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EDITORIAL

MANAGEMENT OF TEACHER EDUCATION

Sunil Behari Mohanty

INTRODUCTION

Management of teacher education is a difficult task because of the fact that there are large numbers of variables in teacher education programmes including variations in the purpose for which persons join teacher training courses of various levels. There are four types of teacher education institutions: (a) government managed, (b) examining body managed, (c) government aided and privately managed and (d) self-financed and privately managed. While certain States do not have any private teacher training institution, there are other States that have large numbers of self-financed private teacher training recognised institutions. Many States do not have examining bodies for pre-school teacher education.

GOVERNMENT ORGANISATIONS FOR TEACHER EDUCATION

Department of Elementary Education & Literacy of the Ministry of Human Resource Development of the Government of India is the apex body that looks after policy for teacher education. Its agencies include National Council for Teacher Education (NCTE), National Council of Educational Research and Training (NCERT) and National University for Educational Planning & Administration (NUEPA). NCERT has five Regional Institutes of Education. They conduct CPD programmes for school teachers and four of them conduct initial teacher training courses - Two Year B. Ed. and Four Year Integrated courses and one year M.Ed. (Elementary) courses. Certain Central Universities also run initial teacher training courses and also courses for teacher educators. There are also a few other Central Government Organisations such as CIEFL, Hyderabad; and KHS, Agra; which run teacher education programmes. University Grants Commission is also involved with Departments of Teacher Education or Departments of Education in the Universities and Institutions Deemed to be Universities and Colleges of Teacher Education. There are Sanskrit language teacher training institutions run by Rashtriya Sanskrit Sansthan, New Delhi; Shri Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeeth, New Delhi, and Rashtriya Sanskrit Vidyapeetha, Tirupati. Besides, MHRD, there are also other ministries that have institutions which run teacher training programmes. Ministry of Women and Child Development has a large network of training of Anganwadi workers, who take care of pre-school component.

At the State level, the apex body that looks after teacher education is the Government Department of Education. In certain States, it is looked after by the Department of School Education. A few States have independent Directorates for Teacher education. In a few others, the Directorate and SCERT function under one Director. The teacher training institutions offering programmes for elementary and pre-school teachers are in many states under the control of the Department of School Education, whereas the teacher training institutions offering degree courses are under the Department of Higher Education. In certain States all teacher education institutions are managed by the State government. In certain other States, majority of teacher training institutions are managed by private

agencies under self-financed category. At the State levels, there are teacher training institutions being run by the Departments of Tribal Welfare, and other administrative departments. Creation of separate cadre for teacher educators has been an important issue to be solved in many states.

SUGGESTIONS FOR IMPROVING QUALITY

A few strategies for improving the status of management of teacher education are as follows:

Establishing Model Teacher Education Institutions by the Central Government in Each State

As part of the strategy to improve quality of teacher education many Institutes of Advanced Study in Education, Colleges of Teacher Education and District Institutes of Education are functioning in the country. It has been found that in a large number of cases, this is an example of wastage of funds. If the Central Government is genuinely interested in improving teacher quality, it may start its own teacher education institutions and discontinue with the present scheme. These institutions may need to have academic autonomy.

Making Teacher Training Institutions Non-Vacational

If the teacher training institutions are to carry out in-service programs, they might have to be non-vocational, similar to the practice followed in the Regional Institutions of Education of NCERT. In this case, the concerned employers have to give proportionate earned leave to their employees as applicable for the non teaching employees of the concerned State governments. When the students are not in the campus, the faculty members can organise seminars and conferences on different themes, undertake report writing of the work they have undertaken earlier and can undertake inservice education programmes for school teachers and other activities.

Encouragement for Formation of Associations of Teacher Training Institutions

National Policy on Education 1986 had suggested networking of teacher education institutions. This can be facilitated by promoting formation of associations of teacher education institutions for each of the types of programmes at different levels.

Encouragement for Teacher Education Complexes

At present, there are mainly three types of teacher education institutions catering to the needs of teachers of pre-primary, elementary and secondary stages. Linking of teacher education institutions of various stages can facilitate teacher educators to learn from each other. Teacher training institutions not offering degree level courses generally, have fewer materials on educational technology, psychological tests and books and journals than found in case of secondary teacher training institutions. Linkage of these institutions can ensure optimum utilisation of resources. Linkage may take care of inadequate amount of daily work found in case of posts such as physical education teacher, art teacher, craft teacher, etc. The head of the complex may be given certain financial support at least for organising complex faculty meetings, disseminating information brochures, etc. and for conducting

seminars, workshops, etc. Selected institutions may need to be strengthened for the purpose.

Making Provision for Follow up Studies and Follow up Activities

Follow up studies indicate the extent to which a teacher training programme has been successful in terms of its application in the field situation. Every teacher training institution may need to carry out follow up studies not only to evaluate their programmes but also to realise the extent to which it has been able to make their product continue as schoolteacher. In the light of findings, the teacher training provider may modify its curriculum. Such follow up studies are also necessary for in-service education programs.

Establishment of Resource Centres for Teacher Education

Formation of National Resource Centre for Teacher Education and State Resource Centres for Teacher Education can boost the efforts to improve the quality of teacher education. These resource centres may carry out following activities:

Facilitating CPD of Teacher Educators

Teacher educators can be helped to become aware of recent developments in training techniques, innovations in teacher education in India and abroad. They may be helped by getting a list of the web sites and an index of materials that each web site contains. The Internet sites may help them in their lifelong effort to continuously update their knowledge and awareness of various types of skills and approaches employed in teacher training in India and abroad.

Facilitating Updating of Initial Training Courses and CPD Programmes for Teachers

The institutions that provide teacher training may be made aware of developments that have been taking place from time to time to cope with the developments in ICT and also developments in school curriculum. They may be made aware of what their counterparts in developed countries are doing in case of initial as well as continued teacher training. This is necessary especially, at the present juncture, when a significant number of persons having teacher training qualifications acquired in India are going abroad and the Indian teacher-training programme can be comparable to the standard in developed countries. The examining bodies prepare various courses of study for different types of teacher training programmes. They may be supported by providing reports of comparative studies of curricula, list of reference books and suggested reading materials, etc. The aspects, on which the teacher trainees are assessed for a particular course, varies from one State to another State and even in one State, from one examining body to another. Often the difference is too much. There is variation in aspects such as: duration of assessment of a particular task, duration of observation of teaching for assessment, and qualifications necessary to act as an examiner. Such variations are not intentional and often are due to ignorance. These may need to be tabulated and comparative analysis of these variations should be made public so that there can be efforts to have improved assessment strategies. A resource centre may make available in its web site as well as in print format, synthesis of recommendations of all the seminars/conferences/workshops organised by the teacher education institutions in India. A data base may be made available on surveys of research conducted by teacher education institutions. Universities, research guides, research

referees and research scholars may be asked to communicate the abstracts of the research studies. The data base may be updated as and when the abstracts are received. The resource centre may develop and maintain research capacity building network including action research and may give support to instructional/individual level researches in teacher education. It may make available networking arrangement amongst all the teacher education Institutions having E-mail IDs to facilitate availability of learning resources.

The resource centres may help experts involved in preparation of norms by providing them norms found in developed countries. Examining body wise analysis of scenario of teacher education courses and programmes in various States may help. Web sites of resource centres may provide an international scenario of teacher education courses and programmes and teacher licensing system, teacher evaluation system and accreditation procedures for teacher education courses and programmes in various developed countries and the data shall be updated periodically. There may be data in respect of comparative analysis of the situation prevailing in States. The resource centres may develop and make available an e-directory of the tools and tests for teacher education to facilitate their utilization. It should create and make available an e-directory of compatible quality learning resources (books and journals) for teacher education institutions and should make available computer based tests for admission into various programs of teacher education.

The portal of the national level resource centres may provide facilities for (i) On-line survey and data search - topic wise and author wise, (ii) Free text search, and (iii) project area search, (iv) A net work to encourage communication between teacher educators and teacher trainees and for providing a forum for exchange of ideas among teacher educators and other professionals, (v) Linkage with other agencies involved in promotion of school teaching and teacher education in India and abroad, etc. It may also provide indexes of topics in different books of a standard quality, web sites of different organisations and associations involved in school education and teacher education, journals on teacher education and school education, lists of recognised persons as principals of various levels of institutions and a list of teacher educators with their fields of specialisation.

Bringing All Types of Teacher Education Programmes to University Level

Education Commission 1964-66 (Art 4.10, P. 129) pointed out the necessity of bringing all teacher education courses to higher education level. It stated that:

> "Teachers for the different stages of education or for special subjects are now trained in separate courses and in separate institutions. The training institutions for pre-primary and primary teachers have the status of lower secondary schools only, in terms of qualifications and remuneration of the staff or the scale of contingent expenditure. There is also a total separation between training institutions for secondary school teachers and those for primary and pre-primary teachers. An important reform, therefore, would be to raise the status of training institutions for pre-primary and primary teachers to a collegiate standard and to end the fragmentation of teacher education which results in weakness at each level and greatly reduces the effectiveness of the programme as a whole. "

Even after four decades of this recommendation, it is necessary that all teacher education programmes need to be provided at the university level institutions. It is recommended that

the Principals of DIETs should be at par with the status of the Principal of a Degree College. To start with, all the DIETs can start degree courses in teacher education for primary and pre-school teachers and can be affiliated to the universities. This up gradation can be part of the Central Government scheme of SSA and also scheme for improving quality of teacher education.

Banning Utilisation of Faculty Member of Face to Face Mode to be Available for Distance Mode

The distance education programmes utilise not only the buildings, but also faculty members of teacher training institutions. This practice does not allow faculty members of face to face mode institutions utilise their holidays for preparation for training their own teacher trainees. Hence, faculty members of face to face mode teacher training institutions should not be utilised for distance mode programmes. Distance education programmes should involve their own personnel for the purpose. They can take help of retired persons.

Encouraging Establishment of Comprehensive Colleges of Education

Education Commission 1964-66 recommended establishment of comprehensive colleges of education. It said that:

> "Colleges should be established wherever possible to prepare teachers for several stages of education and /or for a number of special fields. Some institutions of this type already exist and have shown good results. What is now needed is a planned attempt to develop more institutions of this type and to add sections for training primary and/or pre-primary teachers to training colleges that now prepare teachers for secondary schools only." (Art.4.12, P.130)

The establishment of comprehensive colleges may reduce the cost of teacher education.

Making Provision for Teacher Educators to act as Honorary Academic Supervisors of School Teachers

There are State Government institutions, where a faculty member teaches for less than three hours a week. This is the example of worst kind of wastage of human resources. If the teacher educators can be declared as honorary academic supervisors of schoolteachers indicating their areas, the heads of the teacher institution may engage faculty members in observation and giving feedback of school teaching or in preparation of teacher support materials. Faculty Members may observe lessons of schoolteachers and may finalise their findings after discussion with concerned teacher. Later, they may convey the findings to concerned regular supervisors and heads of schools. Carrying out evaluation of schools and giving feedback to schoolteachers may help in improving the teaching skills of the faculty members of initial teacher training institutions. This may strengthen existing supervisory mechanism existing for schools. This may help the faculty members having inadequate weekly workload get adequate amount of work. Concerned authorities in charge of supervision may bear the travel cost of the teacher educators from their institutions to schools and back.

Encouraging Formation of State Boards for Teacher Education

The Education Commission 1964-66 stated that "… each State Government should establish a State Board of Teacher education, which should work in collaboration with the

State Institute of education," (Art. 10.53, P.474) State Boards of teacher education may be instituted in each State. These may take charge of developing and conducting admission tests for admission into teacher education courses and can also develop State level standards for teacher education as well as for school teachers.

Carrying out Continuous Evaluation of Initial Teacher Training Curricula

Any curriculum needs to be evaluated at intervals. The renewal process should be involved in getting rid of the content and processes that have become in course of time obsolete. Course of study is only one aspect of the curriculum. Evaluation is a process of systematic and critical analysis leading to judgments and or recommendation for improving the curriculum. Curricular evaluation process generally involves all the stake holders such as teacher trainees, ex-teacher trainees, teacher educators, peers working in other types of teacher education programmes, school inspectors and supervisors, educational administrators and even members of community.

Increasing Stress on School Experience

School experience is the pivot of initial teacher training programs. Duration of school teaching experience varies from nation to nation and even from one examining body to another in a nation. Some systems prescribe number of lessons. In India, most of the examining bodies, do not prescribe any duration for school experience. There are occasions, when the duration is restricted to only 2 weeks. Most of the examining bodies prescribe minimum number of lessons to be delivered. Minimum number is generally the standard. The number of lessons in case of secondary initial teacher training course of one year duration, in each of the two method subjects varies between 10 and 20. In case of two year course, it is 28 lessons in each of the two subjects, in case of one examining body. Duration of school experience in case of a few other nations was: France 14 weeks out of 60 weeks course in IUPM, Netherlands 20 weeks in a secondary course of 48 weeks and 40 weeks in a 4 year course. In USA, there is also "Two year residency" made available under *Teachers for a New Era* (TNE) project being implemented by the Carnegie Corporation (Kirby, et al, 2006, p. xix). Weightage for school experience, in one-year courses for graduates for teaching in secondary schools, in one year PGCE courses of England is 50%, whereas in case of India, in one year B. Ed. course, it is as low as 15%. Hence, in the present era of globalization, it may be necessary for appropriate examining bodies to increase school teaching experience in their initial teacher training programmes.

Improving Quality of School Support for Teacher Training

The special nature of job of the teachers of the schools utilised for practical work of teacher trainees may require special training. Such teachers may need to be more skilled than ordinary schoolteachers. The teacher trainees are generally slower than regular teachers in covering course. A number of teacher trainees may even teach wrong content. Hence, the teachers of these schools need to be more effective than the teachers in other types of schools. There may be an official order, if necessary by State act, empowering the State Governments to attach a specified number of schools to the proposed teacher education institution. The remuneration amount may be fixed by each State Government. Besides the remuneration for concerned school teachers, every school to which teacher trainees are deputed may get an amount to be utilised by the concerned schools for purchase of books, educational journals and equipment.

Carrying out Continuous Evaluation of Teacher Education Institutions and Their Programmes

Evaluation process may be internal and external. Internal evaluation generally precedes external evaluation. The findings of internal evaluation can form the base for external evaluation. NCTAF, USA (2004) stated that

> High quality teacher preparation programs are accountable to others, and must hold themselves accountable for performance that is measured and evaluated qualitatively across the board. Key measures of quality include the quality and academic preparation of students recruited to the program; how these recruits are doing as they move through general education after they come to the University; how graduates impact the performance of their own PreK-12 students; and how well support for new teacher graduates prevents or reduces teacher turnover. (NCTAF, USA, 2004, p.10)

Appropriate agencies in India may need to carry out evaluation at intervals of two to three years.

INDUCTION PROGRAMS

In advanced systems, teacher-training course is not considered adequate for providing practical experience. "A number of studies show that new teachers' careers can be influenced by their experiences in the early years of professional practice. A supportive school and/or department appear to be the strongest positive influence on career development." (Wilson, et al, 2006, p.48). A product of teacher training institution is attached to an effective teacher (mentor) for a specific period. During the period of attachment, the trainee receives reduced workload and carries out teaching work under guidance. The said trainee is evaluated a number of times. Induction programs are generally school based programs. However, in countries like Israel, induction programs are run by teacher colleges and the academic school of education. Nations have been making attempts to improve the quality of the induction programs for beginning teachers. Since September 2007, a new set of standards are in vogue in UK. These include a reduction of 10 per cent in teaching timetable in relation to the other teachers in your school, which is in addition to the guaranteed minimum 10 per cent timetabled teaching time for planning, preparation and assessment (PPA) time that all teachers receive (TDA, UK, 2007, p.3). Standards are available in 5 sections - 1. Developing professional and constructive relationships; 2. Working within the Law and Frameworks; 3. Professional knowledge and understanding (Pedagogic practice and Promoting children and young people's development and wellbeing); 4. Professional skills (Planning and assessment and teaching) and 5. Developing practice. Benefits offered by the Teacher Induction Scheme of UK (Scotland) for eligible probationers include: a guaranteed one year training post, a maximum class commitment of 0.7 full time equivalent, dedicated time set aside for professional development, access to an experienced teacher as a nominated probationer supporter, a consistently high quality probation experience, and a good salary which compares well with other professions. The alternative route involves supply teaching or completing temporary service in Scottish state schools, teaching in the independent sector, choosing to complete the probationary period outside Scotland, gathering service in exceptional circumstances, and this route takes 270 days to complete. Britton, et al (2003) found that peers play effective role in induction programs in China and Japan. Formal induction programs are not found in many countries. These programs not only produce better skilled teachers but also provide helping hands in schools to take care of classes when teachers are on leave and reduce the burden of over burdened teachers. The added responsibility makes teachers working as mentors improve their own standard to show examples to the beginners. A number of countries have prescribed standards for mentors. As there is payment as well as prestige attached to this, there may be initiatives among teachers to update themselves in knowledge as well as in skills of teaching. Nations going to introduce this system need to develop a good system of mentor selection and make provision for continuous updating of knowledge and skills of mentors.

CONCLUSION

Management of teacher education is a difficult task, especially at the present juncture where teacher education programmes are being delivered by a large number of unaided private teacher education institutions. These institutions are also not sure of their tenure, as in near future; possibility of huge unemployment of trained persons may result in drastic fall in enrolment figures. The surviving institutions can only be helped by appropriate authorities in improving quality of their management.

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TEACHER EDUCATORS CAN ONLY IMPROVE TEACHER QUALITY

S.P. Malhotra

INTRODUCTION

The very fact that teaching is a profession entails that teaching is a specialized activity for which specialized knowledge/ training is required through specialized institutions. A good institution will produce individuals who will be devoted to the profession and make their mark in the activities organized by them while going to the field. If examples with respect to engineering and medical institutions in India and abroad are considered, one will agree that the onus of getting good teachers lies on the institution that prepares the professionals. Further the institutions alone do not matter much; it is the teachers in the institutions who produce desired individuals. Teacher educators are responsible for producing quality teachers. Harvey (1993) and Atwood (2007) point out that Quality processes tend to focus on 'core' aspects of education such as learning-teaching and course organization. In other words teacher educators' way of organizing theoretical framework, practical sessions and skills development programme affect the future teachers. The activities suggested during training are carried to the classroom teaching in the schools. Researchers like McAffrey et.al. (2003), Rivkin et.al. (2005) and Rockoff (2004) found that teachers have a significant impact on the achievement of the students. However, research studies are jejune to provide answer to the

question if the teacher educators directly affect the teachers' classrooms behaviour or management of activities in the schools. Reasons for this could be many.

Teacher educators have never taken the aspect of professionalism very seriously. They have been criticizing the process of teacher education rather than providing answer to problem faced by them. However, NCTE was established in 1993 by the Act of parliament to give the tinge of professionalism to teacher preparation programme. Unfortunately instead of mending the system it caused some damage to the programme of teacher education. Obvious reason was lack of insight on the part of teacher educators to provide a good model of teacher education. Till date they have not been able to envision a good model of teacher education programme. Existing teacher education problems were further aggravated by the privatization of teacher education institutions. Teacher educators never accepted the private enterprise in teacher education programme though they had been party in recognizing the private teacher education institutions (through NCTE) for the sake of fringe benefits bestowed by the private players. The situation deteriorated to such an extent that at particular time a committee was constituted by the Ministry of Human resource Development to scrap the regulatory body of teacher education (NCTE). The situation was saved after a great hue and cry made by some right thinking teacher educators to reverse the decision. The developments like these have made it mandatory for the teacher educators to put their heads together and give a little thinking to their role in the changed set up under Liberalization, Privatization and Globalization.

CONTRIBUTION OF TEACHER EDUCATORS

The teacher educators have much to contribute to the development of quality amongst the teachers. It is high time that they understand their role rather than simply criticize the system in the name of NCTE. If they do not contribute, they will move from the current marginalized status to the one of irrelevance. They will have to respond at both conceptual/empirical and pedagogical levels (Liston et.al. 2008).

The first and foremost thing is that they will have to accept the existing realities of the world. Privatization has entered educational system and they cannot deny it at any cost. A large number of men and women aspire to get degree or diplomas in teacher education to join teaching or jobs similar to teaching. The existing teacher education colleges or the University departments of education cannot accommodate all the aspirants. The nation at such a juncture will have to depend on private participation in education system of the country. Further the Mass Education does not Necessarily Mean the End of Quality. Simply harping on the tune of deterioration of standards due to the gap in demand and supply will not serve any purpose. Teacher education programme in India has never been based on demand and supply phenomenon. There has always been a good number of participants who never joined teaching after earning a degree or diploma in education. It has generally been observed that objective of many women in getting admission to teacher education programme has been to earn a certificate for future employment. Many women join teaching even after a decade of getting professional degree in wake of their personal or family problems. In such a situation there is a need to draft teacher education courses that have totally specialized knowledge, specialized skills and inherent code of ethics. It can be done by having good theoretical base. Instead of depending on Philosophy, psychology or such other subjects they should bring up a body of knowledge that the future teachers start philosophizing or thinking psychologically to find solution to their classroom problems. Also the teacher educators should start devising the knowledge akin to the discipline of education. For example over the years the education has developed its own vocabulary like learning styles, thinking skills etc.

Secondly, the teacher educators will have to delve on specialized skills that add quality to the professional functioning. Such skills mean having hard, technical expertise along with softer interpersonal capabilities. Skills of quality teaching and quality assessment are most desired.

Quality teaching skills involve the process of making students work hard and become independent learner. For example posing a problem before the learners and helping them find solutions to these problems is a skill and such skills need to be developed in the teacher trainees. Similarly the teacher trainees have to be trained in quality assessment procedure. This type of assessment requires the trainees to assess the students with respect to their thinking process and learning styles. In the same manner, the skills related to feed back have to be developed amongst future teachers so that the feedback is accepted open mindedly by the students and they improve upon.

Thirdly teacher educators should envision functions other than teaching by making teacher education degree/ diploma broad based with respect to changing times. Many dimensions with specializations will have to be added since the future teaching will not be limited to classroom teaching alone. Students will not depend upon teachers to seek knowledge about subject matter. They will be finding better transmitter of knowledge in media. However, they will not be able to negate the teachers. They will require help of the teachers to solve their day-to-day learning or behavioural problems. The students who will not be able to have access to schools will look for teachers get self learning material to suit their learning styles. Not only students, even the parents of the students will seek indulgence of teachers in achieving their aspired goals. Above all the future schools will be having trauma centres on their campus and will depend upon teachers' skills to solve various issues related to behavioural problems of students. All such issues cannot be ignored by the teacher education programme if it has to suit the demands of the society. Therefore teacher educators will have to design course curricula to accommodate such functions of the teachers. Specializations like Public Relationing, Parent Counseling, Behavioural Therapy, Developing e-learning material etc. will have to be included in the course curricula of teacher education. All such dimensions have to be added to the teacher education courses if these courses have to exist in the future. Otherwise there is very likelihood that these courses will loose their credibility to the global societal needs.

Fourthly, the whole nature and process of teacher education will have to be worked out differently. Existing teacher education programme is divided in to different academic papers and sections. Usually the academic papers are Principles of Education and Educational Psychology etc. While teaching these courses, the teacher educators emphasize information aspect only (having no relevance to classroom teaching or school problems). The student teachers are never taught 'how to use the information for solving problems related to school education in general and teaching in particular'. Keeping in view the limitations of discipline oriented approach the teacher educators should visualize Problem oriented approach. A comprehensive list of various problems faced by various functionaries be developed through field based working. The student teachers should be asked to find out workable solutions to the problems. The purpose of teacher education should be development of problem solving skills rather than imparting knowledge alone. This is possible by having flexible, experience based, process oriented teacher education programme; wherein the student teachers are trained in analyzing the problem, developing hypotheses, collecting relevant data and drawing conclusions. Later the student teachers discuss these conclusions with large group to work on the solutions in simulated set up. Such a Project based teacher education programme will help in establishing credibility of teacher education programme. Let the apex institution like NCTE work with a vision to metamorphose the existing teacher education programme.

Fifthly, the teacher educators will have to organize their research as per the needs of the society and the market forces. Liston et.al. (2008) in his editorial pointed out that "Teacher quality research emerges from different conceptual lenses, some less familiar to educators (e.g., labour economies). It is important to grasp varied theories of action implied and to analyze assumptions and values in different research designs." To put it in simpler words, it connotes that research process and research problems in education should be such that these solve societal problems from different

angles. For example the society in India at present is being faced with problems like violence by schools students, sex linked problems at primary stage, aspiration of parents that their child should lead the class in every activity, going for tuitions even at pre-primary level, etc. The answer to such problems is not simple. It involves knowledge of sociology, psychology as well as economics. The teacher educators need to get all essential knowledge to take up the issue and find workable solutions. After all it is the teacher educators who teach about the nature of the child and work directly in the field.

CONCLUSION

In short it is suggested that instead of criticizing or finding faults with the Apex body of teacher education (NCTE), let the teacher educators work with a vision and extend helping hand to the NCTE. The objective of the NCTE is to produce quality teachers. Since the NCTE does not have its own staff, it depends totally on the services rendered by teacher educators employed in the Universities and colleges. Also the personnel heading NCTE belong to us. They had been part of the Universities or colleges. The major question is – should we criticize our colleagues because all of us are unable to visualize and perform our own role? The role of teacher educators today is to mend the existing system with vision to help teacher education grow as a profession and produce quality teachers for schools.

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VIEWING THROUGH THE LOOKING GLASS: RECOGNIZING FACTORS: AFFECTING MULTICULTURAL AWARENESS AND COMPETENCE OF PRE-SERVICE TEACHERS IN EARLY CHILDHOOD TEACHER EDUCATION PROGRAM

Basanti Dey Chakraborty

INTRODUCTION

Consider the following views of pre-service teachers on multiculturalism:" Multicultural education is important because it can help to eliminate the stereotypes and discrimination in the world's classrooms and possibly outside the classroom as well." "Children learn about the world through

their classmate's presence, when the teacher chooses to teach various ethnic back grounds. It is a great way to learn about world culture in a non-threatening way. Children become well rounded at an earlier age and eventually become competent young adults." "Make sure to teach each individual with respect and make sure you highlight/emphasize something significant and important from each culture that is meaningful for the child." "The more those teachers will incorporate ideas on multiculturalism in their teaching and curriculum, the better the people will get along and coexist peacefully. Children will know that people are more alike than different and those differences make the world more interesting." These voices resonate some of the views of leading scholar in multicultural education. Consider the following: Thinking, caring, and acting are the heart of my teaching of multicultural education. It is assumed that in addition to the need for teachers who are well informed about their content areas and cultural diversity, the nation needs teachers who are fair minded, critical thinkers, who care about the welfare of their students and humanity in general, and who act in ways that encourage all students to learn and develop to their highest potential (Sleeter, 1995). Scholars (Banks, 1989; Bennett, 1995; Derman-Sparks & the A.B.C. Task Force, 1991; Haberman & Post, 1998; Irvine, 1994; Nieto, 1996; Sleeter, 1995, and Tatum, 1992) in the field of multicultural education have emphasized the need for culturally responsive teachers in the schools. How do culturally responsive teacher preparation programs look? Culturally responsive teacher education programs must include opportunities for pre-service teachers to work in schools where all students learn and develop to their highest potentiality; where students and teachers understand and begin to develop multiple ways of perceiving, behaving, and evaluating; and where students conform to those aspects of school culture necessary for harmonious social interaction while retaining their own ethnic identity (Irvine, 1994). Haberman and Post (1998) in their article "Teachers for multicultural schools: The Power of Selection," emphasized on the following qualities of teachers: Self-knowledge, Self-acceptance, Relationship skills, Community knowledge, Empathy, Cultural human development, Cultural conflict, Relevant curriculum, Generating sustained effort, Coping with violence, Self-analysis, and Functioning in chaos. To fulfill these qualities as responsive teachers in 21st century schools, the pre-service teachers must become aware of the diversity among young children and their families, develop understanding and respect for diverse cultures and build partnerships with families in educating young children. Through early exposure to the concept of multiculturalism prior to entering into a teacher preparation program, pre-service teachers can learn to develop the right kind of attitude and skills to address the issues negatively affecting the education of young children. Preparation of pre-service teachers involves three major phases: liberal arts education, specialized subject-field education, and professional education. During these phases the students get exposures and opportunities to learn about the world around them, strengthen their personal knowledge on specific content, and develop critical thinking ability in making decisions and solving problems for themselves and others. Liberal arts education develops and refines the thinking process of individuals to accept rational explanation of phenomenon happening around them and to be able to accept and recognize diverse viewpoints with patience, respect and decency. This kind of refinement of the thought process facilitates students' ability to make rational decisions and solve problems scientifically. Pre-service teachers in early childhood education courses are exposed to knowledge, skills and professional dispositions on diversity issues, teacher expectations of all students, professional and ethical qualities to become an empathetic teacher through clinical experiences, classroom activities, discussions and dialogs. It is with these assumptions, the investigator, explored perceptions of factors effecting the development of multicultural awareness and competence of pre-service teachers.

RESEARCH DESIGN

The following questions were explored in the study: What is multicultural competence? How is multicultural education valuable for prospective teachers? Which instructional strategies were effective in promoting awareness, understanding and appropriate attitude towards

diversity/multiculturalism? What issues posed obstacle in the process of developing multicultural awareness and competence among the teacher candidates? The conclusion was based on the analysis of teacher candidates' responses to the above research questions.

Methods

Qualitative approach with a small sample was used to generate data from a survey questionnaire. The questionnaire was administered to pre-service teachers in an undergraduate early childhood program of a north-eastern university in U.S.A. Participants were surveyed on their personal exposure to diversity, the impact of a liberal arts education in exposing them to the process of critical thinking and the teacher education program in training them to address the needs of diverse young children. Participants were surveyed on conditions and factors that facilitated their multicultural awareness and competence. The questionnaire included items that tapped demographic characteristics (age, sex, ethnic background) and exposure to diversity.

Data Source

The responses to the questions in the questionnaire consisting of objective and open-ended questions served as the primary data source. Descriptive statistics were used to analyze the students' responses to objective questions in the survey. Content analysis was used to analyze open-ended survey questions. The survey involved undergraduate students (Total n=302; male=9 and female=293) in early childhood teacher preparation program. The ages ranged from 22 to the late fifties. There were 16 Asian American, 46 African American, 122 Hispanic, 101 Caucasian, and 17 who designated their background as other, in the sample.

RESULTS

Exposure to Diversity

The personal life experiences of students played a vital role in their acceptance and understanding of diverse issues discussed either in liberal arts or in teacher education program courses. These personal experiences also facilitated students' acceptance, and understanding of diversity among young children and their families. 97% of the participants reported having prior exposure to multiculturalism while 3% reported having no exposure. 93% reported having exposure to multicultural experiences in education courses. Pre-service teachers reported their source of exposure to: experience with people of different ethnicities, multicultural activities in both liberal arts and early childhood teacher education courses experience of working in school systems, university environment, reading diverse/multicultural literature

Value of Multicultural Education

Pre-service teachers reported that multicultural education is extremely valuable, should be taught at an early age, and be a part of every students' life. According to them:

"Multicultural education helps one to become a better person, to develop insight into other culture, and to get to know each other." "Multicultural education is essential to living in 21st century, and is a novel way to learn about the world culture in a non-threatening way. Multicultural education will work towards eliminating stereotypes and discrimination in the classrooms. This will help children to be tolerant of others, and help teachers in dealing with children and parents effectively."

Successful Strategies

The strategies found successful in developing multicultural awareness and competence of the pre-service teachers were: Observations, meetings and discussions with parents; Debates on complex issues like "Gay and Lesbians;" Group work and interviews; Dramatization and role-playing about different culture; Learning about multiculturalism thorough content and the process of reflection/conflict resolution; and Reading of controversial books.

Effective Multicultural Activities as perceived by Pre-service teachers

Participants responded with powerful messages about effective activities:

"Writing an essay on our lives and culture was the best activity." In addition, participants' suggested the following activities as powerful and meaningful: "Doing an activity on stereotype misconception. Having the DISCOMFORT in doing this activity pushed the pre-service teachers' boundaries forcing them to think beyond the box"; Activities with young children in schools to understand their cultural background, to understand the "Special needs child"; Activities on "White Prejudice" ; Watching the video "Class Divided" and writing reflection paper; Annotated bibliography on multicultural children's literature; Discussing peer's background; and Creating a multicultural tree with children's handprints.

CONCLUSION

The results of the survey on strategies, activities and perception of participants on the value of multicultural education provide critical information for the teacher educators. The result demonstrates the use of reflective activities, group work, interviews, discussions and reading of books as important factors in enhancing participants' critical thinking. Perceptions of the participants suggest that certain activities are more powerful than others in evoking the right kind of feelings and attitudes to think beyond the box and examine issues critically. The researcher believes that there is a need for evaluation at the beginning and end of the teacher education program to assess the entry and exit level awareness and competence of pre-service teachers on multicultural education. It is also felt that interdisciplinary collaboration between the content specific courses, liberal arts courses and teacher education courses may strengthen the competence of pre-service teachers in multicultural education. The following are some of the suggestions for further research: Interviewing pre-service teachers; Exploration of faculty views on the issue of multicultural awareness and competence; and Surveying and interviewing faculty members teaching various courses in subject specific courses; liberal arts courses and teacher education program may provide valuable information for further analysis.

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HIGHER EDUCATION: PROBLEMS & PROGNOSIS

D. R. Goel
Chhaya Goel

Philosophies Governing Higher Education

Indian higher education is being governed by neo-liberalism, neo-capitalism, and neo-colonialism and vice-versa. Those who have power to purchase higher education of any kind, from anywhere, at any time can purchase it. These producers and consumers have liberal, borderless, global markets. But, do we get what we want from higher education? We are used to food of our choice, our taste, our suitability, anywhere, anytime, any condition. Now, why are we trying to bring in fast food, fast information, cafes, expecting the consumers to change their tastes as per the tastes of the producers? Fast food, though, provides us more of choice and a variety of strange taste, but, it bewitches neither the body, nor the mind, forget about the spirit. Higher Education, which perceptually is the regime of these neo-isms, is the regime of none of these. We need to revive our values and ethos. It is only inculcation of values and sensitivity to the basic culture, which can help us.

Increasing Demand and Dilution

The increase in the demand for higher education, be it liberal or technical, has been unmanageably large, rapid and pressing. Particularly, Law, Commerce, Engineering and Education Faculties are over loaded. Higher Education is at the cost of the innocent public, which is investing with high hopes, but, little returns. There are problems of transition from +2 stages to higher education institutions. We have blind floods in higher education, neither knowing their origin nor destination. There are gaps between the academic attitude and academic aptitude of sizeable students enrolled in higher education. There are gaps between the teaching attitude and teaching aptitude of sizeable teachers employed for higher education. There are imbalances in student & teacher strength in various streams and programs. We have market oriented higher education be it admission, instruction or placement. There is competition, fair or foul.

HIGHER EDUCATION IDENTITY

At present there are 342 universities and university-level institutions in India including 18 Central Universities, 211 State Universities, 95 Deemed Universities, 5 institutions established under State Act and 13 institutes of national importance apart from around 17,000 colleges including 1800 women colleges in India. Of these, 40 universities/Institutions provide higher education in agriculture (including forestry, dairy, fisheries and veterinary science), 25 in medicine (including Ayurveda, Homoeopathy, Pharmacy, Dental, etc.), 49 in engineering and technology, 07 in Information and Communication Technology and 08 in law. The number of Open Universities is 11 and that of Women Universities is 06. The total enrolment of students in universities and colleges is 99.54 lakh while the number of teachers is 4.5 lakh. Only seven percent of the population in the 18-24 age groups has access to higher education. India will need 1, 500 universities to attain gross enrolment ratio of at least 15 per cent by 2015. This is a key observation made by the National Knowledge Commission (NKC) in its note to the Prime Minister on higher education. Stating that opportunities for higher education "are simply not enough in relation to our needs," the NKC has called for a massive expansion of opportunities.

Higher Education: Maintenance & Expansion

There is a problem of maintenance and expansion of higher education. A large number of institutes of higher education have constituted a variety of committees, such as, Admission Committee, Work Load Committee, Fee Committee, Selection Committee, and Salary Committee. In spite of all efforts by the institutes of higher education, there are problems, such as, follows:

*A large number of State Universities are under staffed.

*The teaching staff positions are sanctioned by the Central Government, but very often there is no State concurrence.

*There is abrupt cut on the teaching and non-teaching staff positions by the States.

*Staff salary on paper is different and in actuality is different; more so, in case of sizeable institutions run by a large number of private trusts.

*There is degeneration of a sizeable number of higher education institutions in terms of various parameters- input, process, throughput, and output.

*There are demand and supply in-equations.

There are problems of all levels of maintenance - preventive, corrective, adaptive and perfective. We have significantly lesser number of higher education institutions than what we need - Establish six more IITs. Open more IIMs. Establish 1000 more universities. These are excellent recommendations by the Committees and Commissions. But, how to? Professors cannot be produced over overnight. Merely pumping money, bestowing grants and laying foundation stones do not ensure suitable infrastructure. Expansion of higher Education is beyond the limited data bases and faculties of Committees and Commissions; it demands a countrywide debate and discussion.

Higher Education: Public & Private

The public and private dichotomy is a continuous phenomenon in higher education. A large number of existing institutions have inadequate infrastructure and educational competence to bear Higher Education. Neither we have been in a position to sustain liberal arts nor develop science and technology. The product which gets the license from the institutes of Higher Education is rarely their product. This is largely the product of off-campus sector which operates in many varied ways. Higher Education day by day is being governed by the private sector, which has more of commercial motive than educational. Higher Education has been made commodity and commerce. How to realize excellence, equity and equality at the same time?

Higher Education: General & Honours

Honours at Bachelor's level is an anti-thesis to inter-disciplinarity. Graduates without sound knowledge base at a tender age try to be micro-specialists having little understanding of the whole. As a result, they are neither fit for self nor field. It is high time that the nation does away with honours at under-graduate level. Specialization should emerge from the field even at Post-Graduate level. The Generalist & Micro-Specialist dichotomy is very difficult to resolve.

Choice Based Credit System

In syllabus, on paper, we offer a large number of optional areas, whereas, in practice, a few. It is a countrywide phenomenon. In fact, there is little choice or no choice. Where is the option? What is wrong with our educational system? It is attributed to limited faculty, diverse courses, and scarcity of resources. But, more than the question of resources it is a question of resourcefulness. If the institutes of higher education do not modernize themselves, then there is every possibility of their going defunct. Choice Based Credit System at the face of it increases the work load of the teaching faculty significantly, particularly, classical F2F faculty. Wider the choice more are the demands on the education system. CBCS demands multiple modes of instruction through expert sources and systems, namely, modular mode, e-mode, synchronous, as well as, asynchronous modes, educational sourcing in addition to traditional formal instruction. Similarly, the evaluation is

through electronic evaluation rubrics, continuous, internal, on line, on demand, in addition to paper-pen, activity based and practicum based.

Staff & Student Attendance an Alarming Issue

Observation of process norms ensures quantum and quality yield. Surprisingly, though, the teaching faculty and students are present on campus, but, some of them do not class. What to label this phenomenon? Present Absent. On the contrary, in some of the faculties, there is very little presence. There are off campus classes by the private sector. The question is, when 80-85 % attendance is compulsory, then, without completion of attendance how these students are permitted to appear at end examination? How about their continuous, comprehensive internal evaluation? Still serious issue is professional ethics. More serious are the problems with distance education & open education programs.

Apex Agencies Lost in the Dual Roles

A large number of apex agencies, namely, UGC, AICTE, NCTE, NAAC, BCI, MCI, and ICAR have come up during the past. Of all these agencies, the NCTE has been questioned most, to the extent that at one point of time the nation thought of dissolving it. But, that too, perhaps was not found to be the resolve. UGC, being, both, the Grants Commission & Higher Education Monitoring Agency has been trying its level best. NAAC has taken up the task of observing quality and relevance of higher education. It is functioning relatively better. But, the higher education institutions try to show off what they are not. In between recognition and accreditation, the process of higher education is lost somewhere. In this context the efforts of the NAAC are appreciable in working out the Key Areas, Quality Aspects, & Quality Indicators, particularly, for Assessment and Accreditation of Teacher Education Programs. Engineering, Law, Medicine, almost, all the disciplines need to be regulated. What should these agencies do, so that, the respective institutions and their products have professional feel and appeal? How to excel and exhilarate higher educators and institutions?

In breeding in Higher Education

There is lot of inbreeding, that is, regionalism and provincialism in higher education. Some of the States insist on State domicile for admissions into the programs. In addition to this the services rendered by the teaching staff in the other States do not count towards the service benefits. As a result the higher education is administered by a mono- culture, largely, by mediocre.

Reservation not Remediation

We have sizeable reservation (>50%) in higher education. In this age of equity, equality and democracy, it is highly desirable. But, along with this, what is absent is, thorough remediation.

Inadequate Autonomy, Flexibility & Transparency

Higher Education institutions have only a little autonomy, flexibility and transparency, which is too meek to nurture higher education. Higher Education is being governed by bureaucratic, conservative, hierarchical, traditional model rather than by human relations model.

Higher Education: Input, Process & Output

We have little control on the Inputs and Processes of higher education. So, the relevance and quality of the product of higher education cannot be forecasted and achieved deterministically. Process norms are grossly neglected. There is more focus on exposition and instruction, rather than creation and construction. Higher Education has become more theoretical than practical. There are wide gaps between vision and mission. There are wide gaps amongst educational objectives, curricula, modes of transaction, and evaluation. There is progressive dilution from objectives to evaluation.

Problems of Sharing of Resources, Inter-disciplines & Trans-Disciplines

There is a little networking amongst the agencies and institutions of higher education. Exchange and sharing of resources is very rare. A few consortiums here and there are more for demonstrations, than fully functional. There are rare repositories of learning resources. There are boundaries and seasoned gate keepers amongst disciplines. People from various disciplines rarely sit around the table. There is a need to share credits intra-university and inter-university. Also, there should be provision for Credit Transfer, Student Mobility and Mutual Recognition. Most of the Higher Education Institutions are working more or less in isolation. There is a need of sharing resources and courses within institutions, between conventional and conventional universities, Open and open universities, and conventional and open universities.

Centralized Higher Education

Most of the Universities in India are affiliating universities. The affiliated colleges go by the curricula, modes of transaction and evaluation designed by the Universities. They have little autonomy, because a large majority of them are not properly equipped for offering Post-Graduate Programs. Being economically affluent and politically powerful does not ensure the higher education credibility of a private trust. The Post-Graduate product of a large number of these trusts has little insight into the national problems and developmental challenges. Research has become a ritual. As a whole the quality of higher education suffers. Should the PG programs be delimited to Universities and autonomous institutions, only? Or else could each and every institute of higher education be resourceful, powerful, and autonomous?

In-innovative Higher Education

In spite of the repeated focus on semester based credit system, still annual and marking system is prevalent in most of the institutions of higher education. Choice Based Credit System is offered by the rare institutions. Continuous internal evaluation is the feature of rare institutions. Still there is a primitive culture of flying Squads in Higher Education Examination. Even in this age of Technology in Education, Electronic Distribution of Examination Papers is done by only a few institutions. Very often the Innovative Programs proposed by the efforts of some Institutions are declared to be not under the purview of the apex agencies in the respective areas, because, the so called expert committees fail to appreciate these programs. The apex agencies need to be additionally careful while constituting the Expert Committees for the Innovative Programs.

Research at Higher Education

Research at higher education level has been carrying out more of analytical, descriptive and evaluative functions than advisory and inventive. We are more in the realm of description rather than prediction and control. Massive Action Research, Applied Research, Operational Research seem to be mere slogans. Even the Basic Research is not through sound theoretical framework. Research Studies have largely lost their research rigor. A large number of doctoral degrees in various disciplines are conferred every year. The credibility of research of a large number of Institutions of Higher Education is lost. Who is accountable? A large number of projects are approved and financed by the apex bodies without adequate monitoring. As a result there are meager returns. Even with fair intentions how is it that we have not been in a position to realize the enunciated objectives. To begin with, it is because our objectives though highly sounding are questionable. We need to have a thorough vision of the reality and enunciate the objectives objectively. Otherwise we are likely to keep failing our predicaments. Whether it is logical positivism or naturalistic enquiry, we have not done much. There is very often only a little correspondence amongst the research problems identified, objectives enunciated, methodologies adopted and the emerging theses. Neither we have been in a position to solve immediate problems nor have we been in a position to generalize. Even if we claim to have formulated cognitive and meta- cognition theories, what use are these theories without application or expression?

Invalid Evaluation in Higher Education

Evaluation in higher education is largely invalid right from input through process to output to placement. Our admission criteria in most of the faculties are faulty, because we do not have the research base with respect to the predictors of performance in various programs. Still, the classical Norm Reference Testing continues in most of the institutes of higher education, promoting competition. Rarely, we go by Criterion Referenced Testing and Item Response Theory. In the interview boards, rather than trying to know what the candidates know, we try to make them feel stupid by making them conscious of what they do not know. A large number of interview boards fail to discriminate finely between candidates. The problem becomes, still severe, when we need to discriminate between 98^{th} and 99^{th} percentiles. Internal evaluation, revaluation, double valuation, centralized evaluation, all have question marks. A person with B+ passes the life situations, whereas, A+ fails. What do the degrees of a degree represent, if not the helplessness of the Higher Education System? Rather than grading our product on an n point scale could we have pass and not-pass in higher education realizing mastery learning?

Low Return on Investment in Higher Education

Only 5-6% of the persons who are conferred degrees are graduates in the real sense. Ritual convocations without real invocation are meaningless. How to observe the Higher Education wear the scarf with distinction, decency, decorum & discipline and glittering medals with resonating pride? For realizing that, we need to revive the culture of higher education. Rather than formally constituted knowledge commissions, each and every entity of higher education should realize and demonstrate its identity as a Knowledge & Action Commission.

Self Killing Complacency of Micro-Specialists

Self-killing complacency of micro-specialists of Higher Education is a matter of great concern. How much each one of we Professors professes even our own discipline? Higher Education has made us more fragmented than holistic.

Placement, Promotion and Administration in Higher Education

Where are the alumni of higher education? Most of the institutions of Higher Education do not have record of alumnus. What would be more shameful than the institutions of higher education refusing to recognize their own products? Academic administration of the institution must, by thinking, speech and action, portray their commitment to high ethical standards. A sizeable number of educational institutions do not observe healthy constellation and ethical climate. Many academic administrators are not in a position to observe the laid down acts, rules, resolutions and ordinances. The true test of administration is when the rules and acts are silent. At times the conditions demand administrators to be over and above the system at the same time not against the system.

State of Arts, Commerce, Science & Administration in Higher Education

Art without perspective, commerce without substance, science without ethics, and administration without sensibilities and sensitivities are meaningless. This seems to be the greatest problem of higher education. Who should be the top academic administrators of higher education? These have to be essentially inter-disciplinary experts having rich profiles and balanced personalities. An analysis of the top administration of higher education, nationwide, reveals that civil servants, industrialists, pure academic professionals, and Statesmen all are misfits in the administration of higher education. There are rare personalities with integrated profiles. The Universities and institutes of higher education have to bear with the best possible available. It is disgracing higher education to plant in-compatible administrators.

Stereotyped Higher Education

A large number of refresher courses which are meant for staff development and capacity building are not serving the envisaged purpose. Rather than designing means for staff development we have more of staff rating scales. These tools are more for describing the field than constructing. Same age old practical are repeated in the science laboratories. Same age old theories are practiced in spite of the changing conditions. Arbitrary criteria are superimposed on the reality promoting fundamentalism. Neither we have been in a position to sustain liberal sciences, nor, scientific realism.

Micro-Specialization, Narrow Breadth and Shallow Depth

Though the various disciplines are doing a lot of service to the society, yet there are many emerging issues and problems. How to stop deforestation? Can Botany contribute to the reduction of pollution? How to mass educate the development of the seasonal plants? How to save endangered species of plants? Can Zoology contribute to the regulation of population? How to correct the imbalances in male-female ratio? How to control diffusible diseases? How to save endangered species, for example, lion, tiger, black- buck? How to realize mass production of compatible medicine? How can Chemistry contribute to the control of pollution? How to produce degradable polymers? How can Physics realize the conservation of energy using conventional sources?

There is a lot left to be discovered/ constructed in the areas of laser technology enhancement, transportation and space research. Rather than abstract and empty, mathematics needs to be more real and meaningful. Languages should be register specific and functional. Commerce should be more with service motive. Technology is sweeping the globe. But, there is more of media crowd than culture. Educational instructional software is rarely user compatible right from KG to University and continuing education levels. Still there are gender discriminating stereotypes in science and technology and more so at the higher education level.

Though information in Science and Technology is multiplying at exponential rates but still there is a wide gap between the expected rate of evolution of scientific knowledge and what it actually obtains. There are easily perceptible Science and Technology divides in the society. Philosophy and Psychology which are the strongest foundations for society are loosing their identities? How top level administrators very often are found to have low level affect attributes? Our degrees of a Degree are representative of the extent of course completion than developed competencies.

Inclusive Education: A Mere Slogan

The expression inclusive education is recurring most frequently these days. What is its origin? What is its structure and function? We talk of multi-lingual models and go on superimposing mono-lingual model. We talk of multi-style teaching, but go on throwing mono-style. We talk of inclusive education but fail to provide differentiated differential inputs. Inclusive education demands highly resourceful dedicated systems.

Career Advancement Scheme (CAS) in Higher Education

CAS in higher education is highly desirable in this age of humanization and democratization, but, it has significantly lost its purpose. The Career Advancement rather than a function of merit is the discretion of whims and fancies of administration and it is loosing credibility due to malpractices prevailing in the institutes of higher education, for example, referees not sending the reports in time, faculty having sound profile being not promoted.

Professional Ethics in Higher Education

We are largely proud of the Indians for their roles & professional ethics. In spite of all adverse conditions they perform their duties with all dedication. For parenting Indian parents are models for the globe, for software industry Indian Engineers, for patients Indian Doctors, for learners

Indian Teachers. We have harmonious culture and healthy constellation amongst all entities. However, some deviants, here & there spoil the professional excellence, peace and harmony. How? Needs no illustrations.

Every one needs to rear the baby. We should not leave it to others. The very presence of doctors relieves the patients of disease and discomfort. All doctors need to observe punctuality and presence. Software engineers should produce vaccines to remedy than viruses to replicate. We teachers need to renew ourselves to remain alive and innovative rather than becoming stale to delete even the already running programmes and courses. Rather than neo-liberalism, neo-capitalism, neo-colonialism, let humanism flowing through all professions govern higher education in India.

PROGNOSIS

Philosophies to Govern Higher Education

There is a need to de-colonize minds. Who will do that? It is Education and Education only. Globalization with equity and equality and sensitivities to the basic culture, liberalization with civilization, Privatization with Service motive, and State with Public Spirit should govern the higher education. The States should not shun away from the responsibility of higher education. With a tendency of doing so, we have already done the greatest harm to the nation. The economy should not try to overarch State and Schools of Higher Education. The economy should realize that it is the return of education. Traditional, conservative, bureaucratic, hierarchical model being a big failure and impeding power, we need to recourse to human relations model. Autonomy, transparency and de-centralization ought to be the salient features of higher education.

Sustaining genuine demand of higher education

Approval for the new Higher Education institutions through NOC should be provided on the basis of up-to-date data, need and demand in public interest. In no case it should be a function of vested interests and malpractices. The norms for recognition of the institutions need to be developed and objectively observed, irrespective of who constitutes the inspection teams. There should be valid criteria for admission into the Higher Education Programs.

Correspondence among Objectives, Curricula, Transaction and Evaluation in Higher Education

We are relatively creative in enunciating the objectives of any program. First dilution takes place at designing of curricula, next in transaction of curricula and highest in evaluation. Every higher education institution should observe an inventory of correspondence amongst various elements of educational instruction design. We need to have clear vision and mission. Gaps between these are lowering the higher education. Particularly, mission functional procedures need to be worked out more meaningfully.

Consortiums in and networking of higher education

There should be networking of higher education institutions. More of disciplinary and inter-disciplinary consortia need to be created for sharing of resources.

Inter-disciplinary & Trans-disciplinary Higher Education

More and more inter-disciplinary programs should be designed and implemented in higher education. It should be mandatory for every student of higher education to opt for a course from other faculties to facilitate trans-discipline, and it should be credited.

Integration of various skills in Higher Education

Various skills, namely, techno-savvy skills, net-savvy skills, Life skills should be integrated in higher education. In addition to cognition there should be adequate focus on affect attributes and psycho-motor skills. Higher Education ought to be wholistic rather than fragmented.

Choice Based Credit system

There should be choice based credit system in higher education. It is possible only when we have innumerable approaches to learning resources, such as, e-contents through open source, learning modules, sharing of credits intra-faculty, and inter-faculties, intra-university and inter-university. Induction of choice based credit system is very challenging, but, highly desirable.

Focus on process norms

If inputs and processes are well taken care of then the output yield and quality are almost ascertained. We do not have adequate mastery on the processes. Some of the institutions have the problem of capacity and burnout, whereas, a sizeable number of them have the problem of throughput and rust-out. Over years we have laid relatively more emphasis on examination reform. We need to reform the processes. There is a need of evolving process norms in almost all areas of Higher Education.

Evaluation in Higher Education

There should be semester based credit system and continuous comprehensive internal evaluation in higher education. Various modes of evaluation need to be practiced, such as, activities, assignments, projects, seminars, field work, and tests having variety of items, such as, essay, objective and notes. Evaluation should be inclusive of subject specific knowledge, relationship with other subjects, development of psycho-motor skills, life skills and affect attributes. Electronic Distribution of Examination Papers needs to be inducted.

Research in Higher Education

Research in higher education should be revealing and suggestive. Along with scientific realism, there should be added focus on phenomenology and construction.

Need to Observe Intelligentsia & Ethics in Board of Studies, Faculty Boards, Academic Councils & Executive Bodies

The Board of Studies of various Departments & Faculty Boards should abstain from arbitrary decisions. Not only such decisions are harmful for the particular departments & faculties, but also, these have implications for the wider field. All these Boards, Councils, and Bodies should observe their identities and function as per the acts specified in the constitution observing code of ethics.

CONCLUDING REMARKS

With all ifs and buts, the Indian Higher Education has its own strength. The struggle of the average middle class families for higher education of their young ones is remarkable. Higher Education is the highest priority for them. In fact, these are the people who are helping higher education to sustain and develop its identity. Neither the international institutes of higher education, nor the virtual foreign universities can nurture the Indian youth, but it is the indigenous education which can evolve and actualize the self. A thorough analysis of the product of higher education can reveal a lot. We feel proud that we, the innocent public of India have constituted a sovereign, socialistic, secular, democratic, republic India. No economy, howsoever developed, no state howsoever advanced, no judiciary howsoever knowledgeable should commit the mistake of superimposing education, and more so higher education. There is a need to realize inter-disciplinary, trans-disciplinary, inter-domain, wholistic higher education for harmonious living.

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A STUDY ON READING COMPREHENSION IN TAMIL AND STUDY HABITS OF UNDERACHIEVERS IN IX STANDARD

P. L. Ponnalagappan
A. Selvaraj Gnanaguru

INTRODUCTION

The burning crisis that grips every youth is the poor reading comprehension ability. At the same time there is a remarkable increase in the browsing of information. Reading is the process of thinking, evaluating, judging and imaging. This refers to the process of identification of symbols and figures and giving appropriate association and meaning. Reading includes two basic processes of decoding and comprehension. The decoding process involves resilience on using words, phonological structure, understanding the phonemegraphime relationships and translating printed words into representations of similar to oral language. The decoding skill enables the reader to pronounce words correctly. Comprehension skills enable the learner to understand the meaning of words in isolation and in context. Reading is a process of recognizing and understanding words and ideals. It helps in understanding the general organization, reading content and related sub-skills.

OBJECTIVES OF THE STUDY

1. To study level of IX standard students reading comprehension in Tamil and study habits;
2. To study whether there is any significant difference in reading comprehension in Tamil and study habits of underachievers in IX standard with respect to (a) gender, (b) locality and (c) medium of instruction.

METHOD

Normative survey method is adopted in the present study. It seeks to obtain precise information concerning the current status of phenomena and to draw valid general conclusions from the facts discovered. This study is restricted not only to fact findings but in formulation of important principles of knowledge and solutions of significant problems related to locale, state, national and international level. This method of research attempts to describe and interpret what exist at present in the form of conditions, practices, process, trends, effects and attitude. In brief it is an attempt to analysis, interpret and repeat the present status of a social institution or the group. Thus in the present study, the investigators adopted normative survey method.

Sample

The sample for the present study was 600 IX standard students belonging to Cuddalore and Nagapattinam districts of Tamil Nadu State. The sample for the study has been selected by a simple random technique and applied multi stage sampling method to categorize the underachievers. Finally the investigators arrived at 267 underachievers of IX standard in schools of Cuddalore and Nagapattinam districts of Tamil Nadu State

Tools

In the present investigation the investigators used reading comprehension test constructed and validated by Selvaraj Gnanaguru (1992). This test consisted of two parts i.e. part one had 30 items of fill in the blanks and part two had 40 items of fill in the blanks. Each right answer carries a score of one. Maximum score for this test was 70 and minimum score of this test was 0. The reliability of the test was 0.72 by test retest method. In order to measure the study habits of IX standard students, the investigators applied study habit inventory constructed and standardized by Selvaraj Gnanaguru (1992). This scale had 24 items and responses to each item were to be made by entering the subject's level of agreement with each of the statements on 3 point scale. This consisted of 12 positive and 12 negative items. Each item had three alternatives i.e. always, sometimes and rarely. Scoring for positive items was 3, 2 and 1 and for negative items the scoring was reversed. The data collected were fed to computer and analysis was done with the help of SPSS package.

RESULTS

The reading comprehension was conducted for a maximum score of 70. Hence, having a score 51 or above was considered to have high reading comprehension and a score of 26-51 was considered to have an average reading comprehension and a score below 26 was considered to have low reading comprehension. The mean (32.02) and standard deviation (9.49) of under achievers of IX standard students reading comprehension is average. Similarly study habit inventory is conducted for maximum score of 72. Hence having a score of 58 or above indicates good study habits, 39-58 indicates average study habits and below 39 indicates poor study habits. The mean (34.06) and standard deviation (9.27) scores of study habits of underachievers of IX standard students is average. It is found that the entire sample reveals average reading comprehension and average study habits of underachievers in IX standard. There was no significant difference in mean Tamil reading comprehension scores of under achievers of (a) boy and girl students, (b) rural and urban school students, and (c) Tamil medium and English medium students. Boys showed better reading comprehension than that of their counter parts. Rural school students showed better reading comprehension than that of their urban counter parts. Tamil medium students show better reading comprehension than that of English medium school students. There was no significant difference in study habit scores of under achievers of (a) boys and girls students, (b) rural and urban school students, and (c) Tamil medium and English medium students. Boys had better reading comprehension than that of their counter parts. Rural school students had better reading comprehension than that of their urban counter parts. Tamil medium students had better reading comprehension than that of English medium school students.

DISCUSSION

It is observed from various studies, the underachievers have poor reading comprehension but this study reveals that underachievers have average Tamil reading comprehension. There are various other causes that prevent them from their better reading comprehension. There are also few facilitating environments in every school for the improvement in reading comprehension in school levels. As everyone believe that boys have better reading comprehension in Tamil than girl students. But in the case of under achievers, the reading

comprehensions of boy students were better than that of girl students. The general assumption is that the urban students with the varied exposures to media, newspapers and journals have better reading comprehension. But in the case of under achievers the reading comprehension of rural students are better than urban students. It is found from the present study that the Tamil medium students have better reading comprehension as against the peoples believes. It is often considered that the English medium students have better reading because of the highly educated group of students and parents and peer group. This clearly spells out that in English medium school, the reading of Tamil is not given sufficient attention. These schools are concentrated over teaching and speaking of English language and miss the importance of learning and reading Tamil. It is often believed that girl students have better study habit than boys. This study found that the girl students have lower study habit in comparison to boys.

RECOMMENDATIONS

Girl students should be given better attention in sparing more time for reading. In spite of medium of instruction, both medium students must be encouraged to read Tamil news papers and to conduct comprehension test occasionally in the respective class rooms and to conduct Tamil elocution competitions in class rooms. Case analysis needs to be carried out for improving study habits for every student in schools.

CONCLUSION

It has become the need of the hour to focus our attention on laying emphasis on reading, improving the comprehension and familiarities among the students. Study habit and Tamil reading comprehension seems to have positive relations which result in the academic performance of students. It can be concluded that the teachers who are agents of transformations of the young generation, have to concentrate on accelerating the comprehension capabilities of young minds. The parents and classmates should build developing strategies for better study habits of underachievers.

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PREPARATION, RECRUITMENT, AND RETENTION OF TEACHERS

James M. Cooper
Amy Alvarado

CONNECTING PREPARATION, RECRUITMENT, AND RETENTION

The preparation, recruitment, and retention of teachers are interrelated, but typically there is no policy framework that links them together in a coherent fashion and that is connected to national and state educational goals and standards.

International context

The preparation, recruitment, and retention of teachers can be viewed as a pipeline that springs leaks over time. In many developing countries, the number of new teachers cannot keep up with population growth. In Western countries, where suffi cient numbers of teachers are prepared, many newly prepared teachers either choose not to teach at all or leave teaching within a few years. In the United States, for example, only 60 percent of students that are prepared for teaching actually choose to go into teaching after graduation. Similarly, 40 percent of teachers in the United Kingdom leave the profession within the fi rst three years. However, teacher retention does not seem to be a problem in other countries (for example, Germany, France, Hong Kong, and Portugal).

Research findings

Until the early 2000s in the United States, policy efforts directed toward meeting the need for teachers have focused primarily on supply issues, such as instituting and encouraging alternative licensure routes into teaching, establishing scholarships and loans for prospective teachers, and increasing salaries to make teaching more attractive. Much less effort has been directed toward improving working conditions in schools, one of the primary causes of teacher attrition. What seems to be lacking is a framework for policy that creates a "coherent infrastructure of recruitment, preparation, and support programmes that connect all aspects of the teacher's career continuum into a teacher development system that is linked to national and local educational goals" (Darling-Hammond, Berry, Haselkorn, and Fideler, 1999) Congruence and commonality of effort are difficult to achieve in a decentralized system of education. Without a set of common understandings, these education systems will implement teaching policies on an ad hoc basis, with gaps, conflicts, and inefficiencies being inevitable outcomes. Countries with a national system of education find it easier to develop a coherent framework of policies that reinforce and support one another because education policy is under the control of the central government.

Policy implications

Although the challenges of implementing a policy framework that links teacher preparation, teacher recruitment, and teacher retention are great, they must be met. Some of the more important of these challenges have been listed below:

• Align teacher preparation with the needs of diverse learners, content standards, and contemporary classrooms.

• Simplify and streamline hiring processes so teachers are not discouraged from teaching, particularly in "hard-to-staff" schools.

• Ensure that all new teachers participate in quality induction and mentoring programmes.

• Address working conditions so that schools become learning communities for both educators and students.

• Reinvent professional development for teachers so that it supports sustained growth and is organized around standards for accomplished teaching.

• Ensure better pay for teachers who demonstrate knowledge and skills that contribute to improved student achievement.

• Design incentives for increasing the diversity of the teaching force and for teaching in critical shortage areas.

To create and maintain an effective policy framework aimed at teacher quality, governments must develop and use a system for collecting data to inform policymakers of the results of various policy initiatives. Policy coherence is difficult enough when policymakers are dispersed among separate jurisdictions. However, without effective data gathering and analysis, policy coherence is virtually

impossible. Many of the issues touched upon in this principle have been elaborated in the five principles that follow.

Sources
Cobb (1999); Darling-Hammond, Berry, Haselkorn, & Fideler (1999); Hirsch, Koppich, & Knapp (2001); National Commission on Teaching and America's Future (1996); Stoel & Thant (2002); Villegas-Reimers & Reimers (2000).

TEACHER SUPPLY AND DEMAND

The teacher supply and demand balance is affected by policy considerations, local labour market conditions, institutional practices, and societal attitudes toward teaching.

International context
In some countries (for example, the United Kingdom, Australia, France, and Germany) there are shortages of teachers in general or in specific fields. In these countries, governments are proposing special recruitment incentives, such as extra pay for hard-to-staff subjects and schools (Stoel and Thant, 2002). In other countries (for example, Japan, the Czech Republic, Portugal, and Hong Kong SAR) the supply of teachers is adequate. Teaching is still an attractive career in these countries and draws enough teachers to replace those leaving the system. As stated earlier, each state in the United States bears responsibility for licensing its own teachers and managing the balance between supply and demand, with the result that a variety of different policies exists. Some states have produced more teachers than there are jobs available, while shortages of highly qualified teachers exist in other states.

Research findings
Keeping the supply and demand of quality teachers balanced requires a consideration of several factors. There are three major components of teacher demand: pupil enrolment, pupil-teacher ratios, and turnover. With respect to pupil-teacher ratio, for example, these ratios have slowly declined over the years in several Western countries, particularly in primary grades. In contrast, the ratio of primary pupils to teachers is three times higher in the least developed countries than in developed ones. As important as enrollment and pupil-teacher ratios are, however, the demand for teachers in any given year is affected most by teacher turnover (see Issue 5). The supply of teachers also depends on several factors, including the number of students graduating from teacher preparation programmes, the proportion of these students who choose to enter teaching, the number of teachers licensed through alternative programmes, and the number of returnees from the reserve pool of teachers, including retired teachers. Other factors influencing the supply of teachers include salaries and benefits, working conditions, difficulty of licensure standards, presence or absence of incentives to attract teachers, and public perception of teaching as a profession. In Western countries, the supply of teachers is less an issue of numbers than one of teaching field and distribution. For example, the United States generally produces enough teachers to meet needs each year. However, there is an inadequate supply of teachers in the fields of mathematics, science, special education, and bilingual education. In addition, there are not enough quality teachers willing to teach in schools enrolling large numbers of at-risk students. In some developing countries, on the other hand, just having enough teachers is a major problem. In an attempt to increase access to schooling, the growth in the number of school-aged children has outpaced the growth in the number of teachers in most of these countries. In many Western countries, there is a shortage of minority teachers. Although an increasing number of students are members of minority groups, teaching staff tend to come from the majority group. This disparity in the cultural backgrounds of teachers and those of the children they teach often results in low teacher expectations and the use of inappropriate teaching strategies. Recruiting quality minority teachers, therefore, is very important. When faced with difficulties in finding sufficient numbers of quality teachers, school administrators

traditionally do one of three things. They either hire less-qualified teachers, assign teachers trained in one area to teach in the shortage area, or make extensive use of substitute teachers. As a consequence, many students, particularly at-risk students, are being taught by teachers who lack the knowledge and skills necessary to produce desired student learning. The effects of teacher quality are long lasting and cumulative, especially for these at-risk students (Haycock, 1998). Various strategies are used to deal with the problem caused by the gap between the supply of high quality teachers and the demand for them. They include strengthening teacher preparation programmes by emphasizing standards and accountability, creating alternative pathways into teaching, attracting mid-career professionals, luring retired teachers back into the classroom, establishing scholarships and forgivable loans for prospective teachers in high need areas, raising teacher salaries and benefits, and creating signing bonuses, housing assistance, and other incentives to attract teachers. In terms of hard-to-staff schools, additional strategies are being implemented. These include bonuses for teachers of mathematics, special education, and other shortage fields, bonuses for teachers who teach in high-poverty schools, financial support for graduate study, and partnerships between local education areas and colleges to help such areas "grow their own" teachers. Unfortunately, evidence of the effectiveness of these various efforts is scant. Specifically, there is little systematic research on the effects of different kinds of alternative licensure programmes on teachers, teaching, or student learning. What research there is suggests that successful alternative licensure programmes possess many of the same characteristics as successful traditional teacher education programmes. In addition, however, alternative licensure programmes do attract a more diverse pool of potential teachers, in terms of ethnicity and age, than do traditional programmes.

Policy implications

Governments should continue to experiment with various strategies for attracting high calibre teachers, especially since the research base is not strong enough to rule out particular approaches. Increasing teacher salaries is not likely to attract people into teaching who don't have the "calling." However, adequate salaries to support a family and to save money for children's education are likely to keep teachers who do heed the calling. All new teachers, whether graduates of traditional or alternative programmes, should be held to high academic and performance standards. It makes no sense to strengthen the requirements for college-based teacher education programmes, while at the same time ignoring standards for those coming through alternative licensure programmes.

Based on the review of teacher recruitment initiatives, the following practices are effective and should be considered by policymakers.

- Collect and analyze data on the supply and demand of teachers at national, state, and local levels to direct recruitment efforts.
- Cast a "wide net" in recruiting, including targeting secondary school students, paraprofessionals already working in schools, and mid-career professionals in other fields.
- Develop multiple pathways to becoming teachers while maintaining high standards for all new teachers.
- Develop a comprehensive, research-based strategy to recruitment, rather than multiple initiatives that may not relate to each other nor fit with other initiatives.
- Evaluate the effectiveness of these initiatives, including the effectiveness of teacher recruits and their retention.

Sources

Darling-Hammond, Berry, Haselkorn, & Fideler (1999); Hallak (2000); Haycock (1998); Hirsch, Koppich, & Knapp (2001); Ingersoll (1997); Liu, Kardos, Kauffman, Peske, & Johnson (2000); National Commission on Teaching and America's Future (2003); Siniscalco (2002); Stoel & Thant (2002); Voke (2002); Wilson, Ferrini-Mundy, & Floden (2001).

TEACHER RECRUITMENT

A variety of teacher recruitment strategies should be employed to expand the teacher pool and improve the pipeline into teaching.

International context

Internationally, recruiting quality teachers is a problem due primarily to the low status of teaching (as evidenced in some countries by very low salaries) and the lack of appeal found in the profession. In a study of ten Asia- Pacific countries, Japan and Taiwan were exceptions to this generalization, with salaries and teacher status being quite high in these countries (Morris and Williamson, 2000). Germany, Ireland, and Belgium are other countries in which a surplus of qualified teachers has led to a highly competitive entry process serving as the main recruitment strategy. Recruitment issues internationally typically fall into one of five categories: (a) flexible entry routes; (b) new forms of initial teacher training; (c) courses for candidates from other fields (that is, career switchers); (d) recruiting qualified teachers from other countries; and (e) increasing incentives, such as higher salaries and job sharing. In developing countries these issues tend to be more centralized than in such countries as the United Kingdom, Australia, and the United States, where recruitment is often handled at either the school or local area level.

Research findings

Although sufficient numbers of teachers graduate from teacher preparation programmes each year, teacher shortages exist in part because graduates either do not enter teaching, or a significant number of those who do enter leave within three to five years. To combat this shortage, as well as to address the issue of bringing greater diversity and quality into the teaching profession, a variety of teacher recruitment strategies need to be employed at various points in the education pipeline. Teacher recruitment can begin at the secondary school level. Secondary school students can participate in Future Teacher or Future Educator clubs, internships, or formal coursework in pedagogy and/or educational foundations. Efforts made at the secondary school level address another important recruitment issue; namely, attracting high quality and diverse students into teaching. University settings provide another opportunity for teacher recruitment. Examples include forgivable loans and scholarships, paid internships in school systems, and opportunities to work toward an advanced degree through five-year programmes. Partnerships between schools and universities can provide incentives that are helpful in attracting teacher candidates. Such incentives include bonus or salary increments for teachers willing to teach in hard-to-staff schools, earlier job offerings, and streamlined job application processes. Many of these programmes attempt to counteract the reasons that pre-service teachers give for not entering the teaching profession. Paraprofessionals are another group of potential recruits. These adults, currently working in schools, have the advantage of already knowing the school and the students. They tend to come from diverse backgrounds and are familiar with the social and cultural contexts in which students live. Programmes for paraprofessionals include financial assistance to pursue a degree, academic and social supports including work with a cohort of other paraprofessionals and faculty mentors, and flexible teaching arrangements which allow them to continue working in their current positions while taking classes and fulfilling practicum requirements. Mid-career, post-baccalaureate professionals working in other fields (for example, private industry, and the military) provide a fourth arena for teacher recruitment. Programmes geared toward this group often focus on hard to-staff fields such as science and mathematics as well as hard-to-staff schools. Participants in these programmes may be seeking to change careers or have retired from one career and are interested in teaching as a second career. Many enter teaching through alternative licensure programmes. Although some view these programmes as “back door” routes into teaching that are less rigorous than other programmes and that lead to less-than-high quality teachers, these programmes can be quite effective provided that they “provide options to the traditional undergraduate teacher

education programme without lowering existing standards" (Darling-Hammond, Berry, Haselkorn, and Fideler, 1999, p. 208).

Policy Implications

There are three policy areas related to teacher recruitment: school-university partnerships, recruiting teachers for hard-to-staff subjects and schools, and using two-year colleges. There are several advantages of school-university partnerships. They can enhance pre-collegiate recruitment efforts by providing secondary students with early opportunities to engage in teaching experiences and take courses aimed at understanding the profession. They can also provide opportunities for paid internships and early employment as well as signing bonuses for agreeing to teach in hard-to-staff areas or schools. School-university partnerships have been found to be successful in recruiting new teachers into the profession, particularly recruitment into hard-to-staff subjects and schools. These partnerships make it possible to use incentives such as scholarships and forgivable loans. These incentives encourage students to attend college and, specifically, to enter teacher preparation programmes. Two-year colleges (for example, community colleges, technical colleges) can be important players in the recruitment-preparation sequence. For the sequence to be operative, however, there must be clear articulation agreements between programmes at two-year colleges and teacher preparation programmes at four-year universities. These agreements allow for smoother transitions for students and help the programmes fit together more seamlessly.

Sources

American Council on Education (1999); Bolam (1995); Bristor, Kinzer, Lapp, & Ridener (2002); Darling- Hammond (1997); Darling-Hammond, Berry, Haselkorn, & Fideler (1999); Genzuk & Baca (1998); Hirsch, Koppich, & Knapp (2001); Hunter-Boykin (1992); Morris & Williamson (2000); Recruiting New Teachers, Inc. (2002); Yasin & Albert (1999).

TEACHER PREPARATION

Effective teacher preparation programmes, both traditional and alternative, must include high standards for entry and require strong content preparation, substantial pedagogical training, and supervised clinical experiences in schools.

International context

There is great diversity in teacher preparation programmes internationally depending in large part on the economic, political, and social contexts that exist within each country. In countries such as China (both mainland and Hong Kong), Indonesia, and Singapore changes in school standards and programmes have influenced the emphasis given to teacher preparation. In many countries, preparation standards are different for teachers preparing to teach in elementary and in secondary schools. Elementary teachers for primary school are often trained in special institutes or teacher training colleges. Secondary teachers are more often trained at universities, increasingly in "consecutive" programmes in which a degree in a subject area is earned prior to undertaking pedagogical training. These differences in preparation requirements between elementary and secondary teachers do not so much reflect a philosophy that elementary teachers need less schooling as much as a concession to issues of supply, demand, and compensation.

Research findings

There are four components of teacher preparation programmes that contribute to their effectiveness. The first is the existence of high standards for entry. Over the past two decades, there have been increases in the entry-level qualifications of students enrolling in teacher education programmes, both in terms of undergraduate grade point average and standardized test scores. The second and third components of effective teacher education programmes are strong content (subject matter) preparation and substantial pedagogical training. Heated debates have occurred as to the relative

importance of these two areas, but essentially both are keys to effective preparation. In terms of content preparation, most researchers believe in the importance of solid subject matter knowledge. However, the idea that more content is better is not always necessarily true. Rather, there may be a point after which additional content courses produce minimal value. What seems to be needed is not necessarily more content preparation but rather having sufficient knowledge of content to teach it well. In addition, teachers need to know how to organize and present the content in a way that makes it accessible for increasingly diverse groups of learners. Shulman (1987) calls this knowledge, "pedagogical content knowledge." The link between content and pedagogical knowledge shapes teachers' decisions about materials, instructional approaches, and assessment. In addition to pedagogical content knowledge, teachers must possess general pedagogical knowledge, including competencies in the areas of classroom management and discipline. To ensure that subject matter expertise and pedagogical expertise receive sufficient emphasis, many programmes in the United States as well as several other countries are being redesigned to allow for a degree in a subject matter field to be obtained during a baccalaureate programme followed by education coursework in a graduate degree programme. The final component of an effective teacher education programme is supervised clinical experiences that are integrated with more formal coursework. Although most pre-service teachers describe their practicum experiences as the most valuable component of their teacher preparation programme, many practicum experiences are narrowly focused and disconnected from students' previous coursework. Clinical experiences are most effective when they are carefully planned, interwoven with coursework, undertaken with highly effective classroom teachers, and carefully supervised. The importance of well-prepared teachers for student learning is unquestionable. Better prepared teachers are more academically able, are rated as more effective by principals, supervisors, and colleagues, and enter and remain in teaching in greater numbers. In contrast, less well prepared teachers have more classroom difficulties, are rated less effective by evaluators and colleagues, and leave at much higher rates at earlier points in their careers. Whether prepared in traditional or alternative teacher education programmes, well prepared teachers are the foundation for ensuring that high quality teachers are working in all classrooms. As mentioned earlier, the ultimate determiner of whether a teacher is "high quality" is student achievement. If the teacher is consistently successful in helping students to achieve at or above expected levels of academic performance, then he or she can be considered effective and of high quality. Research shows that having a sequence of quality teachers can help students overcome the deficits of their home environments.

Policy implications

High standards of quality for teacher preparation programmes are the key to preparing high quality teachers for our schools. Although teacher shortages require implementation of a variety of recruiting strategies, it is essential that all teacher preparation programmes contain high entry standards, a combination of subject matter preparation and pedagogical training, and a long term, supervised clinical practicum. Additionally, more research is needed on efforts to combine subject matter and pedagogical preparation by having teachers in various university departments work together to enhance teacher development. Quality teacher preparation is not the sole responsibility of Colleges of Education; faculty in a variety of departments throughout the university must be involved.

Sources

Allen (2003); American Council on Education (1999); Ben-Peretz (1995); Bristor, Kinzer, Lapp, & Ridener (2002); Cobb (1999); Coleman & DeBey (2000); Darling- Hammond (2000); Darling-Hammond (1997); Galluzzo & Arends (1989); Jarrar (2002); Kolstad, Coker, & Kolstad (1996); Morris & Williamson (2000); Shulman (1987); Wilson, Floden, & Ferrini-Mundy (2001); Hanushek and Rivkin (2004).

TEACHER RETENTION

Teachers are primarily attracted to teaching by intrinsic motivation, but extrinsic factors play a major role in retaining them.

International context

With the exception of the United Kingdom and the United States, where from 30 to 50 percent of teachers leave within the first three to fi ve years, overall attrition rates in many other developed countries are low to negligible: Germany (less than 5 percent); France (insignificant); Hong Kong SAR (less than 10 percent); Australia (18 percent for female teachers in the age group 25-29 years of age; only data available); and Portugal (insignificant). Because the student population in some of these countries (Germany, France, and Portugal) has declined in recent years, teaching jobs are at a premium. As a result, little teacher turnover occurs.Even in those countries in which the attrition rates are quite low, however, there are areas in which teacher turnover is quite high. In Issue 3, schools located in these areas were termed "hard-to-staff schools." Many of these schools enrol large numbers of at-risk students, the very students for whom stability of teachers is perhaps the most important.

Research findings

Most teachers choose to enter teaching because they believe that teaching is important work and contributes significantly to society. An overwhelming majority of new teachers in the United States (80 percent) say that if they were to start over, they would choose teaching again. In spite of these positive reports, the fact remains that somewhere between 30 and 50 percent of new teachers in the United States leave teaching within the first five years. Furthermore, the most academically able new teachers are most likely to leave. Although salaries can make a difference in terms of teacher recruitment, teachers generally report the importance of good working conditions in making a decision to stay in teaching. A number of school organizational factors play a crucial role in teacher turnover, including inadequate support from school administration, student motivation, and discipline problems, and limited teacher input into and influence over school policies. These factors also affect the motivation and commitment of those teachers who stay at the school. There are two kinds of teacher turnover: migration and attrition. Migration refers to teachers leaving one school to take a job at another school, which does not result in an overall permanent loss of teachers. Attrition refers to leaving teaching altogether, either to take another job outside of teaching, for personal reasons as child rearing, health problems, family moves, and retirement. Whether through migration or attrition, teacher turnover is expensive. There is the hidden cost of public investment that goes into tuition and tax support for preparing new teachers, many of whom leave teaching within a few years. In addition, local areas bear the costs of recruiting, inducting, and mentoring new teachers, only to lose many of them through the revolving door of teaching. Also, with so many teachers leaving, there are opportunity costs related to disruption of coherence, continuity, and community that are critical to effective schools, particularly those serving large numbers of at risk students. The most serious long-term consequences of high teacher turnover are loss of teaching quality and lower levels of student achievement. Research indicates that teachers who switch schools or school districts tend to move to schools where student achievement is higher.

Policy implications

While policy efforts are often directed to the supply side of the equation, school staffing problems are primarily the result of the demand created by teachers leaving for reasons other than retirement. Since the primary cause of teacher turnover seems to be due to poor or difficult working conditions, changing the culture of schools should be the primary target of policy efforts. This cultural change would involve the creation of learning communities – schools that are learner-centered, assessment-centered, knowledge-centered, and community-centered. Schools should be places that support learning by teachers, as well as students. According to Ingersoll (2001), cultural change would

"contribute to lower rates of turnover, thus diminish school staffing problems, and ultimately aid the performance of schools."

Sources
Darling-Hammond & Sclan (1996); Darling-Hammond, Berry, Haselkorn, & Fideler (1999); Gold (1996); Ingersoll (2001a, b); McNeil (1988); National Commission on Teaching and America's Future (2003); Stoel & Thant (2002); Hanushek, Kain, & Rivkin (in press).

INDUCTION AND MENTORING PROGRAMMES

Induction support, including well designed mentoring programmes, can improve retention rates for new teachers.

International context
International interest in teacher induction has existed since the 1960s, but only in a relatively few countries. Research conducted since the 1980s has focused on five areas: (a) mentors for novice teachers; (b) release time for both novices and mentors; (c) planned, schoolbased support activities; (d) planned, external support activities; and (e) increased administrative support. In general, when retention is a greater problem, induction receives greater emphasis. New Zealand, for example, encouraged mentor programmes to offset retention and recruitment problems. In Japan in the late 1990s, the focus was on lifelong professional development of teachers, with mentoring being an important aspect.

Research findings
One approach to stemming the high attrition rates in teaching is to redefine novice teacher needs. Consistent with recent research, the fi rst years of teaching need to be viewed as a phase of learning that follows and builds on the learning that occurred prior to entry into the profession. If teachers receive no support during this time, one of two outcomes typically occurs. First, the teacher may leave the profession (attrition) or transfer to other schools in search of support (migration). Second, the teacher may stay in the profession but learn poor practices in an attempt to cope with his or her struggles. Although novice teachers indicate that induction support is important in their development as teachers, there is a great deal of disparity in terms of both the quality and accessibility of induction programmes found in schools. Three reasons can be given for this variability.

- The criteria for participation in mentoring programmes are variable, especially in situations where the programmes are not adequately funded.
- The criteria for the qualifications and support of mentors are also diverse, resulting in a wide variety of expertise.
- The structure of mentoring programmes is varied and is rarely set up in such a way as to be most accessible and convenient for novices or their mentors.

Effective induction programmes must address these areas if they are to meet novice teachers' needs and improve retention rates. Rather than focus on "fix-it" approaches to specific problems (for example, classroom management), effective induction programmes should focus on the subject-specific pedagogical strategies needed by novice teachers to promote and foster student learning. Improving instruction and student learning often proactively addresses the classroom management issues experienced by many new teachers. To focus on such pedagogical issues with novice teachers, mentoring programmes need to be structured to accommodate professional discourse. Mentors need to be selected based on high quality standards and trained to analyze and evaluate instruction effectively and conduct discussions about their findings with novices. Effective mentor programmes also include common planning time for mentors and novices as well as release time available to both teachers so that each can observe in the other's classroom. Finally, incentives should be provided to mentors in an effort to encourage high quality teachers to participate in the

programme. Mentor programmes that provide incentives for attracting mentors and for quality mentor training tend to be more effective. High quality induction programmes are effective in providing the support needed by novice teachers during their first years of teaching. Novice teachers indicate that where such programmes are supported and financed, the guidance offered them has increased the likelihood that they will remain in teaching.

Policy implications

It takes several years to become an effective teacher. Unfortunately, many novice teachers leave the profession much too early. The following recommendations are intended to change this pattern. The first is funding research on models of developmentally staged supervision and induction. Support for teachers that enables them to move along the developmental continuum is also important. The second is funding the development of effective mentor/induction programmes and quality assessments of these programmes. Because student learning is the ultimate goal of classroom instruction, the assessment of mentoring programmes must include the monitoring of student learning. When funding for induction programmes is on a par with that provided for recruitment of new teachers, both teachers and the educational system benefit. The time, effort, and money necessary to mentor novice teachers are substantial. Fortunately, the rewards in terms of teacher retention are also substantial. Investing in the short term yields long-term payoffs in terms of higher quality teachers who remain in the profession longer.

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Authors:
Prof. James M. Cooper, *Professor Emeritus from the Curry School of Education at the University of Virginia, USA*
Dr. (Ms.) Amy Alvarado, *Assistant Professor at the Curry School of Education at the University of Virginia. USA*

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DEVELOPMENT AND STANDARDIZATION OF ATTITUDE TOWARDS USING NEW TECHNOLOGY SCALE (ATUNTS)

S. Rajasekar
Saleena Philpose

INTRODUCTION

Technology tools have become a part and parcel of our life. The introduction of technology to the field of education has completely changed the conventional way of teaching and learning by modifying and making the enormous use of technology in the field of

education. In order to make the best use of our resources, it is essential that all persons engaged in the educational enterprise and especially the teacher should understand adequately the dynamics and mechanism of educational technology and provide the best possible education to the students. Also the favourable attitude of teachers' towards using new technology in teaching will certainly make them use in appropriate situations in teaching and thus measuring of teachers' attitude towards using new technology in teaching is very much needed. As there is no suitable tool available to measure this, the investigators decided to construct and standardize a scale to measure the teachers' attitude towards using new technology in teaching. One among the studies carried out on attitude towards using new technology for the teachers was done by Serhan (2007) in United Arab Emirates in a workshop results that the principals of the schools have positive or favourable attitude towards using new technology in teaching in their tools.

METHODOLOGY

Normative survey method was employed and the data have been collected from the sample of as many as 100 higher secondary school teachers of Ernakulam district, Kerala, using random sampling technique for conducting pilot study.

TOOL DESCRIPTION

As there is not suitable scale available to study the teachers' attitude towards using new technology in teaching, the investigators have decided to construct and standardize a scale to measure the teachers' attitude towards using new technology in teaching. It is of Likert type Scale having as many as 40 statements; out of which 22 were favourably worded and remaining 18 of them were unfavourably worded. The statements were categorized with the experts opinion under the dimensions namely,

Hard ware - Material use in the class room
- Economy of hardware
- Impact of hardware

Soft ware – Soft ware programme
- Economy of software programme
- Impact of software programme

Each statement is set against a five point scale of 'Strongly Agree' , 'Agree', 'Undecided', 'Disagree' and 'Strongly disagree' and weights of 5,4,3,2 and 1 are given in that order for the favourable statements and the scoring is reversed for the unfavourable statements. The scores in this scale range from 40 to 200 in the direction of the most unfavourable to the most favourable.

ITEM ANALYSIS

The individual attitude scores for all the 100 teachers were found out and they were arranged from the highest score to the lowest. Then 25% of the subjects with the highest total scores and 25% of the subjects with the lowest total scores were sorted out for the purpose of item selection. The next step in the construction and standardization of an attitude scale is to find out the 't' value of each statement which forms the basis for item selection. As many as 30 statements having the 't' values equal to or greater than 1.75 were chosen in order to form the final scale. This has as many as 13 favourable and 17

unfavourable statements. An individual score is the sum of the scores of the 30 items. Higher score indicates the favourable attitude towards using new technology in teaching.

RELIABILITY AND VALIDITY

Attitude towards using new technology scale has construct validity as items were selected having the 't' values equal to or more than 1.75 (Edwards, 1975). Its intrinsic validity was found to be 0.98. The reliability of this scale by split-half technique (Consistency) was found to be 0.95. Norms have been established for the attitude towards using new technology scale.

CONCLUSION

Thus the attitude towards using new technology scale has been developed and standardized by the investigators which can be used to measure the teachers' attitude towards using new technology in teaching, which in turn may be helpful for the Government to decide and to plan the in-service training and workshops for the teachers in using new technological instruments in teaching.

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SMILE - LEARNING FRAMEWORK FOR THE KNOWLEDGE AGE

R. K. Bagga
M. S. Bhat
A. Vidya Sagar

INTRODUCTION

Education is the center of the knowledge-based economy, which is characterized by the need for continuous learning and the competencies to apply knowledge to real world tasks. The digital revolution facilitates sharing of codified knowledge through universally accessible digital libraries. It leverages advances in information and communication technologies to create an environment for active, engaging, personalized, collaborative learning that leads to effective knowledge creation and dissemination. Schools need to develop strategies for effective dissemination of knowledge with the vision of life long learning. The management of schools needs to take a strategic approach in developing vision, systems, processes, networks and e-learning materials to empower teachers as well as learners. The strategy should be simple, flexible and responsive to learner's needs and to integrate the efforts of schools, Government and industry to create and share an environment that helps every student to achieve his/her full potential and prepare them for the knowledge age.

LEARNING IN THE KNOWLEDGE AGE

Global networks of the digital age create fluid multi-faceted spaces for learning, which can re-enforce and enhance knowledge dissemination, through the creation of an enriched platform for discourse – an important element of knowledge dissemination. The knowledge-based economy is a hierarchy of networks driven by constant change in technologies and skills that create value. The learning environment is engaging and effective and instruction design is appropriate to the learner, the context and the content with right mix of instructional strategies that optimize the learnability of the content. The content design is learner centric and yet flexible to meet the requirements of a wider audience, which is achieved through simple, shareable learning objects. The content so developed is anchored to establish learning theories and instructional design methodology. Innovation and creativity design and develop a learning environment that offers highly satisfying learning experiences with concepts explained in graphics-rich format with relevant applications and interactivity. The learning principles underlying cognitive, constructive, experiential and motivational learning theories are embedded in a technology enabled networked learning environment through an appropriate content design and delivery. Cognitive learning theory views knowledge acquisition as the outcome of an interaction between new experiences and the structures for understanding that have already been created. So building a framework for understanding becomes the learner's key cognitive challenge. Theories of neuroscience, brain based learning and multiple intelligences suggest that learning environment should be learner centric to accommodate different learning styles and preferences with emphasis on learner's social context. The emphasis should be on whole ideas, real life experiences and solving real world problems. Constructivist learning environments are learner centric and facilitate knowledge construction in individual contexts through social negotiation, collaboration and experience with due consideration for previous knowledge constructions, beliefs and attitudes of the learner. Teachers play the role of guide, tutor, coach and facilitator by creating an environment with tools and activities that encourage meta cognition, self analysis, regulation, reflection and awareness. Self directed learning through inquiry, exploration and problem solving promotes higher order thinking and deep understanding. Collaborative learning with appreciation for multiple perspectives and alternate view points promotes understanding of conceptual interrelatedness required in multidisciplinary learning to work on projects related to real world context. Experiential learning theory suggests that the learning environment should promote active participation of student in the learning process and has control over its nature and direction and should be based on practical, social, real life situations. This theory also emphasizes the importance of learning to learn and openness to change. Self-evaluation is recommended for assessing progress or success and shall be integrated with the learning process. Experiential learning is participative, interactive and applied. Interactive multimedia supported by innovations in technology has given way to rich interactive applications where the learner is relatively free to explore at her own pace and pursue thought in a free and non-linear fashion. So experiential learning theory and Kolb's learning styles model suggest a learner centric and interactive environment with lot of scope for learning by doing. Motivational learning theories suggest that the learning environment should accommodate strategies to create and sustain attention, relevance, confidence and satisfaction. The four motivational factors that influence learning in technology enabled learning environments are: interest in or attention to the media rich, interactive content; perceived relevance of the content; self-confidence in the ability to access and use the content and resulting satisfaction from successful access and usefulness. **SMILE** integrates the learning principles to facilitate active learning, learning with understanding and learning how to learn.

NEED FOR SMILE

SMILE is an acronym for simple, motivating, interactive and learner centric environment. It integrates the cognitive, constructive, experiential and motivational learning theories to create a learning environment and transforms learning and teaching by harnessing technology to implement established learning theories with creativity and innovation.

Learning with understanding:

There exists a gap in the education content provision market with respect to active learning concept. There is a limited (if any) attempt at structuring and presentation of content in a manner that addresses the retention of information for a real application. The idea of presenting subject with multiple links (Examples and Demos) with the way students think is virtually ignored. SMILE intends to build (substance) and deliver (sophistication) content that encourages active learning.

Learn with SMILE

Creating a highly motivating learning environment calls for re-purposing content to make it interesting and engaging. The content design shall be learner centric and yet flexible to meet the requirements of a wider audience, which may be achieved through simple, shareable learning objects. The content developed shall be anchored to the established learning theories and instructional design methodology to explain learning points in interesting, absorbing and imaginative ways, with emphasis on conceptual understanding, retention and application of knowledge in real life situations. E-learning is most effective when it is combined with more traditional forms of instruction, often called a "blended approach", providing students with as many learning opportunities as possible. E-learning offers the teacher a whole new set of teaching tools that include digital libraries, multimedia simulations and assessment tools. Innovation and creativity are required to design and develop a learning environment that offers highly satisfying on-line learning experiences. Concepts presented in graphics-rich format with relevant applications and interactivity creates an engaging learning environment. Self–paced learning, anywhere, anytime learning, extends the classroom boundaries and the learning experience.

WWK: Portal for SMILE

"Wonder Whiz Kids" creates an innovative, inquiry based, interactive learning environment to acquire knowledge, gain insights and think intuitively. WWK creates SMILE by integrating cognitive, constructive, experiential and motivational learning theories. WWK is for students of age 12 years and above, parents, teachers and all those who are interested in promotion of science and scientific thinking. The main features of this portal are visualization, concept related content sequencing, interactive and collaborative learning, self-assessment, games and simulations. The content would be informative, interesting and interactive to sustain and enhance the span of attention while helping the student to understand the fundamental concepts of science and apply them gainfully to real world situations. This facilitates students to think effectively - observing, classifying, applying, analyzing, and evaluating. Students would be different in the following ways when they finish this courseware: *Firm understanding of the basics of the subject, *Think critically, and &Ready to apply the concepts to real world problems

Architecture of SMILE

SMILE is like a wikipedia for schools with instruction design anchored in learning theories and principles. Technology enables creation of SMILE in a blended learning environment where in teacher will be at the heart of transformation to empower and enrich students as well as teachers. A well-defined framework, which is flexible and scalable, is required to accommodate and update the knowledge base on a continuous basis. The environment needs to be dynamic and invite contribution from everyone to enrich the knowledge base. Hence a web2.0 framework is required to create SMILE for schools and sharing the SMILE. The framework shall facilitate sharing of knowledge and best practices while defining and directing the teacher's contribution to the content, lesson plan, feedback in creative and innovative ways while navigating through templates and

content repositories. Students can be guided through the learning process and content with appropriate, self-directed navigation and interactive participation for a satisfying and engaging learning experience. Web server in a school with SMILE, presents the course content effectively to enable active learning.

How do we share the SMILE?

E-Learning initiative requires know-how, access to state-of-the-art technologies, design of content, preparation of appropriate teaching materials and the support of a set of educators and trainers. We should create networked partnerships among schools to share e-learning resources, and to develop and adopt good practice with the new possibilities presented by greater school-community links. We have to identify projects to develop productive collaboration and identify the optimal conditions for partnerships including partnership with government and industry.

Benefits of Sharing the SMILE

The future of education is promising as school learning in the coming years stands to be fruitful, innovative and above all rewarding for teachers and learners. The future needs to be created with vision and conviction that these new goals are worth achieving, along with support and commitment from all.

Teachers

Innovation in Teaching: Teachers will find their profession joyful and enriching in an environment that stimulates innovation and creativity in designing and creating engaging learning experiences. The teacher can design and develop a lecture presentation based on the lesson plan by aligning the structure and sequence of concepts to be learnt with the learning objectives. Teacher selects relevant media objects to be used in the presentation such as graphics, images, pictures, applets, animations, audio or video files from the media objects repository and interesting videos from the lecture repository to create a motivating and engaging learning experience. Teachers can introduce interactive simulations at an appropriate time during the lecture to encourage the active involvement of students and help them learn by experiencing the outcome of experiments in varying conditions to create interesting and satisfying learning experiences which improve the confidence of the students to apply what they have learnt for solving real life problems in entirely new situations. For example: The teacher can explain the core concepts of light using the 'Applets' given in WWK and its applications which are discussed in the 'Explore' and 'Frontiers' feature.

Course Management: The teacher accesses the course information and course documents in the course content pertaining to a class and customizes the lesson plan available in the repository to suit the profile of students in the class. Lesson plan contains the method of delivery, and the specific goals and timelines associated to the delivery of lesson content. A lesson plan is a teacher's detailed description of the course of instruction for an individual lesson and will be a useful guide for the teachers, in that it tells what to do, in what order to do it, and what procedure to use in teaching the material of a lesson. Lesson plan is built on the lesson outline available in the database and includes all the details required for the presentation. The framework and templates help the teacher to maintain quality, consistency and usability in presentation with user-friendly navigation.

Student-centered Guidance: Teacher refers to the learner profile available in the database and addresses the learner specific issues like learning prerequisites, learning style, preferences, attitude and interests to help the child improve his/her level of understanding. Once the topic is completed, the teacher prepares an assessment and advises the students to take the test by accessing the 'Quiz' link in WWK, the results of which are stored in the 'Assessment' table. The teacher sees the performance of the students and estimates the level of understanding. If the teacher feels that some concepts are not clear to the students, she clarifies doubts of the students and improves the lecture

with more examples and better explanation if the students still have difficulty in understanding. Teachers upload the homework and assignments in homework shelf of 'To do list'. The students can access the 'To do list' to download the homework sheets and complete them and resubmit them in the 'Homework shelf'. The teacher discusses and reviews the homework sheets and clarifies the doubts in the class. The teacher can assign projects to group of students who need to explore, inquire, reflect, analyze the information related to the project from various sources. The members of the group need to work as a team, under the guidance of the teacher who defines the problem/project and directs them throughout the whole process. The teacher acts as a guide and encourages the students to learn from one another and from sources beyond the classroom by interacting with experts and participating in discussion forums. This facilitates the students to gain the skills to synthesize and integrate multiple perspectives and views into a whole idea to solve real life problems and teachers would find this a highly challenging and enriching experience.

Professional Development: Teachers will get the opportunity to contribute and share the share the knowledge in a networked environment and develop professionally. Teachers can access the lecture repository and best practices for the desired topic to identify appropriate examples, analogies and applications that capture the imagination of students with relevance in their daily life. He can refer to course information and documents in the course content repository, lecture repository, reference books and hyperlinks to educational portals mentioned in the course content to prepare the lecture material which is simple and relevant to facilitate learning with understanding. Teacher can discuss with the other teachers and subject matter experts about the topic through chat, blogs or discussion forums through 'Community' link in WWK. The experts can share their ideas and contribute by uploading the text files, audio, video files related to the topic via 'Contribute' link in WWK. The teacher can then finalizes his/her lecture material and uploads the prepared lecture into the lecture repository, which can be shared by other teachers also.

Students

Enjoy learning: Students can access the course content well before they attend the class and prepare themselves for a highly interactive session. They can access the content repository in the school server as well educational portals suggested in the course content to enrich their knowledge. They will find media rich content much easier to understand, interesting and interactive so that they enjoy the learning process and would be ready to participate in the class with enthusiasm and confidence. Projects, quizzes and games help students to test their own understanding of the concepts and their ability to apply multiple concepts in problem solving.

Active Learning: Students will be actively involved in the learning process by participating in discussion and interaction in the classroom as well as working on projects. They would have an opportunity to work on interactive simulations available in the content and media objects to gain more insights and perform experiments, which are otherwise not possible in a typical laboratory. They can understand the relationships between different parameters in varying conditions and learn to apply the concepts learnt to real world problems. They can actively find answers to many doubts that arise during learning by searching the educational portals with features like Know Why, Key word search, Explore and Ask the Expert.

Learning how to Learn: Students can have learning flexibility to learn at their own pace and their convenience besides learning according to their preferred learning style. They can access the content in a non linear way so that they can explore the subject matter based on their level of understanding and aptitude with the help of keyword links, explore, hyperlinks and search. Self-assessment with quizzes along with worked out examples and solutions helps students to learn and develop awareness of their own competence, shortcomings and their preferred learning style.

Project based learning also helps students to develop meta cognition, that is ability to think about one's own thinking.

Collaborative Learning: Students who work on projects discuss the project among them and gather the information by referring to the related sites and study material already mentioned by the teacher. The group works from home after school hours through application sharing and conferencing. They discuss and share the ideas through e-mail, chat and discussion forums. They even can get the ideas and suggestions from the experts or peers through blogs and discussion forums. The completed project is uploaded in the 'Projects' table. The teacher calls for an open discussion of the projects done by each group and evaluates the projects and assigns grades to them. This helps students to develop communication skills, team spirit and the ability to appreciate diverse view points and perspectives while working towards a solution.

Parents

The parents know about the courses offered through Curricula. They know about their child's performance through accessing the assessments and projects done by the child and the grades assigned to the child. Parents can participate in the child's learning process by expressing their opinions and ideas for improvement of their child's performance or the overall development of the school through blogs, discussion forums. Parents can be aware of the scheduled dates of important events by accessing the 'To do list'. They can assist their children in doing projects, assignments and homework. They even can chat with the teachers regarding their child. Parents can even contribute to the knowledge repository by uploading the content. They can actively participate in their child's development and find it highly rewarding, exciting, enriching and satisfying experience.

Proposed strategy: Share the SMILE

The proposed strategy is derived from the strategic vision and purpose that every student should have the opportunity to learn with smile and achieve his/her full potential. ICT in digital age can be leveraged for mobilization of intelligence in a networked world. We can create great value to the learning community of students and teachers by adopting strategies that profit from intelligence migration. Key elements of such a strategy are collaboration, content, access and technology and they need to be integrated in a coherent manner to create and share the SMILE. Collaboration is the common thread connecting all the key elements to enhance the effectiveness of each of those elements. Networked collaborative environment facilitates rewiring information chains and communities to connect experts and institutions with diverse skills and knowledge, to share best practices, communicate and collaborate. So the learning strategies in new economy should aim at creating value by sharing a common infrastructure and resources. We should create networked partnerships among schools to share e-learning resources, and to develop and adopt good practice with the new possibilities presented by greater school-community links. We have to identify projects to develop productive collaboration and identify the optimal conditions for partnerships including partnership with government and industry. Schools will find it more economical to combine and share resources including teacher skills and technology and systems to combine resources. We can look forward to a national school system with shared resources. Share the SMILE strategy empowers teachers to be creative and innovative in teaching by orchestration of varied combinations of learning objects to suit different learning styles and create a unique offering appropriate to the context, the learner and the content. This strategy enables creation of an ideal learning environment, which has the

qualities of being high in acceptable challenge; having active participation of learners and being a place where learners can experience a relaxed alertness.

MAIN STUDY AND SURVEY

The main study was conducted in six secondary schools in Hyderabad, three of them are following central board syllabus, two of them following State board syllabus and the remaining one following ICSE syllabus. Conducted a survey with representative sample of teachers and students from private as well as government schools to examine the opinions and preferences of students and teachers in creating a learning environment that facilitates learning with smile, learning with understanding and learning how to learn enabling life long learning. A workshop on "The implementation of SMILE and its benefits" with the aid of Wonder whiz kids portal was conducted. An intense and interactive discussion on a selected topic in physical sciences has been carried out in schools for three to four hours. Multimedia presentations like applets and animations have been extensively used to explore and explain the subject matter. Real world applications of the concepts have been elaborated during the workshop. Students have actively participated in exploring and understanding the subject matter. All the students and teachers who participated in the workshop were given a questionnaire at the end of the workshop to elicit their opinion on SMILE.

Data collection procedure

As the selected educational institutes offer secondary education, random sampling method is adopted to collect data from the students to avoid sampling bias. A letter, which explains the purpose of the research study and a confirmation to keep the names of the participants confidential, was enclosed along with each questionnaire. The student questionnaires were handed over to the respective class teachers of all the six educational institutes participated in the study. They in turn distributed the questionnaires to the students with an advice to self-administer the questionnaires. It was requested that questionnaires be filled at a stretch. They were also asked to return the filled in questionnaires to the class teacher. The researcher offered support / clarifications if needed by them. It was assessed that the students took 20 – 25 minutes to fill in the questionnaire. The researcher collected the filled in questionnaires from the class teachers. There were totally 1500 questionnaires distributed and 1470 filled in questionnaires were received back. Out of 1470 filled in questionnaires, one questionnaire was found blank and the other two were not having proper data. Hence 1467 filled in valid questionnaires were used in the study, thus getting a 97.8% rate of return. 107 teachers from the same schools gave their opinion on various aspects of learning in schools by answering the questionnaire provided to them. It took one month to complete the final study in six educational institutes.

Data analysis Procedure

The data collected using the structured questionnaires for students and teachers were checked for inconsistencies and computerized by creating structure in standard database package (MS-Access). Quantitative analysis of data has been carried out using the statistical software, Statistical Package for Social Scientists (SPSS Version 10.0) and basic frequency tables and bi-variant cross-tabulations for selected variables have been generated. For example, cross-tabulations were run to study the association between variables related to learning environment (SMILE), benefits, strategic objectives and key elements of the strategy.

Analysis of data collected from students

Data collected from all the 1467 students from various Government as well as private schools by using questionnaire were analysed for appropriate grouping of similar factors. Data has been grouped as key elements of strategy, benefits of the strategy /strategic objectives, strategic actions, and the proposed strategy (share the SMILE) and the results are presented in the form of bar charts. Binary logistic regression models were run on the data collected from students using SPSS in order

to study the relationship/influence of (i) key elements of strategy and strategic actions on learning environment (SMILE), (ii) learning environment (SMILE) on benefits of strategy, strategic objectives, and (iii) key elements of strategy and strategic actions on benefits of strategy/ strategic objectives.

Reliability

Cronbach's coefficient "Alpha" of reliability has been computed for the questionnaire collected from students and teachers. The alpha co-efficiencies are computed for aggregate sample (n = 1467 in case of students and n=107 in case of teachers). The alpha value **0.73** obtained for students and **0.732** obtained for teachers indicates the high internal consistency of the questionnaire used in the study.

Findings

Key Findings from student's data:

Findings from analysis of the students' data suggest that technology assisted blended learning enabled by access to accredited, enriching content in a networked environment supported by training in educational technologies facilitates creation of a simple, motivating, interactive and learner-centric environment. Teacher plays an important role in making learning a joyful experience. The strategic objectives are enjoy learning, active learning, learning how to learn and collaborative learning. Binary logistic regression has been carried out on SPSS to find out the influence of attributes of SMILE on strategic objectives. The results demonstrate a significant influence of SMILE on the strategic objectives. The binary logistic regression of the opinion of students was also carried out by considering the attributes of the "SMILE" namely "simple", "motivating"," interactive" and "learner centric" as dependent variables with key elements of strategy and strategic actions as independent variables. It has been found that the proposed strategic actions such as open access to educational portals with accredited and appropriate content, networking of educational institutions, blended learning and training on technologies have significant influence in creating SMILE.

Key findings from teacher's data

Teacher will be at the heart of transformation in learning to facilitate every student to enjoy learning and achieve his/her potential. Students enjoy learning and learn with understanding, while teachers would be more innovative in a simple, motivating, interactive and collaborative environment. SMILE facilitates teachers to achieve the objectives such as making learning a joyful experience, active involvement of students in the learning process, enabling students to learn how to learn, learn to share and share to learn by learning together. Technology assisted learning also helps teachers to find more time for interaction with students and find the whole experience satisfying and rewarding. Media rich accredited content with simulations and applets help them to be innovative and creative in teaching and there by enjoy teaching. Collaboration helps teachers in being creative and innovative in teaching and thereby find their profession exciting and enriching. Benefits of SMILE include active learning, learning flexibility, collaborative learning and innovation in teaching. Teachers agreed that the strategic actions proposed such as access to accredited educational portals, networking of schools, blended learning with flexibility in curriculum and assessment and training for familiarity and usage of educational technologies and tools helps them to cerate SMILE and achieve the strategic objectives. There is need for reforms in curriculum and examination system with emphasis on student's learning with understanding. Common national curriculum with flexibility given to the teachers as well as students in the assessment of learning, selection of content, method of teaching and way of learning to suit the learner and the context. Infrastructure and access to ICT should be improved by providing broad band internet with the associated computer hardware and software to every class room. Educational satellite programs should be made available with video lectures from subject matter experts to facilitate professional

development of teachers. Technical support for the network infrastructure and training in educational technologies are required in every school.

CONCLUSIONS

Teacher is at the heart of the learning strategy and hence teachers' commitment is essential for the successful implementation of the strategy. Teachers need to share the vision and drive the strategy to empower students and themselves. Technology should be used only as a means of enabling effective learning along with new paradigms of content design and delivery appropriate to the delivery medium. Technology should be integrated into the learning environment with a sound appreciation of how people learn and how technology can be leveraged to enhance learning experiences. We need to understand learning processes and the impact of ICT on those processes, to create an effective, supportive learning environment that is Simple, Motivating, Interactive and Learner-centric. Majority of the students and teachers agreed that SMILE helps them to enjoy learning and learn with understanding. We need to create and share the SMILE to facilitate every student to learn with smile and achieve his/her full potential by learning how to learn to actively pursue life long learning. SMILE shall provide access to accredited, appropriate and affordable content in a collaborative networked learning environment. Sharing the SMILE facilitates students communicate extensively with their peers and teachers and develop a community of learners who share their knowledge, there by extending learning opportunities to all. Open access to national archive of engaging and accredited e-learning content through educational portals, connecting schools into a collaborative networked environment to share best practices and educational resources, reforms in curriculum and assessment aligned with student centered learning, center for excellence in educational technologies for professional development of teachers are strategic actions to be pursued to create and share the SMILE.

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STATUS OF TEACHER EDUCATION IN UTTARAKHAND

Sunita Godiyal
R. C. Nautiyal

INTRODUCTION

One of the three new born states of Indian Union, Uttarakhand (born on 09 November, 2000) a hilly state was formally a part of Uttar Pradesh. Its' population is 84, 89,349 (Census 2001) and total literacy rate is 72.29% whereas male literacy is 84.01% and female literacy is 60.26%. The number of different level schools (Government aided) are:

No. of Primary Schools	13,795
No. of Junior High Schools	3,487
No. of High Schools	686
No. of Intermediate Schools	907
No. of special schools for handicapped	13

Besides these government aided schools, there are many public schools with an international reputation.

STATUS OF SECONDARY TEACHER EDUCATION PROGRAMME

Three universities of the state two government and one private run education departments conducting secondary teacher education programme. The two state universities have M.Ed. programme too. Both state universities namely HNBG University and Kumaon University were

established in 1973 in Garhwal and Kumaon regions with three campuses for Garhwal University at Tehri, Srinagar and Pauri and with two campuses for Kumaon University at Nainital and Almora. H.N.B. Garhwal University has 40 self financed B.Ed. Colleges. The number of self-financed B.Ed. colleges in Kumaon University is colleges is 11. The Kumaon University has established education faculty at Almora Campus whereas in the HNB Garhwal University education faculty is spread over two campuses at Tehri and Srinagar with a distance of 110 kms between them. Himgiri Nabh Univerity branch of Talim Research Foundation, Ahmadabad is the third university running B.Ed. programme established in 2003 at Dehradun. The H.N.B. Garhwal University plans to conduct B.Ed. self financed programme at its third campus at Pauri in the session 2008-09 charging a fee Rs.40, 000.00. Of late, the state government initiated a programme of running B.Ed. self financed programme in the current session in some 20 government colleges controlled by it in order to thwart the excesses committed by self financed private institutions on the students and teachers. The fee structure in the self financed colleges decided by the state government is Rs.40, 000.00 for government/state quota i.e. 50% of the total seats, Rs.50, 000.00 for self financed institution quota i.e. rest of the seats of which 15% sets will be N.R.I. seats with a fee of Rs.60, 000.00 for each seat. Teachers appointed under self-financed scheme in government B.Ed. college will be paid Rs.20, 000.00 each while the principal or head of the department will be drawing Rs.30, 000.00 fixed per month. The regular colleges of B.Ed. government and private have nominal fee structure and therefore, attract applicants securing higher merit in the test. All the three universities follow own entrance test. The state universities follow U.G.C. norms in the selection of teachers. The B.Ed. colleges being run under self-financed scheme recruit teachers as per the N.C.T.E. norms. It is obvious that the universities have highly qualified and experienced faculty being paid in accordance with U.G.C. guidelines. Well-trained teachers turnout from these universities most of whom get absorbed in government and private sectors. The teacher student ratio in these departments is 1:10 (now 1:15), but a unit of 100 seats is allotted to each institution. Each extra unit granted to an institution increases the number of B.Ed. students by a hundred. The overall intake in all these institutions viz. university departments, government colleges, private affiliated colleges and self financed institutions was about 6425 (825 in regular colleges and departments) and 5700 in self financed institutions (including 100 seats of Himgri Nab University) in session 2007-08. The number will go up to 8425 in the current session 2008-09. This number is inclusive of the proposed 18 B.Ed department in colleges and one university self financed department. The B.Ed. syllabus prescribed by the universities consists of the following two parts: A) Theory - 600 Marks & B) Practical Teaching - 200 Marks.The theory papers are (I) Teacher in Emerging Indian Society; (II) Development of Learner and Teaching Learning Process; (III) Development of Educational Systems in India; (IV) Essentials of Educational Technology and Management; (V) School Teaching Subject – I; and (VI) School Teaching Subject – II. These six papers are compulsory and each carries 100 marks. The paper II allots 80 marks for the written examination, 10 marks each assigned for internal assessment and for educational psychology practical, which include psychology tests and experiments. In case of each of the remaining five papers, 10 marks are assigned for internal assessment whereas 90 marks are assigned for final written examination of three hours at the end of the academic session. The evaluation of these papers is internal as well as external. In case of the 7th paper, which is elective one , any one of the following courses would be chosen (i) Library science (ii) Physical education (iii) Environment education (iv) Guidance and counseling, (v) Population education, (vi) Elementary education (vii) Alternative education, (viii) Educational administration management, (ix) Education and mental measurement (x) Teaching of values. Each paper carries 100 marks. Practical or skill in teaching is also evaluated both internally and externally. The external examination is of 150 marks and 50 marks are meant for sessional works, which is distributed as (a) Hand work (b) Scouting and guiding (c) First aid (d) Co-curricular activities (e) Physical education. Minimum pass percentage in each paper in theory is 30% but in aggregate it is 36%. Division and marks in theory, in skill in teaching and in sessional works are calculated and shown separately in the marks card.

INGOU (Indra Gandhi National Open University) also offers B.Ed. course through distance mode. The INGOU regional office is located at Dehradun. The total number of the INGOU study centers in the state are 08, out of which 05 centres are in Garhwal region (Dehradun, Rishikesh, Srinagar, Kotdwara and Gopeshwar) and three other in Kumaon region (Pithoragarh, Almora and Haldwani). The INGOU organizes an entrance test for B.Ed. course in June or July of every year. INGOU B.Ed. course is meant for the untrained teachers with two years teaching experience and who are working in primary schools as teacher or as Shiksha Mitra and Shiksha Bandhu in remote areas of the state. The duration of the IGNOU B.Ed course is two years. One unit of B.Ed student comprises of 100 students who are given a contact programme of 13 days in the month of June every year. The main objective of the programme is to cover the backlog of a large number of untrained teachers working in primary and elementary schools of the state.

STATUS OF PRIMARY TEACHER EDUCATION PRORAMME

State Council for Educational Research and Training (SCERT) was established in the state at Narendra Nagar a town of Tehri district in 2001. The SCERT, besides managing the teacher education conducted at 10 DIETs and three mini DIETs organizes from time to time short and medium term courses and training for teachers of primary education. The mini DIETs are run in the three districts of Rudraprayag, Champawat and Bageshwar where the number of teachers is less than 2000. The DIETs have been set-up to train field inspecting staff as well as teacher educator at the basic or primary level. The DIETs were set-up to strive for bringing excellence in the training of teachers and providing academic support and educational leadership for academic improvement through efficient in-service and pre-service teacher training conduction of education studies, surveys, development of modules in different subjects and development and transaction of teacher education curriculum suiting to children's and local needs. The DIETs also organize special training course namely special B.T.C. or Visistha B.T.C. for those teachers who possess a B.Ed. degree but are working in primary or Basic Schools. The course duration is one year which is divided into two parts. The teacher trainees teach in schools and complete 40 lessons and other curricular activities under the supervision of Head of the School in the first six months. The teachers are required to complete their training in DIETs in the second six months. The teacher trainee gets a fixed salary Rs.8000.00 per month during the training period. Successful completion of training entitles them to full scale of pay and permanent teacher status at primary level. The State has there are 4 N.T.T. (Nursery Teachers Training) centers running and preparing teachers for nursery schools or K.G. sections of public schools.

The District institute of Education and training run B.T.C. regular and special (Vishistha B.T.C) B.T.C. Courses. In case of B.T.C. Regular, selection is made through entrance test by the state Education Department Graduates is eligible for training. Training tenure is 2 years out of which, 45 days are set or teaching practice and the rest for theory teaching. Age limit for females is 19-32 years; for males is19-27 years and male and female ratio is 50:50. In case of Visistha B.T.C. (Special B.T.C), candidates already having B.Ed., L.T., C. P. Ed. and B. P. Ed., are chosen year wise on the basic of the year of training .Training tenure is One year – Six months for theory and six months for teaching practice. Age limit is 19-40 year for both male and female candidates and male and female ratio is 70:30 or whatever is decided for female reservation. On the completion of B.T.C. training the trainees become eligible for appointment as a teacher in primary or elementary schools within the state. Since the year 1999 no entrance test has been organized by the state. So presently no regular B.T.C program of any sort has been taken up by the DIETs.The B.T.C. syllabus prescribed by the Education Department of the state consists of the following there parts: Part I : Theory papers. Total marks 325; Part II: Practice Teaching –Total marks 300; and Part III: Evaluation of Project work, curricular activities and activities related with each paper – 500 marks. The practical teaching is of 300 marks. The skill in teaching is also evaluated by the head

master of the school where the practice teaching in doing besides the teacher educators from DIETs. The trainees have to prepare a total number of 50 lesson plans in all the categories of teaching. The syllabus for B.T.C. program includes many activities and project works carrying a total number of 500 marks. The head master's report, school records and criticism books are also evaluated for the final assessment of the trainees. The projects work of the trainees is evaluated by the Curriculum Development and Evaluation Department of the DIETs. The DIETs have highly qualified and experienced teaching staff. Most of them possess a post graduation, M.Ed. and Ph.D. degrees. The teacher educators are appointed in the scale of pay of Rs. 6500-200-10500 in accordance with state Government's guidelines.

NURSERY TEACHERS TRAINING PROGRAMME (N.T.T)

The course includes 5 compulsory theory papers related with early childhood and is of 100 marks each. Practice teaching requires minimum 25 lesson plans. Teaching practical examination has 200 marks. Division and marks in theory, in teaching skill and in sessional work and calculated and shown separately in the marks card.

SUGGESTIONS

Some suggestions for improvement in quality of teacher education in the state are given below:

1. Professional preparation of teacher educators and trainee teachers need to be made more relevant and effective.
2. For admission to M.Ed. degree of a university experience in teaching need to be considered as already been recommended by the Higher Education Commission and the Education Commission.
3. M. Phil degree course should be started for brininging excellence in the field of teacher education.
4. The government and university should develop some procedure of regular monitoring of the faculty positions in the self-financed and other regular institutions offering B.Ed. courses. So that the required numbers of eligible teachers is maintained by the institutions. It is a common acknowledge that students are fleeced by the self financed B.Ed. institution. It is urgently required to devise some ways to curb this menace.
5. B.Ed. being run in colleges and universities is maintained as one of the many subjects taught by them. The constraints of time, space and freedom required to run the course as per N.C.T.E. norms in these conditions compel the teacher training departments to adjust their programme with the time table, environment of and space provided by the institution leading to the production of half-backed teachers. B.Ed. training programmes in regular colleges need to be run as an independent course that the department and not other extraneous factors be held responsible for the quality of their teachers.

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TEACHER EDUCATION IN MANIPUR

Sumana Paul
Kh. Malemnganbi

INTRODUCTION

As early as in 1906, the need for giving training to the teachers was felt in Manipur. During that time, the Department of Education organized a training course for teachers which was of 4 months duration for the improvement of the method of teaching. Twenty primary school teachers attended

the course. This was the beginning of teacher education in Manipur. Imparting training to secondary school teacher began in the year 1928, when one of the teachers of Johnstone High School, Imphal was deputed to undergo B.T. Training outside the state. This marked the beginning of training programme for secondary school teachers. After 1947, the State Government took a keen interest in teacher training programmes. A humble beginning of training the primary and middle school teachers in Manipur was made in 1952-53 by starting Normal Institute at Imphal. The Normal Training School was substituted by Basic Training Institute in 1956. Since then, the Basic Training Institute (BTI) was giving training to elementary school teachers in the state. By 1958-59, there were one Junior Basic Training Institute and one Hindi Training Institute in the State with 80 enrolments in Basic Training and 10 in Hindi Training Institute. Training of Secondary School teacher was done by opening a BT Section in the D.M College in 1959. The B.T course was intended for graduate teacher and Certificate in Teaching (CT) course was for the undergraduate teachers. The B.T section at D.M College was converted into full-fledged training college and named as P.G.T. (Post Graduate Training College) which was affiliated to Guwahati University on 15th September 1972. Subsequently in 17th January 1997 the P.G.T. College is converted as D.M.College of Teacher Education as a member College of Dhanamanjuri Group of Colleges which is affiliated to Manipur University. After the implementation of National Policy of Education 1986, District Institutes of Educational Training (DIET) has been established in every district of the state to provide pre-service and in-service training to primary school teachers.

SECONDARY TEACHER EDUCATION

Secondary Teacher Education programmes (B. Ed. Courses) are provided by 5 colleges of teacher education. The course pattern is as follows: Part A consists of core papers: I: Teacher in Emerging Indian Society; II: Development of Learner and Teaching-Learning Process; III: Development of Education in India; and IV: Educational Technology and Management. Part B consists of Optional Papers V & VI, any two method subjects out of: English, Social Sciences, Mathematics, and Physical and Biological Science. Part C is Elective Group: Additional Specialization, Paper VIII: Any one special paper - Educational and Mental Measurement ; and Educational Management and Administration. Part D. consists of Field Based Experience: Classroom Teaching and Practical Work

ELEMENTARY SCHOOL TEACHER EDUCATION

Elementary School Teacher Education is done in District Institute Education and Training (DIET). There are as many as 8 (eight) DIETs in Manipur. These DIETs play a very important role in providing quality teacher's education. District Institute of Education and Training (DIETs) are under the control of SCERT. Primary Schools teacher working in the institutions in different districts of Manipur can join the in-service teacher training programmes conducted by DIETs. The aim of DIET is to provide the latest methods of teaching and learning. Since information technology is included in the new syllabus and text books for class I-V have been introduced from the session in 2004-2005 and the teachers are to be oriented to acquaint them the knowledge of teaching new text books. The Course is divided into three major curricular areas. Foundation Course – 2 papers of 100 marks each -Education in Emerging India and Educational Psychology. Stage Relevant Specialization (6 papers of 100 marks each (I –V I) and 3 papers of 50 marks each (VII-IX) - Teacher Functions at the Elementary stages, Teaching of English; Mother Tongue (Manipuri) or Non-Formal Education; Mathematics; Environmental Studies I (Social Studies); Environmental Studies II (Science); Health and Physical Education; Art Education; and Work Experience. (C) Practicum consists of Practice of Teaching Skills (Micro-Teaching approach) – 40 marks; Internship in Teaching – 50 marks; Observation of lessons – 10 marks; and Final practice teaching of one lesson – 50 marks.

Some of the common problems faced by the DIETs are related to: Manpower, finance, non-availability of teacher educators. Many employees are under contract basis. Another problem is non-payment of Salaries regularly to the employees of DIETs working on contract basis. There are 154 Block Resource Centres (RBCs), 156 Cluster Resources Centres (CRCs) functioning under the direct control of SCERT, SSA and DIETs respectively.

PRE-PRIMARY SCHOOL TEACHER EDUCATION

Pre-Primary Teacher Education programme in Manipur is at the initial stage. The training centres run by the State Government and NGOs give on-job training courses to Anganwadi workers and helpers. The Central Social Welfare Board also organizes Orientation courses at regular intervals for the benefit of Anganwadi helpers. There are more than 7 (seven) pre-primary teacher training institute in Manipur which are under the control of private agency. These institutions are developing day by day and contributing a lot in the field of pre-primary education.

CONCLUSION

Preparation of well equipped and qualified teachers is must for brighter future of Manipur. In the context of present society, peace is the most important objectives of the human beings. It is a must for all the developmental activities in any society. Thus it seems pertinent that peace education be incorporated in the teacher education curriculum to train the would be teachers to teach school students about peace. Again for promoting the principles of 'Inclusive education' special education should also be added in the curriculum of Teacher Education Programme. Moreover, in order to develop professionalism among teacher trainees the duration of B.Ed training programme may be enhanced to two academic sessions.

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EFFECTIVENESS OF SYNECTICS MODEL OF TEACHING IN ENHANCING CREATIVITY, ACADEMIC ACHIEVEMENT AND ACHIEVEMENT MOTIVATION OF LEARNERS

Sesadeba Pany

INTRODUCTION

The growth and development of human civilization since the pre-historic era till today is the result of explosion of knowledge and innovations in different fields. All such innovations are directly or indirectly related to human ingenuity and creative potentialities. As such, the creative individuals are the treasure of any nation. Creativity as a psychological construct is more or less present in each and every human being which is to be unfolded and nourished through a well planned and purposive system of education. Creativity is not only concerned with the creation of novel products but it is very much concerned with innovation of original solutions to problems at hand. As such, creative potentialities of the individuals need be developed among all the individuals through appropriate means for the greater benefit of the society. Education as we know is the most effective means for development of the innate abilities of the individuals, appropriate educational programmes need be

evolved in the form of teaching techniques for the development of creative ability of the children. It may be mentioned here that the present day classroom transaction system provides little opportunity for creative work. The materials presented to the pupils are very much polished and finished products providing very little scope to think critically and divergently. Therefore, the teachers need be trained in appropriate creative teaching techniques to develop the same among the children. The synectics model of teaching is one such approach specifically meant for enhancing creativity. The term synectics refers to putting irrelevant things together. Such task is generally accomplished by use of metaphorical exercises the keys to development of conceptual distance and ultimately contributing towards development of creative potential. This model of teaching generally consists of two approaches such as Making Familiar Strange (MFS) and Making Strange Familiar (MSF). On the MSF approach a number of research evidences are found in India and abroad as developing creative talent but a few research evidences are there on MFS approach especially in Indian context in developing creative talent of the learners. Therefore, to support its credibility in favour of enhancing creative ability an attempt has been mode through the present investigation to study the effectiveness of the synectics model, model of teaching in enhancing the creative thinking abilities of the children along with their academic achievement and achievement motivation as the present day educational system gives emphasis on integrated development of the children.

OBJECTIVES

The study was undertaken with the following objectives;

*To study the effectiveness of the Making Familiar Strange (MFS) approach of synectics model of teaching on development of learners' creative thinking ability,

*To study the impact of MFS approach of Synectic model of teaching on development of learners achievement in the subject general science and

*To study the impacts of MFS approach of Synectic model of teaching on achievement motivation of the learners.

HYPOTHESES

The following hypotheses were formulated and tested in the process of investigation through appropriate techniques;

1 The Making Familiar Strange (MFS) approach of synectics model of teaching has no significant impact on the creative thinking ability of the learners.

2 The MFS approach of synectics model of teaching has no significant impact on learners' achievement in General Science.

3 The MFS approach of teaching has no significant impact on learners' achievement motivation.

METHODOLOGY

The investigator of the present study followed the non-equivalent control group design of quasi-experimental type. For the purpose of experimentation two primary schools of Bhubaneswar city having almost similar facility were randomly selected out of four apparently similar type of schools with regard to their management, infrastructural facility; teacher and student strength. All the 35 subjects of the experimental group and 36 subjects of the control group were subjected to the teaching of 18 lessons on General science. The experimental group was taught by the investigator himself by following the MFS approach of Synectics model of teaching whereas the control group was taught by their regular class teacher by following the traditional method of teaching. Further, for the purpose of the assessing creative ability, academic achievement and achievement motivation the investigator had used the verbal and non-verbal test of creativity as developed and standardized by Baquer Mehdi (1985); comprehensive achievement test on General science and achievement motivation inventory as developed and standardized by the investigator himself. The subjects of both the groups were pre and post tested on all the dependent variables such as; creativity, academic

achievement and achievement motivation. The pretest scores of both the control and experimental groups were found almost equivalent when tested for their normality of distribution. As such, all the hypotheses were tested by means as applying the 't' test statistical technique.

MAJOR FINDINGS

The major findings of the study are presented briefly in the following: The Making Familiar Strange (MFS) approach of synectics model of teaching was found to be effective in enhancing the creative thinking ability of the learners.The MFS approach of synectics model of teaching did not prove to be effective in enhancing the achievement motivation of the learners.The MFS approach of synectics model of teaching did not put any significant impact upon the achievement of the learners in the subject General science.

CONCLUSION

Creativity as one of the important psychological construct is found among the entire individual in different degrees. It is not only essential for individual development rather has substantial contribution towards the growth and development of civilization from various angles, Therefore, attempts through appropriate teaching strategies like synectics model of teaching should be taken for enhancing such ability among the learners. It may also be suggested that steps may be taken to apply this approach with necessary modification for developing the academic achievement of the learners in different curricular areas and achievement motivation of the learners. However, the results of the present study do not encourage the use of the MFS approach in teaching with the objectives of enhancing academic achievement and achievement motivation.

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TEACHER'S PERCEPTION ON THE LEARNING DIFFICULTIES AND DEVELOPMENT OF ENGLISH LANGUAGE SKILLS AMONG HIGH SCHOOL STUDENTS: INFLUENCE OF CLASSROOM TEACHING AND WORKBOOKS

S. Paul Douglas
G. Srinivasa Rao
M. Eswara Rao
Madanu Rayappa

INTRODUCTION

English occupies an important place in the world today. Every country, every citizen of the world prefers to learn English. English has become the channel of communication in the present scenario in all sorts of communication gadgets operating with English as the medium. Much of the communication at the administrative level and organisational level is being done in English with little emphasis on regional or local languages. English is playing a significant role in the overall the development of the individual and society to share knowledge, information, beliefs and feelings. Countries like India, are introducing English at a later stage in the school education. With the stress on Mother Tongue, Environmental Education, Mathematics and other life skills taking a major part in the early part of education, much of the education in Government and Public schools, English is being introduced at a later stage. This is influencing the overall language development of the individual. The effect of mother tongue or local native language, which the student is learning at initial stages, is influencing the English language skills of the learning both in articulation, reading, writing and pronunciation. So the method adopted by the teachers is crucial in teaching better English language skills to the youngsters. This article makes an in depth analysis

of the effect of methods of teaching and the workbooks on the overall language development of the students studying in the schools. A number of research studies have been carried out to improve the English language teaching in primary schools and high schools in the background of English as a second language. Not much has been really brought from research into practice in the schools. Much of the research is confined only to the reports but not propagated to the practitioners. Hence, the present study has been taken up to study the Influences of Classroom Teaching and Workbooks on the learning difficulties and development of English Language in the school children.

OBJECTIVES OF THE STUDY

*To study the learning difficulties and the development of English Language skills in Secondary School students.

*To study the influence of classroom teaching on the development of English Language Skills

*To study of the influence of workbooks on the development of English Language Skills.

*To compare the perceptions of teachers based on variables like Gender, School Management, Medium of Instruction, Professional Qualification and Experience on the development of English language skills.

METHODOLOGY

A descriptive survey type of research has been conducted for this study. The information has been collected from the teachers on the difficulties faced by the students and the development of English Language and on the influence of classroom teaching and workbooks.

Tool, Data Collection and Scoring:

An opinionnaire consisting of 30 items has been used for the collection of data. The final tool was prepared from a tool prepared with 40 items and based on the item analysis and difficulty index, discrimination index and the reliability of the tool and was finalised and adopted for the purpose. Each of the test item of the tool had three options namely, Agree, Undecided and Decided and the teachers are advised to choose any one option. The data were collected from a total of 50 teachers in Vizianagaram District of Andhra Pradesh who are teaching for the Classes VI and VII. A stratified random sampling technique was used to choose the sample, as this study was of a very limited duration. The responses of the subjects were quantified by duly assigning the numeral values of 3, 2, 1 to responses Agree, Undecided and Disagree in the case of positive statements and the values were reversed in the case of negative statements. The data were entered using MS-Excel and the analysis was done using SPSS13.0 software. Statistical measures such as Arithmetic Mean, Standard Deviation, significance of t-ratios and Analysis of Variance (ANOVA) were calculated for analysis.

Limitations

Keeping in view of the time of the study, the study is limited to finding out the opinions of students from only the town of Vizianagaram District in Andhra Pradesh only. Only 50 teachers who are teaching for classes VI and VII are chosen for this study as these two classes are most crucial in learning the fundamental concepts and learning skills in English language. The information is collected only from the teachers

FINDINGS

This study reveals that teachers are under the opinion that there is a significant influence of method of teaching and the nature of workbooks and the way they are being used in the classroom on the overall development of English language development in the students. Almost all the teachers felt that only the classroom practices, methods of teaching, communication in the classroom and effective utilisation of the textbooks and workbooks only provide the effective learning of English in all areas i.e. reading, writing, listening and speaking. The teachers are under the opinion that

there is a tremendous influence of mother tongue on learning English in these students and the effect of non usage of English other than the classroom is one of the major factors influencing the English language development. There is significant difference among the teachers working in English and Telugu Medium students on the overall development of English language in the students. The learning difficulties are less and language development is more in English Medium Students when compared to Telugu medium students. This is an indication that the medium of instruction is playing a pivotal role in the English language development in the students. Regarding the process of instruction, the teachers are under the perception that writing is more useful to learn the language only for writing purpose. Much of the workbooks are providing the students the writing part of language but not the oral communication part of the English. This shows that, there is a lot of opportunity for the teacher to use oral communication in the classroom to develop listening, reading and speaking skills in the classroom, which the teacher has to develop through various methods and modes of instruction. More opportunities should be provided to students to develop pronunciation, intonation, stress, etc. in the language teaching.The study also found out that there is no significant difference in the perception of teachers based on their gender i.e. male and female, management of school i.e. Government, Private and Aided Schools and qualification of the teacher i.e. D.Ed. B.Ed. or M.Ed. on the language development of the child. This is an indication that any of the factors like gender, nature of the school or the qualification of the teachers are influencing except the method of teaching, nature of activities in the classroom, nature of use of workbooks and the exercises therein and the medium of instruction. This is showing a significant contribution that the method of instruction is playing a significant role in developing English language in the students.

EDUCATIONAL IMPLICATIONS:

This study has a greater influence on the initiation of various modes of activities in the language teaching at primary and secondary stages. As the need for English education is increasing day by day and the need for the eligible students who can communicate in effective and correct English is increasing day by day, this study is throwing light on the formational years and the methods of teaching. As per this study, the teacher has to play a greater and pivotal role in developing English language and communication skills in the early years of schooling. The correct communication styles in classroom teaching, usage of English language in and out of the classroom and the usage of better tools are very much important to minimise the learning difficulties in English language teaching and in enhancing the language development in the students.

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ATTITUDE TOWARDS MATHEMATICS OF XI STANDARD STUDENTS IN TRICHY DISTRICT

R. Ravanan
A. Blessing Mary
Julie

INTRODUCTION

The main aim of education is to develop harmonious personality of learner. Education should make pupils fit to live with. In all modern human societies the young are prepared for their future roles through educational process which may be in the form of examination.

Schools are always transitional institutions. They prepare pupils for education or for occupation or for family life and so on. Mathematics in the real sense is a science of space and quantity that helps in solving the problems of life needing numeration and calculation. It provides opportunities for the intellectual gymnastic of the man's inherent powers. Teaching of Mathematics essentially helps the students in acquiring essential mathematics knowledge, skills, interests and attitudes. And it is necessary for and helpful in the realisation of the practical or utilitarian value, disciplinary value and cultural value. Mathematics education trains students to make and use measurements and includes the study of computer programming, algebra, statistics, geometry and calculus. Attitude is a mental set or disposition, readiness to respond and the psychological basis of attitudes, their permanence, their learned nature and their evaluative character. It includes object things, peoples, places, ideas or situations. Attitudes are not just a passive result of past experience; instead they impel behavior and guide its form and manner. The components of attitudes are : i) a cognitive component (opinion information or strength of belief or disbelief; (ii). an affective component (emotional component of like (or) dislike) and (iii) an action (co nature behavioural component of habit or readiness to respond).

NEED FOR THE STUDY

In every class there are three types of students: 1. Those who perform very well, 2. Those who never perform well and 3. Those who can perform well; but do not fare well actually. The pupils of the third category may have the general intelligence to do well, but owing to several factors, they do not fare well in mathematics. Special attention will help the pupils of that category to bring out their abilities in full. If this is done in schools, the society may have to lose eminent scholars in mathematics and great mathematicians. The influence of the teacher on the pupil is not confined to imparting of subject knowledge alone, but goes further to play a part in the total development of the child. The influence of the teacher has been studied on the attitude to wards mathematics. In the present curriculum every attempt in being made to include mathematics as an integral part of school education to develop the speed and accuracy in doing numerical problems, an ability for abstract, an ability of logical reasoning, an ability for spatial concepts and so on. However the mathematics achievement education in schools and colleges largely do not cater to aims and objectives of mathematics education as specified by many educational commissions and committee. Students mostly prepare themselves for passing examinations. Further more the teachers and parents were concerned with relatively Low achievement of students in mathematics and a number of studies had looked into the causes of such poor performance. Attitude is really the disposition of an individual to learn and to develop some proficiency in some particular area. Actually it helps to acquire knowledge in a particular area and on the basis of interest the future performance of a child can be predicted. A child under the pressure of parents or teachers selecting a professional course will be a failure in that area without attitude in that field. So it is the responsibility of teachers and parents to guide their children according to their attitude. Modern education must not restrict itself to developing more rote-learning, but also nurture the ability of children to produce relevant new meaning to their class-room experiences. Hence along with promoting educational achievement it is obligatory on the part of the school to equip the child with the skill of logical thinking and reasoning which will enable him to cope effectively with whatever state of world be will encounter later in life. Curriculum which impacts training in these is the need of the hour. Though these are documented evidences about the effects of factors like gender, region, stream of study, medium of instruction, Type of School Management and socio economic status, on Attitude towards Mathematics more investigations are to be done in the field.

OBJECTIVES

*To investigate the difference of Male and Female due to their Attitude towards Mathematics.
*To investigate the difference of Region due to their Attitude towards Mathematics
*To investigate the difference of Steam of Study due to their Attitude towards Mathematics
*To investigate the difference of Medium of Instruction due to their Attitude towards Mathematics
*To investigate the difference scores of Types of Management due to their Attitude towards Mathematics
*To investigate the difference of Socio - Economic Status due Attitude towards Mathematics

HYPOTHESES OF THE STUDY

1. There is no significant difference in Attitude towards Mathematics of XI standard students in Trichy District, owing to differences in their gender, region, stream of study, medium of instruction, type of school management and socio – economic status
2. There is no significant association between Attitudes towards Mathematics of XI standards students in Trichy District in their Gender, Region, Stream of Study, Medium of Instruction, Type of School Management and Socio - Economic Status

LIMITATIONS OF THE STUDY

The study was limited to only 10 schools in Trichy District. The study was restricted to four Government schools, three Aided and three Unaided school from both Rural and Urban areas. The sample was limited to 450 students of XI only. Standardized test materials alone were used in this investigation. The investigation did not develop any psychological tests for investigative purpose.

RECENT STUDIES RELATED TO ATTITUDE TOWARDS MATHEMATICS

Saha (2007) conducted a study Gender, Attitude to Mathematics, cognitive style and Achievement in Mathematics. It was found that all the three contributes to statistically significant difference in achievement in mathematics. Thomas (2006) conducted a study to determine the Attitude towards Mathematics and achievement by combining co-operative learning strategies with instruction delivered using an Integrated Learning System (ILS). Sixty five fifth grade students were randomly divided in two groups, co-operative and individual. Result revealed that students using on ILS for mathematics instruction performed better on standardised tests and were more positive towards math and they worked in co-operative groups than when they worked on the same individually. Xin Ma and Jianymin (2004) conducted a study to determine the casual ordering between Attitude towards Mathematics and achievement in mathematics of secondary school students. Results showed the achievement demonstrated casual predominance over attitude across the entire secondary school. Gender difference in this casual relationship was not found but elite status in mathematics moderated this casual relationship.

DESIGN OF THE STUDY

Descriptive methods of study were though to be appropriate to analyses the impact of Attitude towards Mathematics, related to selected variables are Gender, Region, Type of School Management, Stream of Study, Medium of Instruction and Socio Economic Status. The sample constituted 450 XI standard students drawn from 11 schools from Government, Aided and Unaided in Trichy district. Random sampling was used to select the sample. The tools used for the present study was Mathematics attitude scale prepared and standardized by Dr. C. Dandapani**.** The data collected for the present investigation was under the category of Mathematics Attitude tool administered to the students by the investigator. After data was collected and classified, it was subjected to statistical tests of significances using SPSS package for testing the hypothesis for the

investigator. The methods of analysis were used students' t test, ANOVA, Chi-square test and Karl Pearson's product Moment.

Reliability and Validity

The reliability and the validity of the tool for the present study are computed as 0.70 and 0.83 respectively. The co-efficient of split half reliability is 0.85 and validity with the achievement test in mathematics is determined to be 0.80. The sample for this study was selected randomly. Representative sample of 450 students who have joined in XI standard (English and Tail Medium) were selected from Government Aided and Unaided schools.

MAJOR FINDINGS OF THE STUDY

There is no significant difference in Attitude towards Mathematics of XI standard students in Trichy District, owing to differences in their Gender, Region and Medium of Instruction. There is significant difference in Attitude towards Mathematics of XI standard students in Trichy District, owing to differences in their Stream of Study, Types of School Management and Socio Economic Status. There is no significant association between Attitudes towards Mathematics of XI standards students in Trichy. District regarding their Gender and Medium of Instruction. There is significant association between Attitudes towards Mathematics of XI standards students in Trichy District with their Region, Stream of Study, Types of School Management and Socio Economic Status

EDUCATIONAL IMPLICATIONS

Education is a process of human enlightenment and empowerment for the achievement of a better quality of life. In India the quality improvement of mathematics education is the greater need of today the quality of education can be measured through achievement and psychomotor domains. To achieve this goal positive mathematics attitude should be highly motivated to develop their skills like mathematics aptitude, logical thinking, reasoning etc. Mathematics education is crucial to the entire developmental process of the country. Mathematics is poorly tough and badly learnt, it is little more than burdening the mind with dead information, and it could degenerate even into a new superstition. Mathematics has added a new dimension to education and to its role in the life of nation, but central to all this is the quality of education. This finding should enlighten educational authorities to devise instructional strategies across the curriculum to enhance the Mathematics Attitude of Science students. Also learning experiences provided in the class rooms should include such activities which provide opportunities for students to bring out analogies, to classify, to draw inferences, to arrive at generalizations and so on. The Government as well as Aided educational institutions should take steps to develop the Attitude of students. The present study revealed that the students of Low Socio- Economic Status are better in Mathematics Attitude. It is important that Management, Government, Parents and well wishers take active interest in the development of other students. This in turn will go a long way in the uplifting the society.

CONCLUSION

The purpose of the present investigation was to study the mathematics attitude with reference to some selected variables and the study indicated significant relationship among the variables. The study may find some usefulness in the field of mathematics education and the finding of this study may serve as a data base for the future research.

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ATTITUDE OF M. ED. STUDENTS TOWARDS RESEARCH

K. V. Sridevi

INTRODUCTION

In the fast moving world research has become important intellectual equipment for the human beings to change their life style according to the needs and necessities of the society. Research opens new frontiers in all the fields like medicine, agriculture, space, business, and also in Education. One of the important objectives of teacher education is to create awareness and understanding of importance of research in the classroom. Thus, Action research became a part of the syllabus where in, the students are expected to prepare action plans and implement the same during their practice teaching sessions. This, in turn is strengthened in the Post Graduate Progamme of Education where in Dissertation was made a compulsory component by University of Mysore. The main aim of the M.Ed course is to provide capabilities of serving community in general and developing research attitude and skills among the students in specific. These students in future have to promote interest towards research among the B.Ed. students when they take up their jobs as teacher educators.

Research is the systematic process of collecting and analyzing information to increase our understanding of the phenomenon under study. It is the function of the researcher to contribute to the understanding of the phenomenon and to communicate that understanding to others. It provides rewarding learning experiences for students, and producing graduates capable of high personal and professional achievement. The strategy underpinning the courses like M.Ed. is to provide a framework for the acquisition and progressive development of knowledge throughout the learning experience, to stimulate inquiry into subjects and to develop personal skills which will equip students for life-long learning. Educational research is often undertaken for the sake of Degree and not with a goal to make a significant discovery. It is also commented that research has become imitative, repetitive; only oriented towards western culture and philosophy; instrument oriented rather than goal oriented; statistics dependent in place of mastery of knowledge domain; and lastly is not out of interest, aptitude of the students. Other factors that affect the quality of research conducted by the students are facilities available, mentors, departmental activities, attitude of both staff and students towards research, confidence etc. Attitude towards research of the staff enhances enthusiasm and credibility among the students. One's attitude influences

mentally how a person mentally approaches research including all the work and human interactions related to that research. A positive attitude enables a person to solve the problem quickly where as, a negative attitude hampers the efforts in research both technical proficiency and in terms of interpersonal relationships that research entails.

OBJECTIVES

1.To investigate M.Ed. students attitude towards research.
2.To study the attitudinal difference among M.Ed. students with respect to gender.
3To study the attitudinal difference among M.Ed. students with respect to marital status.
4.To study the attitudinal difference in the attitude of M.Ed. students towards research with respect to their stream (Arts/Science).

HYPOTHESES

1.M.Ed. students do possess a favorable attitude towards research.
2.There is no significant difference in the attitude of M.Ed. students towards research with respect to gender.
3.There is no significant difference in the attitude of M.Ed. students towards research with respect to marital status.
4.There is no significant difference in the attitude of M.Ed. students towards research with respect to their stream (Arts/Science).

METHOD

Sample

Descriptive survey method was followed. Purposive sampling technique was employed to select the sample. The sample comprised of all the M.Ed. students of University of Mysore, Manasagangothri which included 71 male and 63 female students. Overall 134 students were considered as the sample of the study.

Tools

Personal data sheet by the investigator: It consists of general information about the subject's age, gender (male/female), marital status (Married/unmarried), and stream (Arts/Science).
Attitude towards research scale: It is developed by the investigator using Likert's Summative technique. The items were based on General aspects of research, utilitarian value of research, research process especially data collection procedures etc. Over all, the scale comprises 42 items including 21 positive and 21 negative items which are to be rated on five point rating scale.

ANALYSIS AND INTERPRETATION

The scores obtained from the attitude scales were tabulated and analysed using SPSS 10 version. Statistical techniques like percentage, mean, standard deviation and t test were used to analyse the data. Frequencies and percentages of students falling under favorable, uncertain and unfavourable attitudes were tabulated. Out of 134 students, 120 of them were found to have favourable attitude where as only two students have exhibited unfavourable attitude. In other words, majority of the students (92%) were found to have favourable attitude towards research. Hence the hypothesis 1 is accepted. Student 't' test was

conducted to find the significance of mean difference in the attitudes of students with respect to gender, marital status and stream. Analysis revealed that there is no significant difference in the attitude of students with respect to gender as the't' value (1.519) is not significant at 0.05 level. Hence the hypothesis 2 is accepted. Both male and female students do not differ in their attitudes. It was also revealed from the analysis that there is no difference in the attitude towards research among married and unmarried students, as the't' value (0.507) was found not significant at 0.05 level. Hence the null hypothesis 2 is accepted and retained. Interestingly, even irrespective of the subjects or streams to which they belong to, all the students possess similar favorable attitudes. In other words, there is no significant difference between science and arts students with respect their attitudes. The 't' value (0.217) supported the same, as it is not significant at 0.05 level. Thus irrespective of the gender, stream, marital status, all the students have favorable attitude.The reasons for the above findings may be the institutional freedom, democratic atmosphere, dedicated and highly motivating staff; facilities provided to them like library; personal interest, awareness of future prospects etc.

CONCLUSION

All the teacher education programmes must emphasise to develop a research outlook among the teacher trainees irrespective of the level of the programmes. It may be in the form of action research in B.Ed. or a Dissertation in M.Ed. programme. In future it would help them in solving their classroom related problems in specific and in serving the society in general. One of the main objectives of these programmes must be to develop a favorable attitude towards research among them, so that they would soar the heights of excellence successfully in their future.

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TEACHER EFFICACY IN DIFFERENT MANAGEMENT TYPES OF SECONDARY SCHOOLS

Y. N. Sridhar
Hamid Reza Razavi

INTRODUCTION

Teacher is an integral component of the educational system. He is intimately connected with society, and is conditioned by the ethos and culture of the society in which he lives.. The constitutional goals, the directive principles of the state policy, the socio-economic problems, the growth of knowledge, the emerging expectations and the changes operating in education, etc. influences the teacher to a large extent in building up of his efficacy. To be able to discharge such a high responsibility, it is very necessary that the teacher must be conscious of his efficacy. His behavior should indicate his attempt to do his job properly and keep on improving his efficacy. His personality must reflect characteristics of good citizenship, so that s/he may transmit the same to

the younger generation. Teacher efficacy is related to student achievement and teacher effectiveness. Teachers' sense of "efficacy" is teachers' judgments about their abilities to promote students' learning. Because teachers' sense of efficacy is a belief that affects teaching and learning, teacher educators, administrators, and policy makers are interested in the study of various dimensions of efficacy. In the present study teacher efficacy in different types of schools in Mysore is examined. In the present study, the relationship between teachers' efficacy in two dimensions (PE and GTE) with different types of school management in Mysore district is examined. Specifically, gender, qualification, age, teacher experience and attentiveness influence teachers' judgments about their own efficacy. Hence teachers' efficacies with respect to these demographic variables in different types of secondary school were also examined.

RESEARCH QUESTIONS

1. Do the Teacher Efficacy scores of the teachers are different with respect to type of school Mysore city?
2. Is there any significant difference in the Teacher Efficacy of secondary school teachers with respect to, gender, age, educational level, subject taught and teaching experience?

Sample

Out of a population of 81 secondary schools and 392 teachers in Mysore city (south), 61 secondary schools and 256 teachers responded to the questionnaire. The population consists of: Male teachers = 67(26.2%); female teachers= 189(73.8%). Number of teachers in type of schools: government teachers = 25(9.8%): private unaided teachers =62 (24.2%); private aided teachers= 71(27.7%); C.B.S.E (central Board of Secondary Education) teachers = 40(15.6%); Minority (Muslims school) teachers= 28(10.9%); Navodaya Vidyalayas Samiti (NVS) teachers = 30(11.7%).

Instruments

Two questionnaires are used in the present study. They are : Teacher Efficacy Scale questionnaire (TES) and Demographic variables inventory. T E S Questionnaire was designed by Woolfolk and Hoy (1990) to measure two dimensions of teacher efficacy. The instrument includes 12 statements to measure PE and 10 statements to measure GTE. Teachers were asked to rate the statements on a 6-point scale. The rating was scored on *Likert-type scale.* The scale ranges from 1 for "strongly disagree" to 6 for "strongly agree". A neutral point was not provided, to force the teachers to give a specific response that reflected their extend agreement with each item. The reliability was measured by researcher using split half method. The obtained alpha coefficient of 0.95 for the personal efficacy and 0.63 for the general teaching efficacy, assures that instrument has adequate reliability. The validity of the instrument was got rated by experts by the researcher and was found to be an average of 9points on a 10 point rating scale. Teachers were explained about the procedure of marking on rating scale. The questionnaire was got back after half an hour time. Some of the teachers did not respond. The subjects were requested to clarify all their doubts in answering the items and to complete all the questions, in each scale. Coded data were analyzed with the help of SPSS software. ANOVA and t-test was used to compare the teacher efficacy with types of school and demographic variables.

RESULTS

Question 1: Do the Teacher Efficacy scores of the teachers are different with respect to type of school Mysore city? One way ANOVA result, showed a significant difference between groups in personal efficacy. F (5,250) =5.258 P=0.05. The t-test scores exhibits a significant difference between Navodaya schools and government **(4.20),** unaided (**4.84)**, aided (**5.37)** schools. There was no significant difference between Navodaya schools and Minority, C.B.S.E school.One way ANOVA results, showed no significant differences between of General Teaching Efficacy F (5,250) =2.093 P= .067 with types of school.

Question two: Is there any significant difference in teacher efficacy of secondary school teachers with respect to, gender, age, qualification level, teaching experience and subject taught? One way ANOVA analysis produced a non significant F scores in Personal Efficacy for Age-F (3,252) =.321, P= .810, Gender- F (1,254) =2.34 P=0.13. Qualification- F (2,253) =.78 P= .46 Teacher experience- F (2,253) =.73 P= .98, subject taught- F (1,254) =.09 P=0.77 . The analysis exhibit higher mean scores of personal efficacy, for Below 30 years of age (mean=49.89) and above 51years of age (mean=49.82), than teacher with 31-40 years (Mean=48.24) and 41-50 years (Mean=47.04).The data exhibit higher mean score of personal efficacy in female (49.54) teachers than in male (45.58) teachers. The analysis exhibits higher mean score of personal efficacy of teachers with master degree (mean=49.52) than teacher with bachelor degree (Mean=47.42).The analysis exhibits higher mean score of personal efficacy of teachers with experience 21 years and above (mean=50.94) than teacher with experience 11-20 years (Mean=47.17) and Below 10 year (Mean=48.64).The analysis exhibit higher mean score of personal efficacy in science teachers (48.23**)** than in arts teachers (48.91**). O**ne way ANOVA analysis produced a non significant F scores in General Teaching Efficacy for Age- F (3,252) =1.15 , P= .33, Gender- F (1,254) =0.94 P=0.33, Qualification Level- F (2,253) =0.62 P= 0.46. Teacher experience- F (2,253) =.14 P= .87, Subject taught- F (1,254) =0.44 P=0.51. The analysis exhibits higher mean scores of general teaching efficacy, for 41-50 years of age (mean=37.48) and above 51years of age (mean=36.34), than teacher with below 31 years (Mean=35.12) and 31-40 years (Mean=35.85).The analysis exhibits higher mean score of GTE in female (36.39**)** teachers than in male (35.27**)** teachers. Analysis exhibits higher mean score of GTE of teachers with bachelor degree (mean=36.15) than teacher with master degree (Mean=35.97).The analysis exhibits higher mean score of GTE of teachers with experience Below 10year (mean=36.35) than teacher with experience 11-20 years (Mean=36.08) and 21 years and above (Mean=35.61).The analysis exhibits higher mean score of GTE in science teachers (36.50**)** than in arts teachers (35.82**).**

DISCUSSIONS

Significant relationship exists between personal efficacy and types of school. Navodaya teachers' scores on personal efficacy were found higher then teachers of other schools. It seems likely that these teachers are satisfied with their job and posses required classroom management skills to teach effectively. On the other hand student achievement can also influence personal efficacy. Admissions to Navodaya schools are done by a common entrance examination. This ensures admission of quality students. Most of the students of Navodaya schools are talented than the other school students. Hence higher PE in both teachers and students can be expected. However there was no significant difference between GTE and types of schools. This indicates that GTE is independent of type of secondary schools. Mean score of GTE of CBSE School teachers are found to be higher than other type of schools. The CBSE syllabus is found to be of higher standard compared with the syllabus followed in all other types of schools. Due to this depth of knowledge in the subjects of teachers in CBSE schools should be naturally higher than that in teachers of other types of schools. Hence the GTE of CBSE teachers are found to be more. Very few insignificant reports are available with regard to TE and types of schools. Teachers below 30 years and above 51 years of age, teachers with Masters' degree, and teachers with experience more than 21 years, teachers teaching science and female teachers are found to have higher Personal Efficacy and also higher General Teaching Efficacy than their counterparts in respective groups.

CONCLUSION

Navodaya teachers' PE is better than that of other type of schools. They are satisfied with their job and posses required classroom management skills to teach effectively. Definition of general teaching efficacy tends to focus on the ability of teachers to help or reach students beyond the external factors that influence the learning process. Hence type of school causes no influence on GTE. Depth of knowledge of teachers in CBSE schools is found to be higher than that in teachers

of other types of schools. Hence the GTE of CBSE teachers are found to be more. Teacher efficacy studies connected with various types of schools are found in insignificant number and hence a detailed study of this area is very much essential. Female teachers are better in both personal efficacy and teaching efficacy than male teacher. Females are generally more inclined to attribute success to what they had done in the classroom. The research on the relationship between years of experience, educational level and Teacher Efficacy is inconclusive since we get varied results and needs further study.

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VIRTUAL TOUR IN LEARNING SOCIAL SCIENCE AT STANDARD V- IS A BOON

G. Singravelu

INTRODUCTION

Primary Education is to be urgently revamped to achieve the competency of the young learners to acquire the suitable and desirable citizen by modifying their behaviours in the way of transacting the effective way of innovative teaching methods in the classroom. Learning Social science is necessary at primary stage to perceive the present situation of the politics, constitution of country, geographical knowledge, historical places, monuments, some famous temples, lakes. seas etc. Acquiring knowledge from books is not in effective for the young learners of standard V. Using albums, pictures and maps failed to achieve the goal of the learners at the younger stage. Everyday teacher endeavors to use activity oriented learning and play way methods in teaching Social science which were not fruitful to acquire the expected competency in social science. Sarva Siksha Abhiayan trains the teachers in effective manner to achieve the competency of the learners up to upper primary level. By the S.S.A programme, dropout rate should be reduced and education for all should be reached in nook and corner in India. Aim and goal of S.S.A. may get only through finding and implementing innovative methods.

Teachers of primary level are using different approaches in teaching Social science to the learners of standard V, which was not effective to achieve the expected competency. Arranging tour to the young children is the effective method for teaching Social science, in which children can enjoy the scenery and learn the subject matter with mixing of experience of their friends. Learners are able to learn everything in person through tour programme. Planning tour and executing in younger children is difficult to the teachers and administrators, the same visual amalgamated experience can be provided with in the four walls of the classroom by displaying DVD and video cassette. In the virtual learning, children can enjoy and learn whatever they learn in the real tour. It is suitable to the rural schools also and reduces physical and mental strain of the young learners and teachers. Hence the researcher found out the innovative method of Virtual Tour in the classroom of Social science at primary level.

OBJECTIVES

*To assess the problems of the young learners using the present methods of learning Social science at standard V in pooluvapatti panchayat union primary school, Coimbatore.
*To find out the significant difference between the post test of control group and post test of Experimental group in achievement mean scores of the pupils in Social science.
*To find out the significant difference between the pre test of Experimental group and post test of Experimental group in achievement mean scores of the pupils in Social science.
*To assess the impact of Virtual Tour in learning Social science.

HYPOTHESES

1. There is no significant difference between the post test of control group and post test experimental group in achievement mean scores of the pupil of standard V in Panchayat union primary school, Pooluvapatti
2. There is no significant difference between the pre test of Experimental group and post test of Experimental group in achievement mean scores of the pupils in Social science.
3. Learning Social science by using Virtual Tour is more effective than existing approaches.

OPERATIONAL DEFINITIONS

Virtual Tour refers to use the Video cassettes in displaying in the class room, children need not go to the places, the real effect of the tour is created in the screen. Social science is a subject prescribed for the children of standard V.

METHOD OF STUDY

Experimental method (control group and experimental method)was adopted for the study.

Sample design

Eighty pupils of standard V from panchayat union primary school at Pooluvapatti in Coimbatore were selected as sample for the study.

Tools

The investigator's self made Achievement test was used for the pretests and post tests of both control groups and experimental groups. The same question was used for both pre and post tests to evaluate the pupils' skills in Social science through objective types of question which carried one mark for each question and contained 25 marks. Pupils could answer appropriately by using the virtual learning in learning Social science.

PROCEDURES

Phase 1: Identification of the problems of the learners of standard V in achieving mastery in Social science in existing methods through administering pretest.
Phase 2: The problem of the learners in learning Social science was discussed with the class teachers
Phase 3: Discussion about available educational technology in the school.
Phase 4: Preparation of the tool with the help of the class teacher
Phase 5: Administrating pretests to the both groups of the children in Social science and evaluating the test.
Phase 6: Preparation of taking snaps and collecting more information from internet in the format of DVD/Video cassette.
Phase 7: Editing the scenery.
Phase 8: Practicing the new methods in the classroom
Phase9: Evaluating the new method.
Phase 10: Administering the post test towards the learners of virtual learning.

Data collection

The researcher administered pretest to the pupils with the help of the teachers. The question paper and response sheets were given to the individual learners and collected and evaluated learning obstacles of the learners were identified by the pretest. The causes of low achievement by unsuitable methods were found out. The Virtual Tour was displayed in the classroom based on the subject matter. The posttest was administered and the effectiveness of the Virtual Tour was found.

Data Analysis
Statistical technique 't' was applied for the study.

Hypothesis testing
Hypothesis 1: The calculated 't' value is (9.65) greater than table value (1.99). Hence null hypothesis is rejected at 0.05 levels. Hence there is significant difference between the post test of control group and post test of experimental group in achievement mean scores of the learners in social science.

Hypothesis 2: The calculated 't' value is (8.67) greater than table value (1.99). Hence null hypothesis is rejected at 0.05 levels. Hence there is significant difference between the pre test of Experimental group and post test experimental group in achievement mean scores of the learners in social science.
Hypothesis 3. The above findings prove and confirm the Virtual Tour is more effective than traditional approaches in learning social science at standard V.

FINDINGS
There is significance difference between the post test of control group and post test experimental group in achievement mean scores of the pupil of standard V in learning social science through Virtual Tour in panchayat union primary school, Pooluvapatti There is no significant difference between the pre test of Experimental group and post test of Experimental group in achievement mean scores of the pupils in Social science. Learning Social science by using Virtual Tour gives significant improvement in in learning social science.

EDUCATIONAL IMPLICATIONS:
Virtual Tour can be extended to upper primary level secondary level and higher secondary level.
It can be encouraged to implement to use in adult education. It may be implemented in teachers education. It may be implemented in alternative school. Slow learners can improve by using it. It may be more supportive to promote Sarva Siksha abiyan in grass root level.

CONCLUSION
The study reveals that the learners of standard V at panchayat union, primary school of Pooluvapatti, had problems in learning social science by using traditional approaches. Hence it will be more supportive to promote primary education.

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COMPARATIVE STUDY OF CLIMATE OF OPENNESS OF CORESPONDENCE COURSES IN ORISSA AND IGNOU

Kalpalata Patri

INTRODUCTION

Initially christened as correspondence courses and now developed to distance education and open learning system, the concept has become an important alternative of higher education. In developing as well as developed countries higher education is beset with a variety of problems, i.e finance, quantitative demand, instructional quality, catering to variety of needs and relevance etc. In order to answer all these problems and to make equality of educational opportunity a success we have to adopt distance education as an alternative strategy and develop it to a mass movement. To develop huge human recourse potentials available in India with limited resources and to make learning effective there is no other way than to look forward to distance education. This realization has gained momentum with the establishment of Indira Gandhi National University (IGNOU) at national level and a number of open universities at state level. In the secondary stage also National Open School and number of state level open schools are established to cater emerging needs. With advancement of communication technology, strengthening the autonomy and openness of learner and learning activities has now become imperative .We have to see to what extent the objective spelled out in opening up of open Universities is achieved .Few important objectives for opening Open Universities are: greater equality of opportunity of access to higher education; opportunity for those who missed higher education when they are young and join carrier; opportunity for those adults who would like to have access to higher education throughout life; and .help for those who want to renew or upgrade their knowledge while in service. The terms - distance education, open universities, open schools are very much familiar in India. The basic question remains that to what extent openness or actual autonomy is enjoyed by the students in distance education. Here actual autonomy implies learner participation in farming curriculum, entrance policy, selection of course content, choice of methods. Media and technology, place of study, schedule, feedback and evaluation procedure. Analyzing different dimensions of openness the authors have identified following components viz,(i) learners intake (ii) entrance policy (iii) availability of seats (iv) objective of learner (v) counseling (vi) materials(vii) methods (viii) course structure (ix) course choice (x) course choice(xi) media(xii) place of study(xiii) attendance (xiv) entry time (xv) time of completion(xvi) time table, (xvii) method of assessment (xviii) type of assessment (xix) feedback(xx) date of assessment(xxi) coverage of assessment (xxii) support system (xxiii) place of support system (xxiv) mode of support system (xxv) destination, as major dimensions of openness. Taking all these dimensions a scale is developed by the authors viz, "Institution Closeness Openness Scale" in order to know the extent of openness that exists in any distance education institution. The present study shall focus light and develop better understanding as to what extent correspondence courses offered by traditional Universities and IGNOU cater to needs and aspiration for open learning of students.

OBJECTIVES

*To study the existing openness in correspondence courses and IGNOU as perceived by students of respective institutions.

*To compare the levels of openness between correspondence courses and IGNOU with reference to Orissa.

*To study the preferred futures of openness between CC and IGNOU as perceived by students of distance education towards 2005.

HYPOTHESIS

There will be no significant difference between the level of openness in CC and IGNOU.

METHODOLOGY

The sample for the present study constituted of 165 IGNOU students and 235 correspondence students of Utkal and Berhampur University of Orissa. They were selected from study centers and contact program centers.

Tools

The data were collected by administering the "Institution Closeness – Openness Scale" developed by the authors. The institution Closeness Openness Scale consists of 25 dimensions. The alternatives are given in a continuum from least openness to complete openness with a 5 point scale. Against each component, the characteristics of closeness- openness continuum have been specifically mentioned in a 5 points scale, for instance on case of course choice dimension the alternative read as (i) No openness- whole course compulsory (ii) openness to some extent- a particular course with a few optional combinations (iii) Moderate openness- equal weight to major and minor papers (iv)High –openness credit system , courses with common core paper and large number of optional papers on modular and credit basis (v) Extreme openness – entire course including wide rang of optional papers on modular and credit basis.

Scoring Procedure

Weightage was given on the basis of ascending order of openness of 1 to 5 with 1 indicating least openness 2 openness to some extent , 3 moderate openness , 4 high openness , and 5 complete openness.

ANYLYSIS AND INTERPRETATION

Mean scores of each dimension were calculated for CC and IGNOU respectively following criteria was fixed for data analysis. Above 4.50 - Complete openness 3.50 to 4.49-High openness 2.50 to 3.49- Moderate openness 1.50to 2.49 – openness to some extent Below 1.5 –least openness. The critical ratio test was used for analyzing the data in the context of the second objective. The interpretations of the results are presented as under.

Dimension wise comparison of present and future status of openness of CC &IGNOU in terms of mean value

The study covered 25 dimensions of openness: 1. Learner's intake; 2. Entrance Policy; 3. Seats Availability; 4. Objectives of Learning; 5. Counseling & guidance; 6. Learning Materials; 7. Methods of teaching; 8. Course Structure; 9. Course Choice; 10. Course Content; 11. Media; 12. Place of study; 13. Attendance; 14. Entry Time; 15. Time of Completion; 16. Time Table; 17. Method of Assessment; 18. Type of Assessment; 19. Feed Back; 20. Date of Assessment; 21. Coverage of Assessment; 22. Support System; 23. Place of Support System; 24. Mode of Support; and 25.Destination. Dimension wise comparison of present and future status of openness of CC &IGNOU in terms of mean value found that the students of IGNOU have perceived all the 25 dimensions as open to some extent (Mean values above 1.50 to 2.49) in contrast students of DCC have perceived no openness in all the 25 dimensions of openness closeness scale (Mean values ranges from 1.00 to 1.26) .This reveals that correspondence courses offered by DCC has remained mostly conservative. Though mean values in case of entrance policy (1.22) time of completion (1.22, mode of support system 1.26) and feedback (1.21) comes almost openness to some extent but it does not distinctly differentiate correspondence education to that of formal education. Flexibility is the important characteristics of distance mode which is not maintained in correspondence centers in the State of Orissa. Where as the IGNOU students' perception reflects that, the above objective of complete openness has not been achieved satisfactorily. Hence there is a great need to further opening up of IGNOU and its allied institutions so that the needs and aspirations for open learning comes true.

As stated above the t-test was applied to study the significance of difference of mean scores of openness closeness scale as responded by 165 IGNOU students and 235 correspondence students. The critical ratio values on different dimensions were tabulated. It was observed that in case of all the 25 dimensions perceived value of openness by IGNOU and CC students significantly differs from each other at 0.5 as well as 0.1 level. Further concerned mean score on openness criteria for

IGNOU were found to be higher on an average than those of DCC.From above analysis it can be concluded that there existed significant difference between the openness of mean scores of IGNOU and DCC with 99% level of confidence. Hence the null hypothesis of no significance difference between the openness mean scores of IGNOU and DCC is rejected. It is ultimately revealed that the status of openness of correspondence courses offered by the directorate of correspondence courses of Utkal and Berhampur University Orissa is least open. Correspondence courses offered by traditional Universities have not been able to shed the shackles of rigidity, closeness and non-flexibility of the parent institution. It has just risen above the traditional system to cater to the needs of students who for some reason or other fail to get them admitted in traditional higher education. On the other hand IGNOU has opened up satisfactorily and significantly for its clientele as per perception of DE learners. But the high objectives and ideals for which IGNOU was opened has not been satisfactorily achieved its openness is really unimpressive. Hence, there is a need to assess and revitalize the institution so that open learning system becomes successful.

Students Perceptions of Preferred Future

The students of CC as well as IGNOU were asked about the preferred future regarding the openness of institution towards 2005 AD in Orissa. It was observed that CC students preferred high openness in future (Mean values 3.56 to 3.93) in all the 25 dimensions. On the other hand IGNOU students' preference ranges from high level to complete openness. The IGNOU students preferred high openness in majority dimensions (20 out of 25) such as learners intake, entrance policy, seats availability, objectives of learning, counseling and guidance, learning material, methods of teaching, course structure, course choice, course content, media, place of study, attendance, entry time, time completion, time table, method of assessment, date of assessment, place of support system and destination (Mean values from 3.52 to 4.49 complete openness in rest six dimensions such as type of assessment, feedback, support system ,mode of support system and coverage of assessment (Mean values 4.5 above). Students of CC perceived the present status as non-openness and expect to be highly open in future. Similarly, students of IGNOU perceived the present status as openness to some extent while preferring the futures from highly open complete openness. To conclude it can be said that both the groups of students are not satisfied the less openness existing in their institutions and preferred higher degree of openness in future.

CONCLUSION

From the above analysis of result it is seem that both the groups of students of CC and IGNOU are very much optimistic about the future of distance education in Orissa. It is a sign of positive indication. Educational planners and administrators of distance education system may take it into account for fulfilment of students' expectations.

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UNIVERSALISATION OF ELEMENTARY EDUCATION IN UTTAR PRADESH

Nidhi Bala
Suniti Rani Bora

INTRODUCTION

Recent giant leap towards achieving quality education in the State of Uttar Pradesh was the launch of the centrally sponsored programme –'Sarva Shiksha Abiyaan' (SSA) in 2001 covering all 70

districts of Uttar Pradesh aiming at all children of 6-11 years to complete 5 years of schooling by 2007 and all children of 11-14 years to complete 8 years of elementary schooling by 2010.

MANAGEMENT

U.P. Education for All Project Board (UPEFAPB) has evolved a management structure with a high degree of flexibility in administrative functioning. In a vast state like Uttar Pradesh with regional variations, the emphasis has been on conceptuality, local needs and decentralized planning. For the effective implementation of the programme, UPEFA also works in convergence and collaboration with other departments. As per the report of Overall Implementation Report, January, 2007 during 2005-2006, the total available fund with the state for SSA was Rs. 2484.88cr, out of which Rs. 2233.74cr was spent till March 2006.

Expanding Access

In order to make schools accessible and within the reach of children, the State revised the previous norms and reduced the distance to 1 km for primary and 3 km for upper primary schools to be opened. In addition to this, an initiative was also undertaken in 1997-98 to evolve the cost-effective and environmentally sensitive designs of primary school buildings. Consequently, five new designs of primary school buildings-New Prototype Design, Bhorsi, Roshan Pura Design, Railway Ganj Design, Asigaon Design, and Bhamma Purva Design developed from 'School Construction Innovation Fund' have been provided under DPEP-II.

INCREASE IN ENROLMENT

According to the provincial data available under District Information System for Education, in Uttar Pradesh, the Gross Enrolment Ratio at primary level for boys and girls was 107.85% and 106.66% in 2005-06. The Net Enrolment Ratio for boys and girls was 98.29% and 97.17%.

Mid-Day Meal

The State Government launched cooked mid-day meal programme for nourishment of children in primary schools aims to provide minimum 300 calories and 8-12 gram protein to each child for at least 200 days in a year. The programme is administered by Mid-Day Meal (MDM) cells set up at State, Commissionary, and District levels and Village Education Committee (VEC) at village level. Task force, constituted at district and block levels, visits at least 5 schools every month for effective monitoring and supervision of the programme. The implementation of the Mid-Day Meal has ensured the increased in enrolment and retention of children.

Village Education Committee

For one of the major components of SSA is promoting the retention of children in the school, the emphasis has been on giving pre-eminence to people's involvement, including association of non-governmental agencies and voluntary efforts, inducting more women in the planning and management of education. VECs play a major role in bringing the positive attitudinal change in people towards education and in mobilizing the community and motivating parents/ guardians to send their children to schools, especially girls and children from disadvantaged groups. They are also responsible for school construction and maintenance, purchase of materials, school mapping and micro- planning exercise, preparation of Village Education Plan and school management as well as teacher performance.

Promoting Girls' Education

National Programme of Education for Girls at Elementary Level (NPEGEL) launched in 2003, initiated the opening of Child Care Center to relieve girls from sibling care and distribution of free uniforms to girls. Libraries have been set up in these schools in collaboration with National Book Trust. Mahila Samakhya, also supporting cause, is working in 11 blocks in 11 districts in UP, as a

movement for women rights with girls' education as its main tool. Another innovative step Kasturba Gandhi Balika Vidhalaya (KGBV) Scheme launched in 2004 aims to deal with issues relating to gender gaps, regular attendance of girls and transition to upper primary stage. This initiative seems to be very effective as girls who could not be sent to formal schools in the same village due to socio-economic reasons; their parents now willingly send their girls to KGVBs. Another excellent initiative to promote the confidence of girls and give them life skill education is Meena Manch. These Manchs have a range of art and craft activities for skill development like stitching, making soft toys etc. which could make them stand in long stead for income generation as well. These life skill camps also familiarize the adolescents with issues related to family, health care, including reproductive health; safe motherhood, AIDS etc.

Strategy for bringing out - of- school children

With the annual growth in the school - age population, the ever increasing number of 'out of school children' within the formal education fold and lack of available places to keep pace, demands flexibility in school timings to adjust to the needs of such children who can not attend formal schools. Education Guarantee Scheme (EGS) is one such scheme which envisages opening of centers for class 1 and 2 in habitations, with no primary school within a radius of 1 km and 30 children in the age group of 6 to 11 yrs. To foster 'ownership' of the scheme, the community has been assigned the responsibility to provide the space and accommodation for the center. Formal curriculum and textbooks are used in these centers. Each EGS center has an Acharyaji, a local candidate with minimum High School qualification, selected by VECs to teach children of class 1 and 2 with monthly honorarium of Rs.1000. In 2006-07, out of 5693 sanctioned EGS, 4985 sites have been selected and 4554 centers are operational.

Education of Children with special needs (CWSN)

The National commitment of providing free education to all children of the age group of 6-14 years will remain a distant dream unless children with special needs are included into the umbrella of education. Estimates indicate that 5-10% of children in the State either do not enroll in primary school or dropout due to a variety of physical or learning related disabilities.

For this, early detection and integration of such children, medical and functional assessment, supply of aids and appliances, special-teacher training programmes etc are conducted in collaboration with various NGOs and Handicapped Welfare Department. When the academic session starts, the identification and classification of CWSN is generally done by non-medico persons like class teacher, resource persons and iterant teachers, which is not very medically accurate. When such children are examined by the doctors at the later stage, the classification done by the non- medico persons often gets reshuffled. Therefore there is difference between the number of identified CWSN and the number of integrated children. For the first time. appointment of 171 single disability special educators at districts level as resource persons and 924 itinerant teachers at cluster level with the aim to provide support to CWSN in schools has been initiated. SSA has also adopted a zero rejection policy which means that no child having special needs should be deprived of the right to education. A three month Residential Bridge Course has been introduced for severely disabled children. The objective of the programme is to prepare children with visual and hearing impairments for school through a readiness programme. Contents of these bridge courses are mobility training, Braille reading and writing, social integration, speech therapy, language development, lip reading, etc. These children are prepared for class 1-5 depending on their learning levels. An impressive initiative has been the conversion of all primary textbooks into Braille script making learning process according to the needs of CWSN. Conversion of upper primary textbooks is under process. Another step has been the making of barrier free school buildings for physically handicapped children with the aim to provide ramps in all primary schools. Also Rs.3.5crore has been released to Handicapped Welfare Department for strengthening of 12 special schools, seven workshops and establishment of Nursery schools for CWSN. Five nursery schools have been

started in- Agra, Allahabad, Lucknow, Saharanpur and Varanasi.226 children have been enrolled in these schools. These children are provided vocational training for computer training, candle making, English speaking course, tailoring, mobile repairing, typing.

QUALITY IMPROVEMENT

Improving the quality of elementary education is central to the SSA and teacher pupil ratio has a significant bearing on quality of education. To bring the State teacher pupil ratio of 1:49 to that of National level of 1:40, recruitment of teachers is being done in the State. For class 1 and 2, during 2001-2002 to 2005-2006; 1, 49, 868 para-teachers (shiksha mitras) and in 2006-07, 801 para-teachers were selected and have been placed in primary schools. The recruitment of para-teachers has reduced single teacher schools from 17% to 4%.

TEACHER TRAINING PROGRAMMES

Empowerment and capacity building of teachers lie at the core of all the quality programmes. Teachers are regularly given various in-service and refresher course trainings focusing various pedagogical areas. The modules developed for the purpose are: 1. 'Shikshakodaya' module focusing on motivating the teachers and improving their self image; 2. 'Sabal' emphasizing on developing the content knowledge of primary teachers and equipping them to use the new textbooks for Maths (class 2-3) in the classroom effectively; 3.Saadhan' on effective use of textbooks in the classroom, up gradation of content knowledge of teachers, use of new transitional methodologies, handling multi-grade and multi-level teaching and preparation of content specific teaching learning materials; 4.'Samridhha' focusing Block and Cluster Resource coordinators to carry out their responsibilities effectively at upper primary level; 5. 'Sankalp' comprehensively talks about the leadership qualities and roles and responsibilities of head master as the leader of the school; 6. 'Effective School Library' focusing on how to inculcate reading habits among children through school library; and 7. 'Pathan Kshamta Vikas' to make teachers oriented towards techniques of reading skill-pronunciation, modulation. The introduction of new text books generated a demand to orient teachers towards new textbooks and upgrade their teaching skills especially in English and Sanskrit subjects at primary level. Therefore, one teacher from each primary school is trained on these subjects. Master trainers in each subject for upper primary teachers have been trained by institutes like- State Institute of Education (SIE) Allahabad on social studies, English Language Training Institute (ELTI) Allahabad on English subject, State Institute of Science (SISE), Allahabad on science subject and Hindi Sansthan, Varanasi on Hindi subject. With the help of Pratham, an NGO, all para-teachers are being trained to teach Hindi and Mathematics with the help of specially designed and developed teaching learning materials for classes 1 and 2.

Textbooks and Teacher Guides

The next important step is improvement in classroom transactions and ensuring quality in children's learning. Child friendly textbooks developed both for primary and upper primary grades are being used. Teacher guides based on these new textbooks have also been prepared to reinforce the child centered pedagogy. Teacher guides from class 1-5 on all subjects have been developed and distributed in all primary schools. Teacher guides of class 6 to 8 on six subjects (Hindi, English, Maths, Science, Social studies and Sanskrit) have been developed and distributed in all upper primary schools. All teacher guides have been translated into Urdu language to expand their reach to minorities' schools. Attractive workbooks for grade 1 and 2 have also been developed with UNICEF assistance which would certainly improve learning opportunities of children.

Grading of Schools

School grading earlier was being done in the districts on the basis of parameters, which did not give priority to learners' achievement levels. The aim of school grading was to create competitive spirit among the schools and direct action to be taken to improve the quality of education of the target

school under grade 'C' and 'D'. School grading is based on learning level for which 55% marks have been provided. Three session exams have to be organized before grading, which are to be held in the month of Sept, Nov. and Feb. Grading to be done in the month of October, January and March on the basis of three session exams. 100 marks have been kept for grading. The provision of addition of 25% marks from 3 session exams with half yearly and yearly exam has been given in G.O. to maintain the importance of session exams.

Other strategies

*No detention policy is followed in class 1 and 2.
*Teaching of English as a subject from class 3 onwards.
*Free text books to all children.
*An annual grant of Rs. 2000/- to each primary school of the district for improving school environment by purchase of required materials.
* Repair and maintenance grant @ 5000 per school to schools of 70 districts.
*Annual grant of Rs. 500/- per teacher for development of locally suitable teaching learning materials.
*Remedial teaching course are conducted during summer vacation.
*Inclusion of one period for remedial teaching in regular time table of the schools.

CONCLUSION

While there is no doubt that the programme is making strides towards its super goals, there are certain concerns which need to be addressed in order to ensure maximum attainment of SSA goals. While the programme has demonstrated a fair degree of progress with regard to universalizing enrolment, teacher trainings, textbook development, improvement in infrastructure facilities in schools, time has come now to make a clear shift in focus towards addressing the other more critical parameters such as retention/ dropout, attendance, transition and learning levels. There is need to widen and deepen the range of investigations to include empirical studies, analysis of available data, assessment of impact of programme interventions and factors influencing the achievement of programme objectives.

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EFFECTIVENESS OF THE DEVELOPED EXAMINATION RESULT MANAGEMENT SOFTWARE FOR IOE, DAVV IN TERMS OF USER'S REACTION

S. K. Tyagi
Karuna Tiwari

INTRODUCTION

Information and Communication Technology (ICT) is emerging as a key factor in bringing about changes in the sphere of education. There are perceptible gains in the quality of education through the use of ICT due to: Progress and implementation of electronic based teaching technologies; Better access to the world and educational information resources; and Improvement of educational management based on the information system. Computer not only brings to the teaching learning process such attributes as excellence coupled with untiring patience but also plays an important role in solving various problems related to students, staff, maintenance of office record, teachers training etc. Hence a number of universities have focused on creating special Information Management System for their various units viz. library, staff, enrollees, academic-process, accounting etc. Apart from this, yet important role of computer lies in management of examination

to make it easy, valid, reliable and fast. In view of Semester system with continuous comprehensive evaluation adopted by most of the departments of various universities, the manual system of recording and processing the results puts extra burden on the shoulders of already shrinking staff. Use of computer is simplifying the work of administrators and staff members so that they are able to think, plan and perform many other kind of responsibilities creatively.

OBJECTIVES

*To compare the mean scores of Reaction towards Examination Result Management Software (ERMS) of Hindi and English medium users.

*To compare the mean scores of Reaction towards Examination Result Management Software (ERMS) of male and female users.

* To compare the mean scores of Reaction towards Examination Result Management Software (ERMS) of Science and non-Science users.

* To study the effectiveness of developed software on the basis of users' reaction towards ERMS.

HYPOTHESES

1.There will be no significant difference between mean scores of Reaction towards ERMS of Hindi and English medium users.

2.There will be no significant difference between mean scores of Reaction towards ERMS of male and female users.

3.There will be no significant difference between mean scores of Reaction towards ERMS of Science and non-Science users.

SAMPLE

Sample comprised of total 55 users including students of B.Ed. and M.Ed. courses along with teaching and non-teaching staff of Institute of Education, Devi Ahilya University, Indore. Sample consisted of male and female, Science and non-Science background, and Hindi and English Medium users.

DEVELOPMENT OF ERMS

Examination Result Management Software (ERMS) for the study was developed in VB 6.0 . All the steps for developing computer software were followed. In the end, on the basis of experts and users suggestions some required modifications were made in ERMS.

TOOL

The tool used for data collection was developed by the investigator with inputs from the Guide, in the form of five-point reaction scale named "Reaction Towards ERMS Scale". In this scale, out of 20 statements ten were positive and rest negative. The aspects covered in scale were related with user interface, data entry/data retrieval process, utility of ERMS, Quality of output, and data base security.

PROCEDURE OF DATA COLLECTION

For this study VDU and LCD projector were used for data collection. Having established rapport, the operation processes of ERMS were demonstrated. After demonstration, the users were permitted to exercise each menu option of ERMS. Reactions of users were taken with the help of developed Reaction Scale. Data were analyzed using independent t-test.

RESULTS AND INTERPRETATION

The results and interpretation of the data are presented below.

Comparison of mean Reaction scores of Hindi and English medium users

The First objective was to compare the mean scores of Reaction towards ERMS of Hindi and English medium users. The value of t is 0.136 which is not significant at 0.05 level with df = 53, It reflects that the mean scores of Reaction towards ERMS of Hindi and English medium users did not differ significantly. In the light of this the null hypotheses that there will be no significant difference between mean scores of Reaction towards ERMS of Hindi and English medium users was retained. This fact makes both Hindi and English medium student at same level in terms of understanding the process of ERMS. Hence, the developed system was equally useful in terms of Reaction of Hindi and English medium users.

Comparison of mean Reaction scores of Male and Female users

The Second objective was to compare the mean scores of Reaction towards ERMS of male and female users. The data related to this objective was analyzed with the help of Independent t-test. The value of t is 0.213 which is not significant at 0.05 level with df = 53, It reflects that the mean scores of Reaction towards ERMS of male and female users did not differ significantly. In light of this the null hypotheses that, there will be no significant difference between mean scores of Reaction towards ERMS of male and female users of IOE, was retained. Therefore, hardly any marked difference between the genders was found in respect of use of the system.

Comparison of mean Reaction scores of Science and Non-Science users –

The Third objective was to compare the mean scores of Reaction towards ERMS of Science and non Science users. The data related to this objective was analyzed with the help of Independent t-test. The value of t is 0.756 which is not significant at 0.05 level with df = 53. It reflects that the mean scores of Reaction towards ERMS of Science and non Science users did not differ significantly. On the basis of this the null hypotheses that, there will be no significant difference between mean scores of Reaction towards ERMS of Science and non Science users, was retained. Therefore, it may be said, that the developed ERMS was not found to be influenced by the subject streams of the users. Hence, the software was equally useful for Science and non Science groups of user.

The Effectiveness of developed ERMS on the basis of Reaction of Users

The Fourth objective was to study the effectiveness of developed software on the basis of Reaction towards ERMS. The data related to this objective were analyzed by computing the mean and SD. The mean score of Reaction towards ERMS was 76.81 which is about 75% of maximum possible score, signifying a favourable Reaction towards ERMS. The SD was found to be 13.70, which was a bit large. It indicates that the subjects within group did vary to some extent in respect of their Reaction towards ERMS.

FINDINGS

The major findings were: There was no significant difference between Reactions of Hindi and English medium users towards ERMS. There was no significant difference between Reactions of male and female users towards ERMS. There was no significant difference between Reactions of Science and non-Science users towards ERMS. The users were found to react favorably towards developed ERMS.

IMPLICATIONS

The research has the following implications for the various personnel: The student teachers having knowledge of computer language can undertake such works for their would-be institutions. The developed software will also be useful for other faculties or institutions. The study has great importance as an action research for administrators to maintain students' record on computer, getting various required information about students, running course, preparing result with minimal

efforts, preparation of duplicate Grade cards as and when required. Database of a particular session can be kept on CDROM for future. This research work can provide strong base for further computerization of administrative works. Educational researchers can also be benefited in understanding the gaps, inconsistency in findings related to computer application in educational administration, especially in evaluation system.

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TEACHER EDUCATION IN RAJASTHAN

A. K .Paliwal
Shima Sarupria
Daya Dave

INTRODUCTION

Archaeological and historical evidence shows a continuous human habitation of the area dating back 100,000 years. The present form of Rajasthan came into being after the Independence. The capital city is Jaipur. As per the 2001 census the population is 56.47 million. As per the 2001 census, the literacy rate is 61.03 %.Rajasthan is located in the northwestern part of the subcontinent. It is bounded on the west and north-west by Pakistan, on the north and north-east by the states of Punjab, Haryana, and Uttar Pradesh, on the east and south-east by the states of Uttar Pradesh and Madhya Pradesh, and on the south-west by the state of Gujarat.In the west, Rajasthan is relatively dry and infertile; this area includes some of the Thar Desert, also known as the Great Indian Desert. In the southwestern part of the state, the land is wetter, hilly, and more fertile. The climate varies throughout Rajasthan. Rajasthan has a single-chamber legislative assembly with 200 seats. The state sends 35 members to the Indian national parliament: 10 to the Rajya Sabha (Upper House) and 25 to the Lok Sabha (Lower House). Local government is based on 32 administrative districts. The principal language of the state is Rajasthani, comprising a group of Indo-Aryan dialects derived from Dingal, a tongue in which bards once sang of the glories of their masters. The four main dialects are Marwari (in Western Rajasthan), Jaipuri or Dhundhari (in the East and South-east), Malvi (Malwi; in the South-east), and, Mewati (in Alwar; which shades off into Braj Bhasa in Bharatpur district). The use of Rajasthani is declining with the spread of modern education, and its place is being taken by Hindi (the official state language of Rajasthan). However, Rajasthani deserves to be one of the constitutionally recognized languages of India. Rajasthan's economy is mainly agricultural; millet, wheat, maize (corn), and cotton are grown. Though parts of the state are extremely dry, and are covered by the Thar Desert, the total cultivable area in the state is 27,465

thousand hectares, and the sown area, 20,167 thousand hectares. Tourism is also an important part of the economy.

ELEMENTARY TEACHER EDUCATION :

The elementary teacher education programme offers a two-year teacher education course called BSTC (Basic School Teaching Certificate) which DIETs and STC schools conduct under the Department of Elementary School Education. The curriculum of the STC course is designed and approved by the Department of Elementary Teacher Education in SIERT. The Department of Elementary Education of the State government under Director of Elementary Education made admissions to the BSTC course on merit basis till 2007-2008.But this year (2008-2009) admissions will be made through a pre - test to be conducted by a State university.. All the state approved and prescribed norms for admissions and reservations are followed by the STC institutes in the state. Monitoring and supervision of these institutions is done by the Department of Education through SIERT. The categories of institutes are: Govt. - 42 (12 + 30 DIETs); Private and Self financed - 136; and Pvt. NTT -22; Total - 200.

Teacher educators for the course have post graduate degree in the relevant school subjects along with M.Ed. Many of them have done STC themselves and have taught in elementary school for at least five years. AS per the new norms of the NCTE (January 2008), even teachers with MA and B.Ed are being recruited as school lecturers in STC institutes. The faculty members are called school- lecturers and are given salary as per the school lecturer-grade. Their basic pay presently is Rs.6500. The fee charged for the course is prescribed by the state govt and it is Rs.11, 250/- at present. There is no payment seat for the course.

The details of STC course are as follows:

Theory Papers - First Year: Principles of Education and Education in Modern India.; Educational Psychology; School Management and Organization; Education Technology; Teaching of Mother Tongue; Teaching of English; Teaching of Third Language; Teaching of Mathematics; Teaching of Environmental (Social, Physical & Biological) Studies; Teaching of Physical and Health Education; Teaching of Art Education.

Theory Paper - Second Year: School Management & Educational Innovation; Teaching of Mother Tongue; Teaching of English; Teaching of Maths; Teaching of Social Science; Teaching of Science; and Teaching of Work Experience.

Practice of Teaching; Each year 600 periods are meant for teaching practice and school experience which include Teaching Practice in (i) Basic Skills teaching (ii) Multi-grade Teaching, Observation of lessons, Block Teaching, Scouting Camp, and Teaching Learning Material Preparation.

Secondary Teacher Education:

Teacher education colleges affiliated to respective universities conduct Secondary Teacher Education Programme. Admissions to the B.Ed. programme are made on the basis of a state level admission test called Pre Teacher Education Test (PTET) conducted by a state university under the directions of the state government. In the year 2007-2008, Maharshi Dayanand Sarswati (MDS) University, Ajmer, conducted the PTET. All the state approved and prescribed norms for admissions and reservations are followed by the B.Ed

institutes in the state. The fee prescribed for the course is Rs.22,400/- as per the Rajasthan state Govt. Norms. There is no payment seat for the course. Up to the year 2004-05, there were around 52 B.Ed. Colleges in the State. There were 554 Secondary Teacher Education Colleges in Rajasthan till April 2008 approved and recognized by state universities, Department of Secondary Education, Government of Rajasthan and NCTE. Manahement wise, these institutions are: Govt. -2; Private and aided -3; and Self-financed- 549.
The examining bodies for secondary teacher education courses are 6 State Universities, one State Open University and four institutions deemed to be universities. University of Rajasthan offers only M.Ed. programme, through its Department of Education. The colleges affiliated to Rajasthan University offer B.Ed. programme. Some Universities have recently started M.A. (Education) Course. Besides this, B.Ed (Child Development) course is also conducted at a deemed to be university. There are five private Universities approved and established in the state in the year 2007-08.

Secondary teacher education in Rajasthan is controlled by the state Department of Secondary Education, the State Universities to which these B.Ed. colleges are affiliated and by the central apex bodies like the UGC and the NCTE. The B.Ed. colleges in the state follow the curriculum designed and approved by the state universities concerned. Different universities follow different B.Ed. and M.Ed. syllabi. However, since 2002, these universities have been asked by the Chancellor/ Governor to follow a common syllabus prepared by a state university in consultation with all the universities concerned.
The faculty qualifications till December 2007 were PG along with M.Ed .As per the new norms of the NCTE (January 2008), even teachers with MA/ M.Com /M.Sc. and B.Ed are being recruited as lecturers in B.Ed colleges.

Unlike the other states in the country, all the B.Ed. Colleges (Secondary Teacher Education Institutes in the State) including government, non-government and aided B.Ed. colleges come under the Director of Secondary Education, not under the Director of Higher Education, in Rajasthan. The teaching staff members employed in these colleges do not get UGC Pay Scale as per the norms of UGC and NCTE. The staff members employed in the university department of education get UGC pay scale. No in- service training programmes are conducted for the faculty of these colleges as there is no Academic Staff College for them.

THE B. ED. COURSE

There are two parts of the programme consisting of Theory and Practice components. The details are as given below.
(A)Theory Papers: Four Compulsory papers: I Education in the Emerging Indian Society;II Development of learner and learning process;.III Educational System in India and school organization; and .IV Essentials of Educational Technology and Classroom Management and Teaching Subjects: Paper -V&VI (Two optional papers): Graduates in Arts, Science, and Commerce Streams are required to offer any two teaching subjects studied at Graduate level at least for two years for paper V and VI out of the following:
Teaching of Hindi ; English; Sanskrit/Urdu/Rajasthani; Mathematics; General Science; Social Science; Art Education; Commerce, etc.

Additional Optional Specialization papers (Paper VII): A candidate may opt anyone of the following papers : Educational and vocational guidance; Basic Education; Non-formal Education;
Physical Education; School Library organization; Audio-visual Education; Measurement and Evaluation; Moral Education; Education of the handicapped; Primary Education; Yoga Education; Population Education; Educational Psychology; Educational Television; Programmed Learning; Environmental Education; and Computer Literacy & Education Application.
Qualifying Compulsory paper :(Paper-VIII) Computer Literacy and Educational Applications (CLEA)
Teaching Practice Programme:
Micro Teaching in 5 skills / EPS (Experiencing Pedagogical Skills) including Communication skills; 30 Macro Lessons
Internship : Minimum 3 lessons along with lesson plans per day for two weeks.; Group feedback and sharing of class room experiences; Understanding school system and nearly community; Eco-Education camp (Open Air Session) - A five day camp (An experience in Environmental Studies, Value education and working with community; Participation in and organization of co-curricular activities (Literary, Cultural and Games) and Extension lectures.
Assessment Procedure: For a pass in Theory a candidate is required to obtain at least - (a) 30% marks in each theory paper the (b) 36% marks in the aggregate of all the theory papers. (ii) For a pass in Practice of Teaching a candidate is required to pass separately in the Internal & External Examinations and obtain at least 40 marks in each.

Some universities also offer certificate, diploma and degree courses in Physical Education called C. P. Ed., B. P. Ed. and M.P.Ed. Besides these colleges and institutions, there is a Regional Institute of Education (RIE) of NCERT, which conducts four year integrated B. Sc. B.Ed. course and one year M.Ed. programme largely there is some uniformity in teacher education programmes .However, some universities exercise their power o f academic freedom and autonomy and thus have introduced special activities in their programmes.

M.ED. PROGRAMME

Out of the eleven universities, ten universities (except Vardhaman Mahaveer Open University Kota) offer M. Ed. programme in Education as per the norms of the NCTE and the universities concerned. There are 17 institutions: Central Govt. (NCERT) -1; State Govt.-2. University Dept. -2; Self- financed – 9; and Private and aided -3. The candidates must have, after graduation, passed the B.Ed. /B.T. or L.T. examination degree from any recognized University as per norms laid down by the NCTE or any other examination accepted as equivalent by the University with 50% marks in Theory & Practical Examinations separately. There is a centralized scheme in force for the admissions of the M. Ed. candidates. The fee for the M. Ed. course is 22,400/- as per the state government norms. The M. Ed. programme consists of theory papers, field based surveys and a dissertation.
Part I : Compulsory Papers (Foundation Papers); I: Philosophical and Sociological Foundation of Education (100 Marks);II: Psychological foundations of Education and Educational Technology (100 Marks);III: Methodology of Educational Research and Data

analysis (100 Marks);and IV: Essentials of Teacher Education and Comparative Education (100 Marks). In these papers candidates are evaluated by internal and external examiners. Each paper consists of 'sessional' work which carries 25 marks.

Part II : Areas of specialization (Optional Paper) :Each specialization area has two papers of 100 marks each. Out of the following a candidate has to opt for one specialization paper: Guidance and Counseling; Teacher Education; Educational Measurement and Evaluation; Curriculum Development; and Management, Planning and Financing of Education.
Part III : Field based Experiences (Survey):They are related to supervision and evaluation of practice-teaching and other aspects of school experiences of B.Ed. programmes. This part carries 50 marks which is internally evaluated by a team of members constituted by the principal within the institution.
Part IV : A Dissertation: Dissertation is compulsory for candidates pursuing the M.Ed. Course. It carries 150 marks.

DISTANCE EDUCATION PROGRAMME

As part of distance education programme, VM Open University, Kota conducts distance mode B.Ed course and M.A Education. IGNOU conducts B.Ed. programme through its Study Centres established at various places in the state. IGNOU has recently started M.A in Education Programme.

INSTITUTES OF ADVANCED STYDY IN EDUCATION & COLLEGES OF TEACHER EDUCATION

As part of qualitative improvement in teacher education programme under NPE 1986, MHRD upgraded 4 colleges of the state to IASEs and 8 colleges to CTEs. Out of the four IASEs, two were government IASEs and the remaining two were non-government IASEs till 2004. The state government changed the status of two privately managed IASEs to CTEs. Therefore, there are two IASEs and ten CTEs in the state at present. In addition to pre-service programme, these IASEs and CTEs also conduct theme- based and content - based in-service programmes for secondary school teachers, headmasters, principals etc. with the financial support under the IASEs, CTEs scheme of the MHRD.

CHALLENGES AND SUGGESTIONS

Over the past couple of years there has been a mushroom growth of secondary teacher education institutions in the state, which is not based on any empirical evidence for the need for such teachers' training schools (STCs) and colleges in such a big way. Teacher education in the state especially secondary teacher education is blocked by some impediments to quality secondary teacher education such as inadequate infrastructure, lack of qualified faculty and need for empowerment of newly recruited teacher educators, etc. The agencies concerned must take immediate effective measures to prevent rapid deterioration in teacher education.

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INFLUENCE OF PARENTING STYLE AND SELF-COMPASSION ON MENTAL HEALTH OF SECONDARY SCHOOL PUPILS

P. Usha
Lakshmi S.

INTRODUCTION

Deterioration of mental health of the youngsters is one of the problems of the world today. Mental health of an individual is equally important to that of his physical health. A person is said to have good mental health when he succeeds to maintain harmonious relationship between himself and his environment. For a nation to progress, its citizens have to be both physically and mentally healthy. Kerala has a leading role among the other Indian states with regard to literacy and the physical health of its people. At the same time, growing evidences suggest that there is a gradual deterioration in the mental health level of its people. The outcomes of mental health problems are stress, frustration, irritability, mistrust, isolation and alienation. Many adolescents resort to socially destructive and personally devastating ways of coping this stress. The very high suicide rate in Kerala is comparable to the highest rates of suicides in the world. The most unfortunate and astonishing thing is that the number of adolescents' suicides in the state is increasing. Statistics reveals that the alcohol consumption has also increased in the state. This is also evident from the long queue of youngsters and adults in front of the liquor shops. Besides, there is an increasing rate of crime, drug-addiction, self-harm, running away from home, depression, stammering, bed wetting, nail biting, etc. among the adolescents. All these are the manifestations of the outcomes of mental health problems, which may range from simple behavioural problems to varying degrees of psychiatric problems. All these point out to the need for a study on the mental health of adolescents in Kerala. Mental health is a broad term which involves a complete physical, mental and social well being and not merely the absence of any diseases. It is an important aspect of one's total health. Social interest, concern for others, a cooperative approach to the life and striving for ideal community promote both physical and psychological well being. It is an adjustment of an individual to the environment with maximum efficiency and comfort. The present study was taken up to find out the influence of parenting style and self-compassion on mental health of secondary school pupils.

OBJECTIVES

*To study the main effect of Parenting Style and Self-Compassion on Mental health for total sample and sub samples.

*To study the interaction effect of parenting style and Self-Compassion on mental health for the total sample and sub samples.

HYPOTHESES

1. The main effect of Parenting Style and Self-Compassion on Mental health for the total sample and sub samples on the basis of sex, locale and type of school management will be significant.
2. The interaction effect of Parenting Style and Self-Compassion on Mental health for the total sample and sub samples on the basis of sex, locale and type of management of schools will be significant.

METHOD

Variable

Mental health is the key to wholesome adjustment (Scott, 1961; Nunnally, 1961; Smith, 1961). It is the freedom from disabling and disturbing symptoms that interfere with mental efficiency, emotional stability or peace of mind (Maslow, 1954). According to Meninger (1945), it is the ability of human beings to adjust to the world with maximum effectiveness and happiness. Parenting style

denotes the extent of parents' demandingness (control, supervision and maturity demands) and responsiveness (warmth, acceptance and involvement) in overall development of the child. For the present study, authoritative parenting style is considered. Authoritative parenting style is an effective style of parenting in which the parent is warm and loving, yet sets well defined limits that he/she enforces in an appropriate manner. Authoritative parents are demanding of and responsive to their children, and also clearly communicating expectations and rules. Neff (2003) derived the construct "Self-Compassion" from Buddhist psychology. Self-Compassion entails being kind and understanding toward oneself in instances of pain or failure rather than being harshly self critical, perceiving one's experiences as part of larger human experiences rather than seeing them as isolating and holding painful thoughts and feelings in mindful awareness rather than over identifying with them. Though the construct has its origin from the eastern philosophical thought, the investigator could find only a very few studies in India during the review of related literature. Therefore, the present study done on a sample from Kerala becomes significant.

Sample

The present study is conducted on a representative sample of 500 pupils of standard IX from 6 schools of Pathanamthitta and 3 schools of Alapuzha district of Kerala state. Samples are drawn by proportionate stratified sampling method giving due representation of factors like sex, locale and type of management of schools.

Tools

The tools were used for measuring the variables of the present study were: 1.Parenting Style Inventory (Usha and Sindu, 2004); 2. Self-Compassion Inventory (Usha and Lakshmi, 2007); and 3.Mental Health Status Scale (Usha, Anil & Remya, 1999).

Statistical Techniques

The study used two-way analysis of variance with 3x3 factorial design for finding out the main effect and interaction effect of Parenting Style and Self-Compassion on mental health of secondary school pupils.

FINDINGS

The main effect of Parenting Style on mental health was found to be significant at 0.01 level of significance for the total sample ($f = 13.390$) and the sub samples based on sex (for boys, $f = 5.012$ and for girls $f = 4.991$) and locale (for urban, $f = 7.420$ and for rural $f = 4.120$) at 0.01 level of significance. The main effect of Parenting Style on Mental Health was found to be significant for Aided school pupils ($f = 10.761$) at 0.01 level but it was found not to be significant for government school pupils ($f = 0.542$) even at 0.05 level of significance. The main effect of Self-Compassion on Mental health was found to be significant for the total sample ($f = 12.084$) and the sub samples based on sex, (for boys, $f = 15.167$ and for girls, $f = 7.691$), locale (for urban, $f = 11.448$ and for rural, $f = 6.161$) and type of school management (for aided, $f = 9.626$ and for government, $f = 14.835$) at 0.01 level of significance. The interaction effect of Parenting Style and Self-Compassion on Mental health was found not to be significant for total sample ($f = 0.851$) and sub samples based on sex (for boys, $f = 0.375$ and for girls, $f = 0.175$), locale (for urban, $f = 1.558$ and for rural, $f = 0.727$) and type of school management (for aided, $f = 0.689$ and for government, $f = 0.849$) even at 0.05 level of significance.

CONCLUSION

Today, much importance is being given to mental health and related areas because it is found that a poor mental health condition may prevent an individual from doing any progressive activity. Mentally healthy people are able to fulfill their social roles successfully. They enjoy peace of mind, happiness, self confidence and other's company. Today's children are tomorrow's citizens. So, they

must be brought up as citizens with good mental health. For that we must be aware of the variables that affect one's mental health. From the present study, it can be concluded that parenting style and self-compassion influence the mental health of secondary school pupils.

IMPLICATIONS

In order to improve the Mental health of pupils, parents should consider the following suggestions. They must never set rules, requirements and restrictions. They must encourage healthy bi-directional communication with their children. They must provide their children with a rationale for their actions and priorities. They must accept the child's uniqueness. They must encourage the child to correct mistakes and develop capacities. They must give enough freedom to the child so that he can develop at his own place. Parents and teachers can do the following to raise the self-compassion and thereby the mental health of pupils. If a parent or a teacher identifies a self-critic child, they must help him to understand the fact that all human being have got their own limitations and therefore failures can happen to anyone who is fully human. Thus, the child may learn to forgive his limitations and failures rather than being a self-critic. In instances of pain, help him to correlate his experiences as part of the larger human experience rather than seeing them as isolating. When the child faces failures, parents and teachers must point out where he has gone wrong and remind him about his previous achievements so that he regains self-confidence and self-kindness. Whenever the child succeeds, parents and teachers must be careful to appreciate the child at his success so that he feels proud of himself. Schools can adopt the following measures to promote the mental health of students. Conscientizing parents with regard to their influence on the child's mental health, arranging classes and lectures by experts on self-compassion and mental health and discouraging unhealthy competition among students. There must be provision for counselling in school and the counselling services in school must include facilities like psychological testing materials for assessing one's mental health. Thus, parents, teachers and school play a significant role in promoting the mental health of children. By promoting a child's mental healthy they are helping the nation because a mentally healthy citizen directly or indirectly becomes an asset to national progress.

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ORIENTING PRIMARY TEACHERS TOWARDS COMPETENCY BASED ENGLISH LANGUAGE TEACHING

K. Chellamani

INTRODUCTION

The basic aim of teaching English is to enable the student to develop the skills of listening, speaking, reading and writing English. It is while speaking and writing that the problem of

intelligibility and acceptability arises. Correctness based on internationally accepted standards can not be ignored by us. For today the compulsions of learning English in India arise, out of the need to enhance knowledge especially in science and technology. Therefore the teachers of English should take up the task of helping students to acquire the second language, English. A student must be equipped not only to get information and knowledge from books written in English, but must also have the ability to use the language for intelligent discussion and communication. He/she must learn English in a way that the sentences he/she produces, both written and spoken, must be clearly understood and must be adequate for the context. Of all the methods in language teaching, the communicative approach emphasis on current language in use. It presents the second language in more clearly specified social context and situation than the formal or structural approach. To meet the day's need, English has been introduced right from class 1, since 2003-2004. The area of development is focused on Listening, Speaking, Reading, Writing, Grammar, Vocabulary and Language. The Objective of Teaching English at the Elementary Level are to :understand simple statements when spoken; understand questions asked, short talks and short passages when read out(all within his experience); ask simple questions relating to his experience and answer them orally; read with fluency (both aloud and silently) and understand simple passages within the vocabulary and structural range of the syllabus; and express in writing with reasonable accuracy within the range of the syllabus or topics within his experience. These general objectives are specified in terms of competencies. The content of the text carries these competencies and the teacher instruction is in the form of a note. It is the task of the teacher to follow the note, understand the competencies and make use of the lesson, i.e., the tool for developing the prescribed competencies. Comprehension of the above is the basic prerequisite for any teacher to handle any text book whenever any revision occurs.

The latest revision of textbooks has begun from the year 2000. Introduction of new text book goes with the teacher's handbook and organization of in-service training programs. But interaction with the teachers reveals that they are not even aware of the competencies identified and enlisted. They take up the lesson as a subject to be taught and never think that it is only a tool for developing competencies. They do not know what competency means actually. They do bother about syllabus completion and preparation of students for examination. Without understanding the organization of the text, the input components are considered as lesson and are transacted to students as subject and lesson. As a result, the objectives of primary education are not attained. Hardly there is competency development. With this, base the primary level children move to upper primary class. In upper primary class, the area of language competencies are ten in number, right from Listening to Creative competency. It really requires a base, without which the objectives of upper primary can not be achieved. The entry behaviour of upper primary students with the existing condition really scare the language teachers of upper primary. Consequently with little understandings of competencies they prepare those students for examination by training them to by heart all ready made questions and answers. Ultimately throughout in elementary the prescribed competencies are not at all achieved and the objectives of elementary level education go in vain. One more aspect to be recognized here is the preparation of Teaching Learning Material by teachers. Teachers are expected to use TLM for effectiveness in achievement of competencies. TLM are supportive materials for the tool given in hand. TLM should provide experience for students in their development of language competencies. But actually happens is, teacher do take up preparation of TLM as part of their lesson plan writing. And they do produce charts in thermo coal, copying what is given in the textbook and call it a TLM. And this mechanical process may not also be followed for all, the lesson. It serves more for inspection process rather for development of competencies. Thus TLM plays a meaningless role in instruction. In order to have a comprehensive understanding of the prescribed competencies, the investigator pooled down all the competencies and made a list of them. For competency development among children, it is essential for the teachers to possess all those competencies. Therefore the required teacher competencies for the learner competencies in each language skill area are sketched by the investigator in her study. Objectives of the Programme

were to enable the primary teachers: To understand the theory of second language learning; To understand the second language teaching principles; To practice the essential language teacher competencies; To practice the expected language competencies of primary level students; To understand the psychological/pedagogical/technological principles in the instructional design; To know the concepts on preparation and utilization of TLM materials; and To equip themselves towards the application of the principles in their utilization for the development of desired competencies.

Sample

*Teacher sample :*Ten teachers from 5 zones in Chennai city were selected at random as teacher sample.

Student sample: Students of respective sample teachers, a set for each class (from class 1 to 5) was selected for the study.

Duration of the programme

A total of two months in which the training of the teachers was followed by implementation in their classrooms.

Research Phases

In order to realize the objective, the investigator had proceeded the research in the following manner.

Phase 1: Developing a tool to find out the present level of English language teaching competencies among primary teachers in Chennai City.

Phase 2: Designing an instructional programme where the preparation of TLM would be based on psycho/techno/pedagogic principles - "Orienting the teachers on learner's English language competencies and train them to design instructional language programmes along with the preparation of TLM".

Planning for a Training programme: The investigator assessed the training requirements of the teachers based on the data collected through a set need assessment tool. The one on TLM preparation was collected during an in-service training programme on TLM preparation. And the other on , "an assessment on English language teaching competency" was given to the primary teachers. From the responses, the investigator inferred that teachers need to:

*Have awareness on strategic planning and devising appropriate methods of instruction;

*Know that the preparation of instructional materials and devices must be in accordance with the nature of the learner and the principles behind learning;

*Possess the essential language competencies for facilitating the students to acquire the expected competencies;

*Understand the psychological/technological/pedagogical principles to be adopted in the instructional design; and

*Have the ability to identify the appropriate TLM requirements for development of the stated language competencies.

The investigator reviewed related literature for identification of instructional strategies, cognitive, metacognitive, psycholinguistic principles and literature to establish research grounds. The psycholinguistic principles for language teaching were gathered. Experts were consulted, regarding the principles behind preparation of TLM materials. The scientific principles behind selection, preparation and use of TLM were understood. Then Romiszowski's(1974) guidelines for using Media Taxonomies were selected. The theories of learning were consolidated and the pedagogical principles were listed down. The investigator referred technology books and studied the applications of technology towards education. In the perspective of TLM preparation, she identified

certain factors like Task factor, Student factor, Physical attributes, Economic factor, and Media factor, essential to be taken care of. Then the important component playing in human learning i.e., psychological principles were attended. The psychological principles were sketched under four frames, viz. Motivation, Attention, Perception and Cognition for concept formation. Thus the skeleton for preparation of TLM was set ready. Through the need assessment, the investigator realized the necessary inputs to be incorporated in the training programme. The necessity for teachers to comprehend the objectives of English Languish Teaching at primary level, the structure and the design of the text book, the enlisted English Language competencies, and the teacher requirements for developing the competencies among students were sensitized. Since the teacher trainees need theory inputs, the investigator arranged for expert lectures. While learning theories, practical sessions are essential for hands on experiences. Consequently, a schedule for preparation of TLM, using Pedagogical, Technological and psychological principles was interwoven in the program time frame. The programme was planned in such a way that through brainstorming their expectations were elicited and their requirements were incorporated. The first two days of the programme, the necessary theory inputs on English language teaching, familiarization of language competencies, conceptualization on TLM preparation and utilization, theory on language components were given. The other three days were exclusively for hands on experience on TLM preparation. The investigator gave a model Instructional design, with a demonstration class. The participants were ten in number and they were divided into five different groups. Each group was given one textbook thereby all the classes (1-5) textbooks were analyzed. Orientation on Instructional Designing was given. Here the teachers' perception on looking at the content was directed towards taking them as a tool for developing the expected competencies. The teacher was to see the relevance and the sufficiency of the given input for the prescribed competencies for students, with that deficiency identification, keeping the pedagogical and technological principles on the main frame, designed an instructional programme. This instructional programme has TLM and students' participation. Each group has a demonstration class followed by a feedback. The feedback carried corrective measures and it had been attended in the following session. The last session focused on consolidation, presentation and validation. The investigator realized the importance of portfolio writing for every individual to reflect on her own growth and development in the programme. Everyday, before the session calls it a day, they recorded the things they had learnt, and the areas of inquiry. The investigator collected their portfolios and did attend their enquiry in the following day. The last day they voiced out their experience in that programme. Thus the investigator designed a training programme where the primary teacher was tuned to develop Teaching Learning Materials using pedagogical, technological, and psychological principles. The developed instructional packages were consolidated and arranged in a module form.

Phase 3: The investigator wanted to assess the effectiveness of the training on teacher language competencies and hence administered the same pretest tool as post test tool. The research design of the training programme is pretest-training posttest design.. The scores of both the tests were collected. Teacher portfolios were also collected.

Phase 4: The training input, i.e., designing an instructional programme where the preparation and utilization of TLM are based on pedagogical, technological and psychological principles was taken to the classrooms by the trainee teachers. The teachers assessed the language competencies of the students' using the instructional design that they developed in the training programme, to their real class. It was followed by the administration of a post test tool similar to the pretest tool. The content validity of the tools was established by experts. The reliability of the tools was established by KR 20 method. The scores of both the tests were collected. This has been uniformly carried over by all the trainee teachers in their schools.

Phase 5: Scheme of Data analysis: The pretest and post scores on English language teaching competency of the trainee teachers were tabulated and the mean and standard deviation were computed. The scores of the competencies were computed and tabulated. In order to find out the significant mean difference between the pretest and posttest mean scores on ELT competency, the

't' test for correlated small group was applied. Hence 'r' value between the pretest and posttest scores of language competencies were computed separately. Omega square analysis was attempted. The pretest and posttest scores on English language performance of all the experimental group students performance were tabulated and the mean and SD were computed. In order to find out the significant mean difference between the pretest and posttest mean scores on English language performance, the 't' test for correlated sample was applied. Hence 'r' value between the pretest and posttest scores of the experimental groups was computed separately. Omega square Analysis was attempted to see the effect of the instructional design treatment in their performance in English language. In order to see the overall effectiveness of the treatment the weighted arithmetic mean of the entire students sample was found out to see the overall effectiveness.

CONCLUSION

The results of the analysis proved that there is change in English language teaching and assessing language in a way that encourages a positive working atmosphere, where students make mistakes and learn from them. The reflections of trainee teachers speak that there is shift in their perception of the text book. Moreover there is prevalence of confidence and hope in attaining the objectives of English language teaching at primary levels.

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AUTHORS

Prof. S. P. Malhotra, National Fellow, NUEPA, 17 B Sri Aurobindo Marg, New Delhi - 110 016
Dr. Basanti Dey Chakraborty, Asst. Prof., ECCE, NJ City University, 2039 Kennedy Blvd., Jersey City, NJ 07305 USA
Prof. D. R. Goel, Centre of Advanced Study in Education, MS University of Baroda, Vadodara - 390 002 Gujarat
Dr. (Mrs.) Chhaya Goel, Centre of Advanced Study in Education, MS University of Baroda, Vadodara - 390 002 Gujarat
Prof. PL. Ponnalagappan, Head, B.Ed Wing, Directorate of Distance Education, Annamalai University - 608 002 TN
Prof. A. Selvaraj Gnanaguru, Head, Department of Education, Annamalai University - 608 002 TN
Prof. James M. Cooper, Professor Emeritus, Curry School of Education, University of Virginia, USA
Dr. (Ms.) Amy Alvarado, Asst. Prof., Curry School of Education, University of Virginia. USA
Prof. S. Rajasekar, Department of Education, Annamalai University - 608 002 TN
Mrs. Saleena Philpose, M.Phil. Scholar, Department of Education, Annamalai University - 608 002 TN
Dr. R. K. Bagga, Director (outreach), IIIT, Gachibowli, Hyderabad - 500 032 AP
Prof. M. S. Bhat, School of Management Studies, JNTU, Kukatpally, Hyderabad - 500 072 AP
Dr. A Vidya Sagar, MD, Avantel Softech Limited, Plot 16, Sec III, HUDA, VSNL, HYDERABAD - 500 081 AP
Dr. Sunita Godiyal, Reader, Dept. of Education, HNBG University, BADSHAHI THAUL, Dt. Tehri - 249 199 Uttarakhand
Dr. R. C. Nautiyal, Dean & Head, Faculty of Education, HNBG University, BADSHAHI THAUL, Dt. Tehri - 249 199 Uttarakhand
Dr. (Mrs.) Sumana Paul, Dept. of Education, Women's College, Shillong - 793 001 Meghalaya
Kh. Malemnganbi, Res. Scholar, Dept. of Education, Women's College, Shillong - 793 001 Meghalaya
Dr. Sesadeba Pany, Lecturer, Krishna Education Centre, PG College of Education, Dadour, Dt. Mandi - 175 027 HP
Dr. S. Paul Douglas, Asst. Prof., Dept. of Engg. Chemistry, AU College of Engineering, AU, Visakhapatnam - 530 003 AP
Dr. G. Srinivasa Rao, Sr. Lecturer, St. Mary's Centenary College of Education, Gnanapuram, Visakhapatnam - 530 004 AP

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EDITORIAL
RESEARCH AND TEACHER EDUCATION

Sunil Behari Mohanty

INTRODUCTION

Three years ago, the editor, as a member of a Teacher Education Resource Group inspection team had visited a State Government managed College of Teacher Education. Majority of faculty members of this institution, including its principal, did not have B. Ed. Degree. The principal said that there was no necessity of M.Ed. or even B. Ed. qualification for its faculty members, as the students taught by such faculty were doing well in the university examinations. During visit to two other States, it was also found that the principals of the government training colleges did not have B.Ed. qualification. There are examples of persons having no Ph. D. in Education subject, no M.Ed. and even no B.Ed. Degree occupying posts of professors of Education in Regional Institutes of Education of NCERT and in University of Delhi. Recently, a national body organised a national conference on teacher education, wherein a large number of resource persons having no M.Ed. or Ph.D. (Education) were invited to talk on teacher training programmes. Although the university Grants Commission requires any Master degree in Education (M.Ed. / M.A. (Education), many universities insist on another PG Degree for their posts of Lecturer in Education. This indicates that teacher education in India has not been able to assert its genuine place in the field of higher education. In order to come out of deplorable situation, teacher education requires a strong research base that can seek answers to a number of questions and suggest remedies for various types of frailty in the system of teacher education. Studies comparing different aspects of initial teacher training in India and in certain other developed countries undertaken from time to time can be useful in developing an effective teacher training system. Comparative study of the efficiency of the products of teacher education programmes and case studies of effective teacher education institutions and their programmes facilitate improving quality of teacher education. The international review of curriculum and assessment framework Internet archive (http://www.inca.org.uk) describes teacher training curricula in a few developed countries. Is there a necessity for a web site in India to display essential aspects of teacher training curriculum in Indian States and UTs? Should there be increased stress on having national / state level researches on teacher education? A few of the issues that may need immediate attention may be as follows:

INNOVATIONS IN INITIAL TEACHER TRAINING

Deliberations on innovations make teacher trainees aware of importance of undertaking innovations for bringing improvements in the school system. "In a global knowledge economy, where the touchstone of competitiveness will be capacity for innovation, the fostering of a culture of innovation is a matter of encouraging the rapid spread of inventions

and new ideas throughout a society" (UNESCO 2005, p. 59). Effective teacher training programmes promote a culture of innovation that promotes rapid spread of innovations and new ideas. Do courses of studies of the examining bodies encourage innovation? If not, how these can be modified to encourage innovations in initial teacher training programmes?

Innovative Courses to suit to Changing Needs

More than three decades ago, the Education Commission 1964-66 stated that "New courses required to meet special needs should also be developed" (Kothari 1966, Art. 4.26, P. 136). The nation has not been able to develop courses to fit to the requirements of different categories of candidates and keeping in view effective utilisation of time and energy for teacher training. However, certain examining bodies such as Jamia Millia Islamia have started a few innovative courses - B. Ed. (Special Education), B. Ed. (Nursery Education), M. Ed. (Elementary Education), M. Ed. (Special Education), M. A. (Educational Planning & Administration). Should such types of innovative courses be started by other examining bodies?

Advanced Level and General Level Initial Teacher Training

In spite of having cent per cent trained teachers in secondary schools, many States have large numbers of institutions where general initial teacher training courses such as B. Ed.; D. Ed., are being provided. Should these States go for Advanced Level of Training Courses so that products of their courses can get preference for teacher recruitment by developed countries? In an era of global competition, introduction of advanced level of teacher training, no doubt, is a necessity. There are special government schools for gifted children. There are also high fee charging private schools which look for talented teachers at higher salary than the Government rates. Countries like UK have developed standards for excellent teachers and advanced skills teachers. Are special training programmes necessary for teachers for teaching gifted children? Should such programmes have provision for internship experience in the special schools? Should this advanced level course be a self-financed course? Can DIETs run such courses for preparing teachers for elementary school teaching and also for pre-school teaching? Should existing two year B. Ed. courses be geared to teaching in Navodaya Vidyalayas, Sainik schools and Public schools and be renamed as B. Ed. (Gifted) courses? Will the Central Government provide a higher scale of pay for products of two year courses? Should there be separate advanced level courses for primary, middle, secondary and higher secondary teaching? In view of single subject method, what should be the duration of B. Ed. (Gifted Higher Secondary) course? Should admission for M. Ed. course be restricted to only a student having passed Advanced Level B. Ed. Course of two year duration?

One Year B. Ed. Courses for Pre-School Teaching for Graduates

As the 86th amendment of the Constitution, has made pre-school education part of Article 45 of the Directive Principles of the Constitution and has made it responsibility of the Government, is there a necessity for creating

examining bodies for pre-school teacher education in each of the States and UTs and expanding facilities for pre-school teacher training? Should DIETs start pre-school teacher training courses? Can Jamia Model of One Year B. Ed. (Nursery Education) course be suggested for other examining bodies? Is it necessary to make this qualification equivalent to two year Diploma course for pre-school teaching after higher secondary?

One Year B. Ed. Courses for Elementary School Teaching for Graduates

Kothari (1966, P. 136). Stated that "The employment of graduates in primary schools - even at the lower primary stage- has been increasing and a special course designed for them could be of great value." After three decades, is this recommendation still valid? Recently, an analysis of qualifications of primary school teachers in Puducherry found that majority were graduates. NCERT had instituted B. Ed. (Elementary) course which was withdrawn. Many developed countries have increased minimum qualifications for primary school teachers to degree level and are also providing their teacher training at the university level. University of Delhi has been providing Bachelor of Elementary Education (integrated course) for higher secondary passed candidates. Is it necessary to have provision for teaching of content, as found in case of two year Diploma courses for higher secondary passed candidates? Is it necessary to have same quantum of practical work? What should be the duration of such a course? What should be the duration of practical training? Can it be a credit based course having Grading system for evaluating performance of teacher trainees? Will appropriate bodies take steps to make such a course viable by making one year B. Ed. (Elementary) courses equivalent to two year Diploma/Certificate courses for elementary school teaching to encourage upgrading of elementary school teacher training to higher education level?

PG Diploma for Higher Secondary Teaching

Teachers in lower secondary schools generally teach two subjects for which B. Ed. courses provide two method subjects. A teacher at the higher secondary school stage teaches only one method subject and requires training in teaching of one method subject. School teaching experience may be restricted to teaching of school students of classes XI and XII. Instead of prescribing one year B. Ed. course for such teachers, should there be a new course such as PG Diploma for Higher Secondary Teaching? What should be the duration of such a course? There are States like Orissa, where most of the higher secondary classes are attached to junior colleges as part of higher education and their teachers need not be trained. Should there be a PG Diploma for Higher Secondary Teaching Course (Distance Mode) for such teachers?

B. Ed. (Education)

While recommending introduction of Education as a subject at both undergraduate and post graduate stages, Kothari (1966, p. 126) stated that.

"In all these courses – undergraduate or postgraduate- a minimum teaching practice should be obligatory just as laboratory work is a compulsory part of the study of sciences. It should be possible for a student who has taken these courses, to become a teacher, after a

period of internship and, if necessary, after some in-service education provided through summer institutes."

There are States (e.g. Orissa) where 'Education' is a subject taught even at the higher secondary stage and it includes training of teaching skills and practice teaching in primary schools. The 'Education' graduates do not deliver lessons in secondary schools and do not cover all types of practical training and all methods of teaching covered in a Diploma or Certificate course for elementary school teaching, a special course is required for them- What should be the duration of such a course?

Bridge Courses to Switch Over from One Stage to Another

A programme is being provided by the government of Uttar Pradesh to make B. Ed. passed candidates eligible for primary school teaching job through their participation in special BTC programme of 6 month duration. Should such attempts be tried out in other parts of the country?

TECHNIQUES FOR IMPROVING INITIAL TEACHER TRAINING CURRICULA

As the society advances, new techniques appear to take care of various concerns. What are the techniques applicable for initial teacher training curricula of this century?

A Few Concerns

MHRD (1986) mentioned a few concerns such as Education of Girls & Removal of Gender Bias (P. 6); Inclusive Education (P.8); Education of Children from Minority Groups (p. 8); Education of Children from Scheduled Caste and Scheduled Tribe Groups (p. 6); Secularism (p. 3); Democracy and Equality of Educational Opportunities (p. 4); National Integration (p. 4); Value Education (p. 4); Peace and International Understanding (p. 4). Should initial teacher training curricula take into account all these concerns?

Improving Quality of Training in School Teaching

Minimum number of lessons to be delivered per method subject varies from one State to another and from one examining body to another. What is the magic number? Should it be a specific number of lessons or a specific period of attachment to school?

Giving Stress on Freedom and Flexibility

Flexibility is an accepted principle of good initial and continuing teacher education programmes. Good curricula have in built freedom to develop its own curriculum keeping in view resources available and national standards for teacher preparation. In an ideal situation, each teacher trainee develops his/her own curriculum. They set their own goals and develop action plans to explore issues that matter to them and develop varieties of lesson plans and teaching learning tools. Effective programmes give freedom to their faculty members to carry out innovations. Will it be possible for examining bodies to allow freedom and flexibility in their initial teacher training courses?

Providing Opportunities for Self-Learning of Teacher Trainees

Modern strategies suggest that initial teacher training is possible through a more personalised training route. In order to have optimum utilisation for self initiated learning of teacher trainees and teacher educators, is it necessary

to have the library and the computer room kept open during morning and evening hours? Advancements in science and technology have brought in newer sources of learning than available in formal traditional sources. Now, there are ample opportunities for self- learning for teacher trainees, who are exposed to Internet. Are initial teacher training courses giving scope for self-learning of teacher trainees? If no, how to ensure it?

Utilising Modern Teaching Techniques

Good programmes train their trainees in skills such as engineering effective discussions, questions and tasks that elicit evidence of learning; providing feedback that moves learners forward; clarifying and sharing learning intentions and criteria for success; and activating students as the owners of their own learning and as resources for one another. They provide training in skills of developing and using graded worksheets and in undertaking project work. They encourage peer learning, group learning, collaborative learning, learning through dialogue and learning from assessment of learning. They utilise innovative methods. To what extent teacher training programmes are utilising modern techniques in training their teacher trainees? Is it necessary that the teacher training courses of studies do specify methods to be utilised in transaction of theory?

Utilisation of ICT including Internet Resources

Effective utilisation of ICT techniques changes the role of the teacher from teacher as a "presenter" to that of a "problem-poser", to a "co-learner" with learners in a problem centered classroom. Is it advisable to make ICT a compulsory paper in each initial teacher training programme? Will utilisation of ICT improve the skills of teacher trainees in all types of situations? What will happen, if they are posted in schools away from urban locations? Will ICT skills be of no help in such locations? UNESCO (2005, p. 22) states that

"There is no point in linking populations with fibre optics unless the development of skills and efforts to produce appropriate contents keep pace with that "connectivity". Information and communication technologies still require the development of new cognitive and legal instruments in order to realize their full potential."

Will the training programme cover training in traditional audio-visual aids, in addition to modern aids, so that there can be effective teaching even during the power cut period, when electrical gadgets are not used?

Action Research

The initial goals of an action research project develop and change as teachers share and reflect on experiences. Some nations provide training in research skill development (OECD 2005, p.107). In case of many examining bodies, trainees submit action research reports for evaluation as part of course requirement. Are they real action researches? Do the trainees get time to undertake action research during their internship? Is it necessary for teacher educators to have action research in training their trainees in different skills and even in taking theory classes?

Lifelong Learning & Learning to Learn

Effective teacher educators make the teacher trainees acquire lifelong learning skills for their own initial training as well as for continuous professional development. Do teacher

educators employ innovative, activity and learner centred strategies in theory classes? Learning to learn requires abilities such as locating, classifying and sorting of the information. Do teacher training programmes develop the skill of learning to learn among teacher trainees? Do they make the trainees develop skills of using lifelong learning tools such as dictionaries, encyclopaedias, thesaurus, index, maps, and globe?

Learner Centered Teaching Strategies

Knowledge does not come from the teacher; it is constructed by the learners. Knowledge society requires use of varieties of strategies suited to each learner's intelligence. Effective teaching requires varieties of teaching methods so as to cover preferences of student groups for any modality. Do teacher educators employ learner centred strategies in teaching theory? Do they utilise constructivist approach, which points out that learning is a personal process? Personalising teaching and learning strategies enable students receive support tailored to their needs, interests and abilities (Gilbert 2006). These strategies are renewed commitment for learner-centered education. Do teacher training programmes provide training in facilitating personalised learning in the classrooms? Do they go for personalised learning of teacher trainees?

EVALUATION OF INITIAL TEACHER TRAINING CURRICULA

Having physical or human resources is not enough for delivery of high quality initial teacher training programmes. Many developed nations carry out periodic evaluation of the programmes at national, state and institutional levels. The strategies employed include portfolios, interviews, performances and direct observation. Is there a necessity for such types of evaluation in Indian situation? What should be the mechanism? Broadly, teacher education programmes are delivered by four types of institutions: University Departments of Education, Departments of Education in general colleges, Government Training Colleges and Private Training Colleges. Is there any difference in quality of the programmes delivered by these institutions? There is a Central Government scheme for improving quality of teacher education. Three types of institutions have come up: Institute of Advanced Study in Education (IASE), College of Teacher Education (CTE) and District Institute of Education & Training (DIET). Are IASEs, CTEs and DIETs providing better quality initial teacher training programmes? If not, should these be abolished? Is there a necessity of such institutions being managed by the Central Government?

CONTINUOUS PROFESSIONAL DEVELOPMENT (CPD) OF SCHOOL TEACHERS

Inter-school sharing of experiences by teachers working at elementary school level is being carried out through the activities of Cluster Resource Centres and Block Resource Centres. Is there a necessity for having such centres for secondary and higher secondary school teachers? Is quality of cluster resource centre activities getting negatively affected due to absence of highly knowledgeable and skilled master trainer, who is available in case of extension service centre? Many old teacher education institutions have extension Services Units. Should every teacher education institution have an extension services centre?

TRAINING COURSES FOR HEAD TEACHERS

Kothari (1966, p. 469) stated that "… special training courses (which do not exist at present) should be organized for headmasters. They should include short induction courses for those who are newly promoted as headmasters as well as periodical refresher courses for others". MHRD (1986, P. 27) stated that "Heads will be specially selected and trained." MHRD (1992, p. 117) stated that "Each State government should formulate a training policy and perspective plan for organising training programmes for educational planners and administrators at different levels." Chapman (2005, pp. 24-25) suggested induction programmes, mentoring programmes and leadership coaching. What factors are obstructing national government as well as State governments to provide a training programme for heads of schools delivered as Diploma courses though distance or face to face mode? What should be the duration of such a course? Can there be a degree course such as One Year Bachelor Educational Leadership (B.E.L.) course? Can such a course, be made available for supervisors / inspecting officers of schools?

TEACHER EDUCATORS

Updating of Knowledge and Skills

Recently, in two workshops being conducted for developing skills for writing research papers, it was found that all the participating teacher educators was not aware of the 86th amendment of the constitution. They did not know that elementary education had become a fundamental right and ECCE had a place in Article 45 of the directive Principles. Continuous updating of knowledge and skills of teacher educators is essential for implementing an excellent initial teacher training curriculum. Should there be periodical tests conducted at various levels? Should there be a mechanism to make teacher educators aware of what changes have taken place in the materials they had learnt during their own training? Which agency should take lead in the matter? Is it necessary that quality assurance in teacher education need develop and operationalise resource centres for continuous updating of knowledge and skills of teacher educators?

Qualifications of Teacher Educators

The minimum qualification for a Lecturer in Education varies from State to State and from Central University to State University inside a State. Qualification wise, there are five types of Professors of Education, who besides a Ph. D. Degree in Education or any other subject has qualifications such as: (a) B. A. / B. Sc. & M. Ed.; (b) M. A. /M. Sc. & B. Ed.; (c) M. A. / M. Sc. & M. Ed.; (d) M. A. (Education); and (e) M. A. / M. Sc. Which of these is most effective? Many examining bodies require that a Lecturer in Education need to have another PG in addition to M. Ed. Do such teachers perceive that they are inferior to their counterparts teaching general subjects, who joined teaching profession two years earlier? Does this inferiority feeling affect quality of their performance?

School Teaching Experience of Teacher Educators

Many commissions in India and reports of many international bodies give stress on necessity of school teaching experience of faculty members

of teacher education institutions teaching method subjects. There are a large number of teacher educators without any school teaching experience. In earlier days, the faculty members used to have not only prior school teaching experience for enabling them to act as teacher educator, but also they had continued school teaching experience. Did this practice remove remoteness of staff in teacher education institutions from current classroom practice? Has non-specification of such a necessity by the UGC and other national bodies resulted in dilution of the quality of teacher training? In case of faculty members who do not have recent school teaching experience, do the demonstration lessons become stereotyped and ritualistic? In many systems, periodic school teaching was part of duty of teacher educators. In case of primary education in India, it was stated that "Without primary level teaching or research experience, particularly in rural schools, teacher educators are poorly prepared to educate" (World Bank, 1997, p. 161). Is this argument equally applicable for faculty members who teach B. Ed. courses?

Teacher Educators as Honorary Academic Supervisors of School Teachers

There are State Government institutions, where a faculty member has to teach for *less than three hours* a week. This is the worst kind of wastage of human resources. The teacher education institutions having only B. Ed. courses, on many occasions, are unable to provide any work to most of their faculty members, when admissions are delayed. Is it necessary to declare teacher educators as honorary academic supervisors of school teachers indicating their areas, so that the heads of the teacher institution can engage the fewer hours working faculty members in observation and giving feedback of school teaching or in preparation of teacher support materials? Will feedback given by the faculty members of teacher education institutions help the school teachers, regular supervisors and heads of schools?

Test for Selection of Teacher Educators

As there is a difference in content covered in Method theory subject at B. Ed. and at M. Ed. or M. A. (Education), can a teacher educator selection test will take care of the differences in preparing teacher educator through M. A. (Education) or M. Ed. courses? M. Ed. course in many States are taught through State languages. Such students may not have acquired secondary school level English language. For example, it was found that a lecturer while filling up a Form for becoming member of an association, wrote "M. Phil" as "M. Fill". A Lecturer having studied M. Ed. through Gujarati medium generally can not teach B. Ed. Tamil medium students. Hence, is it necessary to have separate test for selection of teacher educators at each State level? Should there be national level and State level selection tests? Should the tests include assessment of classroom teaching performance through observation and analysis of video recording along with the applicant? Should there be a Test for issue of Provisional License and another Test for Issue of Regular License? If a national level test is suggested, which agency should take the responsibility of preparing test items, administering tests and declaring results

Orientation of New Teacher Educators

Adequately qualified persons starting career as teacher educators need orientation to the new

roles. Whether there is such a necessity? Studies conducted on existing teacher educators can help in answering this question. If the answer is yes, should studies be undertaken to suggest guidelines for such programmes?

CONCLUSION

Training teachers is a complex issue. "Teacher preparation has become a controversial issue all over the world." (Bray 2007, P. 11). Researches may not be able to suggest strategies that are effective universally, but these strategies can be adapted to suit to specific requirements. There has been no conclusive research evidence for teacher education that can be applicable globally. Various international bodies like UNESCO, World Bank and IIEP have been carrying out researches and encouraging nations to do research. In 2000, American Educational Research Association has set up a panel on Research and Teacher Education. Editors of this Panel stated that their job was to "recommend a new research agenda for teacher education by outlying topics that needed further study, identifying terms and concepts that required clarification and consistent usage, describing promising lines of research and processes most likely to define new directions and yield useful findings for policy and practice" (Cochran-Smith and Zeichner 2005, p. x). In this editorial, an attempt has been made to highlight a few research issues so as to provide a base for All India Association for Educational Research (http://www.aiaer.net) to set up a panel on Research and teacher Education.

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EPISTEMOLOGICAL ISSUES RELATED QUALITY RESEARCH IN EDUCATION
(Presidential Address at AIAER Annual Conference 2008)

S.P. Malhotra

Dear friends and colleagues, I welcome you all to this conference. Your presence in the conference shows your concern for research in the field of Education.

Friends! Research means investigating ideas and uncovering useful knowledge. It is personally rewarding and socially beneficial. Research quality is an *epistemological* issue (related to the study of knowledge). By quality knowledge is meant the knowledge gathered by appropriate tools and analysed without bias. The quality based knowledge is important to librarians (who manage information resources), decision-makers (who apply information), jurists (who judge people on evidence) and journalists (who disseminate information to a broad audience) and above all to the human beings for furtherance of development. That is why it is hammered on the scientists and analysts to create reliable information. The education scientists are therefore urged with concern that they should create such knowledge so as to draw out policies to shape the future generations. The present conference has been organised with this concern. It is hoped that the galaxy of scholars and experts will delve deep into the issues related to quality research.

Issue of quality in research in education has been pressurising the minds of the teachers and Researchers along with policy planners since the first Ph.D. in education was awarded by the Bombay University in 1943 to Dr. D.V. Chikermane for his thesis entitled "Factor Analysis of Arithmetic Ability." To this date nearly sixty five years have passed and more than twelve thousand thesis and projects have been added to this area of study. Instead of one university, now there are more than hundred universities and research institutions who have been putting their might to promote educational research in Education. During these years, grammar of research has evolved with respect to research techniques and complex research designs. One can also observe a change in documentation process wherein many individuals and institutions have come forward to do the task of documentation. Even the concept of dissemination of research has been introduced in the area of education. Efforts have been made to interpret research findings for regular teaching learning process as well as policy planners under "What Research Says to Classroom Teacher". Introduction of Internet (that makes unfiltered information more easily available to the researcher) has made the task of generating knowledge easier thus raising the concern for quality.

In such a situation, I will like to touch upon five major aspects that can bring change in quality of research in the discipline of Education. The first and foremost thing is that let us accept the existing realities of the world. Privatisation has entered educational system,

where the emphasis is on production and priorities are result oriented. Commitment of Private institutions to business has to be accepted. This has an implication that more people will opt for research at Ph. D. level. Obvious reason is that there are more job opportunities in the private sector than the government institutions. Again the chances of promotion are ample in the private institutions than the government system. Large number of men and women therefore will aspire to get doctorate degree for getting the elation of being knowledge workers. Added to it, is the enthusiasm of teacher educators, who in order to be the supervisors will be another addition to the army of researchers. The existing teacher education colleges or the University departments of education in the government aided sector may not be able to accommodate all the aspirant researchers and enthusiast supervisors. But the pressure of numbers cannot be negated. The obvious resultant would be mass production of Ph.D.s. Question is - "Does Mass production Necessarily Mean the End of Quality?" The answer to this question may be both "Yes" and "No". "Yes" in the sense that when large number of researches are taken up, the quality control measures become weak and monitoring does not remain feasible. On the other hand "No" to the said question means that if the process of discovering knowledge is streamlined, the mass production of Ph.D. or research dissertations will add to knowledge generation activities. There is a need to make the grammar of research quite simple and free from pedanticism. Several terms in research grammar should be well defined so that the researchers understand the meaning easily. The issues related to research grammar like research design, sampling process, hypothesising or statistical designs have to be made streamlined in such a fashion that the researchers do not remain confused. Along with quantitative research, qualitative aspects of research should also be made part of the research process. The research questions should be prompted through the process followed by the researcher. Analysis and synthesis should be made part of the routine teaching-learning process so that thinking becomes habit of the researchers. Like language grammar, research grammar should also be continuously hammered in the classrooms of Education discipline so that researchers get accustomed to the formalities of research methods. The objective should be to produce knowledge by quality research process and inculcating thinking process in the researchers. The role of thinkers today is to mend the existing system with vision to help the discipline of Education grow with the professionalism so as to produce quality research.

Secondly, the need of the time is to prepare road map for research issues so as to delve in to specialised areas of research in education. The researchers have to be trained to perceive the problems and find solutions. The existing scenario of education in the country as well as that of the world should be made clear to the researchers. The teaching learning system as well as curriculum in the discipline of Education should be designed in such a way that the researchers are sensitised to the problems of education. Liston et al (2008) in their editorial pointed out that "Teacher quality research emerges from different conceptual lenses, some less familiar to educators (e.g., labour

economies). It is important to grasp varied theories of action implied and to analyze assumptions and values in different research designs." Research process and research problems in education should be such that these solve societal problems from different angles. For example, the society in India at present is being faced with problems like violence in schools, sex linked problems at primary stage of education, aspiration of parents that their child should lead the class in every activity, going for tuitions even at pre-primary level, etc. It is the duty of researchers in education to find solutions to these problems. Providing research answers to such problems and giving theoretical base to issues like these will help add quality to research.

The answer to such problems is not simple. It involves knowledge of sociology, psychology as well as economics. Therefore thirdly, it may be pointed out that the researchers should be made to explain the issues from various points of view: economic angle, political angle, administrative angle and social angle. The researchers in education have to be oriented to various disciplines so that they can explain their findings properly. Knowledge of various disciplines will help building theoretical base of educational problems and workable solutions will emerge out of these. A research providing solutions to the societal problems is quality research.

Fourth aspect to achieve quality in research is to change pedagogy of research. At present, the researchers are provided basic theoretical knowledge of research process at the Masters level and later they get in touch of the supervisors who without putting the researchers to learning research process help them in selecting problems and conducting research. That is why, as has been observed, most of the research problems of the researchers usually match the research thesis of the supervisors (Singh 2008). Further, the pedagogy of research in most of the cases remains up to counselling by the supervisor. There is a need to change this pedagogical process. The institutions will have to take up the challenge by formally introducing inter-scholar and teacher-scholar interaction. Regular seminars in the institutions on research need to be initiated where all research scholars and interested faculty should discuss research problem, methodological issues of research, various implications of findings etc. Each of the sessions in the seminars should be prolonged and well debated and followed by individualised feedback on performance in the seminar. Here, the supervisors have to be careful and should receive feedback for their scholars open mindedly. The interactive sessions may be extended for having views of the outside fraternity (if possible/available). The ideas of the outside faculty are also reflected in research publications. The researchers should be asked to plan their research in such a way that the research can bring out two or three publications. The feedback received from the editors of the research journals will be most beneficial in improving quality of research. *Peer review* (critical assessment by qualified experts, preferably reviewers, who do not know author's identity) enhances research quality. This does not mean that only peer reviewed documents are useful (much information is distributed in working papers or reports), or that everything published in professional journals is correct (many published ideas are proven false),

but this process encourages open debate about issues (Lee and Kamler 2008). Unfortunately, Indian research journals rarely reply back to the researchers for their publications. Even the research journals published by apex bodies of India rarely send back the research papers with feedback to the researcher. There is a need to upgrade research journals in Education.

Fifthly, the research institutions should identify their thrust areas or the areas of specialisation wherein the research issues would be identified. It should be left to the research scholars to know their areas of interest and then identify the institutions where they would like to get registered for research. The thrust area identification will provide specified pedagogy of research which will be easily understood by the researchers and reputed institutions will come forward to supply a manpower thoroughly oriented in research techniques. Further, the concentration of research in the selected areas will help in the formation of group of researchers who develop in to teams pursuing common goals. These teams and the inter-team and intra-team interactions will provide major input to bring quality improvement in research.

CONCLUSION

In short, it may be mentioned here that most of the universities and institutions in the country and world over are concerned about quality of research. One consequence is that doctoral students are now being encouraged to publish during (and as part of) their candidature. While thesis publication practices are relatively well established in the sciences, students and their supervisors in the social sciences are facing new pressures to produce a range of peer reviewed publications by the time dissertation research is completed. In the days of globalisation and Internet technology, it is required that the research scholars are trained well and the research is conducted in a pragmatic framework. The pedagogy of research needs to be harmonised with the research environment so as to develop a research culture. The research supervisors instead of criticising and finding fault with the system should come out openly to create a research culture.

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PHILOSOPHY ON THE RESTORATION OF SCHOOLS IN JAPAN: THE VISION, PRINCIPLES AND ACTIVITY SYSTEM OF THE LEARNING COMMUNITY

Manabu Sato

ANOTHER LANDSCAPE

Let me start by describing a "landscape," which is not well known outside the circle of school teachers and is set against the backdrop of a raucous clamor about the school crisis and a quick succession of top-down school reforms: as of March 2008, roughly 2,000 elementary schools and 1,000 junior high schools across Japan were tackling school reform calling for the establishment of learning communities. Together, they represented about 10% of total public schools in Japan.

This landscape presents a remarkable contract to one that the Education Rebuilding Council, an advisory body to Prime Minister Shinzo Abe, who cried out about the crisis of public school education and about a decline in academic standards and the leadership quality of teachers, and the Central Education Council of the Ministry of Education are creating by mobilising the mass media. This illustrates that a revolutionary change in public schools is taking place where the Education Rebuilding Council, the Central Education Council or the mass media have no roles to play. As an educator who has been involved in the preparation and organisation of this "silent and long revolution," I will introduce in this article the philosophy for school revitalization that calls for the creation of learning communities. I may add here that, in the school reform that involves the establishment of learning communities, the vision and the philosophy of reform are preceding its practice, while its theoretical elucidation is falling behind the progress in its implementation.

Why is it that so many schools are actively participating in the school reform that embraces the creation of learning communities? Why is it that this reform is prompting so many teachers to rise up to its challenge? And why is it that this reform achieves success that can only be called "miraculous?" I have presented the vision and the philosophy of reform, designed a strategy for its implementation and pressed for change by visiting schools throughout the country, but even I have no answer to these core issues. But there are many things I have discovered, learned and drawn lessons from through the course of my study on school reform. In this article, I will attempt to integrate these fragmentary lessons and describe the philosophy that lies at the heart of school reform in theoretical language, where possible, rather than in the language of practice. In other words, it is a description of what is being done behind the scenes to support school reform. This reform envisioning the creation of learning communities has rarely been attempted in Japanese education and it is characterised by the fact that it is guided by philosophy, thought and theory.

The vision of schools as learning communities goes back to 1896 when John Dewey founded a laboratory school as part of the University of

Chicago. The idea of the learning community spread to many parts of the world (Note 1) in the new education movement that began in the 1910s and, after the Second World War, it was woven into the educational reform based on progressivism in the form of "open schools" in the United States in the 1970s. Today, it is discussed as one of the visions for schools in the 21st century.

The idea of the learning community was first discussed in Japan's academic circles and in education research in 1992 when I published Learning as a Practice in Dialogue: In Search of Learning Community (Yutaka Saeki, Hidenori Fujita and Manabu Sato, 1995) and was first practised at Ojiya Elementary School in Ojiya City in Niigata Prefecture (Note 2), a project in which I participated and cooperated. The idea was transplanted to Minami Junior High School in Nagaoka City in 1996 when the principal of the Ojiya Elementary School, Mr. Kenichi Hirasawa, was transferred thereto. In 1998, the Chigasaki City Board of Education founded a learning community as a pilot project after its officials visited the two schools.

It was the establishment in 1998 of a pilot school, Hamanogo Elementary School that was dubbed a "pilot school for the 21st century," that served as the starting point for the spread of learning communities across Japan. Mr. Toshiaki Oose, manager for school education in the city's board of education, played the central role in the preparation for the creation of the school. He drafted a ten-year school reform plan incorporating my vision, philosophy and methodology for learning communities, got it passed by the city council and, with the support of the mayor, the head of the board of education and the city council, created Hamanogo Elementary School as a pilot programme, facing the challenge of managing the institution as its first principal. (Note 3). The establishment of this school was a historic event: no public school had ever been created based on its own reform idea and vision of education before. Following are the vision and the philosophy as embodied specifically in Hamanogo Elementary School as a learning community.

Schools as learning communities:

The learning community is a concept that envisions the evolution of schools in the 21st century into places where children come together to learn and grow, where teachers learn and grow as professionals and where parents and citizens learn and grow by participating in educational activities. In order to fulfill this vision, students learn how to work together in classrooms, teachers build collegiality (Note 4) in their offices where they creatively challenge the issue of how to conduct classes and critique and learn from each other, and parents and citizens take part in classes and work jointly with teachers (classroom participation). Schools as learning communities are guided by three ideas: public philosophy, democracy and excellence.

Public philosophy:

Schools are organised based on a public mission and accompanying responsibilities, and teachers are professionals who are responsible for carrying them out. They are responsible for fulfilling each schoolchild's right to learn and for bringing about a democratic society. Public philosophy also means that schools are open as public spaces. In other words, it is a concept

that schools and classrooms are open to everyone inside and outside and that a variety of ideas and views on life are freely discussed through interactive communication. (Note 5)

Democracy:
The purpose of school education is to build a democratic society, and schools themselves must, therefore, be democratic social organisations. Democracy is more than a mere political process. Democracy here means a way of associated living as defined by John Dewey. In schools organised on democratic principles, each schoolchild, teacher and parent participates in their management as a protagonist with his or her own role and responsibility.

Excellence:
Activities to teach and to learn require a pursuit of excellence. Here, I am not talking about excellence in comparison with others. It does mean that we do our utmost and pursue what is best. The pursuit of excellence in competition with others results in a sense of superiority or inferiority, while the pursuit of the best through utmost efforts brings deep humility and modesty to teachers and learners alike. Teaching and learning activities are built essentially on the pursuit of excellence in this sense, which I am advocating as "learning to stretch and jump."

Methodology: Building of Activity System
The learning community I propose rests on a relationship in which people listen to each other. To listen to what others have to say is the starting point of learning. It is often characterised as an active behavior, but its essence actually lies in "passive activeness." It is said that the ancient Greek language had a voice of verb which combined the active and passive voices. Learning, like this Greek voice, is an activity that takes place in the space between the two ends of a spectrum. The same thing can be said of teaching as well. Deborah Meier, a distinguished teacher, said in her book published in 1955 that "teaching is mostly listening." In fact, good teachers go out of their way to listen to what each child has to say, however "inaudible" his or her voice may be.
A priority on listening is important in order to build schools as public spaces. John Dewey, in the last part of his book 'The Public and Its Problems' published in 1927, stated the following on the superiority of the ear as a necessary condition to establish public philosophy:
"The relationship between the ear and vibrant thoughts and emotions is far closer and more colorful than the one between the eye and them. Vision is a spectator, while hearing is a participant."
The above passage clearly expresses a relationship in which the passivity of listening brings out participation. As John Dewey pointed out, vision enables one to be absorbed in speculation while listening forces one to participate as an interested party.

A relationship in which people listen to each other is critically important in building a community because such a relationship creates a language for dialogue between them, preparing the way for building a community based interactive communication. Schools as learning communities that I propose are organised on a group of activity systems. They are so constructed, when the proscribed activities are followed, as to allow public philosophy, democracy and pursuit of

excellence to be acquired and practiced spontaneously - an operation system that supports learning communities. Activity systems in classrooms are organised to support schoolchildren's active, cooperative and reflective learning. They require the establishment of a relationship in every classroom in which schoolchildren listen to each other. The activity systems, in classrooms of schoolchildren above the third grade in elementary school, require that children organise a collaborative learning system in groups of four of both genders, they establish a relationship in which they do not teach each other but learn from each other, (if they have a question, for instance, they are typically expected to ask "What am I supposed to do here?"), they lean to stretch their limits.

Teachers are expected to organise classes according to their children's responses toward learning. And they are required to consistently listen, connect and return, to speak at a lower pitch and choose words carefully, to pursue creative teaching by spontaneously responding to children.The responsibility to fulfill each child's right to learn in classrooms does not lie exclusively with homeroom or subject teachers. It should be shared with all the children in the same classroom and all the teachers assigned to a particular grade as well as with the principal and parents.

In school management, all meetings have to be abolished except for the monthly faculty meetings and weekly meetings for each grade. In their place, meetings to discuss specific case studies (in-school seminars) based on classroom observation must be firmly placed at the heart of school management. At in-school seminars, teachers should be free to choose their own research theme for presentation and common topics should be avoided. Furthermore, at least once a year, teachers have to open their classes to their colleagues and present their case studies either at one of the in-school seminars or grade-specific meetings (In this way, more case studies than the number of teachers in an entire school will be produced in one year). All teachers who attend the presentations are required to make at least one comment. The main purpose of case study seminars is not to pursue superior teaching but to enable each and every child to learn and enhance the quality of learning. Accordingly, case studies to be presented at seminars should focus not on teaching materials or teaching skills but on the facts about learning as experienced by children in their classrooms and about their learning from each other.

In the relationship with parents, classroom observation, usually held once an academic term, should be replaced by "learning participation" in which parents and teachers work together to create a better classroom and they organise activities in which they share the responsibility for educating schoolchildren. The "learning participation," participation by more than 80% of parents throughout a year should be targeted. Opportunities should be provided for local citizens to work with teachers and design the contents of classroom teaching.

There are three sources of origin for the vision and philosophy of my proposed school reform for learning communities, its methodology and the group of activity systems that put them into practice. First, it is my personal experience of

failures and partial successes during my 28-year efforts at school reform. Since I became a professor at university, I have been engaged in the challenge to reform schools from the inside by visiting schools throughout the country twice a week, observing classrooms and working with teachers. I have visited over the years almost 2,000 kindergartens, elementary schools, junior and senior high schools and schools for the handicapped, which resulted in over 10,000 case studies of classroom practices. Most of my ideas on school reform as well as on classroom improvement came from my encounters with the children, teachers, and principals in these schools.

The second source is many examples of successful school reform inside and outside Japan. We had many instances of school reform in the Taisho Period's liberal education in pre-war days and the post-war democratic education in Japan. I have visited roughly 20 countries for my research and learned from advanced reform examples in these countries. In particular, I have learned a great deal from what Deborah Meier did in New York and Boston in school reform and what Loris Malaguzzi, an Italian, accomplished in leading infant education in Reggio Emilia.

The third source is theories that support reform. Educationists often attempt to prepare and guide school reform with pedagogic theories, but it is impossible to make such an attempt with pedagogy and its related disciplines. It is true that pedagogy and other related disciplines have made great contributions to improvements in education, but school and classroom reform is part of social reform and also part of a cultural revolution, requiring theories from other disciplines as well from the humanities and social sciences. Of course, it is impossible for one scholar to cover all these academic areas. It is only by integrating those theories from a variety of disciplines that school reform can be prepared and achieved. My proposed school reform through the creation of learning communities is based on the theories represented by the following people in a variety of disciplines in the humanities and social sciences: for philosophy, John Dewey, William James, Mitchell Foucaut, Gilles Deuleuze, Donald Schon, and Michael Holoquist: for cultural anthropology, Marcel Mauss: for cultural critique, Lewis Mumford: for psychology, Lev Vygotsky and Jerome Bruner: for political philosophy, Charles Taylor, Amy Gutmann, and Syozou Fujita: for social philosophy, Hilary Putnam, Richard Bernstein, Robert Bellah, and Zigmund Baumann: for poetry and philosophy, Paul Klee and Syuntarou Tanigawa: music and philosophy by Hikaru Miyoshi: theories of drama by Koharu Kisaragi: for ethics, Nel Noddings: for pedagogy, Joseph Schwab, Paulo Freire, Loris Malaguzzi, Lee Schulman, E.W. Eisner, Yrjo Engestrom, and Magdalene Lampert: for educational sociology, Richard Rorty, Andy Hargreaves, and Geoff Whitty.

Many of the principals and teachers who are now promoting learning community-based school reform have been inspired by their visits to pilot schools to observe their classrooms in action. Many of them have read my books and are aware of examples of school reform also through television, newspapers and magazines, but these alone did not motivate them to launch their reform efforts. More than anything else, it is the very existence of these pilot schools

and what is being done there that stirred them. Every month, hundreds of teachers visit Hamanogo Elementary School in Chigasaki and Gakuyo Junior High School in Fuji. And pilot schools across Japan attract hundreds of teachers and sometimes close to 1,000 of them to the open day they hold once a year. It is estimated that, on a cumulative basis, hundreds of thousands of teachers have visited these pilot schools over the past eight years.

SHARING A VISION

What is it about the pilot schools that galvanizes teachers to take on the challenge of reform? Is it a series of their miraculous successes? There is no denying that their achievements are "miraculous." By adopting the Hamanogo style of reform (for elementary schools) and the Gakuyo style of reform (for junior high schools), those schools, however unruly their pupils were before, have seen troubles between teachers and pupils and violence among pupils dwindle to zero or almost zero after a year of reform, with the result that the pupils, without exception, are actively participating in learning. And after two years of reform, the rate of truants (those who fail to attend school more than 30 days a year) at these schools has dramatically dropped, from 5% to roughly 1% (or to zero in cases where truancy was low in the first place). Similarly, a remarkable improvement can be observed in the academic standards. In the first year of reform in schools that are promoting the establishment of learning communities, pupils with low academic standards showed great achievements and two years later, those with higher academic standards also did better, enabling these schools to evolve into the best or one of the best in their cities. Why are the series of these miraculous improvements happening? I am not sufficiently aware of the reasons myself, although I planned and designed the vision, philosophy and methodology of the reform.

There is an interesting episode. Immediately after Gakuyo Junior High School in Fuji published a book on what it had done to reform itself through the establishment of a learning community, several thousand teachers visited the school from all over Japan. Few of them were interested, however, in learning how the school tackled the issue of reform. For most of those teachers, the main purpose of visiting the school was to find out with their own eyes whether what was written in the book was true or not. Who would believe that the school, which had been known for a long time as one of the most "difficult" in Shizuoka Prefecture, succeeded in the first few years of reform in eliminating all disruptive behaviour, in dramatically reducing the number of truants, from 36 to 4, and in enhancing its academic standards to one of the best in the city from the lowest. It is only natural that there was a stampede of teachers who wanted to find the truth first hand. What is more important to recognise here is that it is not the results that might be called "miraculous" in those pilot schools that have caused the learning community-based school reform to spread at an explosive pace. Visitors to the pilot schools all agree how impressed they were by schoolchildren who were humbly learning from each other as well as by the performance of their teachers. Also, they all express hope about the vision of reform that has been translated into reality in these schools.

The first surprise that awaits visitors to the pilot

schools is their quiet atmosphere. They find the children and teachers behaving naturally, speaking and acting gently and connecting with each other smoothly. Running through the entire school life are the teachers' and children's responsive and caring attitudes and the practice of cooperative learning based on the relationship in which people listen to each other. The noises, loud voices, excessive tensions and the oppressive sense of irritation, as if people are always burdened by something – all characteristics of typical Japanese schools — are gone from the pilot schools for learning communities. The fact that they are quiet does not mean the pupils are not studying actively. Just the opposite is true. In fact, both the children and teachers at these schools are surprisingly serious about learning. They pay close attention to what is said or even whispered in the classroom and are sensitive even to slight changes in others' thoughts and emotions. The more people learn, the more modest they become. The more intelligent they get, the quieter they become. The public spaces in learning communities are learning spaces created by listening pedagogy in which people listen to other's voice. They are also echoing spaces in which changes in people's thoughts and emotions, however slight, resonate across the classroom (Note 6).

What is most impressive to visitors to the pilot schools is not the miraculous successes they have achieved through school reform. Rather, it is their quiet atmosphere, the way children and teachers communicate with each other in a gentle and spontaneous manner, the teachers who, without exception, have opened their classrooms and are humbly learning together with the colleagues and from their pupils and the fact that these schools have actually been created. What does all this really mean? The teachers are looking for a vision for school reform and hope for realising that vision in school reform. In talking about school reform, people tend to say that they do not have sufficient staff, time, money or resources. But what is conspicuously missing in school reform is a vision for reform in which teachers can place their hope. We can say here that school reform aimed at building learning communities has won the overwhelming support of teachers, children and parents by turning a vision into reality.

MACRO-POLITICS OF REFORM: HOW TO RESPOND TO PRESSURES FROM OUTSIDE SCHOOL

Chigasaki City, where Hamanogo Elementary School, the first pilot school to undergo a learning community-based school reform programme, is situated, lies near Fujisawa City, the hub of the charter school (private schools founded with public funds) movement in Japan. This elementary school is not only a pilot school that represents the vision for learning communities in the 21st century but is also one that now has an added role of defensing public schools and opening up various possibilities. The name "pilot school" derives from the school Deborah Meier and others established in Boston at the request of the city's teachers' association and the board of education as the base for reform in public schools to counteract the spread of charter schools. The school reform aimed at building learning communities, as the name suggests, has developed in opposition to the ideology and policy of neo-liberalism, which advocates controlling schools by making them compete under market

principles and privatising public education.

In 1995, in fact, the Japan Association of Corporate Executives proposed in its vision of schools for the 21st century that, through the "free choice" of parents, two-thirds of the current functions of public schools be transferred to the private sector and local volunteers and that public education be slimmed down to one third of what it was at that time. In 1999, the fifth working group of the "Design for 21st century Japan" committee, an advisory body to the then prime minister Keizo Obuchi, made a proposal for splitting the function of school education into two parts, "education for the country" and "education for the individual," and restricting the role of public education to "education for the country," thus slimming down the role of public education. And the Council on Economic and Fiscal Policy set up by the then prime minister Junichiro Koizumi continued to propose the scrapping of the central government's financial contributions to compulsory education (the abandoning of the government's responsibility for public education), the implementation of the school selection system across Japan, the introduction of charter schools and sharp reductions in the number of teachers in public schools and their salaries. Further, Prime Minister Shinzo Abe went ahead with the revision of the Fundamental Education Law and has begun a reform programme that will enable the prime minister to directly control schools through the Education Rebuilding Council.

Those who advocate neoliberal ideology and its policy by working through the mass media used the instances of declining academic standards and bullying in schools to create a "manufactured crisis" and, through it, a mass hysteria, repeatedly criticising the way schools were run and bashing teachers. Those teachers were scapegoats for everything that was wrong with education. Moreover, the principles of market mechanism under neo-liberalism have served to dissolve the public nature of education and to make the work of teachers non-professional.

One of the most serious problems created under neoliberal ideology and its policy is the transformation of the nature of teachers' work from responsibility to service, turning the relationship between teachers and parents into that of service provider and service recipient. As a consequence, teachers sacrifice themselves to their endless work, becoming frustrated and exhausted, while parents have become increasingly unhappy with the quality of their services. The greatest obstacle that stands in the way of creative teaching today is parents' mistrust and criticism of teachers and their dissatisfaction with teachers. But should the relationship between teachers and parents be that between service provider and service recipient? Indeed not. Education is not a service but social responsibility that adults have to their children. Teachers and parents must be bound together by their responsibility toward their children's education. It is impossible to form a relationship of trust and partnership between teachers and parents without placing the education of their children at the center of their relationship and sharing its responsibility together. The transformation of the nature of education from responsibility into service has placed the dignity of teachers and teaching as a profession in crisis. Teaching is now considered as easy work that anyone can handle

and the trust in and respect for teachers have been collapsing. What is particularly serious is that the dignity of teachers has been hurt: teachers have been told to go to department stores to learn how to greet other people and to prep and cram schools to "improve" their teaching skills. This is because of excessive "crisis" reports of the mass media on declining academic standards and bullying in schools and because of sensational reports by TV gossip shows on thoughtless remarks and actions of a handful of teachers. Neoliberal ideology and its policy have transformed the teachers' responsibility into accountability. Accountability originally was a concept that meant requesting a service commensurate with the taxes paid - an idea of balancing costs and benefits. The control of schools through accountability and the principles of competition has brought about widespread "management and assessment by numerical targets" in schools. This system of "management and assessment by numerical targets" is effective when an organisation that is being assessed is in a state of devastation, but it serves only to promote its degradation when it is functioning well. "The management and assessment by numerical targets" brings positive effects to an organisation when it has a single and simple purpose but only negative effects when it is a complex organisation with multiple purposes. However, the boards of education in villages, towns and cities in almost all prefectures have introduced numerical targets at their schools as a result of the transformation of responsibility into accountability. Consequently, the work of teachers has been confined to achieving simple and tangible goals such as improving academic standards, reducing bullying and truancy and sending more of their students to better schools. Moreover, they are pouring a great amount of work into displaying their achievements and compiling assessment documents. Thus, today's teachers find themselves torn between two strong demands: on one hand, they are kept busy providing service to parents and tax payers and holding themselves accountable for it, while, on the other, they are increasingly integrated into the system of numerical targets and bureaucratic assessments of those targets demanded by the local boards of education. What is missing in the two assessment-based relationships is the responsibility to each child and appreciation of teachers as professionals.

Micro-Politics of Reform: Jumping Over the School's Inner Wall

Let's turn our eye inside the schools. The process of school reform can be recognised by dialectics of the inside and outside. Schools can change themselves only from the inside and their reform efforts cannot be sustained without support from the outside. Looked at from this perspective, the dialectics of the inside and outside is obviously upended in the current extreme policy on school reform: policymakers are attempting to force schools to reform from the outside, citing as their reason the need to change teachers' mentality, while they do not lend a hand when schools try to change themselves from the inside. No wonder school administrators and teachers are at a loss what to do and feel exhausted.Too many people think that school reform is easy. Schools, however, are stubborn and obstinate organisations. They cannot be easily changed. For instance, every prefecture or city, town and village designates some of their schools as "research schools" to promote and support reform and a vast number of them spend a great deal of work on their

research. But are there schools today which are still continuing their research after announcing their results two or three years following their designation as "research schools"? All these schools, once the period of their designation is over, stop all their research activities and do not want to do anything until they are designated again 10 years later. No one bothers to read the research papers which required a great amount of work to complete. As can be seen from this example, school reform is not an easy task. School reform does not always lead to a higher quality of education. Neither does it improve the morale of teachers. The reality is that it does just the opposite in many cases.

I have helped with the reform plans of almost 2,000 schools during the past 28 years but, to be honest, there was little to show for my efforts but a succession of failures for more than 10 years at first. Obviously, I achieved some improvements in reform from time to time and accomplished a degree of success in some projects, but these reforms were no more than transient in nature and, moreover, they were isolated cases.

School reform is not a task which can be achieved in a few years or by partial successes or by a small group of people. It is a long-running revolution requiring more than 10 years, at least, before it is completed. It has to be a structural and overall, not partial, reform. Drastic reform executed in a short time or partial and local reform, because of its counteraction and side effects, runs a greater risk of being counterproductive.The most important thing in reforming schools from the inside is to understand micro-politics in terms of its structure. The greatest barrier that stands in the way of reform in elementary schools, for instance, is the walls between classrooms. Dr. David Tyack, a social historian of education at Stanford University, calls American elementary schools the "pedagogical harem." He used this name because those schools usually have a male principal and female teachers "residing" in closed classrooms do not get along with each other and they communicate only with their principal. This excellent figure of speech indicates that the reform of elementary schools from the inside cannot be achieved without breaking down the "walls" between classrooms and establishing collegiality between teachers. Prof. Andy Hargreaves (who now teaches at Boston College), a British educational sociologist with many years of research on school culture, described the structure of junior high schools as being balkanised, which I think is again a superb figure of speech. Junior and senior high schools are organised on the basis of study subjects, with a group of teachers of a particular subject forming an "independent state" with its own rules. No matter how hard a principal, however capable he / she may be, may try to reform his / her school with a strong leadership, those teachers will not budge an inch. Here, different walls that exist in a variety of school activities—subject teaching, division of duties in school administration and student club activities—constitute an established power structure that hinders the reform of the school from the inside. It is impossible, therefore, to reform schools from the inside without breaking down the "walls" between the classrooms and establishing collegiality around learning by pupils in elementary schools and, in junior and senior high schools, without tearing down the

walls of teaching subjects and building collegiality focused on students' learning. It is also necessary to understand without any illusions the nature of communication that is taking place in schools. No other place cries out for dialogue more than schools, but they are among the few places where monologue is a dominant form of communication. Principals speak almost in monologue. Teachers do the same in the faculty rooms and classrooms. So do their children in classrooms. Without transforming this monologue into dialogue, we cannot realise interactive communication, nor can we reconstruct schools into communities. There is no place other than schools where the importance of democracy is more desired, yet there are very few other places where democracy is belittled and undemocratic relationships dominate. For instance, teachers often talk about their students in their faculty room, but those students usually account for roughly 20% of the total in an ordinary junior high school. It is rare for teachers to talk about students except for those who often behave disruptively, do especially well or poorly in their studies or perform particularly well in their club activities. Some students receive services worth more than 10 times the taxes their parents pay while many others get services worth even less than one-tenth of their parents' taxes. In order to reform unfair and undemocratic schools like this, the structure of communication itself has to be changed in order to transform them into organisations in which each and every one of their people participates and comes together on an equal footing as a main player. We also need to undertake a thorough review of the leadership of principals. It is the public mission and responsibility of schools to fulfill each child's right to learn, and principals are at the center of this responsibility. It is the core responsibility of principals to bring about the fulfillment of the right to learn for each and every one of their students. A surprisingly small number of them recognise this, however. Principals who are aware of this responsibility would not allow themselves to keep themselves busy handling chores in their office or attending conferences and meetings outside their school. Instead, they would devote themselves to observing the classes, supporting the teachers and revitalising training in their school.

Schools that are active in research activities are not necessarily good ones. Rather, as schools become more active, many of them, instead of fulfilling each child's right to learn, tend to become more focused on research results and improvement of teaching skills with only a small group of teachers and interested pupils actively involved. Those schools ignore the long work hours teachers spend, living an insular life locked up in the small world that is their school. That many of these schools exist means that school reform is not taken seriously. Teaching is an intellectual job based on high levels of education. At the same time, it is complex work that requires sophisticated and specialised knowledge and practical insight. It is not taken for granted in the school reform aimed at creating learning communities that an improvement in teaching skills will inevitably lead to the fulfillment of every child's right to learn and to a guarantee of the kind of learning that will enable them to stretch their limits. This cannot be achieved without teachers and pupils working together. Schools usually try to reform their classrooms by holding "research classes" about three times a year, but in schools where I have cooperated in carrying out a learning

community-based reform program, a sufficient accomplishment of classroom and learning reform is considered difficult, if not impossible, unless teachers conduct roughly 100 classroom observations and case studies, each lasting an hour and two hours, respectively, each year. This illustrates how difficult school reform really is and how complex and sophisticated classroom reform is.

Redefinition: Reflection and Careful Consideration

Behind the fact that so many schools have risen to face the challenge of school reform and achieved the results that can only be called miraculous is the redefinition by teachers of some of the educational concepts. I have proposed the redefinition of the following three concepts as a basis for school reform, the first of which is learning. It is defined in learning communities as a practice of dialogue with the world in which one finds oneself, with others and with oneself. It is a cognitive (cultural), interpersonal (social) and existential (ethical) practice.The concept of "teacher" is also redefined in my proposed school reform aimed at creating learning communities: they were previously defined only as "teaching professional." In learning communities, they are defined as "learning professional" as well as "teaching professional." Furthermore, the professional competence of teachers has been defined hitherto in accordance with the principle of "rational application" of scientific knowledge and techniques, in other words, a capability of putting scientific knowledge and techniques into practice. In learning communities, however, it is redefined as an ability to reflect upon teachers' own practices and to learn from each other's practice (Reflective Practitioners, Donald Schon, 1983). The concepts of public philosophy and democracy, as defined in the context of deliberative democracy rather than participatory democracy, are deepening through the process of search for school reform aimed at creating learning communities. So is the reform of curriculum. Schools that are going ahead with a learning community-based reform programme have been trying to design and implement a curriculum around three basic themes: education in scientific discourse, in artistic skills and in citizenship. The implementation of these themes is expected to lead to the development of a new curriculum structure in the near future. It is true, however, that the more progress this learning community-based school reform now practised thousands of schools across Japan makes, the more it comes face to face with the harsh reality that surrounds education in Japan: how to develop insight and leadership in school principals, how to resist the education policy that categorises teachers as non-professionals, how to deal with a rapidly deepening crisis over children's disruptive behaviour in school, how to roll back the tide of increasing control by bureaucrats over education, how to integrate the reform currently pursued individually by schools into an overall education policy, and how to develop and nurture teachers who underpin school reform on the inside. These are some of the questions we have not been able to answer clearly in our efforts at school reform through the creation of learning communities. I hope to discuss them in greater detail in the future.

NOTES

Note 1: The idea of the learning community goes back to ancient Greek "Akademeia" and medieval monasteries and universities.

"Discipline" in the sense of learning originally meant a community of "disciples" or learners. (See "The Prelude: Toward Pleasure of Learning" of my book, Pleasure of Learning: Toward Dialogue (Seori Shobo Publishing, 1998)..

Note 2: For the historical background of the learning community reform at Ojiya Elementary School and its philosophical meaning, refer to "School as An Apparatus" in Insight That Crosses the Boundary co-authored with Akira Kurihara, Yoichi Komri and Toshiya Yoshimi (University of Tokyo Press, 2000).

Note 3: For the establishment of Hamanogo Elementary School and its initial reform efforts, see Creating School: the Birth of Hamanogo Elementary School in Chigasaki City and its Practices (Shogakukan Inc. 2000) and Changing School: the Five Years of Hamanogo Elementary School (Shogakukan Inc., 2003), both co-authored with Toshiaki Oose.

Note 4: The idea of collegiality was proposed by Judith Little. She conducted research on many factors that led to successful school reform and examined how each factor contributed to its success. She demonstrated that solidarity among teachers as colleagues and professionals played a decisive role in school reform. Her proposal that puts priority

on solidarity among teachers is insightful and I have translated the idea into the Japanese word, "Do-ryo-sei, the English equivalent of collegiality. The word has entered into the lexicon of Japanese teachers and has commonly been used by them.

Note 5: For the concept of "public philosophy" and its political philosophy as employed in this article, see my contribution Politics in the Public Arena: John Dewey between the Wars in Shisou, a monthly philosophical magazine, of January 2001,(Iwanami Shoten).

Note 6: For what Deborah Meier did as principal to reform her school, Central Park East in New York City, and her mission school in Boston where she campaigned for the support of public schools, refer to her book The Power of Their Ideas (Beacon Press) and my book Teachers' Challenge (Shogakukan, 2003), and "The Great Challenge of a Small School in Boston."(Shogakukan, 2003)

Note 7: Yuusuke Maki uses an excellent metaphor to describe his idea of community by saying it is a group like an orchestra where individually different people come together to form one entity, and not like a group of packed corals that is made up of things of the same quality. If learning is born of differences between individuals, then a learning community should be like an orchestra, according to his book The Sound of An Air Stream (Shikuma Shobo Publishing).

Note 8: David Berliner, an educationist at Arizona State University, warns that the so-called crisis in education reported on frequently by U.S. newspapers is a crisis manufactured by the mass media. A similar situation exists in Japan, with its mass media playing up "the crisis" more excessively than in the United States. .

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PERCEPTIONS OF FACTORS INFLUENCING STUDENT-FOCUSED TEACHING APPROACHES IN HIGHER EDUCATION: OUTCOMES OF AN ACTION RESEARCH IN BELGIUM

Peter Van Petegem
Vincent Donche

INRODUCTION

Previous research has shown that how teachers teach can be explained to a certain extent by their conceptions of learning and teaching (Calderhead & Robson, 1991; Hollingsworth, 1989; Lortie, 1975; Tabachnick & Zeichner, 1984). The interrelationship between conceptions of teaching and teaching strategies has been described in the literature in terms of 'approaches to teaching'. It is often said that teachers' approaches to teaching can be placed within two different fields: a conceptual change/student-focused approach and an information transmission/teacher-focused approach (Prosser & Trigwell, 1999). The conceptual change/student-focused approach is intended to help and develop students' conceptions by means of a student-focused teaching approach. In the information transmission/teacher-focused approach the aim is to transmit information and a teacher-focused strategy is adopted. The relationship between teachers' conceptions of teaching and their actual teaching behaviour in the classroom is not as straight-forward and direct as might be expected. In a qualitative study, Trigwell and Prosser (1996) found that the expected consistency between similar learning and teaching conceptions and teaching strategies is not always encountered in practice as a number of teachers were found who were less learner-focused in teaching strategies than would have been expected from their reported conceptions. Similar inconsistencies or disjunctions were also found in other studies (Fang, 1996; Murray & MacDonald, 1997; Van Petegem & Donche, 2006). These findings suggest that there may be a large number of factors which limit teachers' freedom to teach according to their conceptions of teaching (Stes, Donche & Van Petegem, submitted).

These may be contextual factors which act as a constraint on teachers when, for example, implementing student-focused approaches to teaching. Previous research by Lindblom-Ylänne, Trigwell, Nevgi and Ashwin (2006) shows that teachers working in a 'pure hard' discipline (e.g. chemistry) exhibit student-focused teaching approaches to a significantly lesser extent than teachers of 'soft' disciplines (e.g. history, education). It may also be the case that class size and class level are influencing factors with regard to the adoption of a student-focused teaching approach. However, in addition to contextual factors, personal factors may also prove valuable in explaining differences in teachers' conceptions of teaching and the relationship to teaching strategies. Many studies have found that teachers' conceptions of teaching; their beliefs

with regard to teaching and their own theories of teaching, are influenced by their many years of classroom observation during their own time as students (Calderhead & Robson, 1991; Kagan, 1992; Lortie, 1975; Pajares, 1992; Wubbels, 1992). Teachers' learning styles were also found to be related to how they prefer to teach (Van Petegem, Donche & Vanhoof, 2005).

Although it may be possible to identify some of the influencing factors by examining previous studies which have addressed the issues of 'learning approaches' and 'teaching approaches' in relation to the influence of personal and contextual factors, in the exploratory study which follows we have adopted a different basis. We specifically set out to study the factors which teachers themselves perceive as exercising an influence with regard to the application of student-focused approaches to teaching. Previous research carried out by Prosser and Trigwell (1997) already showed that teachers' perceptions of the context can affect the approach of teachers such as feelings of control over how and what to teach, perception of appropriateness of class size, view on the (diverse) ability of students, feelings of departmental support for teaching, and perception of appropriateness of teaching load. It was shown that a conceptual change/ student-focused teaching approach is related to a feeling of control over teaching and the perception of an appropriate class size, ability of students and teaching load. An information transmission/teacher-focused approach was found related with a feeling of lack of individual control and departmental support.

Our empirical study took place within the context of a longitudinal action research project in higher education aimed at implementing more student-focused teaching in classroom practice (Donche & Van Petegem, 2004). We interviewed teachers who were involved in action research processes at the end of their projects. This proved particularly interesting and enlightening as, since the teachers involved were engaged in conducting their own action research project, they had not only a formal, but also an emerging practical knowledge of student-focused teaching and those factors which are crucial to the implementation of a student-focused approach to teaching. We viewed those teachers involved in the action research project as 'rich' sources of information given that they were actively dealing with – and reflecting upon – the complexity of effecting the transfer from theoretical change conceptions to actual student-focused teaching. In a first step we explored teachers' conceptions of teaching and then went on, in a second step, to investigate which personal and contextual factors – according to them – constrained or fostered their use of student-focused teaching approaches in practice.

METHODOLOGY

Context and Respondents

The action research project *Student Centred Education* (SCE) was the result of a collaboration between an external university

research team and in an institute of higher education, department of commercial sciences and business administration. Both at the start and in the course of the project teachers were given various formal training sessions by external coaches on the concept of student-focused teaching and a number of student-focused teaching strategies. In addition to providing these sessions external coaches were also responsible for supervising teachers in developing and implementing educational changes using collaborative action research (Carr & Kemmis, 1986). Action research stresses participation, collaboration and critical analysis and was regarded in this study as a strategy which is aimed not only at optimizing educational practice but also at arriving at a better understanding of the complexity of implementing educational innovations (Elliot, 1991).

Teachers were expected to carry out development and implementation activities aimed at increasing the use of student-focused teaching in their own professional practice. 5 teams were formed, grouped according to the discipline taught by the participants: French, Information management and support, accountancy, management, and marketing. The project began with 17 teachers taking part, but 8 subsequently withdrew largely as a result of external factors, *inter alia* pressure of work. The remaining action research teams developed and implemented an initiative towards more student-focused teaching in a variety of ways, which included the development of open learning materials, self-study guides, enhancing active and cooperative learning and computer-supported self-guided learning. Participants were required to keep a logbook during the project in which they could make notes of their experiences and reflections. The various teams met at regular intervals to share knowledge and reflections regarding the activities they had carried out and what they had learned from this.

Interviews

In the end phase of the project (2-year educational innovation program) a series of individual semi-structured interviews (45 to 60 minutes) were held with the remaining 9 teachers concerned. These interviews were aimed at ascertaining their conceptions of teaching and teaching strategies and their reflections with regard to the personal and contextual factors which exercise an influence on transforming these conceptions into actual teaching practice.

Analysis

As a preparation to the analysis of the data, all the data collected were typed verbatim using a word processing programme (total of 9210 lines) and were subsequently analyzed using the software programme Atlas.ti. This was done in a series of steps which are commonly used in phenomenographic research (Miles & Huberman, 1994; Strauss & Corbin, 1998). In a first step, the text files were coded to each research question, thereby creating a sub-division of text-fragments. We then looked for codes which we could attach to text-fragments. In a second step, the codes

were categorized on the basis of their difference and similarity with regard to content domains. In a third and final step of analysis we investigated the feasibility of the coding and category system by re-reading the text-fragments. At this stage we investigated whether multiple codes could be attached to the text-fragments selected.

These analyses were primarily aimed at trying to establish an underlying structure to the conceptions of teaching. We also looked at how the diversity of conceptions could be organized in a structured way. In putting together the factors relevant to the translation of conceptions into teaching practice we took also into account the frequency of the factors listed.

RESULTS

Conceptions of Teaching

The teachers involved described student-focused teaching conceptions as bringing about a change process with regard to the following domains: The pedagogical –didactic relationship between teachers and students, the didactic design and learning contents.

Pedagogical Didactic Relationship between Teachers and Students

The teachers agreed that the role and attitude of the teacher changes in student-focused teaching. In general, they were of the opinion that the role of the teacher needs to be directed towards the remediation of learning; more supervision of learning processes and more communication and interaction between student and teacher. Most of the teachers also indicated that their task consisted of encouraging students to learn in a more self regulated manner. They also thought that it was the teacher's job to motivate students to study the subject. They advocated a less strongly directive style from the teacher, which means, however, that the teacher still retains control with respect to organising the lessons, determining the learning content and assignments and the evaluation of learning content. Almost all the teachers agreed that a change is needed with regard to the role and attitude of the student, who needs to be more actively involved in the learning and teaching process. Students need to learn in a more independent way and must take on more responsibility for their own learning.

Didactic Design

The teachers' conceptions of how education needs to be changed with regard to didactic design varied considerably. In general, they were of the opinion that students must be able to deal with tasks and assignments more self regulated and that enhancing active learning is a central element in this. In most cases, they also mentioned group work or types of project work which they feel should be alternated with traditional lecture-based lessons. Teachers observed that during the Student Centred Education Project they became convinced of the importance of changing traditional learning materials into more open learning materials and self-study guides as possible tools for implementing a more student-focused approach to teaching. A minority of teachers

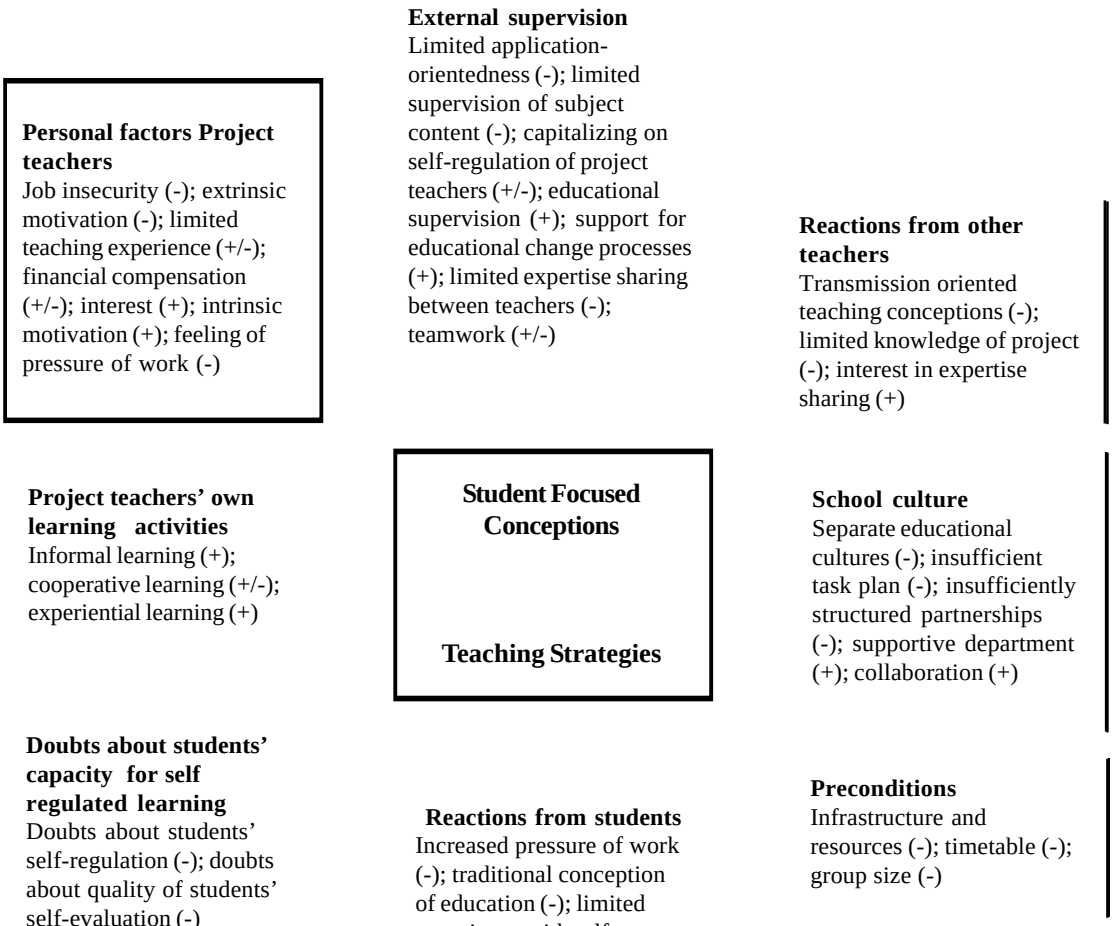
also argued that a didactic design must also aim to encourage alternative forms of evaluation in which the student is better equipped to evaluate him or herself. The focus on differentiation was also mentioned by a minority of teachers. A number of teachers pointed out that student-focused teaching means a large-scale change which not only involves changes in classroom practice but also important changes to the curriculum in its wake. Various participants sketched out the basis of a modular educational system.

Changes in Learning Content

A number of teachers took the view that student-focused teaching implies a number of changes with regard to learning content. Some of these teachers emphasize teaching which focuses less on the simple acquisition of knowledge by students and more on the acquisition of skills such as, for example, learning to process study material critically and a greater emphasis on learning to apply theoretical knowledge in specific situations. The results show that teachers' conceptions of learning and teaching are broadly consistent with a constructivist educational paradigm (Simons, van der Linden & Duffy, 2000). Teachers' conceptions can also be related in general terms to what is known in the literature as 'conceptual change' conceptions (Kember, 1997; Prosser & Trigwell, 1999).

Personal and Contextual Factors

In the interviews conducted, teachers were of the opinion that a considerable number of personal and contextual factors play a role in transforming conceptions of student-focused teaching into classroom practice. The factors mentioned show a considerable diversity: (1) Personal factors relating to the teachers concerned; (2) Teachers' doubts with regard to the students' capacity for self regulated learning; (3) Their own learning activities; (4) The influence of external supervision; (5) The reactions of fellow-teachers; (6) The reactions of their students; (7) Aspects of school culture; and (8) Various preconditions. The direction of the influence was questioned in the interviews. Thus teachers took the view, for example, that by means of experiential learning they were better able to transform their conceptions of student-focused teaching into classroom practice. They perceived teaching large groups as having a negative impact on the possibilities of being able to implement student-focused teaching. Figure 1 offers an exploratory overview of the various factors and directions (see next page). It is definitely not intended to simplify the complexity of influencing factors or to pin down the directionality of the relationships. It is possible, for example, that the assumed effects of certain positive influencing factors (indicated with a + sign) may disappear when the negative influencing factors (indicated with a – sign) which affect the transformation of conceptions of student-focused teaching into classroom practice are also taken into account. In order to draw conclusions of this kind, more research is necessary, however.


External supervision
Limited application-orientedness (-); limited supervision of subject content (-); capitalizing on self-regulation of project teachers (+/-); educational supervision (+); support for educational change processes (+); limited expertise sharing between teachers (-); teamwork (+/-)
Personal factors Project teachers
Job insecurity (-); extrinsic motivation (-); limited teaching experience (+/-); financial compensation (+/-); interest (+); intrinsic motivation (+); feeling of pressure of work (-)
Reactions from other teachers
Transmission oriented teaching conceptions (-); limited knowledge of project (-); interest in expertise sharing (+)
Project teachers' own learning activities
Informal learning (+); cooperative learning (+/-); experiential learning (+)
Student Focused Conceptions
Teaching Strategies
School culture
Separate educational cultures (-); insufficient task plan (-); insufficiently structured partnerships (-); supportive department (+); collaboration (+)
Doubts about students' capacity for self regulated learning
Doubts about students' self-regulation (-); doubts about quality of students' self-evaluation (-)
Reactions from students
Increased pressure of work (-); traditional conception of education (-); limited experience with self-regulation in secondary education (-); motivation-enhancing; more active learning (+); capacity for self regulated learning (+); greater involvement (+)
Preconditions
Infrastructure and resources (-); timetable (-); group size (-)

CONCLUSIONS AND DISCUSSION

Our research shows that there are differences between teachers as to what they understand by conceptions of 'student-focused' teaching. We find that in defining their conceptions of teaching, most teachers stress different dimensions such as changes with regard to the pedagogical-didactic relationship between students and teacher, the didactic design and learning content. The direction in which these changes have to take place points to a more constructivist approach of teaching.

Our research into teachers' conceptions was not able to demonstrate whether teachers attach more or less importance to one of the dimensions distinguished in student focused teaching. It is possible, for example, that certain teachers may perhaps regard the implementation of the pedagogical didactic relationship between students and teachers as more important than a change in learning content. If this aspect is explored in follow-up research this may lead to more refined research results with regard to what teachers perceive as of prime importance in the implementation of student-focused teaching. In this connection it would also be interesting to further explore and validate the dimensionality of 'conceptual change' conceptions in follow-up research.

Our research into influencing factors which play a role in the process of transforming conceptions into classroom practice reveals a complex picture and has also made a further empirical contribution with regard to the factors which teachers perceive as playing an important mediating role in putting conceptions of teaching into teaching practice (Prosser & Trigwell, 1997). The overview of influencing factors presented in figure 1 appears to have a large number of points of overlap with previous conceptualisations such as *inter alia* that of Entwistle *et al*.(2003), including the assumed influence of assessment and feedback, and preconditions such as contact hours and pressure of work, the students' skills and the context of courses. The exploratory overview of these various personal and contextual factors can be regarded as an interactive framework of influences which can positively and/or negatively influence the relationship between teachers' conceptions and their actions. Yet this is not able to show to what extent teachers regard certain factors as more important than others with regard to the transformation of conceptions into classroom practice. Ideally, therefore, these qualitative findings of this study should be tested on a larger scale and preferably also in combination with quantitative research methods. A study of this kind would permit us to further examine the differences in impact of different factors on conceptions and strategies.

This study succeeded in demonstrating that there may be a large number of other factors behind the reason why the presence of student-focused conceptions of teaching among teachers does not always coincide with the presence of likewise teaching strategies. This overview can serve as an initial exploratory basis for further research into the

explanation of disjunctions between student focused teaching conceptions and strategies.

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TEACHER EDUCATION IN INDIA: A PRAXIS READER

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Dr. P. S. Balasubramaniam
Dr. (Mrs.) Vimala Ernest Punithkumar

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EDUCATIONAL RESEARCH AND ENSURING QUALITY STANDARDS

Rekha B Koul

INTRODUCTION

Educational research plays an important role in exploring problems associated with education and as a consequence it improves Teaching and Learning. According to Gay and Airasian (2000), educational research is conducted to provide trustworthy information regarding educational problems and their solutions. There are many approaches to educational research shaped by different research paradigms. The various research paradigms have different criteria for ontology and epistemology to maintain quality standards. The ontology and epistemology of a research paradigm influence researchers applying the quality standards, methodology and methods.

Guba and Lincoln (1989) note that quality standards such as research and policy analysis are essential for judging the quality of disciplined inquiry. Research standards also help researchers in monitoring the process of research construction (Guba & Lincoln 1989). Furthermore, criteria for quality standards for each paradigm are different as they are influenced by the nature of each research paradigm. Therefore, it is important for researchers to understand the nature of each research paradigm and its accompanying quality standards. This article discusses the nature of educational research, the influence of research paradigms on educational research and quality standards.

The Nature and Characteristics of Educational Research

The nature of educational research is analogous with the nature of research itself, which is expected to be systematic, reliable and valid to investigate knowledge and solve problems (Wiersma 1991). However, different from scientific research, educational research is more complex because it not only involves human behaviour and social interaction, but it can also use various approaches and strategies to solve problems in educational settings. Educational research initiates from practical problems in education and returns to solve those problems. It can also incorporate various disciplines such as anthropology, sociology, behaviour, and history (Anderson & Arsenault 1998). Educational research is important because it contributes to knowledge development, practical improvement, policy information, and students' research skills development (Creswell 2005). Therefore, educators are able to use those research findings to improve their competences in the teaching and learning process.

The characteristics of educational research are part of its nature. According to Anderson (1998, p.7), there are ten characteristics of educational research which can be grouped into three main categories; the purpose of research, the procedures of research, and the role of researcher. The purposes of research are to

solve the problems, investigate knowledge, and establish principles in educational phenomena. In short, this category focuses on solving problems and developing knowledge. The procedure of educational research involves collecting or generating data with accurate observation, objective interpretation, and verification. It also involves "carefully designed procedures and rigorous analysis." Finally, the role of researchers is to be experts in their field of study, using research data to develop solutions and increase knowledge. It is also essential for researchers to be patient and careful to use every step of research's procedures to achieve the purpose of research.

Research Paradigms

There are four main research paradigms in educational research: post-positivism; interpretivism; criticalism; postmodernism. Each of these research paradigms has its own epistemological and ontological characteristics to maintain quality standards. According to Bryman (2001), epistemology refers to the ways knowledge is acquired. In other words, epistemology concerns what we can know and how we can know the reality of the research subject (Willis 2007). Ontological assumptions refer to the nature of the world and the human being in social contexts (Bryman 2001; Willis 2007) These involve the inclusion of assumptions of seeing the world as the outside of individual.

Post/positivism Paradigm

The post/positivist paradigm contains two main themes; controlling the research condition such as human behaviour and investigating those trough scientific methods (Douglas 1973 as cited in Cohen, Manion & Morrison 2000). Because it is controlled, the post/positivist paradigm tends to generalise findings with one truth. As it is very structured and clear, it is easy to be objective in this paradigm. However, an inherent weakness of the paradigm is that it cannot investigate all phenomena in education particularly regarding motivation, values and "intentions and feelings" (Anderson & Arsenault 1998, p.5). The post/positivist paradigm seeks to find the truth within controlled conditions that are scientifically observable. Even so, it is problematic to find the "one truth" in some specific social context such as education. For example, students' achievement is not strictly limited in influence by one specific factor. It is difficult to isolate people and control the results in natural phenomena. Epistemological research in the post/positivist paradigm is how the social world can be investigated as natural science. Hypotheses have to be tested by empirical approaches. In post/positivism, the objective results through scientific method ontology which emphasises that social phenomena are independent from other factors. In addition, data analysis uses logical reasoning (a thinking process) and provides explanations with certain generalisations. These generalisations have however, become a challenge in educational research. Due to the sheer complexity of educational phenomena, any generalissation is often difficult to construct.

Interpretivism Paradigm

Interpretivist paradigms study individuals with their many characteristics, different human behaviours, opinions, and attitudes (Cohen, Manion & Morrison 2001). The interpretive paradigm helps the researcher acquire knowledge by investigating the phenomena of

the world and human in many ways. Therefore, its advantage is in finding a meaningful observation of objects. It gives opportunities to seek understanding and make sense of others' perspectives which are shaped by the philosophy of social constructions (Taylor 2008). Through this paradigm, we can gain a fuller understanding of meanings, reasons, and insight human action (Bryman 2001). It must be noted however that this subjectivity leads to results that are relatively complex to analyse and interpret objectively. Nevertheless, it is generally acknowledged that it is more difficult to be objective in human research than in scientific settings. Therefore, subjectivity is an integral aspect of such research. Through the interpretive paradigm, a researcher can observe a situation with different approaches to solving problems. A multiple number of possible solutions and interpretations also emanate. Consequently, the function of epistemology in an interpretive paradigm is to acquire knowledge by investigating the phenomena in many ways, as the social context is different from natural science. The interpretive paradigm emphasises that the world in social phenomena has different meanings. A single factor influences the change in social context. As a result, different researches can reach different conclusions for the same observation.

Criticalism/Critical Theory Paradigm

Critical theory paradigm is "explicitly prescriptive and post/positivist, entailing a view of what behaviour in a social democracy should entail" (Fay 2000 as cited in Cohen, Manion & Morrison 2001, p. 28). The critical paradigm promotes the notion of social justice in order to create the world which is "fairer, more equitable, more inclusive and more harmonious" (Taylor, 2008). In addition, according to Kincheloe and McLaren (2002), critical theory is concerned with the power and justice of several issues in society such as economy, race, gender and education. It considers the power of social politics and ideology which influence educational research. This paradigm relates to "political agenda and that the task of the researchers is not to be dispassionate, disinterested, and objective" (Morisson 1995 as cited in Cohen, Manion & Morrison 2001, p. 28) which involves self-criticisms and consciousness of "oneself as a product of power-driven sociohistorical process" (Kincheloe & McLauren 2002, p.100). Therefore, it considers the power of social politics and ideology, which influence educational research.In critical theory, finding the issues is important and subjective. Its main objective is to improve existing situations which can be achieved through action research. The action can be continually changed to improve the quality of existing educational practices. This action shall then change and solve the problems. Therefore, the solutions are constructed by the reality. The predominant weakness of this paradigm is the difficulty surfaced when trying to conclude many interpretations. It also requires observational skills regarding the changes impacting subsequent actions.

In critical theory, practical issues can construct knowledge. The theory tends to change certain conditions through criticising practical, political and social issues. Therefore, the results are often subjective. The critical theory paradigm tends to see the world as something that has to change. It criticises social phenomena and changes them based on the interrogations of

the phenomena involving both social and individual interactions.

Postmodernism Paradigm

The paradigm of postmodernism focuses on seeking subject understanding through textual "reconstruction, without trapping on the certainty of objectivity" (Polkinghorne, 1992). Moreover, according to Taylor (2008), "postmodernism elicits both fear and favour via its basic principle: be suspicious of all grand narratives (including that of postmodernism, respond its critics, not without irony)". Research under the postmodern paradigm focuses on the importance of self reflections, envisioning, and lived experiences through impressionistic writing which stimulates researchers to express their emotionality in an engaging manner. According to Denzin and Lincoln (2000), the postmodern paradigm allows individuals to include their personal responsibility, emotionality, ethics of care, multivoiced texts, and dialogues to know something without claiming to know everything. Therefore, the postmodern paradigm will be powerful in facilitating research that is reflective, voicing and multi-perspective thinking.

Quality Standards

Quality standards represent the nature of each paradigm with respect to judging the quality of research. It is different on holding the existence of the truth and the role of researchers. For example, in post/positivism, it represents the world with observed truth and objectivity through systematical procedures. On the other hand, interpretivism describes the meaning of the world with different facets of truth which involves the subjectivity of the researchers. However, within its nature, each paradigm is unique, having its limitations and advantages.

Post/positivism

Since the focus of the post/positivist paradigm is to discover the 'truth' through empirical investigation, the quality standards under this paradigm are validity and reliability. Anderson and Arsenault (1998, p.257) write that "validity refers to the extent to which what we measure reflects what we expected to measure [which] has two forms: internal and external. Therefore, "an experiment is valid if results obtained are due only to the manipulated independent variable and if they are generalizable to individuals or contexts beyond the experimental setting" (Gay & Airasian 2000, p. 371). Related to the research, internal validity refers to what extent the findings meet expected results. Meanwhile, external validity refers to the ability of findings to be generalised to other situations and contexts. In order to fulfill these standards, objectivity is important to minimise researcher bias. The analysis of validity is conducted through statistical analysis. "Reliability refers to the extent that an instrument will yield the same results each time it is administered"(Anderson and Arsenault 1998, p.256). Under this paradigm, reliability is an important indicator for the consistency of research findings which can then be replicated. Through statistical analysis, reliability can be estimated by internal consistency based on the correlation among the variables by using Cronbach's alpha reliability coefficient (Brown, 2007; Newby & Fisher, 1997). The size of the data source is directly linked to quality standards. The larger the source of the data, the greater the reliability of the results (Babbie 1990). According to Guba and Lincoln (1989, p.235), "objectivity responds to the positivist

demand for neutrality and requires a demonstration that a given inquiry is free of bias, values, and/or prejudice". Therefore, each step of research, especially methods which are applied in this research paradigm, should minimise researcher bias. During the research process, data is triangulated to reach one conclusion from different methods and data sources. The triangulation is "an attempt to secure in depth understanding of the phenomenon in question..[ensuring that]…the objectivity can never be captured" (Denzin & Lincoln 2000, p.5). Therefore, every step of the research process should achieve this objectivity.

Interpretivism

The interpretivist paradigm seeks the understanding and meaning of people and situations which involve the subjectivity of the researchers. Therefore, the quality standards in this research paradigm are trustworthiness and authenticity.

Trustworthiness

Trustworthiness is the foundational criteria because it is a deliberated parallel to the positivist criteria that are internal validity, external validity, reliability, and objectivity (Guba & Lincoln 1989). The trustworthiness criteria comprise four quality standards: the credibility (via member checking), transferability (via thick description), dependability (via outside reviewer), and conformability (conformability data audit).

Credibility

Credibility is parallel to internal validity. In credibility, the idea of similarities between constructed realities of respondents and the reconstructions attributed to them are measured (Guba & Lincoln 1989, p. 237). In interpretive research, different methods are applied to assess the credibility of the findings. According to Merriam (1989) (as cited in Howitt 2007), multiple methods and perspectives, and member checking are applied for improving credibility.

Transferability

Guba and Lincoln (1989) describe transferability as a term that refers to the generalisation of research findings which can be applicable in different contexts. In this quality standard, the readers may attempt to find similarity between the researcher's personal experiences and their own. This is illustrated in a parallel drawn by Ellis and Bochner (2000, p.744): "generalization is constantly tested by readers as they determine if it speaks to them about their experiences or about the lives of other they know". It is synonymous to external validity and demonstrates a tendency to employ the findings for general purposes (Bryman 2008). Researchers can provide rich data and thick descriptions to achieve the transferability standard.

Dependability

The standard which parallels reliability in a post/positivism paradigm is dependability which concerns the stability of data over time (Guba & Lincoln 1989). In interpretive research, data should be trackable and results should be consistent. Therefore, a detailed audit trail should be given (Guba & Lincoln, 1989; Howitt 2007).

Conformability

Conformability is the standard which parallel to objectivity criteria in post/positivist paradigm.

The process of assuring data, interpretation and outcomes are rooted from the contexts and persons (Guba & Lincoln, 1989). According to Howitt (2007), conformability can be established by giving the readers clear track of data and interpretations. The subjectivity of researcher is evaluated in the interpretive research.

Authenticity

Authenticity criterion is about relationships between others and researcher. Educative authenticity helps researchers to understand their role as educators as well as others who influence their professional practices. This criterion exposes the conversation between researchers and participants, and the situations and emotional compassion that arise during the study (Ellis & Bochner 2000). Various viewpoints for measuring authenticity criteria as mention by Bryman (2008) are: ontological authenticity which helps members to understand their social milieu. Educative authenticity helps members to appreciate others' perspectives. Catalytic authenticity applies to provoke members to engage in action for circumstances change. Lastly, it is tactical authenticity which empowers members to take necessary steps for engaging in action. Natural personal and social setting will help to establish the authenticity.

Criticalism

Criticalism provides the opportunity to think critically and change the situations, especially issues in society; such as political, social, economic, education, etc. In the context of educational research, this paradigm puts emphasis on criticizing the problems and makes the changes. Therefore, the quality standard in this paradigm focuses on critical reflectivity, empowerment, and envisioning.

Praxis

According to Taylor and Wallace (1996, p.1) "Praxis concerns the way in which the researcher attempts to stimulate the reader to take deliberate action towards changing practice." The reflection on researchers' practices, not as merely a self-evaluation, can be a learning process for the readers. According to Bain, Ballantyne, Mills, and Lester (2002, p.10), "reflection is an intrinsically good and desirable aspect of professional development." This paradigm employs writing as the process of inquiry for exploring individuals' own voices (Richardson, 2000). Therefore, it also can help researchers to understand and affect themselves emotionally and intellectually within their pedagogical practices.

Pedagogical Thoughtfulness

Pedagogical Thoughtfulness is a quality of research writing that engages the reader (and also the writer) in thinking about educational issues, especially teaching and learning (Ellis & Bochner 2000; Howitt 2008). Through writing readers may be able to reflect on their own teaching practice and share with researchers working ins the same context. Researchers may also reflect on their own pedagogical practices.

Critical Reflexivity

Researchers' subjectivity could lead to overestimating their judgment on the phenomenon through the process of inquiry. The critical reflexivity helps the readers' to judge researchers' subjectivity, awareness and self exposure (Richardson 2000). According to

Johnson (as cited in Afonso 2007),"reflexivity involves self awareness and 'critical self reflection' by the researcher on his or her potential biase and predispositions as these may affect the research process and conclusions" (p. 47). As a result, this criterion is powerful for envisioning the future and for empowering notion of educational process, not only to criticise, but also to act for the better future world.

Re-envisioning

Re-envisioning is important paradigm, as the nature of the criticalism is creating the changes. Imaginative thinking and envisioning can help to solve problems in life and think critically. According to Robertson & Gerber (2001), it is important for constructing the positive image of the future which could affect the future of society. Therefore, the envisioning is one of quality standards in the criticalist paradigm

Postmodernism

Postmodernism employs the art based research to empower and engage the readers. Through its impressionistic writing, it is "intuitive and subjective" which involve personal voice and emotions (LeCompte & Preissle, 1993, p.354). It includes a process of self-monitoring, and disciplined subjectivity, that exposes all phases of the research activity to continual questioning and re-evaluation (Burns, 1996). According to Ellis and Bochner (2000), the idea of validity in the narrative research related to the researchers' work to engage the readers that the researcher experiences are lifelike and believable and help the readers to communicate with others different perspective and their personal experiences. Therefore, the quality standards in this paradigm is related to representation and engagement.Taylor & Wallace (1996, p.1) state that, "representation concerns the challenge of representing others without reducing them to objects of researcher's gaze". This standard will judge representing of others voices during the inquiry process. Therefore, in this quality standard, how the researchers represent the reality and other voices become important. The other concept which is important for representation criteria is crystallisation. The crystallization recognizes the different views of interpretations. According to Denzin and Lincoln (2000), within crystallisation process, the researchers could present the same tale in many different perspectives. The idea of crystallization not only gives the space to recognise the different views, but also contributes the powerful interpretation for the research. According to Richardson (2000, p. 934), within the postmodernism paradigm, "we do not triangulate; we crystallize. We recognise that there are a far more than "three sides" from which to approach the world". Therefore, this paradigm emphasizes the plurality of the truth. Polyvocality employs different genres on writing to create meaning and emotion. It is because there are alternative options to deliver information and feeling between researcher and readers' consciousness (Richardson, 2000). Thus, readers can gain emotional appreciation from the writing. The verisimilitude is the standard to judge either the idea or writing is similar with the reality and truth. According to Ellis and Bochner (2000), verisimilitude is presentation feeling of truthlikeness upon the reader who reads the narrative inquiry writing. Therefore, through this standard, researchers need to represent their writing in an engaging manner. Although the writing can be fictitious, the

important point is truthlikeness.

Criteria of Writing/Literary Criteria (Orientation, Strength, Richness, and Depth)

Impressionistic writing becomes the way to represent the data in this paradigm. According to Richardson (2000), writing as a method of inquiry helps researchers to find out how the world, we, and others are constructing within our perspectives. Moreover, narrative inquiry engages the readers with the orientated, strong, rich, and deep textual representation. In addition, oriented text means, "the text should be oriented to answering the question of how the researcher as educator stands in relation to life" (Taylor, Gilmer & Tobin 2002, p.31). This can be represented through involving value and teaching experiences in relation to the pedagogical context into research. In educational research, writing should represent "strong pedagogical perspective" (Taylor, Gilmer & Tobin, 2002, p.32) to interpret the phenomenon. The varied and meaningful description of phenomenon should be applied to create the rich text. Finally, the rich text should shape the writing to encourage the readers to think reflectively within their pedagogical experiences.

CONCLUSION

Educational research with its characteristics is influenced by four major paradigms. Each paradigm has its own epistemology, ontology, and quality standards which influence the researchers to find the truth and see the reality. The important point is that knowing the nature of each paradigm which can help the researchers to conduct their research process. Quality standards represent the nature of each research paradigm which can be parallel. Researchers can conduct the research within and across paradigms which is called multi-paradigmatic research paradigms (Taylor, 2008)

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USING MOBILE DEVICES FOR DELIVERY OF EDUCATIONAL CONTENT AND INTERACTION WITH STUDENTS
(AIAER's B.K.Passi Award 2008 Paper on Educational Technology)

Dharam Parakash

BACKGROUND

A decade ago, nobody could predict that there was an insatiable demand and need for communication through telephones in a developing country like India. The struggle with finding an appropriate technology, investing in it and expanding the existing telephone network was being thought of as a solution to the communication needs that were arising. Mobile telephone technology, when it arrived was thought to be a luxury and only very few people with deep pockets could use it. But, as it percolated down to the common man, usage rates went down, mobile devices became cheap and it became a common man's tool for communication. With its user-friendly features like communicating from wherever you are, communicating on the move and so on, mobile technology captured the imagination of the masses. Many value added services were also provided by the commercial mobile networks for different kinds of communication. One of the value added services is SMS, an abbreviated form of Short Message Service. When the commercial mobile network started, it was never thought that such a service could attract user's fancy and could evolve into a major communication tool. But going by the revenue generation patterns of mobile networks, SMS has become the most popular value added service with millions of SMS traveling from various mobile devices to other mobile devices, traffic increasing tremendously during special celebrations like New Years, Diwali etc. Mobile devices with its user-friendly features has also attracted the attention of communication specialists, educationists, advertisers and many more for discovering the possibilities of communication using mobile devices. Possibilities of communication seem to be enormous as the communicator is able to reach the receiver wherever he or she may be, whatever he or she may be doing. Keeping in view the above, there were many questions for which there was a need to seek some answers in educational context. For example, could we use mobile devices for the delivering of some educational content? Will it be possible to interact with the learners through a mobile device? Can we go beyond the 'yes' or 'no' feedback? There was another aspect of concern, "entering the personal space". Most of the users of mobile devices also use them as a personal device to store telephone numbers of their friends, or interesting messages or many other kinds of information. It is also being noted that lots of users are a bit reluctant to share their mobile devices with anybody because they consider it a personal domain or space. So the question was whether the students or learners would mind the invasion of their personal space and due to this may or may not respond to any interaction question or stimulus provided. After detailed deliberations with various experts in the field of mobile communication, educationists and

psychologists, it was decided to use SMS as the communication medium for the study. Some other features of SMS which helped in taking the above decisions were: SMS is unobtrusive i.e. unlike a telephone, one need not attend it immediately. It can be read and responded to whenever the receiver wants to do so. SMS has some characteristics of an E-mail. It can be stored and retrieved whenever you want to do so. It can also be shared by forwarding it.

OBJECTIVES

To explore the possibility of delivering content (educational in nature) to a learner/user using the mobile platform.

To study various strategies of interaction with the learner/user through mobile devices.

TARGET GROUP/PARTICIPANTS

To know more about who are the learners who have access to a mobile device or carry a mobile device for communication with them separate individual discussions were held with various educational institutional heads, teachers, parents etc. It was found that generally the students who were studying in class 9th to 12th have access to a mobile phone or carry a mobile phone with them. It was also found that there was an inbuilt contradiction in the whole scenario. Most of the schools had banned the use of a mobile device/carrying of a mobile device in the school premises as they felt it had a very disturbing effect on general discipline and communication etc. within the school. While discussing about the target users, a request was also made to a commercial mobile network to find out whether they had any information about the users who were between the age group of 14th to 17th years. The mobile network companies, even if they had any information or data, were reluctant to share the same because of the confidentiality clauses imposed on them. It was also pointed out that most of the mobile devices that are being purchased for children may not be in the name of those children. The parents could have bought the device for their child in their own name or in their mother's name. So heads of some schools were requested to let the students of class 10th and 12th (Board Classes) of their school to participate in the study. After detailed discussions and convincing, principals of five schools agreed to allow the students of their school of class 10th & 12th to share information regarding their mobile telephones with us and let them participate in the study. So a list of 1,075 students who had a mobile phone was prepared with the help of the school authorities. All these five schools were English medium public schools of Delhi and catered to lower-middle and middle class category of students. The schools helped in creating a database of mobile numbers of the school children to whom educational content would be sent via SMS mode. One of the school even got the parent's consent for sharing the children's mobile numbers for the study.

EDUCATIONAL CONTENT

There was a detailed discussion on what could be the educational content which was being delivered through mobile devices in an SMS mode. Following points came up during the discussions:

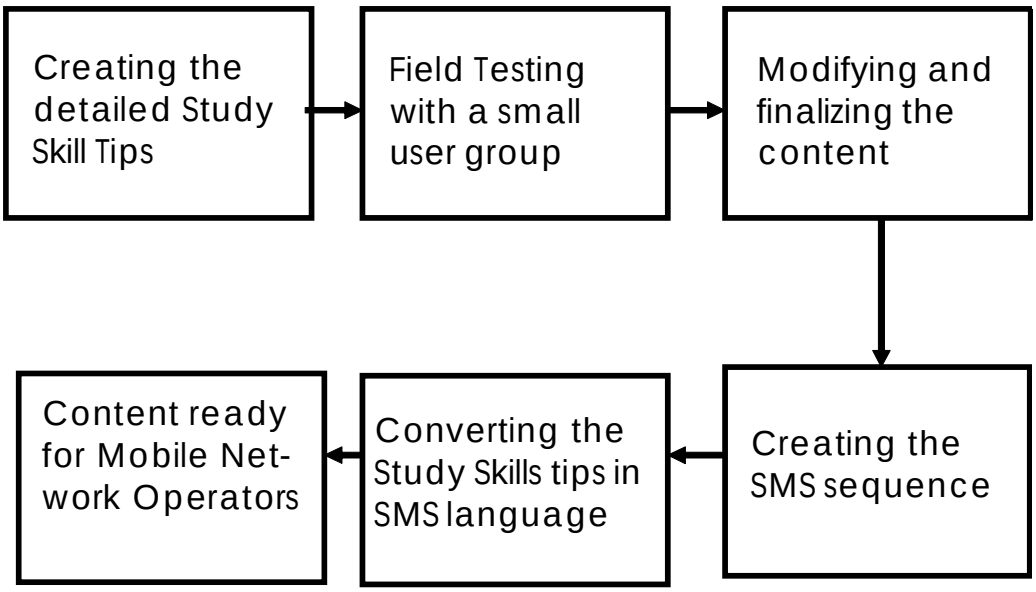
*Mobile network operator representatives pointed out that most of the mobile devices which are in the low cost category, can only receive text messages. Some alpha-numeric fonts could be used. Graphics like photographs,

line graphics, visual icons etc. could only be received by a multimedia ready mobile device. Otherwise special multi-media card has to be inserted into a mobile device, if it has a slot or provision for that.

*The principals of the schools and teachers pointed out that to create only text based educational content which is self-explanatory in nature and can be easily understood by the students without any visual support is going to be a tough challenge in itself.

*Everybody felt that for the study purposes some content should be created which can reach out to every mobile device whether it is multi-media enabled or not.

*During the discussions, it was brought out that most of the students appearing for the Board Exam are never made aware of study skills formally. Although, informally, the teachers and parents keep on providing some thumb rules or tips to them. Based on the limitations pointed out by the various participants in the discussion, it was felt that it would be more appropriate if for the study purpose, some content which is not hard educational content but is educational in nature could be taken up. The receivers (the students) should find that the content is of some use to them in their preparation for exams. So, it was decided to work on study skills which would consist of various sub-units like self-study, concentration, time management, preparation for exams etc. Following flowchart represents the process and various steps that were undertaken to get the content ready:



A two-day workshop was organised in which teachers, principals, school counselors, psychologists etc. participated. Representative of the mobile network operator also joined in the workshop to appraise all the people concerned of various limitations of this mode of delivery. The group after detailed deliberations decided as follows:

*Based on the mobile operator's suggestions and detailed discussion, SMS would be sent initially to the participating student for his/her acceptance to participate in the study.

*The study skills under various sub-units should be sent to the receivers as tips or tip for the day.

*The user could be given the choice of choosing the sub-unit, which he wants to receive tips for.

*In case the user/the student is not sure and wants to check about whether he/she needs to learn about a particular aspect of study skills, then self-check questions were also available. Self-check questions would help a user to decide about which aspect of study skills he/she needs to go in for.

*The user should receive only one tip a day and the next tip should go to his mobile the next day. After receiving all the tips or going through the complete sub-unit he/she could be asked for the next choice or feedback.

*The possibility of encouraging children to ask questions regarding a particular study skill was also pondered on but was put in abeyance due to various resource limitations and the counselor/psychologist's opinion that it would be difficult for even a trained counsellor to respond to any such question without knowing more about the background of the child.

*The module and tips on study skills were developed during the workshop .

MAKING THE CONTENT SMS READY

The group of teachers, psychologists, counselors and principals worked together to get the content ready. The sub-units of the study skills taken up were: Preparing and writing for exams; Concentration; Time management; Memory; and Self-study. As it was felt that one sub-unit and tips given under may be sent for 5-6 days, 5 to 6 tips in each sub-unit were prepared.

To check the suitability of wording and student friendliness of the matter, tips evolved by the group were again field tested with the students of Class 10th in one of the participating schools. The suggestions and comments received from the students were carefully examined. Most of the suggestions were related to making use of simple language. Necessary modifications were made in the tips. Then a detailed SMS sequence was prepared. For example, the first SMS had to be an SMS which invited the receiver for registering by sending a 'Yes' response to a pre-designated number. Once the receiver sends a 'Yes' then second SMS provides list of sub-units with a request to send their choice to the same pre-designated number so that based on their choice further SMS's start flowing in. As the whole of this sequence would be required by the mobile network operator for sending the SMS messages automatically, detailed instructions had to be provided in the SMS sequence. Also while making the SMS sequence, the feedback mechanism was built in to the sequence. Question like how to simplify the feedback mechanism, when do we activate feedback mechanism etc. were discussed and resulted into the SMS sequence

CONVERTING STUDY SKILLS TIPS IN SMS LANGUAGE

As pointed out earlier by the mobile network operator a single SMS message would consist of 180 alphanumeric characters. This count of 180 characters also includes the blank spaces or the punctuation marks within the text. If there are more than 180 alphanumeric characters in the message then the software for sending the SMS messages will automatically divide the message into two messages. The receiver's mobile device would have the compiler software, which would then compile the two messages as one message. It was also felt that a long message may not be read by the receiver. The work on changing the text started and was a great learning experience. For example, 'would' would change into 'wud' and 'could' into 'cud'. Similarly, 'you' got changed into 'u' and 'for you' got changed into '4u'. 'Diagrams' got changed into 'digrms', 'before' got changed into 'b4' and so on and so forth. The effort was to use alphanumeric text in a creative manner so that not only it becomes brief and uses minimum possible characters but also is able to communicate the message. While going through this exercise and looking at the readymade templates available within the mobile devices, it was felt that using such a language may not create any problems for the young users as they are habituated to such a style of SMS language. So the tip initially, which was written as 'think about the overview before starting to read in depth' was finally sent as 'think abt the overview b4 strtng 2 read in depth'.

Interactivity

Various levels of interactivity was built into the study at various stages:

i)After receiving the first SMS, the user has to SMS back 'Yes' to start the further flow of SMS.

ii)The user had to choose one such unit out of five units and SMS back the code of the sub-unit to a pre-designated number.

iii)If the user wanted to do a self-check about a particular sub-unit he/she could SMS 'check' to the same number and receive 'self-check' questions.

iv)After receiving the tips, the user could SMS <feedback> and give feedback through SMS about the tips received.

Interactivity at (ii), (iii) is need based but at (iv) requires an extra effort on the part of the user.

Getting it to the mobile network operator

Once the sequence and the content was SMS ready, then a detailed discussion about implementing the experiment took place with the mobile network operator. Wherever possible, in the SMS sequence, detailed and specific instructions were formulated and provided so that chances of confusion or vagueness were reduced minimally. The whole material was then sent to software developers and backend operators for the mobile network company. While encoding the whole sequence into the software they had lots of queries like "What do you mean by this instruction?" or "Once the user has given the feedback what happens next?" which were settled through E-mails or telephones.

Revenue Sharing

It was found that SMS to a five digit number which is accessible from all over India is charged depending on the spread of audience from 5 to 6 rupees and the revenue thus generated by sending the SMS is shared

between the mobile telecom operator and the organisation or the company sponsoring the event or the happening.

In case, six-digit number or normal ten-digit number is used the charges are lower but the revenue sharing between the two organizations continues and varies depending on various factors like audience spread, volume of responses etc. However, for this Pilot Study a ten-digit number was used and instead of sharing the revenue with the teleco, it was decided that the SMS sent by the user or by the person participating in the study is to be charged at a very low rate i.e. 50 paise per SMS and thus, NCERT cross subsidised SMS responses for the purpose of this study.

Time Schedule for the Study

Initially, it was proposed to start the experiment in mid December 2006, but due to administrative delays and other delays, could only start on 31st January 2007. The timing of this experiment was crucial and critical as most of the Board Class students were busy preparing for exams and were not attending the schools. So it was thought to be an opportune time for support in various aspects of study skills and it was felt that quite a lot of students would opt for it. However, the delay in starting the experiment may be a factor, which impacted some aspects of the study.

DATA ANALYSIS

Following information about the users flowed in after the experiment was finished:

Database of mobile numbers available and first SMS (requesting the students to SMS back 'Yes' to receive further SMSs) sent to 1071 participants

No. of students who registered (sent 'Yes') after first SMS was 275;

No. of students who registered (sent 'Yes') :after first reminder was 90;

No. of students who registered (sent 'Yes') after second reminder was 37; and

Total No. of students who SMSed 'Yes' was 402.

Out of 402 participants, the number of participants who gave their option for any of the sub-units and received SMS's was 159;

Detailed break-up of the students who opted for different sub-units were: Self Study-34; Memory-14; Concentration-26; Time Management-27; Preparing and writing for exams -38; Total-159.

No. of students who took up "Self-check"questions and also related study skills – sub units was 61.

No. of students who requested for tips on 2nd sub-units of study skills was 75

Detailed feedback was provided by 8 students

There was a sharp drop in the number of participants who sent 'Yes' or agreed to take part in an exercise of improving their study skills. Out of 1,071 students in the first instance, 25.7% students SMSed 'Yes' or agreed to take part in the study. Registration improved to 37.5% of the sample after two reminders. Although, as per industry standards, most of the SMS sent by various companies/ organisations get a response upto 10% to 15%. Response, in this case, was better than industry standards but it was below the expectation of the team conducting the study. There could be some possible reasons for this:

The students were informed about such a study by the school principals/school teachers in November 2006 when the mobile numbers of

the students were collected. The pilot study was delayed by almost a month and not many students were available and reminded about the pilot study due to exam preparation holidays. It is also likely that in the personal space of the students, it is their own will or motivation that would prompt them to join such an activity. Also improvement in the number of students who agreed and SMSed 'Yes' after 1st and 2nd reminder showed clearly that reminding students was effective. The registrations improved from 25.7% to 37.5%. It also indicates of the need to remind the students and cajole them into action or pursuing the receivers as most of the advertisers do to improve the receiver's responses. The students who actually then gave their option after selecting the sub-unit and started getting tips was less than the students who registered. 39.6% of the registered students actually opted for one of the sub-unit.

During the planning, it was clear that some students may not like to choose (i.e. to interact) and may drop out. The major possible reason contributing to this dropping out would be the level of interaction required. In this interaction, the receiver was given the choice of sub-units as 1, 2, 3_ _ _ _ __ along with the title. The receiver after reading the title of five sub-units had to SMS back the number of sub-unit (1, 2, 3 or _ _ _ _) to a pre-designated number. This required slightly higher level of interactivity and it could be a factor due to which there was a reduction in numbers of participants. Also the experiment started on 31st January 2007. Most of the students were in the midst of their board exam preparation. It is quite likely that after having registered and received the 2nd SMS, they chose not to get distracted and hence did not respond further.

The distribution of students in opting for a sub-unit clearly indicated their concern. Maximum number of students (29% of the registered students) opted for sub-unit entitled "Concentration". Next most opted for sub-unit was "Preparing for and Writing Exams" (24% of the registered students opted for it). Third popular or opted for sub-unit was "Self-study" (21.4% of the registered user opted for it). 48% of the receivers also opted for a second sub-unit after receiving tips on the first sub-unit. It implies that quite a lot of students were finding the tips in study skills useful. It is clear from the above that there was an untapped need to provide support to students in various aspects of study skills. It also indicates that while planning for delivery of educational content, the choice of content will have to be outlined by the users.

Another aspect of the pilot study was the "self check questions" on various aspects of study skills. These questions help the user to informally know about the need to learn more about a particular aspect of study skills. To receive such question, the user had to SMS "check" to a pre-designated number and then read the questions and decide for oneself what to do. Due to interactivity involved, it was expected that not many students would opt for it. It was interesting to find that 38.4% of the registered students opted for self-check and then registered for the relevant sub-unit. This also provides indicators towards the user's need. If the user feels the need for a particular educational content, then he/she will definitely try to use the same. So, while developing educational content for the mobile platform, user's need needs to be looked into and analysed. It is going to influence what goes in

to the content. Feedback questions were also part of the exploration into interactivity through the mobile platforms. Only few students responded to these questions. It clearly implies that traditional interactive strategies may not work with the mobile medium (as most of the feedback questions were typical traditional feedback questions). There is a need to explore the question of interactivity further in this regard as to what style of interactivity would be best suited for this medium.The feedback given by the small number of participants can be taken as indicative. The students found the tips sent to them useful. All the students who gave feedback tried and used the tips either fully or partially. The recipients also tried to share the tips either by forwarding the tip or by discussing it with their friends. When asked whether information about school subjects in this format will be useful, only few of them gave an affirmative answer.

IMPLICATIONS

It was felt during the pilot experiment that there was a need for support in information dissemination through print or other media so that other students beyond the existing number could also participate in the study. Also it would have required a "pull" model rather than a "push" model that was used. (In a push model, one pushes out the SMSs that has to be sent to the receiver but in the pull model, the receiver pulls out the SMSs by accessing a pre-designated number). There is a need to explore further both the models and compare their effectiveness for educational content.

There is a need to try out various marketing strategies and look at their impact. There is need to explore further the capabilities of mobile platform and experiment with multimedia approach. One can see the market forces are slowly forcing the features like better and more storage, multimedia capability, coloured screen etc. being incorporated in the low end models of mobile devices also. So there is a need to explore the mobile platform for educational purpose using multimedia content. Push model was used in the pilot study. But there is a need to convert some units of school subjects into mobile ready content and then try the 'pull' model where a user could get it by accessing through a pre-designated number. Such an activity could slowly become self-sustaining financially as the numbers of users grow exponentially and each pull generates some revenue for the content developers. Interactivity is an important aspect of educational communication. Different strategies for interactivity need further exploration so as to make communication more effective. The mobile explosion is already taking place in India. Number of mobile phones are growing at a pace of 30% or more and have already outgrown the number of landline telephones. There is a need to explore and use this platform for achieving educational goals as it provide exciting opportunities of reaching the user wherever he/she is.

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TEACHER EDUCATION IN ARUNACHAL PRADESH

K.C. Kapoor
H. Bam
R.K. Mahto
Anupam

INTRODUCTION

Arunachal Pradesh is a tribal population dominated State having an area of 83,578 sq. kms with10,91,117 total population and density of 13 persons/sq. km. (census 2001).There are about 22 major tribes and nearly 45 sub-tribes who maintain group identity and speak different dialects. There was hardly any social, economic and educational development in Arunachal Pradesh during the British period because of their policy of isolation. But after independence, the Government of India took some initiatives for the social, economic and educational development of tribal people of Arunachal Pradesh which was known as North East Frontier Agency (NEFA) during those days. In case of educational development, Arunachal Pradesh did not inherit any system of its own rather the system of education which was found in other parts of the country, the same was planted too. The history of educational development in Arunachal Pradesh is of great significance from the stand point of the view of change and trend of the society. There was possibility of having an original and new system of education in this territory, because the land was hidden and neither the ancient nor the medieval education had any sign of influence here till 1947.Of course, during this period, Buddhist Monasteries imparted education in Kameng (Tawang, Dirang, Rupa and Bomdila) and Tirap districts. There was no attempt by the British rulers in India to establish educational institutions. In 1918, the first school was set up by the local tribal people at Pasighat. In 1922, another school was opened by Adis of Dibang Valley at Dambuk. Subsequently, schools were started in 1934 at Nengroo, in 1940 at Bolung and at Riga (1940), in 1946 at Balek, in 1947 at Along, Daring, Ledum, Pang, and Yomcha. The medium of instruction was Assamese in all those schools. The Department of Education was established in 1947. The office of the Education Officer used to be at Sadiya. In 1952, the office of the Education Officer was shifted to Marghereta in Assam, as Sadiya town was washed out due to the flood.

HISTORY OF TEACHER EDUCATION

In 1947, the first teachers' training institute of its own kind was established by Indira Miri at Sadiya. It was called Bunyadi Shiksha Bhawan (BSB). It was to prepare the teachers taking into account the needs and problems of the tribal pupils at primary and upper primary schools of the territory. Its curriculum was need based in nature. The first batch of 10 trained teachers was produced in August 1948. All these teachers were sent to open new schools on 15th August 1948. In the year 1952, this teachers' training institute was shifted to Marghereta and finally it was taken and located at Changlang in Arunachal Pradesh.

Course Structure of Bunyadi Shiksha Bhawan (BSB)

Pedagogical Theory (50%)

Teacher and Education in the Emerging Indian Society.
Child Psychology.
Organisation and Management

Content-cum Methodology(50%)

Teaching of English.
Environmental Studies-I & II.
Teaching of Mathematics.
Teaching of Hindi.
Work Education
Health and Physical Educatio

It was one year programme. This course structure did not have component like 'Working with Community.BSB institute used to organise teaching practice.This course was designed and organised for in-service primary school teachers only. Duration of the primary teacher education programme was one year. There was only one training institute in the State from the year 1947 to 1988-89. In 1990-91, this training institute was converted to DIET.

STATE INSTITUTE OF EDUCATION

The State Institute of Education, Changlang was established in 1982 with Sri D.D. Trivedi as the first Principal. In March 1986, 6 subject specialists were appointed, one for each school subject, in the rank of group-B gazetted. During 1988, 3 Trained Graduate Teachers (TGT) were posted under the scheme of District Centre for English funded by the CIEFL, Hyderabad. The scheme was abolished in 1994.Till date, the SIE Changlang does not have its own building. It has only a few rooms scattered in the campus of DIET Changlang. This creates a problem in working and co-ordination. The Institute has a hostel of its own. It does not possess adequate physical infrastructure. There is a e Principal, and some supporting staff, but, no faculty. Its Population Education Cell was established in 1990, which has produced some instructional material on population education for elementary and secondary school teachers. It has been organising orientation programmes for the school teachers and other educational functionaries.

DISTRICT INSTITUTES OF EDUCATION & TRAINING (DIETS)

BSB Changlang is the first DIET of the State. During 1995-96, 10 more DIETs were sanctioned by MHRD, New Delhi. Out of these 11 DIETs, only 6 DIETs are functional. These are located at Naharlagun, Pasighat, Dirang, Roing, Seppa and Changlang. Buildings for remaining 5 DIETs are under construction. DIETs run a pre-service teacher education (PSTE) course leading to Diploma in Elementary Education (D. E. Ed.). Apart from this, in-service teacher training programmes are being conducted. The newly recruited teachers under the scheme of SSA are being provided induction training. Each DIET has a principal , six lecturers and 2 ministerial staff.

Course Structure of Diploma in Elementary Teacher Education

Pedagogical Theory (20%)

Emerging Indian Society.
Child Psychology.
Elementary Education: Status Problems and Issues with special reference to Arunachal Pradesh.
Information and Communication Technology.
Early Childhood Care Education.
Psychology of Teaching and Learning.

School Organisation and Management.
Adult Education/Population Education/Value Education.

Working with community (20%)

Content-cum Methodology and Practice Teaching including related Practical Work (60%)

Teaching of English-I&II
Teaching of Mathematics-I&II
Teaching of Healthy and Productive Living.
Teaching of Hindi-I&II
Teaching of Environmental Studies.
Teaching of Science and Technology.
Teaching of Social Science.
Teaching of Art Education.
Teaching of Work Education.
Teaching of Health and Physical Education.
School Experience Programme.
Practice Teaching.
Duration of the course is of two years.

DISTRICT RESOURCE CENTRE OF SCIENCE EDUCATION(DRCSE)

The DRCSE was established in the year 1990 at Pasighat in East Siang district of the state. This centre used to organize short term refresher/orientation programmes and work shops for the Science and Mathematics teachers of Secondary level. This centre is controlled by the Deputy Director of School Education, However, at present it seems to be inactive as its faculties are attached to DIET Pasighat for training purposes. There are 3 senior teachers of Biology, Chemistry and Mathematics whose services are being used in DIET for all training purposes.

STATE RESOURCE CENTRE (SRC)

The State Resource Centre, set up in 1989, takes care of adult education Scheme.It also covers population education, drug abuse, health care, care of mother and child care. Some time training is given for income generation. There is also training facility on music, tailoring, knitting, weaving etc.

SECONDARY SCHOOL TEACHER EDUCATION PROGRAMMES:

There was no teacher education programme for secondary school teachers in Arunachal Pradesh till the year 1987. In 1988,the Department of Education was created in Rajiv Gandhi University (Formerly, Arunachal University) at Rono Hills Campus with one professor, two readers and four lecturers. B.Ed programme was launched in the same year with an intake capacity of 20, out of which 16 candidates were deputed by the State government for B.Ed. course and 4 candidates were fresh graduates, admitted on merit basis. Others courses being offered by the Department of Education include M.A (Education);M.Ed. and Ph.D. programmes.

B. Ed. Course

1st Semester

Teacher and Society
Educational Psychology
Teaching Specialisation (Any two out of the following: Science; History; English/Hindi; Mathematics; Geography
Special courses (Opt-I) (Any one from Group-A) (Adult and Non-Formal Education; Education for Exceptional Children; Human Rights, Values and Peace Education; and Environmental Education)
Teaching Practice and Viva

2nd Semester

Educational Technology and Curriculum Evaluation

Problems of Education in India with special reference to North East Region
Educational and Vocational Guidance
Special courses (Opt-II) (Any one from Group-A)(Education and Rural Development; Educational Administration; Population Education; Pre-School Education)

A minimum of 20 lessons in each of the two teaching specialisation are required to be delivered by each pupil teacher. The practice teaching is evaluated by Board of Examiners appointed by the University. They observe at least on teaching class taken by each candidate and also hold viva-voce after the class observation. The Board awards one of the following grades to practice teaching: Grade 'O' out standing: Above 75%, Grade 'A': Very Good 65% to 74.99%, Grade 'B': Good: 55% to 64.99%, Grade 'C': Average: 45% to 54.99%, and Grade 'D': Failed: Below 45%.

The Department possessed two Professors, two Readers and 6 lecturers for the teaching of B. Ed., M. Ed, and M.A courses. The performance of B.Ed. students remained satisfactory as the pass percentage of B.Ed. students from 1988 to 2007 happened to be from 80.15% to 100%. The M.Ed. one year programme was offered from 1990-91 to 1992-93 for about three years with the intake capacity of 5 candidates and the pass percentage remained 100% in all the three years. The department introduced M.A (Education) two year programme in the year 1993 and this two year M.A (Education) became very popular. There is pressure in every academic session for the increase of seats. Of course, the performance of students is not very satisfactory as compared to B.Ed. and M.Ed. students. In the year 2000, the semester system was introduced and as a result the performance of the B.Ed. as well as M.A students improved so much so that it has gone above 90% and in most of the years it has been recorded 100% In addition to the Department of Education, B.Ed. programmes are also run by two colleges of Teacher Education located at Naharlagun and Pasighat.

COLLEGE OF TEACHER EDUCATION

Till now no government college of teacher education has been established except Dept of Education of Rajiv Gandhi University. However two private colleges have come up. One is located at Itanagar called 'Hills College of Teacher Education' with an intake capacity of 100 which was established in 2005. Another college called 'Doying Gumin College of Teacher Education' is located at Pasighat which has been established in 2007. Both the colleges are affiliated to the Rajiv Gandhi University and semester system of examination is practiced. The courses are of one year so far.

IN-SERVICE EDUCATION OF TEACHERS

Block Resource Centres & Cluster Resource Centres

After the implementation of Sarva Shiksha Abhiyan in Arunachal Pradesh all the Districts have established Block Resource Centers (BRC) and Cluster Resource Centers (CRC).. Accordingly, the Block Resource Center coordinators (BRCC) and the Cluster Resource Center Coordinator (CRCC) were appointed from among the school teachers as per merit and qualification. There are 90 BRCs, 166 CRCs, 101 BRPs and 124 CRPs under

the scheme of Sarva Shiksha Abhiyan For the last three years, these centres have been imparting training. More than 4000 teachers and resource person were trained through these BRCs and CRCs which may be considered a milestone in context of teacher education in Arunachal Pradesh.

PROBLEMS IN TEACHER EDUCATION

The State does not have any training institution which provides the training to pre-primary school teachers. Teacher Educators and pupil teachers face a problem of transportation as the training institutions are located away from the township at a distance of 5 to 7 kms and the transport facilities are not adequately available. It has been observed that the teacher training institutions possess inadequate physical infrastructure but, some of the equipments are badly needed in the institutions and those are LCD projector, Video Camera, Computers, Educational Technology laboratory, Psychology laboratory, Internet facilities etc. The teacher education curriculum needs some modifications in content cum methodology and the process of teaching practice. The biggest problem is that there is no demonstration school with any of the college of teacher education. Institutions are to depend on some schools located at distant places and some times unable to get for the purpose. The teacher educators possess the academic qualifications like- M.A./ M. Sc., B. Ed. (78%), M. Ed. (15%), M. Phil. (3%) and Ph. D. (4%). The majority of teacher are M.A./ M. Sc., B. Ed. There is shortage of teacher educators in the institutions and as a result, the teacher educators are found over loaded which dilute the quality of their teaching. The quality of any educational process depends upon the creative and research abilities of teachers. But, the teacher educators working in DIETs/CTEs do not get any facility for conducting research or getting some orientation relating to research activities. Except some university faculty members, there is no any other teacher educator who has published some papers / taken some research project. Further, Arunachal Pradesh is a state which has extremely poor transportation and communication facilities. Therefore, the candidates do not get various information pertaining to the admission in these teacher education institutions. The DIETs do not have hostel facilities, but, other teacher education institutions do not provide hostel facilities and the pupil teachers suffer. The teacher education programmes seems to be more theoretical in nature as the teacher educators give more time to theory papers and a very less time to teaching practice and other practical activities.The library facilities are also quite inadequate.

CONCLUSION

Educational development is gaining momentum at a very fast rate and educational institutions are coming up at a large scale in the state. But, the teacher education institutions are very limited in number. These institutions are unable to meet the demand of trained teachers of the state. Secondly, there is a need to improve the infrastructure of these training institutions and to look for qualitative teacher educators. The State possesses about 600 pre-primary schools and there is not even a single training institution for providing the trained pre-primary school teachers. Serious and sincere efforts are to be made for quantitative improvements in the teacher education programmes of the State.

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A COMPARATIVE STUDY OF ORIENTATIONS OF COLLEGE TEACHERS ON THE BASIS OF SOME PRESAGE VARIABLES

S. R. Pandya

INTRODUCTION

Every teacher shows preference to and adopts a specific philosophy, style and behaviour for carrying out the teaching-learning process in the classroom. The specific philosophy provides a basis for selecting teaching-learning process through which a teacher's orientation towards his / her teaching gets reflected. According to Duck (1981), the following indicators are necessary for analysing a teacher's classroom behaviour: The nature of the learner may presume to be passive (Lockean) or active (Platonic).The nature of the subject matter may be amorphous (rote-learning) or structured (understanding the relationship among the components of the subject matter).The manner in which the subject matter is used to guide students towards meaningful learning activities could be cognitive or affective. The nature of behaviour trends one should exhibit in order to carry out one's philosophical position could include encouraging students for convergent thinking or divergent thinking.

PHILOSOPHICAL BASIS OF TEACHING

There are six different philosophies which could influence a teacher's behaviour which are as follows:

Perrenialism emphasises humanities as presented in great books with the assumption that there are no absolute truths and standards more real than the physical world. The teaching would be based on S-R association theories of learning with behavioural objectives and assumption of one correct answer. The behaviour trend of the perennialist is convergent thinking - the authoritarian world-view. The nature of the learner is platonic (active). The nature of the subject matter is structured. They are geared strongly towards cognitive learning and to some extent, towards affective learning.

Essentialism emphasises physical sciences as used by authorities. It assumes that there are no absolute truths and that success is based on absorption of knowledge about the physical world. As far as the essentialist is concerned, the learner is passive, and the subject matter is strongly structured and to some extent amorphous. Students are geared strongly towards cognitive learning and convergent thinking.

Experimentalists believe in active learning and learners. As it is believed that all knowledge has some internal correlation with each other, it necessarily has to be structured. The aim of the teacher while using subject matter to guide students towards meaningful learning activities so as to gain knowledge. They strongly believe in divergent thinking and a non-authoritarian world-view. Experimentalists emphasise on social sciences as a framework for problem-solving, assuming that the physical world is constantly changing.

In case of existentialism school of thought, the assumption is that the learner is active, the

subject matter learnt is structured, the focus is more on affective learning and divergent thinking. It emphasises problem-solving in the area of highly controversial and emotional issues in any subject matter, the assumption being that the learners "confine" themselves and their relationship to the environment by their choices.

Reconstructionism implies that one has decided what the "perfect" form of society is and seeks to reach that society through teaching techniques associated with experimentalism or existentialism. The learner here is active and the subject matter is structured. On the other hand, they organise subject matter towards affective learning and not cognitive. There is a characteristic shift from acceptance of students' contributions to an emphasis on the best solution – a shift from divergence to convergence, which gives it a special appeal.

Behaviourism implies that one has decided what the "perfect" form of society is and seeks to reach that society through teaching techniques associated with essentialism. The learner here is passive and the subject matter is amorphous. The behaviourist encourages cognitive and affective learning as well as convergent thinking.

CONCEPT OF TEACHER ORIENTATIONS

Some teachers give high importance to one type of orientation and less to the other type. On the other hand, some teachers give high importance to both orientations. According to Duck (1981, p.275), "teachers with low level of student orientation usually believe in the philosophies of perennialism, behaviourism or essentialism." If such a teacher's content orientation is also low, he / she believes that the students are lazy and careless about studies, and is unable to change this situation and hence his/her main job is to provide information to his/her students. However, if a teacher with low level of student orientation possesses a high level of content orientation, he / she believes that the students do not really want to learn but they will respond to strong direction and control. On the other hand, teachers with high level of student orientation usually believe in the philosophies of existentialism, reconstructionism or experimentalism. If such a teacher's content orientation is also low, he / she believes that the students do not really want to learn but they will respond to teachers they like. Such a teacher's primary responsibility is to win students' friendship so that they can be taught.

A teacher with high levels of both orientations believes that students like to learn and explore and a teacher's primary responsibility is to integrate students' and system's needs by creating a learning climate and make learning meaningful and relevant. A teacher with moderate levels of both orientations believes that students' and system's needs are incompatible. It is of primary importance that something be taught, but students' needs cannot be ignored. A teacher's primary responsibility is to push students enough for them to maintain classroom morale. In other words, on the basis of their student and content orientations, teacher performance / behaviour can be studied. The present research is aimed at comparing senior college teachers on the basis of their gender, faculty and location of the college in terms of

Mumbai and Thane districts, qualifications, nature of appointment and teaching experience.

OPERATIONAL DEFINITION OF THE TERMS

Teacher Orientation is a sum total of a teacher's orientation towards his / her students and content.Student Orientation refers to the extent to which a teacher places emphasis on facilitating students' psychological, social, emotional and intellectual growth and development. Content Orientation refers to the extent to which a teacher places emphasis on gaining knowledge, mastering skills and methodologies, using the best methodologies of teaching, reaching the matter to students, developing professionally, being known as an effective teacher and successfully completing the content.

OBJECTIVES

1.To study Mean Teacher Orientations of senior college teachers.

2.To compare Teacher Orientations of senior college teachers on the basis of (a) Gender, (b) Location of the college in terms of Mumbai and Thane districts, (c) Faculty, (d) Qualifications, (e) Nature of Appointment and (f) Teaching Experience : 1.Student Orientation(SO); 2. Content Orientation (CO); and Total Orientation (TO).

NULL HYPOTHESIS

There is no significant difference in the Student Orientation, Content Orientation and Total Orientation of senior college teachers on the basis of the (a) Gender, (b) Location of the college in terms of Mumbai and Thane districts, (c) Faculty, (d) Qualifications, (e) Nature of Appointment and (f) Teaching Experience.

METHODOLOGY

The present study deals with teacher orientations of existing senior college teachers. Hence it has adopted the descriptive method of research. The investigation is aimed at comparing teacher orientations of existing senior college students on the basis of their gender, faculty, location of the college, nature of appointment, qualifications and teaching experience. Hence it has adopted the causal comparative method.

Sample

The sample of the study was selected using a four-stage sampling technique. At the first stage, two districts in which colleges affiliated to University of Mumbai were selected out of five districts using simple random sampling technique (lottery method).These districts were Mumbai and Thane districts. At the second stage, colleges situated in Mumbai and Thane districts were selected on the basis of faculty of teachers, namely, arts, science and commerce faculties using stratified random sampling technique where the strata consisted of faculty of teachers. At the third stage, colleges were selected from different locations of the two districts i.e. north, south and central Mumbai as well as Vasai, Navi Mumbai and Thane city of the Thane district. At the fourth stage, teachers were selected from these colleges using incidental sampling technique due to reasons beyond the researcher's control.

Initially, data were collected from 168 teachers. However, 8 forms of teachers were discarded as they were incomplete. Thus, the final sample

included 160 teachers. The wastage rate of data was 4.76%. The data were collected from 18 senior colleges situated in Greater Mumbai and Thane districts and affiliated to University of Mumbai. The sample consisted of 97 (60.63%) and 63 (39.38%) male and female teachers respectively. There were 57 (35.63%), 48 (36.25%) and 45 (28.13%) teachers from Arts, Science and Commerce faculties respectively in the sample. Also, the sample included 116 (72.5 %) and 44 (27.5%) teachers from Mumbai and Thane districts respectively.

TOOLS

1. Personal Data Sheet for Teachers

This tool was prepared by the researcher to collect data from teachers regarding their name, name of the college, gender, faculty of study, teaching experience, qualifications and nature of appointment.

2.S-C Teaching Inventory

This tool was used to measure teacher orientation in terms of Student Orientation, Content Orientation and Total Orientation. The SC Inventory (Spire, 1974) includes 40 items covering four categories of statements which are as follows:

Category I: Statements which reflect a teacher's willingness to share classroom authority and responsibility with students.

Category II: Statements which reflect a teacher's tendency to centralize classroom authority in his/her own hands.

Category III: Statements which reflect a teacher's concern for the content of the job i.e. the performance of task activities, including planning and scheduling course content and evaluating student progress.

Category IV: Statements which reflect a teacher's concern for "role attribute" on the job, including having respect from students and colleagues, being an expert, or modelling behaviour for students to evaluate.

The internal consistency reliability of this tool was established using the Cronbach's Alpha and was found to be 0.83 and the test-retest reliability of this tool was found to be 0.77 on a sample of 106 students including 51 girls and 55 boys in the Indian context. The scoring was done in such a way that higher the score, higher the score on the specific orientation. The minimum possible score on the Student Orientation as well as Content Orientation 0 and the maximum possible score on these two aspects was 20 each.

ANALYSIS OF DATA

The techniques used for inferential analysis of the data in the present study includes the t-test, ANOVA and χ^2 Estimate. The Mean SO and CO of senior college teachers is 10.66 and 10.38 respectively and hence can be termed as average since the maximum possible scores on both these dimensions are 20. Further analysis of the data revealed that (i) 6 teachers have a High Score on Student Orientation and Low Score on Content Orientation, (ii) 17 teachers have a High Score on SO and High Score on CO. Both these categories of teachers usually believe in the philosophies of existentialism, Reconstructionism or experimentalism. (iii) 11 teachers have a Low Score on SO and Low Score on CO, (iv) 10 teachers have a Low Score on SO and High Score on CO. Both these categories of teachers usually believe in the philosophies of perennialism, behaviourism or essentialism. (v) 116 teachers have a Moderate Score on SO and Moderate Score on CO.

TESTING OF HYPOTHESES

1 (a): There is no significant gender difference in the Teacher Orientations. This null hypothesis was tested using the t-test. The t-ratios for SO, CO and TO were found to be 0.83, 0.54 and 0.89 respectively and not significant at 0.05 level. Hence the null hypothesis is accepted. Hence, there is no significant gender difference in the (1) SO, (2) CO and (3) TO of teachers.

1 (b): *There is no significant difference in the Teacher Orientations on the basis of location of the college in terms of district*. This null hypothesis was tested using the t-test. The t-ratios for SO, CO and TO were found to be 1.93, 4.47 and 4.03 respectively and not significant at 0.05 level for SO but is significant at 0.01 level for CO and TO. Hence the null hypothesis is accepted for SO but rejected for CO and TO. The mean CO and TO of teachers from Thane district are significantly greater than those from Mumbai district. However, there is no significant difference in the SO of teachers from Thane and Mumbai districts. 10.60 % and 8.70 % of the variance in Content Orientation and Total Orientation of teachers is associated with the location of the college in different districts. The probable reason for this could be that teachers from Thane district might be giving more importance to teaching content matter, may have stronger desire to acquire latest knowledge in the subject matter, updating the learning material used by them, making efforts for their own professional development, making detailed plans of each classroom activity, planning appropriate question papers, implementing new teaching approaches in the classroom, having stronger desire to be known as an effective teacher, teaching basic as well as progressive curricula, emphasising systematic student evaluation and attending professional meetings as compared to teachers from Mumbai district. One of the probable reasons for this could be that teachers teaching in colleges situated in Mumbai district have to travel very long distance – as much as two to three hours a day to reach their place of work leaving very little time and energy for professional development and improvement. Moreover, Thane being a relatively smaller place compared to Mumbai, teachers from Thane district might be having greater motivation to be known as effective teachers.

1 (c): *There is no significant difference in the Teacher Orientations on the basis of faculty.* This null hypothesis was tested using the technique of ANOVA. The F-ratio was found to be 1.79, 5.57 and 5.32 for SO, CO and TO respectively and not significant at 0.05 level for SO but is significant at 0.01 level for CO and TO. Hence the null hypothesis is accepted for SO but rejected for CO and TO. Hence, there is no significant difference in Student Orientation of teachers from Arts, Science and Commerce faculties. There is a significant difference in Content Orientation of teachers from Arts, Science and Commerce faculties. 5.40 % of the variance in Content Orientation of teachers is associated with the faculty in which the teachers are teaching. There is a significant difference in Total Orientation of teachers from Arts, Science and Commerce faculties. 5.12 % of the variance in Total Orientation of teachers is associated with the faculty in which the teachers are teaching. The Content Orientation as well as Total Orientation of teachers from Commerce

faculty is significantly greater than those from the Arts and Science faculties. The probable reason for teachers from commerce faculty having higher Content Orientation as compared to teachers from arts and science faculties could be that there is a very strong demand for admissions to commerce courses with an emphasis on job-oriented courses thereby making it necessary for commerce teachers to be giving more importance to teaching content matter, having stronger desire to acquire latest knowledge in the subject matter, updating the learning material used by them, making efforts for his / her own professional development, making detailed plans of each classroom activity, planning appropriate question papers, implementing new teaching approaches in the classroom, having stronger desire to be known as an effective teacher, teaching basic as well as progressive curricula, emphasising systematic student evaluation and attending professional meetings as compared to teachers from arts and science faculties.

*1 (d): There is no significant difference in the Teacher Orientations on the basis of qualifications (classified into only PG, PG with M.Phil and PG with Ph.D.).*This null hypothesis was tested using the technique of ANOVA. The F-ratio was found to be 0.97, 0.58 and 0.28 for SO, CO and TO respectively and not significant at 0.05 level. Hence the null hypothesis is accepted. Hence, there is no significant difference in the Student Orientation, Content Orientation and Total Orientation of teachers on the basis of their qualifications.

*1 (e): There is no significant difference in the Teacher Orientations on the basis of nature of appointment (classified into permanent. on probation or temporary).*This null hypothesis was tested using the technique of ANOVA. The F-ratio was found to be 0.75, 1.63 and 1.00 for SO, CO and TO respectively and not significant at 0.05 level. Hence the null hypothesis is accepted. Hence, there is no significant difference in the Student Orientation, Content Orientation and Total Orientation of teachers on the basis of their Nature of Appointment.

*1 (f) : There is no significant difference in the Teacher Orientations on the basis of teaching experience (classified into below 5 years and above 5 years).*This null hypothesis was tested using the technique of t-test. The t-ratios for SO, CO and TO were found to be 2.11, 1.40 and 2.27 respectively. This t-ratio is not significant at 0.05 level for CO but is significant for SO at 0.05 level and for To at 0.01 level. Hence the null hypothesis is accepted for CO but is rejected for SO and TO. Hence, there is no significant difference in Content Orientation of senior college teachers on the basis of their teaching experience. However, the mean SO as well as TO of teachers with more than 5 years of teaching experience is significantly greater than those with less than 5 years of teaching experience. It is probable that teachers with more than five years' teaching experience have gained adequate confidence so as to give more importance to the development of knowledge and skills amongst students, provide their students an opportunity to decide the aims of learning and content matter, provide them an opportunity to evaluate teacher performance, provide them an opportunity to make mistakes and learn from experience, make himself / herself available outside the class to help

students, have developed the intellectual capacity to accept a mistake made by him / her that is pointed out by a student, to treat students as individuals and create an informal atmosphere in the class. In short, teachers with more than five years' teaching experience focus their attention more on the development of students as compared to teachers with less than five years' teaching experience.

The magnitudes of Mean Student Orientation Score as well as the Mean Content Orientation Scores are 10.66 and 10.38 respectively and hence can be termed as average since the maximum possible scores on both these dimensions are 20. According to Spire, this implies that the senior college teachers believe that "students' and system's needs are incompatible. They believe that it is of primary importance that something be taught, but students' needs cannot be ignored; the teacher's first responsibility is to push students enough to get the work done, but also to do something for them to maintain classroom morale." Similarly, the Mean Total Orientation Score of teachers is 21.15 and the maximum possible score is 40. Hence it may also be termed as average. This also implies that senior college teachers do not clearly indicate preference for any specific philosophy of teaching. Thus it may be said that steps need to be taken to enhance senior college teachers' orientation towards development of students and their own professional development so as to enhance their own effectiveness as teachers with the ultimate aim of student development.

EDUCATIONAL IMPLICATIONS OF THE STUDY

Teachers teaching in colleges situated in Greater Mumbai need to be motivated to pay more importance to their own professional progress. They also need to be given more facilities for the purpose including residential quarters so as to reduce travel time so that they can devote more time for improving their professional performance. Similarly, teachers from Arts and Science faculties need to be motivated for more effective professional performance. Besides, the implication of this study for the field of teaching is that teachers need to be trained and motivated to perform better with an emphasis on higher and equal importance to fulfilling students' and system's needs so as to enhance their own and their institution's effectiveness. In practical and operational terms, teacher effectiveness can be enhanced by enhancing their Student Orientation and Content Orientation as follows:

Student Orientation

Every teacher need to be encouraged to organise his /her subject around the needs and skills of every type of student, enable students to have a say in subject content and objectives, help students to set subject goals and content, allow students a voice in setting subject's objectives and content, allow students to evaluate the performance of their teacher, allow students to make their own mistakes and to learn by experience, be available to discuss with students on an "as needed" basis, tailor the subject content to the need and skills of each class, allow students to plan their own subject of study according to their interests, take an interest in the student as a person, modify his position if one of his students show him where he /she was wrong, to allow students to have a say in evaluating teacher performance, be concerned about the student

as a person and establish an informal classroom atmosphere.

Content Orientation

Every teacher need to be encouraged to keep up to date in the field, to up-date class and lecture materials constantly, attend to his own professional growth, plan in considerable detail all class activities, construct fair and comprehensive examinations, be known as an effective teacher, plan and organize his coursework carefully, try out new ideas and approaches on the class, have scheduled office hours to meet students, teach basic subjects as well as more advances subjects, give examinations to evaluate student progress and attend professional meetings.

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IMPROVING RURAL EDUCATION: CHALLENGES AND STRATEGIES

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IMPACT OF SYNECTICS MODEL OF TEACHING IN LIFE SCIENCE TO DEVELOP CREATIVITY AMONG PUPILS

Shreyashi Paltasingh

INTRODUCTION

Invention and creativity are essential for progress of society and making the life more meaningful. So there is need to orient students in creative thinking. Young people face tremendous challenges for the future which include reduction of natural resources and enhancing problems to everyday life. So investigation on how effectively to stimulate student's inventiveness of creativity is important and a worthwhile research endeavour before the society. Most of the research works on creativity was carried out in USA. Isaksen etal(1993) opined creativity is a multifaceted phenomenon that results in production of new and useful ideas .It is the research of interactions among several components of creativity such as person, process, product and press(Trefinger etal,1993).Studies on mind in relation to creative thinking were conducted by several workers(Suddendorf and Fletcher-Flin,1997). Works on creativity especially on nurturing and promoting creative thinking in class room setting is at nascent stage in India .Therefore much remains to be explored and accomplished in this emerging field. There are large number of methods for developing creative thinking such as brainstorming ,brain calming, mind control, synectics, scenario writing, meditation, creative dreaming, sociodrama, psychodrama, destructuring-restructuring, imagery, analogy, awareness, development, gestalt therapy etc. Some of these have been tried out by different researchers in the field of education. Synectics is an interesting new approach to the development of creativity in school children designed by William J.J. Gordon and his associates. Through the metaphoric activity of the synectics model creativity becomes a conscious process. Metaphors establish a relationship of likeness, the comparison of one object or idea with another object or idea by using one in place of other. Through these substitutions the creative process occurs connecting the familiar with the unfamiliar or creating a new idea from familiar ideas. Metaphor introduces conceptual distance between the student and the object or the subject matter and prompts original thoughts. There are two strategies of teaching based on Synectics model. One of it is "Creating something new" which is designed to make the familiar strange, helping students to see old problems, ideas or products in a new and more creative light. The other strategy is "Making the strange familiar" which is intended to make new, unfamiliar ideas more meaningful. The role of teacher is to guard against premature analyses and closure. Here, the investigator had adopted the first strategy as she had tried to help students to create something new. It had stimulated the students to see and feel the original idea in a variety of fresh ways.

HYPOTHESES

H 1: There is significant difference between effects of Synectics model and traditional method of teaching life science in development of creative thinking ability of students.

H 2: The Gain score in creativity of the experimental group taught Life Science by Synectics model was significantly higher than the control group taught by traditional method.

H 3: The training in creativity by teaching through synectics model produce significantly higher achievement in science.

H 4: The experimental group taught through synectics model obtains significantly higher post test scholastic achievement score than the control group.

METHODS AND PROCEDURES

Sample

It constituted 120 students of class-IX of two schools of which 64 were girls and 54 were boys .These two schools are Oriya medium high schools situated in Banpur town of Khurda district of Orissa. Among them, one school(School-I) had facility for coeducation and the other (School-II) was a girls high school.

Tools

Jalota's Group Test of General Mental Ability was used to measure intelligence. Mehdi's Verbal Test of Creative Thinking was administered to find out total creativity scores. A life science achievement test prepared by the investigator with content validity and coefficient reliability of 0.74 was used to measure achievement scores.

Procedure

The students were divided into two groups in each school. The Experimental group and the Control group had equal number of students(Table-1).The groups were constituted by considering the previous science achievement scores and their intelligence. There was no significant difference in intelligence and achievement score of such groups. The investigator administered Jalota's General Mental Ability test to obtain intelligence score of students. She had also used science achievement score of students in half yearly examination for the purpose. Then she taught life science through synectics model for 20 weeks to the experimental group of both the schools while same topics were taught by concerned science teacher by traditional method. At the end of experiment, Baquer Mehdi's Verbal Test of Creative Thinking was administered as post test to both the groups to obtain creativity scores .The investigator also administered Life science achievement test prepared by herself to both the groups. Total marks secured by students in science and other subjects in the subsequent annual examination were considered for testing significance in science achievement and scholastic achievement.

Stastistical Analysis

The significance of difference in pre test and post test correlated mean scores were tested by t-test to find out effect of training on creativity and achievement scores The t-value between gain scores was found out using pooled variance.

RESULTS AND DISCUSSION

Comparison of Synectics model with traditional method of Teaching

The effect of training on creativity to develop

creative thinking ability of students was studied through first hypothesis. As creativity is a measure of fluency, flexibility, originality, so post test score of all such components were compared between two groups for convenience of discussion. It was found that the t values between post test and pre test scores of fluency, flexibility, originality and creativity were not significant in control group. The t value between post test fluency scores in experimental group were 2.307 and 2.295 in girls as well as 2.131 in boys which were significant at 0.05 level of significance. The corresponding t values of flexibility scores were 2.433, 2.407 and 2.108 which are also significant ($P<0.05$).The t values with respect to originality were 2.441, 2.365 and 2.297 which are also significant ($P<0.05$). It was observed that t values between post test and pre test creativity scores were 2.076 and 2.421 in girls which was significant at 0.005 level of significance and that of boys was 2.295 which was also significant ($P<0.01$).It indicated post test scores of fluency, flexibility, originality and creativity were significantly different from pre test scores in experimental group. So it can be concluded that there is significant difference between effects of Synectics model and traditional method of teaching life science in development of creative thinking ability of students. Thus the first hypothesis is accepted.

Gain in Creativity of Synectics Model

Gain in fluency, flexibility, originality and creativity scores were compared between experimental group and the control group to test the second hypothesis. The t value of gain in fluency scores between two groups were 3.579 and 6.336 in girls and 5.612 in boys which are significant at 0.01 level of significance. The respective t values of gain in flexibility were 4.309, 8.698 and 8.828 which are also significant ($P<0.01$).The corresponding t value in gain of originality were 5.783, 6.225 and 12.172 which are also significant($P< 0.01$).The t value of gain in total creativity scores were 7.058 and 9.102 in girls and 10.623 in boys which are significant at 0.01 level of significance. So it can be concluded that the Gain score in creativity of the experimental group taught Life Science by Synectics model was significantly higher than the control group taught by traditional method and thus the second hypothesis is accepted.

Impact of Training on Science Achievement

The investigator administered achievement test in life science immediately after completion of experiment and its post test scores were obtained .Then marks secured in subsequent annual examination in science were considered. Such two categories of scores were analysed to test the fourth hypothesis. It was observed that the t value of investigator made science achievement scores were 3.944 and 5.279 in girls and 3.386 in boys which are significant at 0.01 level of significance. The corresponding t value in annual examination science achievement were 5.138, 5.228 and 5.224 which were also significant ($P<0.01$).It indicates that the training in creativity by teaching through synectics model produce significantly higher achievement in science. Hence the fourth hypothesis is accepted.

Impact of Training on Scholastic Achievement

It was found that the t value of scholastic achievement scores of experimental and control

groups were 2.849 and 4.028 in girls which are significant (P<0.01) .However such t value in boys was 2.192 which was significant at 0.05 level of significance. So it can be concluded that the experimental group taught through synectics model obtains significantly higher post test scholastic achievement score than the control group. So the fourth hypothesis is accepted.

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EDUCATIONAL RESEARCH IN KERALA

Amruth G. Kumar
Devika R

INTRODUCTION

Kerala has an affluent culture of educational research. The mother department of educational research in Kerala is Department of education of Kerala University. This department was born in 1969, at a time there was only two universities in Kerala state. The Department of Education of Kerala University was started with the launch of Ph.D. programme. It became one of the earliest University Departments in India to do so. The department has been recognized by the UGC for its high standards of teaching and research and has been identified for the DSA scheme (1986), as national Centre for Curriculum Development in Education (1986) and for instituting ASARCO fellowship (1988).

RESEARCH FACILITIES

Department of Education, University of Kerala

The department has a library with 20,000 volumes with 1,300 theses. It has a Test Material Center which is being built up and when completed may be the only one in South India. The department provides extension and consultancy services mainly in curriculum development and evaluations within the state and outside. It has a very strong Ph.D. programme and a video laboratory. It has conducted over 25 state and national seminars and completed six research projects. The Department has been instrumental for 150 Ph. D. and 85 M. Phil. degrees and 1,300 papers. Major areas of research include Curriculum Development, Educational Technology and Learning and Achievement Correlated

Department of Education, University of Calicut

Set up in 1974 to prepare graduate and post graduates to become competent teachers at different levels, the Department of education in University of Calicut has launched several pioneering courses, made valuable contribution in bringing about reforms in university examination and developed several psychological and educational tests. The two pioneering courses offered in the early years were: Master of College Teaching and Master of Education (a vacation course). The Department played a critical role in the implementation of the examination reforms programme by designing and developing questions banks for pre degree and degree courses of the University. Besides attracting special grants of the UGC, the examination reforms programme of the University served as a model for several other Universities . Its library has over 7,000 books in the thrust areas of education. Back volumes of major research journals are also available. Thrust areas of the department include:

Group I: Educational technology, educational administration and supervision, educational planning and finance, advanced educational sociology, theory and principles of curriculum construction, teacher education, special education

Group II: Techniques of evaluation and test construction, Guidance and counselling, History of education, Comparative education, Western and eastern philosophies of education, Development and problems of Indian education, Economics of education.

Group III: Mathematics education, Physical science education, Social studies education, Language education, Commerce education.

School of Pedagogical Sciences, MG University

The School of Pedagogical sciences under the Mahatma Gandhi University started functioning in 1992 with a view to facilitate systematic learning from teaching contexts and professional development. The teaching faculty at the school consists of 7 teachers- 6 of them having Ph. D. Degrees. There are 43 students for the M. Ed. degree courses. More than 80 students have registered for Ph. D. degree and 33 completed Ph. D. so far. There are 6 seats for M. Phil (Education) course.

School of Pedagogical Sciences, Kannur University

Kannur University was established in 1996. The university offers Ph. D. in Education through its teaching and research department 'School of Pedagogical sciences'. Being a novice department it has only two research guides for supervising its research students. No Ph. D. has yet been produced by the school.

A TREND ANALYSIS

Review of Ph. D. theses awarded by different universities in kerala shows that educational psychology was the thrust area of researchers for a long time. Detailed and in-depth studies conducted in the area of Psychology in education also support this trend. A number of research studies have been conducted in the area of non formal education. Teacher education at secondary level and Education at primary and secondary level also received due attention from researchers. Recently a number of studies have been carried out to test the effectiveness of models of teaching and other teaching strategies. Preparation of modules for incorporating at secondary level school curriculum, Psycho social problems and learning difficulties of students are hot area of research in Kerala. Though vast area of topics has been covered, there are some neglected areas also. Very limited researches have been conducted to study the problems and prospects of Higher education, teacher education at primary level (TTC) and at Post graduate level (M. Ed). Another neglected area is measurement and evaluation. Very limited studies have been conducted to introduce innovations and to improve the assessment practices implemented in the state, by schools and other higher education institutions. Educational philosophy of great thinkers and religious texts like Githa, Bible, Koran etc., also seems to be unexplored. Educational administration and potentials of web based learning also need immediate attention. Other neglected areas include Population education, environmental education, Inclusive education, Human rights education, Economics of education, Value oriented education History of education and Educational informatics.

SOME CONSTRAINTS

As globalisation and liberalisation has its influence in all spheres of life, education is not an exemption. Earlier M. Ed. courses in the

state were monopoly of the University Departments. In 1995 Government of Kerala sanctioned M.Ed. course to NSS Training Collge, Ottapalam and Farooq Training college, Farooq, in aided stream. Following this a number of self financing teacher education institutions also obtained sanction to run M. Ed. course. This has resulted in the production of a large number of post graduate students every year. Unfortunately the research facility in education has not grown in par with this. Even now, there is no research center in the state other than university departments. Al together there are only 45 approved research guides in the state in all the four universities. This resulted in a flow of research students to universities in the neighboring states. A few major factors which stand as a hurdle in the path of educational researchers are:

*This could be overcome by finding potential institutions which can offer Ph. D. and M. Phil. courses. A number of institutions like SCERT, State Resource Centre, and Government and Aided colleges have the potential to perform as research centers.

*It may take six months to one year for getting registered as a research student in the universities invariably. Often a new area of research may get out dated as a student is formally registered. This is not an argument to bypass procedural formalities, but an indication that research suffers due to it.

*It is not easy for a research student from Calicut University to refer the department library of Kerala university and vice versa. The reason is fair, the students may copy theses from one university to other. But, the universities cannot ignore the fact that the global society is opening up avenues of education while they are closing. It should be noted that PhD theses of foreign universities are available in the internet.

*Funded researches in the field of education in Kerala can be counted in fingers. The researchers are either unaware or failed to fetch funds from agencies other than UGC. State government and its agencies are providing very limited support in funding researches in education.

*Educational research centers in Kerala rarely entertain researches having inter-disciplinary nature. Most of them confine research to their own discipline.

CONCLUSION

A review of the educational research and its facilities in kerala may prove that access is the major problem to be tackled. In addition to access financial, Quality, Social usefulness etc., also must be addressed. A Coordinated movement from the part of all the universities would be useful in this regard. Researches useful to the state and country should be planned out and implemented.

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BURNOUT AND STRESS AMONG SECONDARY SCHOOL TEACHERS IN RELATION TO THEIR TEACHING EFFECTIVENESS

Indira Shukla

INTRODUCTION

In the educational process, the teacher occupies a very important place. A teacher is the medium through which objectives and plans can be actualized. For this, the teacher must have sound mental and physical health. There have been many studies stating that the person's mental health has direct and significant relationship with his / her working efficiency. Teaching is a profession where every day radical changes occur in the educational system. These changes are likely to increase rather than reduce the level of stress in teachers. Secondary school teachers experience higher level of stress due to demanding situation, while dealing with adolescent students. Overcrowded classes, heavy syllabus and inadequate facilities make teachers' work more complex. Researches in service industry like nursing, hotel and police have highlighted that working personnel experience varying degree of stress and burnout. Correlation between job satisfaction and performance has been proved in above mentioned professions. Present study was undertaken to study the burnout and stress among secondary school teachers in relation to their teaching effectiveness and also how the perceptions of teachers and their students differed on teaching effectiveness.

OBJECTIVES

1.To ascertain the relationship between burnout in terms of (a) frequency and (b) intensity and teaching effectiveness as perceived by (i) teachers and (ii) students.

2.To ascertain the relationship between teachers' experienced stress and teaching effectiveness.

3.To ascertain the relationship between teachers' experienced stress and their perceived burnout.

4.To compare the relationship between perceived burnout in terms of (a) frequency and (b) intensity and teaching effectiveness as perceived by (i) teachers and (ii) students on the basis of teachers' (a) qualification, (b) experience, (c) subjects taught, (d) type of school and (e) age.

5.To compare the relationship between teachers' experienced stress and teaching effectiveness as perceived by (i) teachers and (ii) students on the basis of teachers' (a) qualification, (b) experience, (c) subjects taught, (d) type of school and (e) age.

HYPOTHESES

1.There is no significant relationship between perceived burnout of teachers in terms of (a) frequency and (b) intensity and teaching effectiveness as perceived by (i) teachers and (ii) students.

2.There is no significant relationship between teachers experienced stress and teaching effectiveness as perceived by (i) teachers and (ii) students.

3.There is no significant relationship between teachers' experienced stress and their

perceived burnout in terms of (a) frequency and (b) intensity.

4.There is no significant difference in the relationship between perceived burnout in terms of (a) frequency and (b) intensity and teaching effectiveness as perceived by (i) teachers and (ii) students on the basis of teachers (a) qualification, (b) experience, (c) subjects taught, (d) type of school and (e) age.

5.There is no significant difference in the relationship between teachers' experienced stress and teaching effectiveness as perceived by (i) teachers and (ii) students on the basis of teachers (a) qualification, (b) experience, (c) subjects taught, (d) type of school and (e) age.

Scope, limitation and delimitation

For the present study, teachers teaching std. IX have been selected. Only English medium secondary school teachers are included in the study. Teaching effectiveness had been studied by teachers' self perception of teaching effectiveness and students' perception of teaching effectiveness. Other sources like administrators' perception and peer groups' perception had not been included.

Variables of the Study

Independent variables were stress and burnout and dependent variable was teaching effectiveness.

METHODOLOGY

Descriptive, causal- comparative survey technique was used.

Sample

Sample was drawn from eleven secondary schools of Greater Bombay, using stratified sampling technique. From these eleven schools, a total of 93 secondary school teachers responded to Stress, Burnout and Teaching effectiveness questionnaires.

Tools

1.The Maslach Burnout Inventory (M.B.I.);
2.Teaching Stress Survey (TSS) of M. Mishra;
3. Teaching Effectiveness – Teachers' Self Evaluation Rating Scale of M.N. D'Silva; and
4. Students' Evaluation of Teaching Effectiveness Rating Scale of M.N. D'Silva.

Inferential analysis:

Parametric statistical techniques used were: Pearson's Product Moment Co-efficient of Correlation; One way ANOVA; t-test; and Fisher's "Z"

FINDINGS

Hypothesis 1

Significant correlation between teaching effectiveness as perceived by teachers and teachers perceived burnout due to frequency and intensity of emotional exhaustion as well as personal accomplishment was established. It was also established that (a) higher level of emotional exhaustion results in lower level of teaching effectiveness and (b) higher level of personal accomplishment results in higher level of teaching effectiveness. Significant correlation between teaching effectiveness as perceived by students and teachers perceived burnout due to frequency of personal accomplishment was established. It was established that higher level of personal accomplishment results in higher level of teaching effectiveness.

Hypothesis 2

There is no significant correlation between

experienced stress of teachers and teaching effectiveness as perceived by teachers. This means that teachers have a perception that teaching effectiveness is not influenced by the level of stress. There is no significant correlation between experienced stress of teachers and teaching effectiveness as perceived by students. This means that students have a perception that teaching effectiveness is not influenced by the level of stress of a teacher.

Hypothesis 3

Significant correlation between teachers' experienced stress and teachers perceived burnout due to intensity of emotional exhaustion was established. Correlation is positive for burnout due to intensity of emotional exhaustion, indicating that higher level of intensity of emotional exhaustion results in higher level of stress. There is no significant correlation between teachers' experienced stress and teachers perceived burnout due to (i) frequency & intensity of burnout due to depersonalization, (ii) frequency of emotional exhaustion, (iii) frequency & intensity of burnout due to personal accomplishment.

Hypothesis 4

The difference in relationship between burnout and teaching effectiveness as perceived by teachers for inexperienced and experienced teachers is not significant. The relationship between perceived burnout and teaching effectiveness as perceived by teachers on the basis of teachers' age differ significantly for burnout due to frequency of emotional exhaustion between (i) young and middle aged teacher, (ii) middle aged and elder teachers. The relationship between teaching effectiveness as perceived by teachers and burnout due to frequency of emotional exhaustion is significant for (i) single sex and (ii) co-ed schools. There is no significant difference in the relationship between perceived burnout and teaching effectiveness as perceived by teachers on the basis of qualification (qualified and overqualified teachers).There is no significant difference in the relationship between perceived burnout and teaching effectiveness as perceived by teachers on the basis of school type (aided and unaided schools).There is no significant difference in the relationship between perceived burnout and teaching effectiveness as perceived by teachers on the basis of subjects taught (subject group of Language, Social science, Science).The difference in relationship between burnout due to intensity of emotional exhaustion and teaching effectiveness as perceived by students for inexperienced and experience teachers is significant. The relationship between perceived burnout and teaching effectiveness as perceived by students on the basis of teachers' age do not differ significantly. The relationship between teaching effectiveness as perceived by students and burnout for teachers in (i) single sex and (ii) co-ed schools do not differ significantly. There is significant difference in the relationship between perceived burnout due to intensity of depersonalization and teaching effectiveness as perceived by students on the basis of qualification (qualified and overqualified teachers).There is no significant difference in the relationship between perceived burnout and teaching effectiveness as perceived by students on the basis of school type (aided and unaided schools).There is significant difference in the relationship between perceived burnout due to intensity of emotional exhaustion and teaching effectiveness as perceived by students on the

basis of subjects taught for Language subjects and Science subjects.

Hypothesis 5

There is no significant difference in the relationship between teachers' perceived stress and teaching effectiveness as perceived by teachers on the basis of teachers'(a) Qualification, (b) Experience, (c) Subjects taught, (d) Type of school and (e) Age. There is no significant difference in the relationship between teachers' perceived stress and teaching effectiveness as perceived by students on the basis of teachers' (a) Qualification, (b) Experience, (c) Subjects taught, (d) Type of school and (e) Age.

CONCLUSION

Teaching effectiveness as perceived by teachers and burnout due to intensity & frequency of emotional exhaustion as well as personal accomplishment are significantly related. Teaching effectiveness as perceived by students and burnout due to frequency of personal accomplishment are significantly correlated. Teachers have the perception that teaching effectiveness is not influenced by the level of stress. Students also have the perception that teaching effectiveness is not influenced by the level of stress that teachers perceive. Teachers have shown positive relationship between stress and burnout due to intensity of emotional exhaustion. Relationship of teaching effectiveness as perceived by teachers and burnout did not make any difference between (i) experienced / inexperienced teachers, (ii) qualified / overqualified teachers, (iii) aided / unaided school and (iv) subjects taught (Language / Social science / Science) with the exception of (i) Age of teachers, (ii) single sex / co-ed school. Relationship of teaching effectiveness as perceived by students and burnout did not make any difference between (i) experienced / inexperienced teachers, (ii) Age of teachers, (iii) single sex / co-ed school, (iv) aided / unaided school with the exception of (i) qualified / overqualified teachers and (ii) subjects taught (Language / Social science / Science). Teachers have shown that their Stress and teaching effectiveness on the basis of (i) qualification, (ii) experience, (iii) subjects taught, (iii) type of school and (iv) age of teachers are not related. Similarly teachers stress and teaching effectiveness as perceived by students on the basis of (i) qualification, (ii) experience, (iii) subjects taught, (iii) type of school and (iv) age of teachers are not related.

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PERCEPTION OF SECONDARY SCHOOL STUDENTS TOWARDS COMPUTER EDUCATION

Jaspal Singh

INTRODUCTION

Today computers are no longer specialized tools used only by scientists or engineers. They do not hum behind sealed glass walls in climate controlled environments .Computer systems are everywhere-in places you can not see or would not anticipate to locate them. They are a fact of life, a common thread that ties together our education, work and home life. The importance of computers in our daily life will continue to increase. Learning lesson from highly developed countries of the world, government of Punjab appreciated the importance of computer education in our day to day life. The government of Punjab has launched Information and Communication Technology (ICT) project for computer education in government schools across the state for the students of class 6th to class 12th. In the first phase, 1,306 government schools were covered and in second phase 1,572 schools are being covered. There is a view point that the conditions are not conducive for computer education in the government schools of Punjab because these schools are devoid of infrastructural facilities and teachers. Students enrolled in these schools come from lower strata of the society particularly from SC and BC families. These students neither have the paying capacity nor the awareness of the significance of computer education.

OBJECTIVES

1.To examine the perceptions of secondary school students towards computer education.
2.To locate the difference, if any, between male and female students regarding their perceptions towards computer education.
3.To investigate whether science and humanities students demonstrate different perceptions towards computer education.
4.To find the difference, if any, between male and female students of humanities group pertaining to their perceptions, towards computer education.
5.To discover the difference, if any, between male and female students of science group in respect of their perceptions towards computer education.

HYPOTHESES

1.The secondary school students have favourable attitude towards computer education.
2.There will be significant difference between male and female students pertaining to their perception towards computer education.
3. Significant differences will be found between science and humanities group students regarding their perception towards computer education.
4. Male and female students of humanities group will demonstrate significant difference regarding their perception towards computer education.
5. Male and female students of science group will prove significant difference in respect of their perception towards computer education.

DESIGN OF THE STUDY

The present study falls in the domain of

descriptive study as it intends to investigate the perception of secondary school students towards computer education.

Sample

A sample consisted of 200 students: 100 male (50 science and 50 humanities) and 100 female (50 science and 50 humanities). Convenient method of sampling was used for the selection of schools because only those schools were selected which were easy to approach and students were included in the sample by applying purposive technique of sampling because the students accessible on the day of visit to these schools were examined.

Tools and Scoring Procedure

To collect the pertinent data, an attitude scale was constructed to measure the perception of secondary school students towards computer education following the Likert Method of constructing the attitude scale. The attitude scale comprised of 32 items. Out of these statements, 25 were positive and 7 were negative. Each statement was set against a five point scale of "Strongly Agree", "Agree", "Undecided", "Disagree" and" Strongly Disagree". Weights of 5,4,3,2 and 1 are given in that order for positive statements and scoring is reserved for negative statements. Descriptive statistics (percentage) and C. R. value were computed for the analysis of data and interpretation of results. In order to compute C.R. value, it was also necessary to compute Means, SDs, and Standard Error of Differences.

ANALYSIS AND INTERPRETATION

To test first hypothesis, descriptive statistics (percentage) were used. All the secondary school students included in the sample secured more than 60 per cent marks, 81 per cent students secured more than 69 per cent marks and 22 per cent students secured even more than 84 per cent marks. So it can safely be concluded that secondary school students demonstrate favorable perception towards computer education and hence first hypothesis of the study that secondary school students have favorable perception towards computer education is accepted. The differences between the means of sub groups were tested for significance or otherwise by employing C.R. value. The following Tables explain the details. In case of second hypothesis, it was found that difference between the mean scores of male and female students is .37and C.R value is .26 which is insignificant. These results clearly contradict the second hypothesis of the study that there will be significant difference between male and female students regarding there perception towards computer education In case of third hypothesis, it is observed that difference between the mean scores of science and humanities group students is 2.21 and C.R. value found is 1.72 that is not' significant at any level which leads to the rejection of the third hypothesis of the study that significant difference will be found between science and humanities group students regarding there perception towards computer education. In case of fourth hypothesis, it was found that difference between the mean scores of male and female students of humanities group is 1.00 and C.R value calculated is .046 that is not significant at any level which leads to the rejection of the fourth hypothesis of the study that significant difference will be found between male and female students of humanities group regarding their perception

towards computer education. In case of fifth hypothesis, it was found that difference between the mean scores of male and, female students of science group is 1.20 and C.R value found is .046 that is not significant at any level which leads to the refutation of the fifth hypothesis of the study that significant difference will be found between male and female students of humanities group regarding there perception towards computer education.

FINDINGS

The secondary school students demonstrate favorable perception towards computer education. No significant difference exists between (a) male and female students concerning their perception towards computer education; (b) the science and humanities group students concerning their perception towards computer education; (c) the male and female students of science group regarding their perception towards computer education; and (d) the male and female students of humanities group on the subject of their perception towards computer education. The computer has made an escalating and influential impact upon every facet of life. Recognizing the worth towards computer education in life, government of Punjab implemented ICT project in government schools This job of the government is appreciable but it is observed by the investigator that there are many obstacles in the way of implementation of this project such as non - availability of infrastructural facilities, qualified teachers, non- paying capacity of the students and particularly non- supply of regular electricity in rural area Schools. These tribulations should be removed on priority basis so that students of government schools are benefited from this project since the results of the study are very heartening as hundred per cent students demonstrate positive perception towards computer education.

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ROLE OF EDUCATION ON FERTILITY AND MORTALITY BEHAVIOUR

Pranab Barua
Jiten Hazarika

INTRODUCTION

The three prime demographic parameters viz. - fertility, mortality and migration depend on many socio-economic variables like- urbanization, economic condition, role of religion, family system, occupation of the couple, social status of the women, political factors and education. All of them have strong impact on the all three above mentioned demographic parameters and education being one of them also has influence on the demographic parameters. Education and fertility have close relationship. It is because of the following reasons. Educated women are quite conscious of having a limited family size. At an age when there have very bright chances of having good fertility, the girls are in the colleges and university and thus do not get children, while during this period uneducated girls get. In many cases educated women get employed and with employment they cannot afford to have more children. Span of child producing time in the case of educated women is much less, as compared with illiterate women. Similarly education has role on mortality and migration. The educated persons are more conscious as well as aware of the health problems and so mortality is less among them. Education is one of the important factors in the push-pull theory of migration. Educated persons are often welcome at the source of destination because of their skill as well as eligibility. On the other hand, uneducated persons are not sought at the place of destination and so they have to stay at the place of origin, even against their will.

OBJECTIVE

The broad objective was to trace the cause of abnormal high population growth prevailing among the inhabitants of CHAR areas of western and middle Assam.

STUDY AREA AND DATA

In-spite of launching several schemes by the Assam government for upliftment of the people living in the CHARS , the socio economic condition of the people living in these areas of western and middle Assam (Nalbari and Borpeta are two districts located in this part of Assam), as a whole is worse than the socio –economic condition of people living in other parts of Assam , even Majuli (a CHAR in Jorhat district). So far as socio-economic and demographic factors are concerned, no significant differences are observed between the people living in Majuli and people living in other parts of Assam, thus Majuli is a. proper representative of Assam, regarding socio-economic as well as demographic parameters of the people living there in. This backwardness is resulting a very high growth of population among the inhabitants of CHAR areas of western and middle Assam. Again, growth is a comparative term and comparison is either time relative or space relative. As in this case,

time series data for the specific study area was totally unavailable, there was no option left other than accepting cross section data. Majuli is also a CHAR. However as the objective of the paper is to study the impact of education on mortality and fertility behaviour so, information gathered from Nalbari. Borpeta and Jorhat are presented all together for analysis purpose. To get a clear picture of the poor demographic situation prevailing there in the CHAR areas of Nalbari and Borpeta districts of Assam first let us have a look on the Crude Birth Rate (C.B.R.) and Crude Death Rate (C.D.R.) of these people along with the all India figure. C.D.R. and C.B.R. respectively denote death and live birth per thousand people of a specific population in a specific period. C.B.R. of either Generals and O.B.C. of Majuli or S.C. and S.T. of Majuli has been found less than all India figure, whereas that for the inhabitants of CHAR areas of Nalbari and Borpeta districts has been found more than it. Thus the fertility of the inhabitants of CHAR areas of Nalbari and Borpeta districts has been noticed more than all India average. It can be said that like fertility, mortality condition of the inhabitants of CHAR areas of Nalbari and Borpeta districts has also been worst and it is the fact that until mortality condition is not improved, fertility condition cannot be improved i.e. population growth cannot be checked. Now, as the mortality condition has been found worst for the inhabitants of CHAR areas of Nalbari and Borpeta districts so there is nothing wrong for their high fertility behaviour. But when this mortality condition has been compared with all India average, then it has been observed that for all of these three groups the mortality condition is worse, as the C.D.R. of India during 2001 is 8 per thousand

METHODOLOGY

To measure the role of education on fertility and mortality, educational attainment of the female has been considered as the indicator of education, on the other hand infant mortality (mortality within the first year of life), marital fertility (fertility of married female i.e. only legitimate births are considered) and usual fertility are employed as indicators of mortality and fertility. Regarding infant mortality, percentage of infant died /alive is computed. Again average children ever born per married female is calculated to measure the impact of education on marital fertility. On the other hand- Age Specific Fertility Rate (A.S.F.R.) and Total Fertility Rate (T.F.R.) are calculated to measure the impact of education on fertility. Where A.S.F.R. for the age group (x- x+5) is defined as 5mx = (Births to females in the age group (x- x+5))/ (Females in the age group (x- x+5)) and T.F.R is defined as 5x? 5mx.

RESULTS AND DISCUSSIONS

Following are the findings based on above stated technique. It was found that literacy of mother distinctly reduces the risk of infant mortality in comparison to illiteracy. So by improving the educational system a check on mortality can be made. Interestingly regarding fertility and educational status (based on highest qualification of the female) it has been observed that fertility is more or less low for illiterate, as revealed by A.S.F.R. or T.F.R. However in the very early age group (15-19 years), the fertility of illiterate female is highest except the females having education up to class –IV (L.P.), which is almost expected since basically there is no distinction between an illiterate married female and a female married just after pursuing education up to class-IV. On the basis of T.F.R.

it is seen that the illiterate females have had the least fertility, the possible reason of this might be that, a small portion of female is within the literate group and all of these small section might be involved in the process of reproduction. it has been seen that for all the age groups number of females has been less for literates than illiterates and so all of this small section might be involved in the process of reproduction. However as the percentage of illiterate female is much larger than the literate female so a small fertility of these illiterate females might result in more absolute number of births. when educational attainment has gone up, marital fertility has gone down. Thus it can be said that fertility can be checked by imparting more and more education.

CONCLUSION

From this study it can be said that imparting education is very much necessary there in these areas (CHAR areas of Nalbari and Borpeta districts) because, fertility and mortality is very high in these areas and checking these high fertility and mortality is the very need of the time. Moreover by imparting education this can be done there in these areas, because it has been observed that education has positive impact on fertility and mortality reduction in these areas also.

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COMMON ERRORS IN WRITING A RESEARCH PAPER

*Reference mentioned in the text does not appear in the reference list at the end of the article.
*Reference in the text, let us say, Hussain, 1997, whereas the reference list at the end gives Hussain, 1987, for the same source.
*Spelling of the surname mentioned in the text does not match with the spelling of the surname in the Reference list
*Mistake in name of the place of publication
*Mistake in name of the publisher
*Mistake in the year of publication
* Giving Foot notes, although the journal does not accept it
*Mistake in arranging reference list as per journal reference style
*Spelling errors in the text (Spell check in computer does not take care of all errors)
*Grammatical errors in the text
* Inconsistency in Tense
*Inconsistency in presentation
*Missing words / sentences at the time of correction by the author
*Inconsistency in use of language version:: UK English / USA/ English
*Unnecessary formatting
*Going beyond word limit for an article for a journal
* Using 'Ibid.' ; 'Op.cit'; 'Loc.cit' in the running text;
Language used in manuscript indicates one author, whereas manuscript mentions more than one author;
*No Signature of each author in the letter to the Editor
*Incomplete addresses and non mention of E-mail ID and Tel. No. of the authors
*Name and address of the author including E-mail ID and title of the article not on a separate page

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A COMPREHENSIVE APPROACH TO STRESS MANAGEMENT IN SCHOOL CHILDREN

Baiju K. Nath

INTRODUCTION

Human community is prone to variety of stress in modern life. People of all ages suffer from one or other type of stress. Recently school children, regardless of the level of education, suffer different types of stress. The recent changes in school curriculum, constructivist approach in instruction, modern trends in a rapidly changing society, change in family structure into a nuclear family, preferably with a single child complicated the situations further. If a teacher wishes to provide guidance to his disciples in this regard, s/he should first of all know the stressful situations, possible causes of such stressful situations, and how to relieve them from such situations. A study of this type is essential to give a guideline in this direction .Physical stress is the one which is of prime consideration among different types of stress. A suggestion has been made to reduce weight of school bag is that, to divide each text books into three by dividing portions of the three terms in an academic year. The study throws light on the feasibility of that suggestion also.

OBJECTIVES

1.To identify the factors contribute to 'increased weight of school bag' of children at pre – primary , primary , and secondary levels;
2.To investigate into other important factors put in to physical stress in school children;
3.To suggests necessary measures to reduce weight of school bag of children at pre- primary , primary , and secondary levels ;
4.To provide suggestions to overcome physical stress in school children.

METHODOLOGY

The present study followed the procedure of descriptive research. The investigator gathered relevant information by conduct a survey by administration of various tools such as questionnaire, & schedules and adoption of different techniques, such as observation and document analysis.

Tools

1. Questionnaire for secondary pupils,
2. Schedule to gather information from pre-primary and primary school children; and
3. Interview schedules for parents and teachers

Sample

The sample of the study comprises of school children from pre- primary to secondary level in the Kannur and Kasaragod districts of Kerala state .The sample consists of 200 secondary level pupils, 100 each of primary and pre – primary children. Necessary weightage is given to type of institution such as , boys , girls , and coed schools ; area of institution such as rural / urban; nature of school such as , government , Aided , and unaided ; and level of institution such as pre – primary , lower primary, Upper primary and secondary. Physical balance is used to measure the weight

of each student.

MAJOR FINDINGS

The weight of bag of school children is mainly contributed by text books , note books (separate for school & private tuition), collection books, project album, and assignments as the academic materials .

Other materials such as lunch box, snack box , water bottle, pencil box , umbrella, etc. are the other articles cause increase in weight of the bag .

The number of text books and note books in unaided schools are more in number than govt. and aided schools

The number of text books at pre – primary level in unaided schools are 4 – 6 in number ., but that of Govt institutions have no text books .The text books followed by pre – primary schools have no uniformity . Government does not supply text books for pre- primary section.

The number of text books in primary level at government and aided schools are 1 - 2 and that of unaided schools may vary between institution to institution ranges up to 10 – 12.

The number of text books at secondary level ranges from 9 – 14 in government and aided schools and 15 – 25 notebooks from classes VIII to X.

Supplementary articles such as collection books, project album, assignment report, geometry box, pencil box etc also included in the school bag of children of primary and secondary levels.

The average weight of school bag along with necessary inclusions ranges from 2Kg – 3.5 Kg in Pre- primary level(in unaided institution), up to 4kg in primary level and up to 5.5 Kg in secondary level . Pre – primary children at government institution have a bag weigh ½ - 1 Kg.

In most of the cases the weight of the bag exceeds 1/10th of the body weight of the children at pre – primary, primary and many of secondary level pupils.

Number of students traveled in such student carriages ranges up to 15 in auto rickshaw, 30 in small vans', 50 in medium sized vans and 70 or more in buses

The home work given is excess according to majority of children at pre- primary, and primary level.

Standard of drinking water is very poor in most of the schools and hot water is not provided in majority of schools.

The conditions of urinals were poor in most of the schools in general and very poor for girl children even at girls' schools.

Almost all govt. and aided institutions have a good play ground, but in many unaided schools running pre – primary and primary section have no play

Many students at primary level seek help from parents or others to do homework and projects; but majority at secondary level doesn't get help from parents or teachers to do their homework and projects.

RECOMMENDATIONS

There should be no text books at least up to 4th standard. Instead of text books, teachers' handbooks and resource materials should be provided to each teacher. If text book is a must, then provision should be made to keep those at school itself .Proper utilization of SSA fund to procure authentic reference materials in adequate number, then only teachers could utilize them effectively for all students .Utilisation of CCTV, multimedia presentations and EDUSAT programmes to provide realistic education by replacing conventional text books

and methods of instruction. There should be no home work for pre –primary children. Home works should be given in a limited and realistic manner. Work book or portfolio should be provided to do home work , which should be kept at home and sent to school only once in every term . There should be an institutional plan to assign home work even for higher classes. Specific days should be fixed for home work in each subject. This should help to reduce overstress in children .Files should be made as a practice instead of note books, collection books, etc .Care should be given to provide or prepare by students them selves low cost files to reduce financial burden. Introduction of file system is helpful to reduce number of note books and thereby reduce weight of school bag .In most of the high schools number of periods are seven or eight , or it may increase up to nine by the introduction of library period which is under consideration. The number of periods per day should be reduced urgently to realize maximizing learning and to reduce weight of the bag . At present, in an eight period schedule only 25 – 35 minutes available for instruction. Such short duration is not enough to conduct group discussion and to reach concept attainment. Number of periods can be reduced by combining subject periods, so as to get enough time for group learning techniques which is essential for constructivist classrooms. Reduction in periods may result to reduce stress in children also .This is also helpful to teachers that they will get more preparation time, since preparation time is very crucial in costructivist approach .Number of papers in the secondary level examinations should be reduced as in CBSE / ICSE, which will have direct impact on physical stress. Examination in Information Technology should be eliminated from the scheme. Provision of food and quality drinking water at school help to reduce weight of school bag. There is a social feeling that private tuition is essential for effective learning. Standard of instruction along with remedial works at school should be made optimum to develop the feeling that private tuition is unnecessary. This should be helpful to reduce bag weight and to avoid time spent for tuition in early morning or late evening and on holidays there by reduce mental stress .Mode of conveyance and number of co travelers would increase stress in children by their early departure and late arrival at home along with congested travel for a long time in poorly ventilated and age old vehicles .The rules regarding student carriages should be redefined and strictly observed all over the state. Ensure better urinal facilities and create awareness about better sanitation practice in children, since they are responsible for keeping their whereabouts healthy.

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LITERACY WORK THROUGH NATIONAL SERVICE SCHEME

Indrani

INTRODUCTION

National Service Scheme is a programme run by government of India to development the personality of undergraduate students through social service. Young people are the power of a country. They have energy, enthusiasm and time to work for the welfare of society. If once motivated they can take the difficult and challenging duties. Their calibres can be utilized to enhance the literacy rate by adopting 'each one teach one' programme. Researcher, as Programme Officer of N.S.S. tried to adopt this programme for N.S.S. volunteers.

OBJECTIVES

1. To make aware the undergraduate students the problem of illiteracy in Ghaziabad;
2. To encourage the undergraduates to undertake the project of literacy as 'each one teach one';
3. To guide them and to make them able to undertake the project;
4. To evaluate the output of the project.

SAMPLE

100 undergraduate students registered in National Service Scheme, Vidyavati Mukand Lal (PG) College for Women, Ghaziabad, were the sample for the study. These students belong to B.A, B.Com., B.Sc. (Home Science) Courses. These students reside in different rural, sub-urban and urban areas of Ghaziabad. They adopted persons to educate, from their residential locality.

METHOD AND PROCEDURE

The study was conducted in following manner. Two essay competitions were organized to focus on the problem of illiteracy. The topics were 'Literacy: Why so Essential' and 'Ways to Solve the Problem of Illiteracy'. After these competitions several aspects of problem of illiteracy have been pointed out and ways to get rid of the problem were discussed with the students of undergraduate classes. After this the volunteers were asked to conduct a survey regarding the number of illiterate persons near the locality in which they were residing. The volunteers prepared a list of illiterate persons of their locality. The volunteers were encouraged to adopt one illiterate child or adult and to teach. As undergraduate students are not trained to teach any person, Orientation Programme to teach the illiterates was provided to the volunteers. The background of each case proposed by volunteers was discussed in depth and way & techniques of teaching were discussed with the volunteers. Expert help was taken from other teacher educators whenever required. Volunteers taught the illiterates from Sep.2004 to Feb. 2005. The progress and problems of each adopted person was discussed weekly and undergraduates were further guided to continue the work. After the completion of the project each adopted person was tested to judge the competency in three Rs i.e. Reading, Writing and Arithmetic. The observations and reactions of N.S.S. volunteers were taken.

N.S.S. volunteers were encouraged to continue the work and to teach the adopted persons to obtain higher level of knowledge i.e. knowledge for class III or above level according to the age of the person.

FINDINGS

Government of India run a very important and useful programme for social welfare called National Service Scheme. Every year lacks of undergraduates are registered in this programme for two years, even C.C.S. University, Meerut (U.P.) itself registers thirteen thousand students. Every student registered in this programme has to work 120 hours (minimum) in one year for social welfare. In addition to this, the NSS volunteers also participate in one '10 days special camp' (Day only/ day night) every year. In these camps they carry out several activities for the welfare society. These activities are generally related to cleanliness, awareness literacy environment conservation. It is the observation of the researcher that very temporary and less productive work has been done in the name social service by these registered undergraduates. There is no follow-up programme to evaluate and continue the work of student. As the students are registered in this programme for a period of two years, we have sufficient time to follow-up the work done by students and continue it in next year. If properly planned and motivated the volunteers of national service scheme can do very productive work for the welfare the society. Especially in the case of literacy the volunteers can change the picture of the country. With this belief the researcher started working on the project. The results of the study are as follows. 100 students of N.S.S. has been taken up the project of teaching one illiterate person, but due to the change of residence/work place of the adopted persons, and some other causes 13 Volunteers could not complete the project. Only 87 volunteers completed the project. The numbers of volunteers covering various categories of learners were: (a) 5 to 11 years - 75; (b) 12 to 19 years -09; and (c) 20 to 50 years -04. The occupation (of parents) of learners were: (a) Labourer-41; (b) Gardener-02; (c) Milkman-02; (d) Thela Puller-06; (e) Tailor-01; (f) Sabji Vikreta -12; (g) Plumber-01; (h) Riksha Puller-10; (i) Driver-01; (j) Washer man-03; (k)Painter -02; and (l) House wife -04. All persons selected to literate belonged to very low socio economic status. After measuring level of achievement of competencies in Three Rs (Feb.2005) by the persons adopted for teaching by NSS volunteers, 12 N.S.S. volunteers continued the project. They taught the syllabi of classes I & II to 12 children. These 12 children admitted to school situated in there locality.

Problem faced by N.S.S. volunteers to take over the project:

Most of the volunteers faced the problem to convince the illiterate person or the guardian of illiterate child for starting the literacy programme. The irregularity in attendance of the illiterate person was also reported by many volunteers. Financial condition of the family of educationally adopted persons was also an obstacle in the literacy programme due to which the adopted child or persons has less time available for the programme. N.S.S. volunteers had to adjust the time according to the availability of the person/time schedule was very much irregular with these persons. Lack of retention was also reported by the volunteers

in the beginning. Sometimes, volunteers had to face the criticism of the society and her family for this work.

Results Related to the attitudes of N.S.S. volunteers:

Most of the volunteers had taken the project as an assignment/ fun in the beginning but after they involved in the activity of teaching they started realizing the need to teach every person in the country. They realized the problems of illiterate persons while teaching. Volunteers realized the social economical problem of weaker section of the society, they also realized the problems of different professions as the adopted persons belongs to the families of truck-driver, Rikshaw-pullers, grocers, labourers, thela-pullers etc. during teaching them. Volunteers were very much conscious and crazily ready to help the families after taking the project. Need to make aware these families about proper nutrition and sanitation habits were felt by most of the volunteers.

Ways suggested by the volunteers to help such families

Some vocational training along with literacy programme should be provided to these people. Urgent need for making the families aware about health, nutrition, and sanitation was felt by the volunteers and they suggested organizing camps for this purpose. Awareness about right and duties of these persons were observed very less by the volunteers. They suggested that individual counselling or talk should be there with these persons. Volunteers suggested that the information about the deferent welfare schemes run by government, bank etc. should be provided to these families.

IMPLICATIONS AND SUGGESTIONS

The findings of the research can be used by policy planners. To provide the guidelines to programme-coordinators, programme officers to take over the project of national literacy. The principals and teachers can use the finding of this result for solving the problem of indiscipline as the students creating the problem may be encouraged to take the responsibility to educate one family. In this way the energy of students can be channelized, which would help to solve the problem of indiscipline. The findings of the research can be used by curriculum planner. This type of community extension programme of higher studies. The findings of the research can be used by voluntary organizations and NGO to utilize the calibre of youth for the purpose of upliftment of the community. Literacy along with craft programme may be developed and executed. Health and hygiene should be a part of these types of programmes. Government and bank schemes should be informed to all N.S.S. volunteers so that they will be able to help the families of weaker section.

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EXPANSION OF HIGHER EDUCATION IN GOA

G.C. Pradhan

INTRODUCTION

Goa is a small state spread across 3702, square kilometres. It is located on the west coast of India bounded by Maharashtra on the North, Karnataka on the South-east and Arabian Sea on the West. The length of Goa from North to South is 105 kms. and the width from East to West is about 60 kms. Goa has only two district North Goa and South Goa. There are 11 Talukas comprising 1 Municipal Corporation, 13 municipal towns, 30 census towns and 347 inhibited villages. Goa was under Portuguese rule for about 450 years. It was liberated in December 1961 and treated as a union territory until May 1987 when it was given statehood, the 25th State of India. The total population of Goa at present is around 15 lakhs (13.48 lakhs as per the Census 2001). The density of population of the state is 364 per sq. kms. (Census 2001) higher than the all India average of 325 persons. Goa is an advanced State of India on several indicators of development including literacy and women's status. Sex ratio records 965 female for every 1000 male, far better than the all India figure (i.e. 927:1000). Goa is the fourth highest literate state with an impressive literacy rate of 82.01. Male and female literary rates are 88.4 and 75.4 respectively. There was hardly any institution of higher education in Goa in the pre-liberation era. It is the post-liberation period that witnessed a phenomenal expansion in the field of education right from primary to university level. Goa University was established in 1985 by an Act of Goa Legislative Assembly. Prior to this, institutions of higher education in the State were affiliated to the University of Bombay.

OBJECTIVES OF THE STUDY

To study the growth of higher education in Goa during the last two decades in terms: number and types of institutions, types of courses offered, student enrolment, and course-wise gender difference in enrolment and teacher population.

PROCEDURES FOLLOWED

The study involved an analysis of the expansion of higher education in Goa during the last two decades. It is basically a descriptive comparative study. The data for the study were obtained mainly from the following sources:

1.Educational Statistics at a Glance (various years);

2.List of Recognised Institutions in Goa (for various years) published by the Directorate of School Education (DoE), Govt. of Goa;

3.Goa University Hand Book (for various years);

4.Prospectus and Annual Reports of different institutions.

An Information Schedule prepared by the investigator was used to record the data from the said documents. The obtained data were tabulated and frequency/percentage analysis of the same was carried out.

FINDINGS

Number and Types of Institutions

There were only 8 colleges offering courses in the general stream (Arts, Science & Commerce) and 10 professional/technical colleges by the year 1985-86. It indicated that growth of higher education was very slow during the first two decades in the post-liberation period. The number of general (non-professional) colleges increased to 15 (nearly double) by the year 1990-91, just in 5 years. Further, the number of general colleges increased to 20 during the subsequent 5 years period (1990-91 to 1995-96). It is pertinent to note that Goa University was established in 1985 and Goa got statehood in 1987. Perhaps these two factors contributed for rapid expansion of general higher education in the State between 1985-86 and 1995-96. No new general colleges were established during the last one decade (1995-96 to 2006-07). On the other hand, it was found that only 10 professional/technical institutions of higher education were established in the State by the year 1985-86. A steady increase in number of professional/ technical institutions was observed during the last two decades (1985-86 to 2006-07).The number of institutions offering professional/ technical courses increased to 26 by the year 2006-07, two and half times increase in 20 years. It was found that there were two and half time increase in the number of general colleges established between 1985-86 to 1995-96. But after 1995-96, there was hardly any expansion of general (non-professional) higher education. On the other hand, quantitative expansion of professional/technical higher education consistently continued over the years. In fact, after 1995-96, priority was shifted from general education towards professional/technical education.

Courses Offered

The number of colleges offering Bachelor's degree courses in Arts, Science and Commerce (B.A., B.Sc. and B.Com.) increased substantially over the years. The number of colleges offering Bachelor's degree courses in Arts increased from 5 in 1985-86 to 15 in 2007-08, i.e. three-times increase. Also, the increase was two and half times in the case of the number of colleges offering B.Sc. degree courses during the same period. Compared to the B.A. and B.Sc. degree courses, the increase was higher (four times) so far as the number of colleges offering B.Com. degree courses was concerned. Besides, the traditional B.A., B.Sc. and B.com. degree courses, several new courses have been introduced by many of the general colleges in the recent years on self-financing basis. The courses includes B.B.A., B.C.A., B.Com (Vocational), Diploma courses in Computer Applications, Fire Technology, Biotechnology, Event Management, Journalism etc. By the year 1985-86, there were facilities for only 9 professional/technical courses (viz. Education, Law, Medical, Dental, Pharmacy, Engineering, Art and Architecture) in the State. The number and type of professional courses steadily increased over the years. By the year 2007-08, the number of disciplines in which professional courses offered in the state increased to 17. The number of institutions offering each of the professional courses remained the same during the last two decades except in the case of Engineering, Education, Management and Computer Science in which the number of institutions increased between 2000-01 and 2007-08. The Master's degree courses were conducted only by the Goa

University in its campus until the recent years, except in some professional courses like Education and Medicine. Only the Bachelor's degree courses were offered by the colleges. Goa University made some changes in its policies regarding the conduct of Master's degree in non-professional courses and has granted affiliation in the recent years to some colleges to conduct Master's degree courses in the subjects of Geography, Psychology and Commerce. However, these courses are run on self-financing basis. Goa University offers M.A. degree courses in 11 subjects, M.Sc. in 10 subjects, besides M. Com., M.C.A, M.F.S. and M.B.A courses. Master's degree courses in seven subjects/disciplines viz. Medical, Engineering, Pharmacy, Law, Geography, Psychology and Commerce are available in colleges in Goa at present. In Goa, there are no Master's degree courses in many subjects/ disciplines like Physical Education, Library Science, Social Work etc.

Financing of Higher Education

In 1985-86, 70 percent of the professional/ technical institutions (i.e. 7 out of 10) were established and managed by the state government and the remaining 30 percent were run by private bodies but funded by the State Government. There were no self-financed/ unaided professional/technical institutions in the State at that point of time. By the year 1995-96, number of government institutions increased to 9 and that of government aided increased to 4. During the same period, 2 self-financed/ unaided institutions were established which constituted only 13 percent of the total number of professional/technical institutions. No new professional/technical institutions were established by the Government between 1995-96 and 2007-08. Only one government aided institution was established during this period. But there was phenomenal growth of private self-financed professional/technical institutions in the State between 1995-96 and 2007-08. As many as 11 self-financed professional/technical institutions were established with in a period of 12 years. It was found that till 1985-86, not a single general (non-professional) college was established by the Government. But all the private colleges were provided grants-in-aid by the Government. Between 1985-86 and 1995-96, government had established 4 general (Arts, Science and Commerce) colleges particularly in the rural areas and provided grants-in-aid to 3 additional private colleges. Since 1995-96, government has not established any more colleges in the State, but has encouraged private bodies to establish such colleges by providing grants-in-aid to such new colleges. Thus it is clear that unlike many other States, in Goa there are no exclusively private unaided/self-financed general (non-professional) colleges (Arts, Science & Commerce colleges). However, in the recent years many of these aided colleges have introduced several need-based/job-oriented degree/diploma courses on self-financing basis. On the other hand, 50 percent of the professional/technical colleges in the state at present are exclusively unaided/self-financed. All the general (non-professional) colleges are funded by the government (though certain self-financed courses are conducted by some of these colleges) whereas about one-half of the professional/technical colleges are run on self-financing basis.

Enrolment in Higher Education

There was continuous increase in enrolment in higher education in Goa during the last two

decades. Altogether 11,362 students were enrolled in the year 1987-88 and by the year 2006-07, the figure increased to 22,615, nearly double within a span of 18 years. The enrolment in general higher education (non-professional) increased from 8,886 in 1987-88 to 16,122 in 2006-07. The increase was 81 percent over the years. On the other hand, enrolment in professional/technical higher education increased to 6,493 in 2006-07 from 2422 in 1987-88, an increase of 162 percent. The rate of increase in enrolment in professional/ technical education was much higher than in the general education streams. Also, it was observed that between 1996-97 and 1999-2000, there was drop in enrolment in the general stream, where as enrolment in professional/ technical education increased very sharply during the same period. Moreover, after 1999-2000, there was very steep rise in enrolment in professional/technical courses compared to the general stream courses indicating a growing awareness among the youth about the importance of professional/technical education. Presently nearly 30 percent of the total enrolment in higher education in Goa is in professional/technical courses. Total enrolment in the general stream at the Bachelor's degree level was 9746 in the year 1990-91 . It increased to 14356 by the year 2006-07, an increase of only 47 percent in 16 years. The increase in enrolment during the last 16 years was highest in B.Sc. degree courses (73 percent) followed by 51 percent in B.Com. and 27 percent in B.A. The increase in B.A. degree courses was only marginal during the last 16 years. Moreover, after 1993-94, enrolment in B.A. courses declined significantly. Also, in B.Sc. degree courses, enrolment slightly decreased, but in B.Com. courses, enrolment increased consistently over the past 16 years. Further, it was found that of the total enrolment in the general streams at Bachelor's degree level in 2006-07, 26 percent was in B.A., 18 percent in B.Sc. and 56 percent in B.Com. degree courses. Altogether there were 676 students enrolled in different Master's degree courses in the year 1987-88 in Goa University. By the year 2006-07, the enrolment increased to 1279, an increase of just 89 percent in 19 years. Enrolment in Goa University fluctuated frequently from year to year. It has been observed that except in M. Sc. degree and professional courses, in many of the M.A. degree courses in the faculties of Languages and Social Sciences, the actual enrolment remained far below the prescribed intake over the years.

Gender Gap in Enrolment

Enrolment of male students in higher education (all courses) in 1987-88 was 5997 which constituted 52.8 percent of the total enrolment. On the other hand, enrolment of female students was 5365, i.e. 47.2 percent of the total enrolment in the said academic year. It was observed that during the subsequent years, though enrolment of both the sexes increased significantly, the proportion of male students consistently declined and that of the female students increased. By the year 1993-94, the male-female ratio became 47:53 i.e. the enrolment of girls was higher than that of the boys. By 2006-07, the gender gap in enrolment further widened in favour of the girls and the male-female ratio in enrolment became 42:58, i.e. 42 percent boys and 58 percent girls. In 1987-88, 68 percent of the total enrolments were boys and only 32 percent were girls in professional/technical courses. It was found

that in the subsequent years, the gender gap in enrolment was reduced. By the year 2006-07, the proportion of male and female students in the professional/technical courses was equal. However, in all the professional/technical courses the percentage of girls was much higher than that of the boys except in Engineering and Art, in which boys out numbered girls. On the other hand, of the total enrolment in non-professional courses in the year 1987-88, 48 percent were boys and nearly 52 percent were girls. In the subsequent years, the gender gap further continued to increase in favour of girls and by 2006-07, the male-female enrolment ratio became 39:61. Similar trends were observed in the case of Bachelor's degree courses in Arts, Science and Commerce streams. Male-female ratio in enrolment in B.A. degree courses was 32:68 in the year 1990-91. By the year 2006-07, the gender gap further increased to 28:72. In B.Sc. degree courses, male-female enrolment ratio was 46:54 in the year 1990-91. The gap further widened to 39:61 by the year 2006-07. The percentage of boys enrolled in B.Com degree courses was higher (57 percent) than the girls (43 percent) in the year 1990-91. However, the trend reversed by the year 1996-97 and the male-female enrolment ratio became 42:58 in the year 2006-07. Gender gap in enrolment in favour of girls is highest in B.A. degree course followed by in B.Sc. and B.Com. courses respectively. At present, the overall male-female enrolment ratio in the general stream at the Bachelor's degree courses (Arts, Science and Commerce together) is 38:62. However, it was found that gender gap in enrolment at the Master's degree courses in Goa University, was in favour of boys during the initial years (between 1987-88 and 1992-93), which reversed in the subsequent years and by the year 2006-07, 63 percent of students were girls and only 37 percent were boys. The findings thus revealed that the girls outnumber the boys at both Bachelor's and Master's degree courses and in almost all types of professional/technical courses in the State.

Appointment of Teachers

In the year 1985-86, there were only 695 teachers in higher education in Goa. The number increased to 1610 by the year 2006-07, an increase of 132 percent within a period of 20 years. Of the 695 teachers, 70 percent were male and only 30 percent were female in the year 1985-86. Between 1990-91 and 2006-07, percentage of male teachers declined and that of female increased leading to reduction in gender gap over the years. The male-female ratio of teaches remained at 51:49 in the year 2006-07 i.e. nearly equal percentage of male and female teachers in the higher education sector. In non-professional higher education, 69 percent of the teachers were male and 31 percent female in 1985-86. The gender gap not only reduced over the years but also the male-female ratio got reversed by the year 2006-07. At present the percentage of female teachers is higher than that of male teachers. In professional/technical higher education, only 27 percent were female teachers as against 73 percent male teachers in the year 1985-86. After 1990-91, the percentage of female teachers increased consistently year after year and by 2006-07, male-female ratio of teachers in professional/technical courses was 57:43. In Goa University, there were only 53 teachers in the beginning (1987-88). The number of teachers increased to 145 by the year 2000-01, registering an increase of 174 percent over

a period of 13 years. After 2000-01, teacher population in Goa University steadily declined and by the year 2006-07, there were only 115 teachers, since hardly any recruitment was made during the said period. Initially, a meager 11 percent of the teachers were female and 89 percent male. However, over the years the proportion of male teachers declined slowly and that of female teachers increased. In spite of this, in the year 2006-07, male-female ratio of teachers in Goa University was 75:25, still a huge gender gap in favour of male teachers. The findings presented above, indicated that there has been substantial increase in appointment of teachers in higher education in the State. Though two decades ago, there was a huge gap in male-female ratio of teachers, over the years gender gap has been reduced significantly and at present the proportion of male and female teachers is nearly equal, except in P.G. courses in Goa University wherein the proportion of male teachers is much higher than the female teachers. In fact, in non-professional courses, female teachers outnumber the male teachers.

SUMMARY AND CONCLUSIONS

Expansion of higher education in Goa was very slow during the first two decades in the post-liberation period. But there was rapid growth of general (non-professional) higher education with in the first 10 years of establishment of Goa University and Goa becoming a State. However, the subsequent years witnessed stagnation so far as establishment of non-professional colleges is concerned. On the other hand, the number of professional/ technical institutions of higher education increased consistently during the last two decades. There has been substantial increase in number of colleges offering B.A., B.Sc. and B.Com. degree courses over the years. Many of the general colleges have introduced several need-based/job-oriented courses on self-financing basis in the recent years. The number of disciplines in which professional/technical courses are offered in Goa has increased to only 17 in 2006-07, from 9 in 1985-86. Facilities for Master's degree courses are available only in about 33 subjects/disciplines. No master's degree courses are offered in subjects/ disciplines like Physical Education, Library Science, Social Work etc. In Goa there are no exclusively private unaided/self financed general Colleges though many of the aided colleges have introduced job oriented Degree/ Diploma courses on self-financing basis. During the last 10 years, a large number of private unaided professional/technical institutions have been established, with fees structure being regulated by the Government/ Goa University to ensure that there is no commercialization of education. There has been two-fold increase in enrolment in higher education in the State during the last two decades. The increase in enrolment in professional/technical courses is much higher (162 percent) than in the non-professional courses (81 percent). In Goa, 1 student out of every 3 students in higher education is enrolled in professional/technical courses, which is definitely a significant achievement. Goa University recorded a moderate increase (89 percent) in enrolment over the last 20 years, with frequent fluctuations in enrolment from year to year. In Goa, female students have outnumbered the male students in higher education in the recent years. In all the non-professional courses enrolment of girls remained consistently higher than the boys over

the last several years. In all the professional courses except in Engineering and Art, percentage of girls is much higher than the boys. Interestingly, every year the proportion of girl students is increasing while that of the boys declining in all types of courses. Goa has achieved tremendous success so far as participation of woman in higher education is concerned. Along with the growth in enrolment of students in higher education, there has been substantial (132 percent) increase in teacher population also over the last 20 years. Initially the proportion of female teachers was very less compared to the male teachers. But over a period of 20 years, the male-female ratio of teaches in higher education became nearly equal. The proportion of male teachers has been continuously declining and that of the female teachers consistently increasing year after year. At present not only the enrolment of girls is higher than the boys, but also the woman teachers, have outnumbered the male teachers in non-professional higher education courses in Goa.

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ELEMENTARY PRE-SERVICE TEACHER EDUCATION IN KARNATAKA

Vijaya Kumari S. N.
Mini K. J.

INTRODUCTION

The teacher in the emerging Indian society has a very pivotal role to play in the social reconstruction and in transmission of wisdom, knowledge and experiences of one generation to another. Children are the potential wealth of a nation. They are always exposed to the information of the teacher. It is therefore necessary to realize that the emerging Indian society can achieve all round development with the help of the teachers who acts as a powerful agency in transmitting its cherished values. The qualities of Primary Schools are dependent largely upon the quality and character of the teacher. The quality of the teacher depends upon the soundness of Pre – service Teacher Education programme they undergo. The Pre-service Teacher Education Programme is a programme to develop individuals for a particular profession that is to be a teacher. Teacher education programmes should accordingly provide for a comprehensive coverage of professional knowledge, understanding attitude interest values and skills and have strong functional orientations. For this teachers have to be trained and their preparation depends on the quality of the entire Teacher Education Programme. To improve the Pre-service Elementary Teacher Education the curriculum was revised and implemented from the academic year 2002-03 and was renamed as Diploma in Education (D. Ed). D. Ed is the Pre-service Elementary Teacher Education course provided in Karnataka State since 2002-03. The duration of the course is 2 ½ years which includes six months internship. The curriculum of the course includes general pedagogical subjects and practicums are spread over for first and second years to generate a sound and relevant knowledge base and transaction skills.

NEED FOR THE STUDY

One of the major inputs towards enhancing the quality of teaching and learning in schools as well as the Teacher Education Institutions would be the extent to which research out puts and the outcomes of innovations are utilized by the system. Researches on Teacher Education are being conducted in Universities, national level institutions and other establishment but their utility for the Teacher Educators or the classroom teachers remains low. The last five decades have witnessed several attempts to change modify and indigenize the inherited system of Teacher Education. The system however continues to function more or less on the same principles; similar content and approaches characterized by continuity and unwillingness to change the existing programme of Teacher Education at Primary and Secondary stages. The developments and changes over the last two decades forced the education system to change to the changing

demands of the society. Accordingly curriculum for the Pre-service Elementary Teacher Education was renamed during 2002-03 and the course was rendered as Diploma in Education (D. Ed.). Just like any other programme, there was confusion and opposition from the teacher educators and pre-service teachers especially with regard to internship programme, microteaching and action research. To give feedback to the policy makers there was a need of undertaking a systematic study about the programme. Hence the researches felt the need of undertaking this study after Two years of implementing the programme.

OBJECTIVES

1.To study the opinion of Teacher Educators, Pre-service Teachers and School Teachers with respect to Practice in Teaching and Internship

2. To study the Opinion of Teacher Educators and Pre-service Teachers with respect to Subject Specialization; General Pedagogy; Micro Teaching; and Co-Curricular Activities

3.To study whether there exists any difference in the Opinion of Teacher Educators and Pre-service Teachers with respect to Micro Teaching.

4.To study whether there exists any difference in the Opinion of Teacher Educators and Pre – service Teachers with respect to Subject Specialization.

5.To study whether there exists any difference in the opinion of Teacher Educators and Pre-service Teachers with Respect to General Pedagogy.

6.To study whether there exists any difference in the Opinion of Teacher Educators and Pre-service Teacher with respect to Co-Curricular Activities.

7.To study whether there exists any difference in the Opinion of Teacher Educators, Pre-service Teachers and school Teachers with respect to Practice in Teaching.

8.To study whether there exists any difference in the Opinion of Teachers Educators, Pre-service and School Teachers with respect to Internship

HYPOTHESES

1.There is significant difference between the Opinion of Teacher Educators and Pre-service with respect to Micro Teaching.

2.There is significant difference between the Opinion of Teacher Educators and Pre-service Teachers with respect to Subject Specialization.

3.There is significant difference between the Opinion of Teacher Educators and Pre-service Teachers with respect to General Pedagogy.

4.There is significant difference between the Opinion of Teacher Educators and Pre-service Teachers with respect to Co-Curricular activities.

5.There is significant difference between the Opinion of Teacher Educators, Pre-service Teachers and School Teachers with respect to Practice in Teaching.

6.There is significant difference between the Opinion of Teacher Educators, Pre-service Teachers and School Teachers with respect to Internship.

METHODOLOGY

The descriptive survey method was used to study the Opinion of Teacher Educators, Pre-service Teachers and School Teachers of Coorg District about D.Ed Programme. The survey was carried out in three phases:

I: Selection of the variables involved in the study and Construction and validation of the tool

II: Selection of the Sample for the study and Collection of data using the prepared tool
III.Analysis of data using suitable statistical procedure and Interpretation of data

Variables in the Study

The variables taken for the present study by the investigator were as follows.

Teacher Educators: The Teacher Educators are those who are qualified with the degree of Masters of Education engaged in training the students who have joined the D.ED College's with the aim of becoming a teacher.

Pre-service Teachers: Pre –service Teachers are those II year students of D.ED colleges who have joined the institution to be trained to become a successful teacher in future.

School Teachers: School Teachers are those teachers working in the schools where the teacher trainees are allotted for undergoing Practice Teaching and Internship training.

D. Ed Programme: It consists of both cognitive and non-cognitive aspects of the D. Ed course prescribed in the D. Ed. Curriculum of Karnataka State. In the present study only the Subject Specialization, General Pedagogy, Micro-teaching Co-curricular Activities, Practice in teaching and being taken into consideration.

Population

In the present study the population represents the Teacher Educators, Pre-service Teachers of D. Ed colleges and School Teachers of Primary Schools of Coorg District.

Sample

For the present study twelve Teacher Educators, hundred and forty – five Pre-service Teachers and hundred Schools Teachers were selected using simple random technique.

Tools

Opinionnaire on D.Ed Programme: The tool has two parts A and B. Part A has the statements related to subject specialization, general Pedagogy, Micro Teaching and Co-curricular Activities Part B has the statements related to Practice in Teaching and Internship.

Procedure

Phase 1: The Researcher visited the D.Ed colleges and Primary Schools of Coorg District. The purpose of the study was explained to the Head of the Schools and obtained the permission to administer the Opinionnaire on D. Ed Programme.

Phase II: The Researcher explained the purpose for which the study was being conducted and Teacher Educators were requested to respond to the Opinionnaire.

Phase III: The Researcher personally presented the Opinionnaire to the School Teachers and requested them to respond to the Opinionnaire. The Researcher collected the answered Opinionaire personally.

Phase IV: The data received was recorded and analysed by Researcher.

Locale of the Study: Coorg District

FINDINGS

Teacher educators and pre-service teachers differ significantly in their opinion with respect to micro teaching. Pre-service teacher opinion was significantly more favorable than that of the teacher educators. Teacher educators and pre-service teacher differ significantly in their opinion with respect to co-curricular activities.

Pre-service teachers' opinion was significantly more favourable than that of the teacher educators. Opinion of the teacher educators, pre-service teachers and school teachers do not differ significantly with respect to practice in teaching. Teacher educators, pre-service teachers and school teachers opinion equally favoured with respect to practice in teaching. Teacher educators, pre-service teachers and school teachers differ significantly in their opinion with respect to internship. Teacher educators and pre-service teachers opinion with respect to internship is significantly more favourable than that of the school teachers.

EDUCATIONAL IMPLICATIONS

The study revealed that Pre-service Teachers opinion was significantly more favorable than that of the teacher educators and descriptive analysis of the opinion of teacher educators with respect to microteaching shows that teacher educators knowledge on microteaching was inadequate. Hence adequate training should be provided to Teacher Educators by the DIET in microteaching by capitalizing the process of training the student teacher with respect to some important skill and strategies of integrating those micro skills Another finding of the study shows that Pre -service teachers opinion was significantly more favorable with respect to co-curricular activities offered at D Ecl. Programme than that of Teacher Educators. Descriptive analysis of the opinion of Teacher Educators shows that they were not satisfied with co-curricular activities organized by the training colleges and the product of S.U.P.W. activities with respect to their cost and utilitarian values. Therefore orientation programmer and workshops should be organized for Teacher Educators in organizing co-curricular activities and S.U.P.W activities. The study also found out that Teacher Educators and Pre-service Teachers opinion with respect to internship is significantly more favorable than the School Teachers. This shows the need of organizing seminar / orientation programme for Elementary School teachers in generals and mentor teacher in particular so that the purpose of the internship programme will be achieved.

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EDUCATIONAL RESEARCH IN NAGALAND - A TREND REPORT

Buno Liegise
Lungsang Zeliang

INTRODUCTION

The 16th State of the Indian Union, Nagaland is home to around sixteen tribes spread over eleven districts. The State is still predominantly rural in nature with 82.26% of the population living in the villages. One of the smaller hill states of India, with a total of 16,579 sq. kms and a population of 19, 88,636 as per 2001 census, the social composition of Nagaland, with its myriad tribes and 'unique' history of the Nagas, give the State a distinct character quite different from other States in India. The richness of tribal culture, colour, and systems of traditional governance remain unrivalled. Nagaland is not only a hot spot for tourists but for scholars as well. There is pretty much to see and admire and so much more to examine and study! Nagaland makes good destiny for scholars who are in search for truth and to learn from, particularly, in the field of education. There is a wide scope and enormous prospect for research in education.

EDUCATIONAL RESEARCH IN NAGALAND

Interestingly, the genesis of research in this area may be traced to a Ph. D. study conducted in 1973 in the State University of New York at Buffalo by T A Shishak whose focus is on higher education for Nagaland. This study was followed by two more Ph. D. studies in 1979 by S Sarkar on impact of western education on the Ao tribe and in 1982 by R N Bhattacharjee on socio economic strategies of education. Both studies were conducted in Gauhati University. The first lady research scholar in the discipline of education appeared on the scene in 1984. R Tali did her Ph. D. study on problems of high school teachers and their attitude towards teaching profession from North East Hill University Shillong (NEHU). It follows, then, that the initial researches on Nagaland was done outside the State in the absence of research institutes/department within the state that could conduct research in the strict sense.

The NEHU Nagaland Campus Kohima was established in the year 1978 and with it the Department of Education. It was only after a prolonged gap that the next crop of research studies was produced. Three PhD studies were done from the erstwhile NEHU Nagaland Campus, Department of Education. Since the inception of Nagaland University in 1994, there has been a series of research studies in the field of education, the first two came in 1996 and 1999. Meanwhile, in about the same period, four other scholars pursued their research from other universities in India and abroad, like, Pennsylvania University in United States of America, Jawaharlal Nehru University New Delhi, NEHU Mizoram Campus and NEHU Shillong.

In recent years, apparently there is a spike in the number of research in education. Since 2000 there has been a record of thirteen PhD researches conducted in the Department of Education, Nagaland University. Today there are twenty registered PhD scholars working on their thesis and registration for fourteen scholars are under process in the same Department with many more hoping to pursue such research.

This encouraging trend of demand for research in education, coupled with the present slogan of 'quality education' necessitates a survey and assessment of studies that have been conducted. Hence the significance of the trend report on educational research. The present study is concerned with the review of researches done in the field of education in Nagaland state and includes studies done in Nagaland University, and different agencies in Nagaland such as DIET, SCERT and other Government Departments. The study also includes in its purview, studies done in other universities, states and countries pertaining to education in Nagaland. The purpose of the present study is to make a compilation of educational researches in Nagaland and to give a critical analysis of the same. This kind of study will be of great help to scholars and academicians and policy makers at different levels.

The prime objective of the study is to bring out a trend report which will shed light on the kind of educational research being conducted in Nagaland, reveal research gaps and issues, throw light on priority areas and show the much needed direction for future research. The study will also enable researchers to have a database of what has already been done so as to avoid unnecessary duplications.

The study is divided into different segments according to different stages- research at M. A. (Education) and M. Ed. level, research in Education at M. Phil Level, and at Doctoral level in Education in Nagaland University as well as other universities. The review also includes researches and projects undertaken by different educational institutions, departments or NGOs in the field of education in Nagaland.

Trends of Researches

An in-depth analysis of researches done at MA Education dissertation level show that a total of 142 dissertations have been completed under the Department of Education, Nagaland University since its inception in 1978. It may be mentioned that it was under NEHU at its inception till 1994. On further scrutiny it was found that researches were done in about 26 areas of study. Following data give a clear and immediate picture of the number of research done in each of the areas.

Categorization of Research at MA Education level in Nagaland University, in terms of number and percentage are as follows:

1. Teachers and Teacher Education - 21(14.79%)
2. History and Development of Education - 15(10.56%)
3. Socio Cultural Studies-11 (7.75%)
4. Psychological Studies -10 (7.04%)
5. Management/Administration -09 (6.34%)
6. Curriculum and Syllabus -08 (5.63%)
7. Wastage and Stagnation -08 (5.63%)
8. Women Studies-08 (5.63%)

9. Primary Education - 06 (4.23%)
10. Comparative Studies -06 (4.23%)
11. Guidance and Counseling-05 (3.52%)
12. Moral and Value Education-05 (3.52%)
13. Secondary Education - 05 (3.52%)
14. Computer Education - 04 (2.82%)
15. Higher Education-04 (2.82%)
16. Adult Education- 03 (2.11%)
17. Pre school Education- 02 (1.41%)
19. Girl's Education-02(1.41%)
20. Special Education -02 (1.41%)
21. Extra-Curricular/Co curricular Studies-02 (1.41%)
22. Educational Philosophy-01 (0.70%)
23. Distance Education-01 (0.70%)
24. Sex Education-01 (0.70%)
25. Health Education-01 (0.70%)
26. Higher Secondary Education- 01 (0.70%)
18. Elementary Education- 01 (0.70%)
Total -14299.98 %

At the MA Education level, the area that received the most attention was in the area of teachers' problem and their education. This shows that research priority is in track because for any improvement in the quality of teaching, and of education in general, the quality of teaching must improve and teachers problems and needs examined. The Table also reveals that the next area that got a lot of interest was in the field of educational development and history of education in Nagaland, which accounted for 10.56 % of research at MA Education level. This area covers the indigenous type of education and also the contribution of early Christian missionaries and their impact on education.

M. Ed. course is not available in Nagaland University or any other Institute in the State except through the Distance Education Mode viz IGNOU Regional Center Kohima. However, five M Ed dissertations could be identified which were done in other universities. One of the topics was on vocational aspirations of class X boys and girls of Mokokchung District, Nagaland, another was on academic difficulties faced by Class VIII students of Kohima, Nagaland, the third was on a study of the contributions of Christian Missionaries towards the development of education in Nagaland from 1938 - 1995. All the studies were conducted in 1976-79 in Department of Educational Research and Studies, NEHU. The fourth study was done in the Himachal University Shimla on problems of teaching English at the primary level in the State of Nagaland in 2001 and the fifth dissertation was a study on the awareness of Indian culture among the pre-service teacher trainees of the DIETs in Nagaland conducted in Utmal University in 2006

A noteworthy development in research is the recent introduction of the Masters of Philosophy Program, included in the discipline of education, in Nagaland University, 2007. Three scholars are currently working on their dissertations on the historical development of education among the Rengma and Chakhesang tribes and on intelligence, socio-economic status in relation to academic achievement of school students.

Ph. D.

This segment is divided into two, educational research at Ph.D level in Education conducted under Nagaland University and educational research at Ph.D level in Education conducted in Universities outside the State.

The number of Ph. D.s in Education

Department, Nagaland Campus, NEHU was 3
The number of Ph. D. s in Education Department, Nagaland University was 15.
The number of Ph. D.s in Education on areas related to Nagaland conducted in other universities was 10.

Thematic Arrangement of PhD Research in Education in Nagaland was as follows:
Test Construction: 2;
Teacher & Teacher Education: 2;
Development Studies: 2;
Special Education Studies: 5;
Environmental Education Studies: 2;
Socio Cultural Studies: 6;
Science Education: 1;
Status Studies at Primary School Stage: 3;
Psychological Studies: 4

Categorisation of at PhD education research in Nagaland in terms of number and percentage
1. Special education studies - 05(17.86%)
2. Socio cultural studies-06 (21.43%)
3. Test construction - 02 (07.14%)
4. Environmental education studies-02 (07.14%)
5. Status studies- 03 (10.71%)
6. Psychological studies-04 (14. 29%)
7. Teacher & teacher education-02 (07.14%)
8. Historical/development studies- 02 (07.14%)
9. Science education -01(03.57%)
10. Higher education: proposal-01 (03.57 %)
Total: 28(99.99%)

Out of 28 Ph D researches, in total the figures reveal that the socio cultural studies received the highest research priority with the theme getting 21.43%. Next in line was the area on special education with 17.86% of the Ph D studies, followed by psychological studies 14.29%, status studies at the primary school stage 10.71 %. There were 7.14% studies conducted in test construction, which is to be encouraged. Historical studies, environmental studies and teacher education studies each comprised of 7.14% of the Ph D studies. While science education and innovative proposal for higher education received a meagre 3.57% each, the much neglected areas of study to say the least.

Overall it may be noted that most of the studies were descriptive in nature, employing basic statistical techniques. A few of the studies suffered from typographical and grammatical errors, underutilisation of data and information collected that reduced the standard of the studies. Hopefully future researchers will take cognizance of these lapses.

In light of the above it may be said that more experimental researches need to be encouraged. Use of higher statistical techniques in analysing data will enrich analysis of findings. Researches need to be conducted in more un trodden areas. Policy research, reforms in education, innovations in education, research in emerging areas of concern like education in HIV/AIDS and Human Rights, women empowerment, quality perspectives in education, vocationalisation of education, science education, education and ICTs are some areas which need more attention.

For millions in the rural areas of Nagaland, the twin problems of illiteracy and poverty are still coming into the way of providing quality education to children particularly in the case of the girl child. Fundamental issues of enrolment,

retention and access to elementary education, delivery system of early childhood care and education and other centrally sponsored schemes remain to be systematically examined. The relevance and role of their history, culture and tradition vis a vis the present system of education and global challenges need to studied and intervention programs formulated and effectively implemented.

Number of research projects conducted by Government of Nagaland Departments/ Other Institutions is as follows:

Government of Nagaland: Research Reports: 3

Research projects conducted in Nagaland University: 3

Research Projects conducted by SCERT/ DIETs

The State Council for Educational Research and Training and within it, the District Institutes of Education and Training recorded a total of over 30 action- research projects, which are as follows:

1. School Curriculum -09 (28.13%)
2. Documentation-08 (25.00%)
3. Health problems- 05 (15.63%)
4. Dropout, wastage & stagnation- 03 (09.38%)
5. Communication skill-02 (06.25%)
6. Evaluation - 02 (06.25%
7. Teacher status & competence -02 (06.25%)
8. Communitisation -01 (03.13%)

Total 32 (100%)

Research Projects by Non-Governmental Organization

The emergence of private players in the field of research in education is an encouraging trend. For instance, established in the year 2006, the Youth Action for Rural Development (YARD), which has as its goal to promote comprehensive and sustainable development of resources with the communities, has recently ventured into educational research.

Besides, a National NGO called Pratham Education Foundation that works with and for underprivileged children has been involved in quality improvement program of primary schools in partnership with the School Education Department. In the process the NGO has been engaged in educational investigations in Nagaland - e g the annual status of educational report - ASER Nagaland 2007.

CONCLUSION

Altogether 28 Ph. D. researches in the discipline of education have been identified. Out of which 18 studies were done in the Department of Education (three studies in the erstwhile NEHU Nagaland Campus Kohima and fifteen under Nagaland University). It may thus be said that the Department of Education has been instrumental in conducting more than 64% of the PhD researches in education done so far. The contribution of other universities in India and abroad is acknowledged as it brought in new perspectives and enlightened knowledge. There has been a surge in the demand for research in education due to multiple reasons – for one, there is a requirement of PhD degree for entry and promotion in the teaching profession. It is also increasingly being realized that impact assessments of various practices in education must be made. Besides, there is a need for research in order to devise new pedagogies for effective teaching-learning process and to ensure that the system of education at all levels are in sync with the

changing times and aspiration of the people. Such a condition has led to quantitative expansion of research in education, however much attention must be paid to the quality of the research studies. A close scrutiny of provisions for research available in the state reveals that there is shortage of qualified faculty; poor academic environment and lack of infrastructure for research in general; few research opportunities and meagre grants. Besides, there is limited Internet connectivity and no access to on-line resources for scholars, not to mention of reference books/materials and latest issues of journals.

In this day and age, a society that desires to register progress and development must make investment in research. There must be a resolve to push for educational research by the Directorate of Higher Education and Directorate of School Education, Government of Nagaland, the SCERT and Nagaland University. The increasing interest shown by the Non-Governmental Organizations in the research arena must be tapped and their expertise and resources strengthened. Further, Private - Public Partnership in educational research may be creatively explored. It is only in the interest of the state and its people that it upgrades facilities for research in general, and education in particular. Provide more opportunities for advanced research in diversified areas and extend generous grants and fellowships to those qualified and willing to engage in research. What is urgently required is transformational academic leadership that has vision, sense of global challenges and commitment to build state -of - the - art institutions of research to take the state forward in the twenty-first century.

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ALL INDIA ASSOCIATION FOR EDUCTIONAL RESEARCH
http://www.aiaer.net
E-mail: aiaer@rediffmail.com

AIAER PANEL ON RESEARCH AND TEACHER EDUCATION

There is a proposal to have a Panel on Research and Teacher Education. Members of AIAER are requested to suggest a few thrust areas that may be covered by the proposed panel

Suggestions may please be sent to
Prof. HK Senapaty, Jt. Secretary (Hqrs.), AIAER,
Regional Institute of Education, BHUBANESWAR-751 022
E-mail:hksenapaty@hotmail.com

STUDYING TEACHER EDUCATION
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Sunil Behari Mohanty

Realising the necessity of thoughtful analysis of the relevant research in teacher education, in late 1990s, the American Educational Research Association (AERA) established a study panel. In a foreword to this publication, Dr. Felice J. Levine, Executive Director of AERA asserts that it offers "a foundation of knowledge about teacher education for policy makers and practitioners, for scholars, and for those involved in education and supporting the next generation of teacher education researchers"(P.viii). The editors of this publication, who are also the co-chairs of the panel state that they selected a relatively small number of key questions that policy makers, the public, and the educational community seemed particularly interested in and developed research syntheses that focused in(p.x).The panel restricted itself to scenario prevailing in USA. Extensive peer reviewing helped in improving the quality of the work. The publication has 12 chapters. The first chapter deals with the context and goals of the AERA panel on Research and Teacher Education. The second chapter deals with "Researching Teacher education in Changing Times: Politics and Paradigms. Chapters 3 to 11 have a common format: Background; Guiding Questions; What We have Learned about the Topic; What We have Learned about the Research; and The Research We Need. Titles of these chapters and the Guiding Questions are:

3. *Teachers' Characteristics: Research on the Demographic Profile*:
Who is going into teaching, how are teachers being prepared, what entry routes did they take, and what career paths do they follow?

4. Teachers' Characteristics: Research on the Indicators of Quality:
What are the relationships between teacher quality and the demographic profile, including teacher preparation, entry routes, and career path?

5. Research on the Effects of Coursework in the Arts and Sciences and in the Foundations of Education:
What are the outcomes of teachers' subject matter preparation; general arts and sciences preparation; and preparation in the foundations of education for teachers' learning, knowledge, and professional practice; and for pupils' learning?

6. Research on the Methods Courses and Field Experiences:
What are the outcomes of preparation in

teaching methods and in student teaching and other field work and classroom experiences for teachers' learning and knowledge, teachers' professional practice, and pupils' learning? This set focuses on the evidence regarding the outcomes of preparation in teaching methods and supervised classroom teaching.

7. Research on Pedagogical approaches in Teacher Education;
What are the outcomes of the pedagogies used in teacher preparation (specifically the various institutional strategies and experiences commonly used in teacher education courses, projects, and programs) for teachers' learning and knowledge and professional practice and for pupils' learning? Under what conditions and in what contexts do these outcomes occur?

8. Research on Preparing Teachers for Diverse Populations;
What is the research base for preparing teachers to be effective in teaching traditionally underserved student populations and students in traditionally underserved areas? What is known about the conditions and contexts under which specific efforts to prepare teachers for work with these populations contribute to teacher education outcomes?

9. Research on Preparing General Education teachers to Work with Students with Disabilities;
What is the research base for preparing teachers to be effective in teaching students with disabilities? What is known about the conditions and contexts under which specific efforts to prepare teachers to work with pupils with disabilities contribute to teacher education outcomes?

10. Research on Accountability Processes in Teacher Education:
What is the research base for the range of accountability processes currently used in teacher preparation, specifically certification, teacher testing and accreditation? What is known about the outcomes of these processes for teachers' learning and knowledge and teachers' professional practice and for pupils' learning?

11. Research on Teacher Education Programs:
What is the research base for recruiting and preparing teachers within particular programmatic or structural arrangements and through alternative certification or recruitment routes? What is known about the conditions, contexts, and outcomes of particular programmatic structures and entry routes for teachers' learning and knowledge, teachers' professional practices and pupils' learning?

Chapter 12 is "A Research Agenda for Teacher Education"

In Chapter I, editors have discussed about the procedures in carrying out the study. They have mentioned the guiding questions for each of the chapters. It has taken four years for the panel to complete this study. Although this publication is focussed on the situation in USA, it needs to be read by all policy makers and implementers of teacher education programmes. References and Other Sources Cited are at the end of each chapter. At the end of the publication there are author index and subject index. This publication is a must for researchers in teacher education and organisations and institutions involved in improving quality of teacher education.

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Registration No. 48247/89
N1/55 IRC Village, Bhubaneswar – 751 015
http://www.aiaer.net
E-mail: aiaer@rediffmail.com
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2228 Miss E. Roopa Rao, MIG - 4, II Main Road, E&F Block, Ramakrishna Nagar, MYSORE- 570 022

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2289 Miss Anne Mary Thomas, Lecturer, St. Thomas College of Teacher Education, PALA, Dt. Kottayam- 686 575

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Australia

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Dadra & NH

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Delhi

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Gujarat

1091 Dr. J. R. Sonawane, Reader. Dept. of Education, Bhavanagar University, BHAVNAGAR – 364 002
1196 Mr. Maunas Thaker,B/202, Shilp Srushti Apartments, Vagheshwari Road, Ghatlodia, AHMEDABAD - .380 063

Haryana

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Karnataka

2103 Dr. (Mrs.) Latha M., W/o Dr. M. P. Dharmesh, #L-67 New Kanthabaraja, Urs Road, Kuvempu Nagar, MYSORE- 570 023
2104 Mr. H.R. Purushotham, C/o R. Range Gowda, #1613/2 Sahyadri 4th Cross, Northern Extension, HASSAN- 573 201

Punjab

0924 Mr. Kuljinder Singh, Grace House #739/7, Street #.7, Guru Nanak Nagar, PATIALA - 147 003

Tamil Nadu

0246 Dr. (Mrs.) Priscilla Nirmalakumari Daniel, 23 Outer Circular Road, Kilpauk Garden Colony, CHENNAI - 600 010

Uttar Pradesh

1724 Ms. Akanksha Singh, C/0 Mr. Raj Kumar Singh, 30 Gulista Colony, VN Marg, Near NER Club, LUCKNOW - 226 001

Uttarakhand

1266 Dr. Dillip Kumar Giri, Reader, The ICFAI College of Education, Rajawala Road, Selaqui, DEHRADUN - 248 197

AUTHORS

Prof. S. Palhotra, National University of educational Planning & Administration, 17 B Sri Aurobindo Marg, New Delhi – 110 016 E-mail: spmalhotra.2008@gmail.com

Prof. Manabu Sato, Graduate School of Education, The University of Tokyo, Hongo, Bunkyo-ku, Tokyo, 113-8654 Japan E-mail: jsse@oak.ocn.ne.jp

Dr. Van Petegem Peter, University of Antwerp, Institute for Education & Inf. Sciences, Venusstraat 35, 2000 Antwerp Belgium E-mail:peter.vanpetegem@ua.ac.be

Dr. Vincent Donche, University of Antwerp, Institute for Education & Inf. Sciences, Venusstraat 35, 2000 Antwerp Belgium

Dr. (Mrs.) Rekha B Koul, SMEC, Curtin University of Technology, GPO Box U1987, Bentley, PERTH, WA 6845 Australia E-mail:r.koul@curtin.edu.au

Prof. Dharam Prakash, Dept. of Education in Sc. & Math, NCERT, Sri Aurobindo Marg, NEW DELHI - 110 016 E-mail:dharamp@hotmail.com

Prof. K.C. Kapoor, Department of Education Rajiv Gandhi University, Doimukh 791 112 Arunachal Pradesh E-mail: krpkhem@rediffmail.com

Dr. H. Bam, Principal, DIET, Naharlagun , Itanagar Arunachal Pradesh

Dr. R.K. Mahto, Pedagogy Coordinator, SSA, Itanagar Arunachal Pradesh

Miss Anupam, M.M. College of Education, Mullana, Dt. Ambala Haryana

Prof. (Miss) Shefali R. Pandya, Dept. of Education, University of Bombay, Kalina, Mumbai - 400 098 Maharastra E-mail: srpandya@rediffmail.com

Dr. (Mrs) Shreyashi Paltasingh, Flat A-23, Harisadhan Apartments, Komalgazi, Nrendrapur, Kolkata -700 103 West Bengal E-mail: shreyashi_paltasingh@rediffmail.com

Mr. Amruth Kumar G., Lecturer, NSS Training College, OTTAPALAM, Dt. Palaghat - 679 101 Kerala E-mail:amruthamar@rediffmail.com

Ms. Devika R, Lecturer, NSS Training College, Ottapalam, Dt. Palghat – 679 101 Kerala

Mrs. Indira Shukla, Principal, GES College of Education, Parel, Mumbai - 400 012 Maharastra E-mail: slshukla_2005@yahoo.co.in

Dr. Jaspal Singh, SGAD College of Education, Khadoor Sahib, Dt. Amritsar- 143 117 Punjab E-mail: jaskaran_2000@yahoo.co.in

Mr. Pranab Barua, Lecturer in Statistics, J.B. College, JORHAT - 785 001 Assam E-mail:pranabbarua@rediffmail.com

Dr. Jiten Hazarika, Reader and Head,Dept. of Statistics, Dibrugarh University Dibrugrah-786 004 Assam

Dr.Baiju.K.Nath, Lecturer, Govt.College of Teacher Education, Thalassery -670 101 Kerala E-mail: drbaijukn@rediffmail.com

Dr. (Mrs.) Indrani, Lecturer, Department of Education, VML PG College for Women, Ghaziabad, Uttar Pradesh

Dr. Gopal Chandra Pradhan, Lecturer, Lecturer, State Institute of Education, ALTO-PROVORIM - 403 521 Goa E-mail: pgopalchandra@yahoo.com

Dr. (Mrs.) Buno Liegise, Head, Dept. of Education, Nagaland University, Kohima-797 001 Nagaland E-mail:bunlieg@yahoo.com

Dr. (Ms.) Lungsang Zeliang, Asst. Prof., Dept. of Education, Nagaland University, Kohima-797 001 Nagaland

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