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THE EUROPEAN EDUCATIONAL RESEARCH QUALITY INDICATORS (EERQI) PROJECT[1]

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The EERQI project was motivated by the fact that the international notion of scientific quality as being the main determinant on which research is funded and supported may cause undesired side effects, if the questions of how quality is interpreted and how it is measured are not adequately answered. Current instruments for 'measuring' quality via citation counting and similar methods do cause such side effects, as they are strongly biased and largely inadequate for research in the Social Sciences and Humanities. The EERQI project developed an approach to detect the quality of research texts – with educational research serving as model case for Social Sciences and Humanities (SSH) – by applying an intelligent combination of different approaches that complement each other. This is what we call the EERQI Prototype Framework. It consists of products and methods that can serve as alternatives in processes of assessment of quality in SSH research. The possibility of multilingual assistance of assessment processed by EERQI's multilingual search engine and automatic semantic analysis are tailor-made for strengthening the European research space, but may also be inspiring for other areas of the world that are not adequately recognised in the current instruments of quality assessment. The EERQI products and methods consist of a content base with educational research texts in four European languages that were exemplary included in the EERQI project: English, German, French and Swedish. Furthermore, a multilingual search engine was developed that is capable of finding educational research texts in the Web in the four EERQI languages. An approach to automatic semantic analysis and first tests of a citation analysis method that has the potential to be further developed for the application to educational research (and other SSH) texts do also belong to the EERQI products. Last, but not least, the project developed and tested a set of text-

immanent (intrinsic) indicators for the detection of quality in educational research publications, together with an accompanying peer review questionnaire that operationalised those indicators. The instrument was positively tested for reliability and practicality in the European educational research community. The EERQI team would welcome any further development and adaptation of its approaches that take the specific situation of research in other areas of the world into account.

CONTEXT AND OBJECTIVES OF THE PROJECT

All across the world, the structures and control mechanisms of publicly funded research have changed dramatically in the last decade. There are many widely discussed causes of these developments. The set of causes on which the EERQI-project concentrated is based on the evocation of the 'ability to compete internationally' – a request that is expressed vis-à-vis national research landscapes in Europe as well as the whole European research area, and possibly also research areas in other continents.

A metaphor that is either explicitly used or implicitly resonates in the existing discourses is *quality*. The discovery, improvement and promotion of research quality and the quality of research outcomes – such as publications – are the driving motives for the tendency to re-evaluate and redevelop structures for the research area, for redesigning the funding of research institutions and projects, and for instituting control and legitimization systems that are (or intend or pretend to be) helpful for decision-makers.

In the framework of these developments, the questions of *how quality is interpreted and how it is measured* are of fundamental importance. Analyses dealing with this question supplied the starting point for the development of the research project 'European Educational Research Quality Indicators (EERQI)' focusing on questions such as:What constitutes and marks the current quality control systems that are applied in contexts of governance and funding, irrespective of the genre and the type of research that is at stake? And what are possible (desired and undesired) effects

of these systems on research that is conducted in the European research area, especially in the domains of the social sciences and the humanities?

The project was developed by a truly interdisciplinary European research consortium, a unique composition of experts from educational science, biblio- and webometrics, information and communication technologies, computational linguistics and publishing houses.

Educational research is particularly suitable for considerations and research on such questions, because it can be considered to be prototypical for vast areas of the whole field of the social sciences and humanities. Educational science and research combine a wide spectrum of theoretical and methodological approaches – from primarily philosophical-historical methodologies as used in the humanities to psychologically or sociologically based empirical observations of individual development, education, training or Bildung (formation); from hermeneutical interpretation, single case studies to the generation and statistical analysis of great amounts of survey data. This manifests relevant characteristics of knowledge production, which are also found in other disciplines in the social sciences and humanities.

Another reason why it was appropriate to choose educational research as a model is that the visibility of education and learning as a policy space and its emergence as a significant area of policy are not matched by useful analyses of its operation. Policy in education and educational research is no longer the sole domain of the nation-state, but has become a key feature of a 'Europeanizing' process – or even: of global developments. 'New Learning' through social innovation is central to the knowledge economy, allowing education to be compared, promoted, researched and improved in its role as a key part of the knowledge economy. However, the contribution of European education research to broader global debates is hampered by the way it is organised. Distinctive and fruitful traditions of work are locked into national

intellectual resources and it is a slow process of enabling them to move across borders. Thus, there is a need to intensify networks and agree on common standards paving the way to a shared discourse space for European educational researchers – or even beyond this.

Before the project started, a firm review state of the art research on quality assessment was carried out. The review resulted in a generic judgment that can briefly be articulated as follows:

The existing instruments do not lead to valid results, because they do not measure what they claim to measure. An example to illustrate this statement is quality assessment based on citation indices and journal rankings. As yet, this has been the most common approach in vast areas of quality assessment in higher education.

The central and joint quality criterion that is used in these instruments is 'international visibility' of research findings. This is expressed by the placement of the publication, namely in journals with a good reputation, and by the number of citations of a publication. This approach is – for example – characteristic of the Social Science Citation Index, a commercial instrument, owned by the US American publishing group Thomson Reuter. Its results often play an important role in reporting systems on research achievement. A closer look at the documentation of the journals represented by this index reveals (for the field of educational science according to the "Journal Citation Report") the following:

In total, 201 educational research journals were incorporated in the rankings of 2009. More than half of these journals are published by US American publishers. An additional 25% derive from British publishing houses. The next 'largest' nations in this ranking are the Netherlands (with 4% of cited journals) and Germany (with 3% of publications). Altogether, 15 nations across the world are represented in the ranking. India is not among them.

Another perspective on the Journal Citation Report reveals that 89% of the publications that were ranked in 2009 are in English. The next 'largest' languages with 2.5% and 2% respectively are German, Spanish and Turkish. In total, eleven languages are represented by the index. A language such as French is not included.

Although the owners of these instruments are constantly striving to improve their methodologies, and although these methodologies differ more or less extensively between the instruments, the general problem of their validity is illustrated by these findings of the preparatory EERQI survey: These kinds of approaches do not produce valid information in the sense that they pretend to do. The illustration shows that the intended international relevancy of the included publications cannot be proven. The rankings are heavily biased. They essentially refer to US American or UK publications and to publications written in English. International visibility as a quality criterion must be translated here to visibility of products from a narrow selection of national research spaces to the rest of the world. The provided information is perfectly suitable to substantiate the dominance of a 'minority' of regional and linguistic research areas.

This means in fact, that these methodologies do not reflect an adequate coverage of (not only) European scientific publications, in particular in the social sciences and humanities. Not only are most other languages than English and publications produced outside the US and the United Kingdom ignored but also are other types of publication, for example books excluded. This means a bias to actual publication practice in educational research as well as the whole field of SSH. Another criticism is that mere citation counting may, if at all, indicate research quality in natural sciences, where a 'cumulative model' of citing is broadly practised; a citation indicates that the citing author positively refers to and builds on the work of a cited author. In the social sciences and humanities however, this is not the main tradition and function of citations; instead, citations are often used for contradiction or rejection of another position, or for negotiation. Thus, if citations are simply

counted rather than analysed in their intention, the significance of the result is weak.

Based on such analyses, the motivation for the development of the EERQI project was, in a nutshell, the observation that the strategies of assessment that were developed in 'hard science'-contexts have to be heavily criticised for their methodological weakness and lack of validity. At the same time, there was a genuine desire to develop new approaches that can serve better for the aim of detecting research quality in our domains. This desire unites the SSH-research community as well as relevant stakeholders from other spheres, such as publishing houses, research funding and political decision making.

The EERQI team's general intention was to develop useful tools that support the process of quality detection, generally aiming to

a) raise the transparency and value of the process of quality detection itself; and
b) make the task better manageable and less time consuming.

It was not EERQI's objective to develop one single method, such as another index that can compete with the existing ones. The aim was the development and testing of a set of tools with different functions that can support and accompany the process of detecting research quality in texts - from the moment of identification of a text to the moment of the conclusive determination of quality. The new tools to be developed were compiled in a broader prototype framework, each tool addressing a specific part of the assessment process:

Before being able to assess educational research documents for their quality they have to be identified and gathered. Therefore, when searching for a specific term, it is the task to identify relevant educational research documents and make them available to the user. The EERQI-project developed a specific search engine that is able to identify educational research texts (see http:// makalu.xrce.xerox.com/eerqi/). The stock that the search engine

comprises of contains a wide range of documents, those being freely available in the World Wide Web and those being in the possession of publishing houses or research institutions – which are normally not freely accessible. Since the relevance of the harvested documents plays a crucial role, it was the task of the developers to refine the search engine in order to gather only educational research documents relevant to a respective search term. Taking into consideration the European context in which educational research documents are published in different languages, the search engine needed additional multilingual functions so that it was able to deliver results to the search term in several languages. As the EERQI project could only develop a prototype method, four languages as examples: English, German, French and Swedish were included.

After retrieving the documents, their quality could then be assessed with different approaches. This involved the improvement of 'classic' indicators (e.g. amount of citations; classification of a journal). But additionally, the project developed other approaches. Very soon in the research process, the EERQI team decided that quality detection should differentiate between two different types of indicators:

- one type that was external to the text, such as bibliometric and webometric features was called 'extrinsic indicators'; and
- another type that was internal in the text – namely the signals that were given within the words, graphs, metaphors of which the text was composed was called 'intrinsic indicators'.

In order to assist an evaluator (a reader) with the detection of quality, the extrinsic and intrinsic indicators have both to be applied to the text. Thus, tools had to be developed to assist with their easy detection. Measuring extrinsic characteristics of research publications involves the harvesting of relevant pieces of information from different search engines such as Google Scholar, Google Web Search etc. The detection of the intrinsic indicators is a much more complex process. Here, assistance can be provided

by automatic semantic analysis, a tool developed by the EERQI team members from Xerox Laboratories in Grenoble, France. Another relevant tool is the EERQI peer review questionnaire. This instrument comprises of operationalised items of the intrinsic indicators that indicate internal features of the quality of a text. The reliability and acceptance of this questionnaire was tested with a positive result within the educational research community; responsible were the team members from University of Hamburg and the European Educational Research Association.The combination of methods and approaches to assist a reader in the process of quality detection is what we called the EERQI Prototype Framework.

The EERQI Prototype Framework consists of:

- a content base and the search and query engine that support the detection of potential quality via identification of relevant educational research texts in different (electronically available) sources (developed by EERQI partners RRZN, Hannover, and ISN, Oldenburg).
- a tool called 'aMeasure' that identifies extrinsic characteristics of research publications by using Google Scholar, Google Web Search, MetaGer, LibraryThing, Connotea, Mendeley, and citeulike (developed by EERQI partner Humboldt University, Berlin, Germany).
- a linguistic technology that allows for the automatic dentification of key sentences to indicate parts of documents to which reviewers should pay particular attention (Automated semantic analysis, developed by EERQI partners Xerox and DIPF).
- a Peer Review Questionnaire that contains a tested operationalisation of the intrinsic indicators that were developed by the EERQI project (developed by University of Hamburg and EERA).

Following section explains in detail, examples of the EERQI products.

2. Example No. 1: 'Intrinsic Indicators' and the Peer Review Questionnaire

As already mentioned, the EERQI consortium decided very early in the project's process to distinguish between intrinsic and extrinsic indicators. The hypothesis was that both types of indicators may be relevant for evaluation and assessment processes, but the kind of information wanted on the performance of a text can differ and may or may not be cor- or interrelated. The identification of cor- or interrelations between the two types of indicators belonged to the project's aims. Although the funding period is finished, the data analysis for this purpose is not yet terminated. First attempts show that on a holistic basis there are only weak ties between both types of indicators. Multilevel analysis however, is still ongoing.

The development of the intrinsic indicators was an iterative process which included several hundred experts that were nominated by European Educational Research Associations. On this basis, a comprehensive set of five generic quality indicators emerged:

- Rigour
- Originality
- Significance (for other researchers, policy and practice)
- Integrity (including considerations of authenticity, honesty and ethical requirements in the conduct of research)
- Style (including clarity, communicability, eloquence and elegance).

These indicators were operationalised, again in a consultation process, and transferred into the 'EERQI Peer Review-Questionnaire' that was tested in three waves. In each wave, statistical analysis was carried out in order to test the reliability of the items.

The final version of the questionnaire contains three scales with respect to the indicators rigour, originality and significance with all in all 16 items. All test and item characteristics show good to very good values, which could be approved for subsamples of different areas of educational research with different cultural and linguistic

backgrounds. The following table illustrates the values for the scales:

Table 1
Overview Final Scale Values

Scale	Subscale	Number of items	Reliability	Mean value for item validity
Rigour		9	.92	.76
	Methods & Approaches	3	.83	.72
	Results	2	.94	.64
	Discussion	4	.90	.82
Originality		3	.91	.78
Significance		4	.91	.78

Especially helpful for the reviewing process were the reviewers' comments on the relevance of the indicators and the practical use of the questionnaire. The acceptance and indication of usefulness of the questionnaire was generally very high; especially in reference to educational research texts that derive from empirical studies. Moreover, the statistical results show that the questionnaire can well be applied across different areas of educational research. The analysis of the qualitative responses substantiates that the questionnaire includes the most important indicators in the field of quality assessment in educational research publications.

Different suggestions for an extended use of the questionnaire, for instance, a further development for the purpose of training (especially new) researchers in assessment tasks, were made. These possibilities should be further explored within the educational research communities in the future.

To sum up, EERQI's intrinsic indicators and their operationalization as shown in the questionnaire were successfully tested. The acceptance of the instrument in the European educational research community appears to be high according to our investigations. The instrument is now available on the EERQI website for

implementation and further development. This will hopefully support the intentions to facilitate and to raise the transparency of assessment processes in educational research, and thus, enhance the quality of quality assessment procedures as such.

3.Example No. 2: Automatic Semantic Analysis

The aim of the EERQI approach 'automatic semantic analysis' is to assist human evaluators in the time-consuming process of quality detection. A method to do this is 'key sentence extraction'. EERQI-partner XEROX developed a tool that automatically detects and highlights key sentences in educational research articles in English, French, German and Swedish, and we have tested its performance. The aim of key sentence detection is twofold in EERQI: a) providing reading assistance for peer-reviewers, and b) improving the relevance ranking of the EERQI search engine.

(a) Providing reading assistance to peer-reviewers.

The approach consists in highlighting salient sentences that provide textual evidence for the peer reviewers in order to back up their evaluation. This means that the tool does not 'evaluate' automatically, but suggests to a reader which are the parts of the texts that are relevant for founding the judgment on. The approach is based on a consensus in the EERQI team according to which an evaluation by peers is supposed to judge the relevance of the topic, the clarity of the problem statement, the coherence of the argumentation and the well-foundedness of the conclusions.

These criteria of judgment are inherent in the evaluation that can be carried out with the EERQI Peer Review Questionnaire. Following these evaluation criteria, the tool that was developed highlights key sentences that describe research problems, purposes and conclusions related to the topic of the article as indicated by keywords.

The underlying supposition driving this approach is that by highlighting information, a relevant and coherent representation of the flow of the article is added to it. This complements and

completes the representation that is provided by the structure of the article, i.e. title, summary, outline. Such features are sometimes, but not always made explicit in a text. A summary, when present, gives concise information of the overall issues in the article, but is not sufficient for evaluation. Section headings and article structure play an important role for synthesizing the development of the arguments, but in the domain of educational sciences - as in social sciences and humanities in general - they do not follow general patterns and thus are in many cases not indicative of the underlying argumentation.

Several tests, in order to evaluate the appropriateness and usefulness of the results of this approach, were carried out . One of these tests focused on the time that was needed for evaluation procedures, using exemplary texts with and without highlighted sentences. Our conclusions are the following. Highlighting allows the support of peer reviewers' evaluation process according to the scales of significance, originality and the items for style. Evaluation with respect to the items referring to 'integrity' and the scale for rigour however, can as yet not be supported by the highlighted sentences. Here, further development of the method would be necessary. Another relevant result is that the highlighting makes it possible to rapidly filter out bad quality. In this respect, processing of the highlighted texts took *four times shorter* than the text without highlights.

Another testing (peer review exercise) concerned the question if the highlighted sentences do in fact cover the most relevant contents of the articles. Peer-reviewers who participated in the testing of the questionnaire were asked to briefly summarize the reviewed article in their own words. They were asked to state the main subject of the reviewed article, the research problem, the main conclusions or results and open questions.

The summaries were written in the same language as the reviewed article. The sentences of these summaries were compared to the

highlighted sentences. The following results have been obtained:

- 84% of the human summary sentences correspond to a sentence from the article.
- 56% of the corresponding sentences fulfill the criteria of salient sentences.
- 68% of the salient sentences were detected by XIP, the parser developed by Xerox.
- On average, the automatically highlighted sentences showed four times more of the nouns from the text than occurred in the human summary sentences.

These results show that the automatically detected sentences cover a considerable proportion of human summary sentences. This suggests that automatic highlighting does indeed have the potential of providing key sentences for peer reviewers, and thus allow for less time consuming processes of quality detection.

(b)Enhancing the ranking of the search engine.

The assumption here is that if the query term inserted in the EERQI search engine occurs in the highlighted key sentences, the article is more relevant and thus the article gets ranked higher in the search engine's results. In this way, the key sentences are used as snippets in the mechanism that ranks the results of the search engine.

CONCLUSION

In the EERQI project, we also tested other methods in order to unveil their appropriateness for educational research - for example, the method of citation counts that is used in most current approaches for quality assessment. In former evaluations, manifold shortcomings have been uncovered in scientific analyses of the processes and outcomes of this method. EERQI aimed at providing evidence for the invalidity of this underlying assumptions, namely the idea that research communication is merely cumulative in the sense that one piece of research is cited by another in order to build on it for accumulating knowledge. It was one of our approaches to find out

whether an alternative use of citations could be a means to overcome the restrictions that are bound to citation counting. The main result of this EERQI approach was that citations in educational research (and other SSH-) articles function differently than those in some areas in natural science. Citations may not be motivated by a reference to 'good quality' of the cited text; they may be motivated by the wish to contradict, to criticise – in other words: by the intention to indicate the opposite of good quality. Functions like these could be important factors to be taken into account for the further development of citation indexes. In present methodologies however, one citation counts as one unit independently of its motivation or function; this is obviously an insufficient, if not a misleading information in assessment processes.

The EERQI results as well as all products are explained in more detail on the website www.eerqi.eu and will be published in a volume on "Assessing Quality in European Educational Research – Indicators and Approaches" (working title that will presumably appear in summer 2012. The results were presented at several occasions to the scientific community for verification and acceptance, not only in Europe. These presentations addressed educational research societies, experts in the field, representatives of research funding agencies, and promotion and evaluation bodies at the national and European level. All in all it can be concluded that the aim of the project – the development of a prototype framework that consists of tools which give support to 'human' assessment procedures, but do not replace the human judgment – was met. A special value of the project's processes and results is that we actuated a disciplinary discourse on shared notions of quality as they occur in educational research publications. Moreover, the project could show ways to integrate multilingualism in attempts to identify texts that might be relevant to a researcher who does not master the respective languages. This points to possibilities of strengthening the ties among European educational researchers and allow for more international cooperation and collaboration, even if the different partner languages are not known

to the others. Models of cooperation with one working language, but inclusion of research that is carried out in several different languages, should be better feasible in future. The EERQI project also shows that there is still a lot of work to be done. In the life span of the project, we were able to work out prototypes of the tools and methodologies that we considered to be promising. The research community is now invited to take up the results – the EERQI team welcomes all interested researchers to make use of the data and products that the project developed and advance the approaches.

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ANIMATED IMAGES IN LEADERSHIP LEARNING

Lejf Moos

This paper presents and discusses the use of 'animated images' in two Danish schools participating in the Leadership for Learning project. The intention was to test whether this method can be used constructively in a leadership development process. The aim of the Leadership for Learning project was to examine and enhance school leadership for learning, which meant looking at the relations between leadership and learning at several levels. One of the basic conceptions of the project was that leadership is always distributed in schools and it should be distributed in ways conducive to learning. Hence, this article focuses on the ways relations and leadership were conceived and developed. The series of short narratives, excerpts from animated images from two schools, written on the basis of a series of interviews with stakeholders (superintendents, principals, deputies, teachers, students and parents) conducted on two or three occasions over a three-year period, give an account of how participants develop their conception of relations and leadership over time and how they therefore provide a basis for the analysis of how leadership was conceived and distributed in different ways over the years. To facilitate the reading of the narratives, a brief introduction to the Danish educational context and to the thinking behind this way of conducting research and critical friendship with schools is presented.

THE DANISH EDUCATIONAL CONTEXT

The Danish school system, and therefore also the Danish primary and lower secondary schools (*Folkeschool*, with students aged 6-16) is being restructured and decentralised as part of a restructuring of the welfare society (MacBeath, Moos & Riley 1998). One aspect of this is the devolution of administrative and financial power from the state level to the municipal level, and further on down the line to the institutional level and even to the

teacher team level. As a result, site-based management of schools places more weight on economic and marketplace values and less on democratic, political values (Moos 2005b). In Denmark, neo-liberal policy makers put more focus on market values and less on political and civic society values, while neo-conservative forces simultaneously stress the need for central, state control over matters concerning content and quality assurance. In short, many aspects of what is termed New Public Management (NPM) are being initiated in the Danish context.

There is a long history of autonomy for schools in Denmark, but traditional site-based management was redefined when schools were made financially autonomous and accountable. Principals now manage large budgets in collaboration with school boards that have a parental majority. Legislative action and, therefore, responsibility for the public objectives of the schools still remain in the hands of the Danish Parliament and the Ministry of Education, but interpreting and administering the curriculum is the responsibility of the municipalities. At present, the NPM wave that is moving from focusing on processes towards focusing on outcomes and accountability is gaining momentum. School test results have been made public on the Ministry's web site since 2003. Since then, the majority of the parties in Parliament entered into an agreement to restructure parts of the educational system by introducing national tests in all grade levels.

Principals have apparently been caught in the crossfire between several competing interests (Moos, Carney & Johanson 2000). The most important once are the national objectives for schools that - beyond basic skill requirements - focus on a comprehensive education with a focus on *Bildung/Dannelse*, meaning the effort to assist and facilitate children to develop into being in authority and ready to become citizens in a democratic society (Moos 2003). Second, there are requirements from local authorities demanding financial accountability, and, third, there is a school culture where

teachers are accustomed to being very autonomous and are not eager to be managed or led by the new, strong, visible principals described by national agencies.

ANIMATED IMAGES AS A METHOD FOR ACTION-LEARNING AND ACTION-RESEARCH

Within the framework of the Leadership for Learning project, the aim was to explore the portrait (Lawrence-Lightfoot & Davis 1997) as a tool for multiple purposes: Can it function as a tool for reflection for participating principals, teachers and critical friends, i.e. as a tool for action learning? Can it, at the same time, function as a reasonable tool for data collection from a school development process, i.e. as a tool for action research?

In the process of attempting to answer these questions, it turns out that by repeating the process of constructing images at different points over time (Moos 2005a), the impact of the images can be enhanced because they turn out to work as 'trading points' between practitioners and critical friends/researchers. They become images that practitioners can use to reflect on the past and the way relations and practices developed, and hence aid in making sense of the present situation (Weick 2001).

The Leadership for Learning project is both an action research project and an action-learning project. In action research there is a joint responsibility towards developing the practice of both practitioners and researchers. Some members of the research community who feel that there is often a lack of documentation in action research projects have voiced criticism against action research. Without documentation, it is difficult for both involved and detached parties to criticise the results claimed. This predicament can be clarified by distinguishing between action research I as identified with professional work in schools, and action research II as a research strategy (Kalleberg 1995). Action research I as professional work does not have the same claim on

documentation and publications as does action research II as a research strategy, and can be more aptly described as consisting of critical inquiries in order to separate it from research. A better term that is often used to describe this type of professional work is action learning (Tiller 1998).

The aim of action learning is to assist participants of a community in becoming more conscious of what they know and more attentive to their own experiences. It frames and analyses experiences through a lens of diverse perspectives. The role of the critical friend (for example, a researcher or practitioner from another school) is to assist the participants in documenting, synthesising and reflecting on school experiences in a systematic manner (Tiller, 1998; Tiller, 2000). Creating a *distance* to the experience is a necessary condition for critical reflection on action to occur.

One way of creating this distance is to construct the events in a *text*, which occurs, for example, when a critical friend collects and analyses information and provides feedback in the form of a written account of how key persons within the school describe themselves. By doing this, a new image, partly as seen from the outside, is produced of teachers and school leaders in order to *irritate* or annoy their preconception or cognitive maps, i.e. by producing an appropriate difference. A text works as an inspiration or a tool for reflection on practice. The theoretical basis for this procedure can be found in the above concepts of action research and action learning, which in turn are based on social constructivist conceptions (Qvortrup 2000; Qvortrup 2001).

The way we conduct this form of critical reflection is through the concept of animated images (Moos 2005a) inspired by the portraiture method devised by Lawrence-Lightfoot and Davis (1997). The animated images were developed from interviews with stakeholders and later condensed into short written images that were returned as feedback and discussed with the

stakeholders. Approximately one year later, the same procedure was repeated, resulting in a series of animated images that were integral to the action process.

The portrait and later on the series of portraits, the animated images, proved to be adequate tools for recording perceptions and experiences, and thus for stimulating reflections in schools. Whether or not the qualitative portraiture method can produce a truthful report about a school has been questioned (English 2000). Our aim, however, is not to provide a picture of 'the truth'. Surveys offer one kind of truth framed within the selection of questions, and interviews offer another kind of truth restricted by the nature of the social interactions of the participants (Johnson, Clarke & Dempster, 2005). In addition, the analytical lens we apply to the data sets offers differentiated opportunities for truth-making. As we see it, truth is negotiated, and there are a number of understandings and views that differ based on the viewer's standpoint. For instance, the school principal may understand the school in one way, the teachers in another, and the students in yet another and so on. Like anthropologists, researchers are part of the social world they are researching (Hammersley & Atkinson 1987), and are therefore also influenced by their preconceptions, perspectives and interests. Our aim is to produce images as portraits in progress that can be used not only by stakeholders in schools and by researchers, but hopefully also by the reader of this text as a basis for ongoing reflection.

Brief extracts from animated images from two Danish schools, labelled here as EAS and HGO, are discussed in the next section. Over a period of three years, we interviewed stakeholders (principals, deputy principals, teacher, student and parents) in the two schools two or three times. The notes and transcripts presented here have been compressed into a few pages as animated images and focus on leadership only, while the Leadership for Learning project as a whole focused on learning and leadership, and the

relations between the two.

During the writing process, the author prioritised and selected statements and reflections from the corpus of data collected. The main guideline in making my selections was the general claim made in both schools that leadership is distributed among formal leaders, teachers and also students. The quotes and accounts given intended to catch statements that could illuminate that theme.

When the images were presented to stakeholders (school leadership and groups of teachers) a few weeks after the interviews had been conducted, they were able to recognise their schools, the relations and the leadership styles, which thus validates the images as valid descriptions of aspects of their school. Simultaneously, the images were used as tools for reflection and the negotiation of meaning within the school and the school development process as well as between the principal, teachers and a critical friend. Looking back in time from the present position also indicates a possible future (Weick 2001).

SCHOOL 1: EAS

Comprised from the images, the text in this section is based on document analyses and interviews with principals, teachers, students, etc. on two occasions in 2002 and 2005. A few weeks after the first round of interviews, I wrote the first image, pulling together the meanings and descriptions given in the interviews. Presented to and discussed with the school leadership and groups of teachers, the images functioned as a reflection on the school, allowing leaders and teachers to reflect on their praxis while simultaneously validating their account of the situation.

From Official Documents: Taken from the First Portrait, 2002

A small school situated in the centre of Copenhagen, approximately thirty-five per cent of the student population are bilingual, most of whom are of Pakistani origin.

The staff consists of twenty-seven teachers, eight service workers, one school secretary, one principal and one deputy principal. The school website states:

> *EAS is a school where development is an integral, natural part of daily life for the staff as well as the school board. Both teachers and the leadership take part in projects with external partners. Every year we have a project or a course that includes the whole teaching staff. We do this to ensure that we all have a common understanding of the big issues, like values and goals for learning. By working with school development in this way, we have a well-defined learning strategy to build holistic team teaching on based on projects incorporating the practical and musical intelligence of both teachers and pupils.*

All stakeholders describe the school culture as inclusive and friendly. Everybody knows everybody. The school district is composed of a mix of the working class people who originally lived there, immigrants and a new, resourceful group of people from the middleclass).

FROM THE FIRST IMAGE, 2002

In the first round of interviews, both new and older teachers are described as professional and committed. Everybody is prepared to do his or her best. Many teachers take part actively in the pedagogical debate but do so in different ways. Some are very structured, and some are project oriented, while others are content oriented and so forth. This diversity is considered to be an asset to the school.

The school leader says that parents and staff see him as the leader. It is difficult for him to say how students perceive him. He tries to make himself visible by standing on the playground every morning to say good morning to the students. The school leader and the

deputy see themselves as a leadership team. The deputy carries out administrative jobs and the two of them share information as necessary. He describes his relations to staff as being collegial.

Using a metaphor, the teachers describe principalship by comparing the former school principal with the present one: The former principal was the captain who set the ship's course and praised teachers if they arrived at the destination. He facilitated the journey, but the course was his. The present school principal asks teachers about their professional trajectories. He gives the staff a lot of choice and opportunities to make decisions in self-governing teams and project work. Teachers are very autonomous, but this is difficult and dangerous. Although perhaps satisfactory and rewarding, it is much harder, teachers say. They explain that they could use more assistance and help from the leadership for the journey.

With a vague image of what and who the leadership is, some students say it is the school principals while others say that it is the teachers.

The school leader gives feed back to the staff in team interviews and in staff development interviews, but also on an informal level. Leaders are aware of the Rosenthal effect (Rosenthal & Jacobson 1992), which is when their behaviour and actions influence student performance, also on the class level. However, the school principal says that administrative tasks take more time than ever, limiting the time available for educational leadership. The leadership tries to create the room for the kind of school they want by hiring good teachers and collaborating with them to develop classroom practice.

Teachers find that the leaders influence all aspects of school life. Made for and with teachers, the visions influence what happens in class. Leadership supports the current agenda. The issue is not about developing a new one.

Comments – At Present

Over a protracted period, being the principal of this school has been extremely challenging. The deputy has been away from school for long periods because of ill health, leaving the principal with all of his administrative work on top of his own work. Consequently, little time has been available for educational leadership with teacher teams and individual teachers and classes.

As part of the Leadership for Learning project, the initial portrait and results from the survey were presented to the teachers' council, which every teacher is a member of, for discussion. Although the teachers participated in the discussion with interest, they did not feel the need to make decisions about aspects of the school that could be changed and the senior management team (SMT) did not want to push the issue.

The first round of interviews was completed at the beginning of the Leadership for Learning project in 2002. Following the feedback on the images, a number of school development activities were undertaken over the next three years. At the end of the project, in 2005, I repeated the round of interviews, this time on the basis of both of the first images. The text was again forwarded to the participants prior to the interviews, which covered the basis of school development activities and on development in general.

FROM THE SECOND IMAGE, 2005

The principal explains:

> *We are working on implementing the new leadership structure with me as an educational and administrative leader in addition to being the overall leader. The educational leader is in charge of all kinds of 'normal education', while I take care of the special needs education, the kindergarten class, the integration class and so on, all of the 'non-normal education'. Teachers work*

in department and in teams. Teams are made up of teachers servicing one class, and departments are composed of teachers around a number of classes. I attend department meetings and the educational leader attends team meetings. I do lead with the work I do in the educational committee, but not as much as I would like to. It'is hard to get the teachers' attention. Teachers are of course polite and listen when I talk, but once they are back in class again, they do what they usually do. The feedback from the survey did not further the development. The school focused too much on problems in the SMT, which was once again highlighted with the results and is what put everything to a halt.

The teacher representative on the developmental committee says that the school leader must have an oversight over what goes on in every class and be in good contact with the staff. He must be developmentally oriented and provide space for teachers' perspectives, their commitment and their need to experiment. Early on, signing teachers up for in-service courses was important, now the main issue is the individual development of each and every teacher.

One teacher explains:

Therefore, it is more important than ever that the principal gives clear signals, partly because we now have an educational leader. This often confuses the signals. The principal's influence on my teaching is minimal. He decides of course where I teach and what subjects I teach, but beyond that, no. There are meetings between the principal and teacher teams, but no class visits.

A newly appointed, female teacher says that the school leader should have a heavy say in teaching, but that this is not the case. The SMT does not know much about what goes on. During her

interview she observed the following:

> *I get a pat on the shoulder from colleagues. Being a newly appointed teacher I miss the attention of the SMT. I would like to have discussion with SMT; they could pop in every now and then. As it is now, they only turn up when there are problems. The visits and discussions with leaders could be useful to me. Discussions with colleagues are useful, but to have a new set of eyes from the leaders could help in discussions with old colleagues. I think that our leaders know as little about my teaching as I know about their leadership. I can do whatever I want as long as the parents don't complain. That's not satisfactory.*

A male teacher with fourteen years' experience concurs with the above, stating that the school leader has no influence on teaching except that he is legally responsible. He ought to have real insight into teachers' praxis in education, which he can only get by observing and by talking with teachers. In this regard, the teacher said, *I have never seen a leader in my class nor have I talked to them about my teaching. The SMT could influence teaching through the educational committee, but there is never an educational discussion.*

Four students from grades six and seven say that they often work on projects. This is a good way of working if the project groups function well. The student in the group who is hard working or who has the paper with the assignment, says one student, is kind of the group leader. –Who the leader is depends on who has the energy to take the initiative. Different people take on the role, depending on the subject/theme or content matter. The student explains:

> *If you are good at it, you become the leader. It just happens. Suddenly you're the leader. It is something we do to keep*

control over things; otherwise there is chaos. The teachers don't ask us to take on a leadership role, but we are good at helping each other. The older ones help the younger ones.

Comments – At Present

The first round of interviews present the image of a visible, active principal who initiates and takes part in educational discussions with teachers and acts as a critical friend at team meetings and during one-to-one dialogues. In addition, the teachers are said to be active and committed. Over the years, however, the situation changes and three years later, there seems to be a limited number of educationally relevant interactions between the principal and teachers. Both parties agree with this observation. Teachers regret the lack of attention and support from the principal, claiming that he has never visited a lesson and never talked to them about their teaching. The principal, on the other hand, regrets the lack of response to his ideas and plans introduced at meetings, claiming that the discussions are only too seldom transformed into educational action in classrooms. Part of leading the school is apparently based on routines that are not questioned by teachers or by the principal. Because the deputy principal is frequently ill, he is too busy with administrative tasks and the teachers go about business as usual.

At EAS, the principal and the teachers are apparently often functioning in a parallel performance arrangement. They are occupied with many of the same tasks and practices, such as constructing and negotiating the direction of education in school. Teachers do take care of these tasks and practices in class and during discussions in the educational committee and the principal does the same in meetings and in other situations. Nevertheless, the parties often seem as though they are not pulling in the same direction. The principal regrets to say that even though the teachers listen politely to him at meetings, they do not comply with his

messages. When they get out into their classes, they continue to do what they usually do.

There are other kinds of division of labour at EAS. One example is the division of leadership tasks related to normal educational and special needs educational leadership, as well as the division of special needs leadership between the educational leader and the principal. Nevertheless, teachers complain that this division causes confusion, because the signals sent by the SMT do not match what is happening.

SCHOOL 2: HGO

The text in this section consists of a short account of the document analysis done prior to the first visit to the school in 2002. Thereafter, there are excerpts from the first image written on the basis of interviews completed in 2002. This image was returned as feedback to the school leadership and teacher groups.

One year later, in 2003, when the school development project began after the summer break, the principal re-read the first image and was really surprised by the development she found had occurred over just one year. As a result, we agreed to find out whether the other stakeholders felt the same way as the principal, i.e. that everything had changed over the past year Thus, the second round of interviews were conducted, and I wrote the second image in 2003. The result, along with the first image, was also returned as feedback to the school leadership and teacher groups.

The same procedure was followed two years later in 2005.

READING OFFICIAL DOCUMENTS, FROM THE FIRST IMAGE IN 2002

Established in August 2001, the school only accommodates students in grades eight to ten in five large, flexible learning environments. At present, there are approximately 80 students in each grade

and they work in multi-age groups of 60. Situated in a lower middle class area, very few parents have completed a higher education and sixty percent of the students speak Danish as a second language. The school's concept of education puts emphasis on the importance of enjoying school, mutual respect, and democracy in teaching and school life. The school website also stresses the fact that students have a number of different intelligences. The twenty-six teachers are relatively young and very committed to the school. The senior management team (SMT) comprises the principal and five department/team heads.

FROM THE FIRST IMAGE, THE INTERVIEWS FROM AUTUMN, 2002

One year after the school was established, the general understanding of leadership and of who exercises leadership functions and roles is ambiguous at this point in time. The principal and the deputy principals paint a picture of a relatively clear and transparent division of decision-making and devolution of power from principal to department/team head to teachers and to students. The SMT finds that the flat leadership structure gives a great deal of discretionary power to teachers and students, but that they are apparently unable to see that this is the case. Teachers say that it is hard to see which competencies each of the SMT leaders have. They are also uncertain as to the roles of the self-managing teams. Instructional leadership seems to be rather indirect. The principal is responsible for activating people and projects, creating the school vision, building up an appropriate working environment, and taking care of relations with local authorities and the local community. Although the department/team heads have other more direct educational responsibilities, most of this is left to the teachers. Leadership, it seems, is chiefly tied to the principal and the department/team heads. Teachers do not see themselves as leaders and neither do the students. Leadership is about administration, decision making and (for students) the enforcement of rules.

As the following quote shows, the principal believes that everyone employed on the staff should have a leadership function.

> *We have a flat structure comprising teacher teams, classroom support and administrative staff. Finances are delegated to our various departments. They have lots of autonomy. The lines of communication are therefore very clear. The department leaders have pedagogical autonomy within the framework of our policies and the 'project work' concept. Each teaching team controls the teaching programme.*

The *principal* says that SMT is concerned with clearing the path for learning to take place and that it is involved in the overall development process for teaching. The dispersal of leadership in the departments supports this. The *teachers* say that there are connections, but that they are hard to describe. Apparently, what they are referring to is the link between SMT and teachers,not the direct link from the principal to student learning. Student and parent representatives found it hard to answer these questions.

Comments – At Present

The first image clearly depicts a new school one year later at the time the interviews were conducted. Different from an average Danish school in that it serves a narrower age group, the school was also started with a new kind of leadership structure. The result is a high level of confusion when it came to finding and constructing relations and positions, procedures and practice from day one.

FROM THE SECOND IMAGE, AUTUMN 2003

The principal says that the leadership model was new to both teachers and leaders in the beginning, and finding new culture, procedures and structures proved to be difficult. Self-steering or self-management were not only a matter of taking charge of leading

part of the education and the school, but also taking over responsibility for those aspects of school life. Self-management meant that the teachers and leaders had to develop new relations and new procedures for interaction between department and team leaders, between department leaders and teachers and between department leaders and the principal. In the beginning in 2002, some teachers felt that self-managing teams equated to total freedom for teachers. In the autumn of 2003, some of those teachers had either left the school or realised that leading is a combination of freedom and responsibility.

A teacher from the development committee says that HGO has developed an exciting educational climate in the interplay between the educational foundation, which everybody accepted when they applied for their jobs, and personal experience. It is a challenging enterprise, because time is a scarce commodity. This is not the case, however, because of the structure and culture of the school. One of the features of HGO is the flexible creation of classes that allows room for allocating more resources to some student groups if it is deemed necessary socially or for the subject matter. This feature is the basis for making HGO broader and more capable of making room for and taking care of all kinds of students. Teachers also feel that this aspect of HGO is a major element that helps students develop into being more self-managing and responsible. One teacher reports that:

> *Leadership is about overview, identification, empathy, the competence to lay down educational tracks, educational direction and to be visible…I like a leader who is committed to both structure and plans, and most certainly to education, and who has her finger on the pulse of what is happening.*

Comment – At Present

During the second year, teachers participated in many in-service

courses and seminars at the school. The teams met at least once a week to make plans and evaluate instruction. Teachers and leaders alike welcome the many visitors that come to the school. The school's image and results from the survey were returned as feedback for discussion in the teachers' council, a mixture that, according to the SMT, might well have 'irritated' the teachers and leaders' perceptions.

FROM THE THIRD IMAGE, WINTER 2005

After reading the portraits from 2002 and 2003, the principal and deputy principal find that the biggest differences occurred from 2002 to 2003, to the point that it seemed like there were two different schools. When the school opened, there was a general sense of insecurity regarding the systems, relations and decision making. Now, a number of routines have been established, and that is *"a good thing, too"*.

The teacher teams function much better now. Sometimes, when there are problems with relations in the teams, the SMT is called upon, but mostly the department leaders can lead their team productively. Teachers now understand more fully the space they have to manoeuvre within the teams. One reason for this development is that two-thirds of the teachers who were there when HGO started decided to leave and have been replaced by other teachers who are more willing and able to work in this unique school.

The SMT is present and visible in school and is often called upon to act as a sparring partner for teams and teachers, altering the view of the SMT as the boss to it being more like a group of critical friends. The leadership team (SMT plus department leaders) meets every two weeks to discuss day-to-day operations and long-term strategies.

In a group interview with teachers and department leaders from

the developmental committee, teachers were described as the ones who lead classes and students as they plan and structure teaching and learning. They guide students and carry the overarching responsibility for the situation. They pose critical questions regarding student work to provoke students into reflection. They work as critical friends.

Members of the committee find that collaboration between teachers, and between teachers and the leadership, has improved greatly since 2002 because the relations within the teams have been made clearer and the relations to the SMT are also more transparent, cementing a strong sense of being self-governing teams.

Five ninth graders explained in a group interview that student leadership exists within the group:

> *If somebody gets a good idea in relation to the task or has some kind of insight beforehand, it seems natural that he or she takes on a leadership role for a period of time.*

Teachers exercise leadership when they inspire and motivate students to work with an issue or a theme, and when they get students to follow up on a topic with their own ideas. Sometimes students come up with ideas. Teachers select the overall, thematic groups while the students form the working groups. Teachers also lead students as they work in the project groups by keeping an eye on the work they do. One student explains,

> "*If something needs to be corrected they always take you aside and ask you to assume responsibility for your own learning. It always takes place in a dialogue, not as a form of one-way communication".*

The influence and leadership of the SMT is not visible on an

everyday basis, but "*they must have an indirect influence through teachers*" the students added.

Comments – At Present

When HGO was established, confusion reigned because positions and power relations were not yet transparent between teachers, department/team leaders and the principal. However, applying the animated image to look back over four years, practitioners were able to discover that the teachers had developed, understood and accepted the space available to manoeuvre within the teams and in relation to the leadership. Both teachers and the SMT claim that a culture, structure and relations have been developed and clarified in a continuous process of discussions, dialogue and negotiations between all parties.

Teachers maintain that the self-managing teams are working well and that both department / team leaders and other teachers take on leadership tasks. Equally as important is the fact that teachers now seem to accept the leadership of the department and the team leaders.

The first round of interviews showed that students found it difficult to talk about leadership. They were uncertain as to who exercised leadership in the school. "Is it the secretary?" one of them asked. That changed over the years and in the last interview, students were able to talk about the principal's and teachers' leadership in addition to student leadership. This may be the result of the schools' focus on the project work method and the development of that method to fit local demands, as well as the students' need to feel attached to groups of peers and the leadership roles and responsibilities they now and then take on. Leadership is claimed to stretch over (Spillane 2006) the whole school.

TO SUM UP

These short narratives show that leadership developed differently

in the two schools over the three to four years, they participated in the Leadership for Learning project. Due to factors that are partially outside and partially within the realm the principal's influence, both leadership practice and leadership perceptions developed differently in each school.

It is fair to conclude that leadership is distributed in both schools. Distribution in this sense is not synonymous with an alienating and controlled distribution of labour, but includes both the democracy-doing and creation of autonomy because both responsibility and decision making are distributed (Woods 2004). But the distribution works very differently and has been developed in dissimilar ways in the two schools. While it seems that teachers and leaders at HGO have taken this situation on, this does not seem to be the case at EAS. Over the three year period, the EAS teachers and leadership have apparently separated their actions. They still talk with each other, but only seldom do the words turn into actions. They seem to have divided the school into two parallel spheres. One sphere comprises the classrooms and the teams where teachers lead, and the other sphere is the school leadership with the SMT at its helm. Nevertheless, the direction the SMT sets for the school does not affect teachers. This development emerges very clearly from the animated images, but discovering the cause has been difficult. The deputy principal's illness has meant a large administrative workload for the principal that has hindered him in communicating and collaborating in practical ways with teachers. His leadership and presence has diminished and that could be part of the explanation as to why teachers withdraw to their groups and classrooms.

At HGO, the distribution of leadership has developed differently. In the beginning there was a lot of uncertainty and confusion because of the very new situation everyone found themselves in, but the animated images show how both structural and cultural matters were sorted out so that teachers and students took over

their leadership roles and the SMT worked to distribute the responsibility to them. This development seems to be a result of a targeted and active school policy. The principal openly and explicitly arranged courses, learning situations for teams, time for collaboration in teamwork etc.

Teacher teams are the one preferred social technology that these and many other schools use in order to further collaboration and disperse responsibility and leadership. In both schools there is an emphasis on teacher teams as a structural tool (as part of the formal structure of schools) and as a cultural community (actually functioning as communities for collaboration and interaction between teachers) (Gronn 2002). Teacher teams are intended to function as platforms or scaffolds for planning and evaluating instruction, discussing the direction of the school and for teachers' continuous professional development. Teams are thus expected to function as integral parts of the management and leadership of schools in collaboration with both the SMT and students.

At EAS, the teams seem to function on the basis of tradition, routines and teacher collaboration. The principal, however, does not interact much with teams. At HGO there is an intricate interplay among teams, department/team leaders and the principal in which all parties influence each other. Relations between teams and leaders often appear to be only structural in EAS, whereas they are both structural and cultural in HGO because agents interrelate their actions in a heedful way (Weick & Roberts 1993). Members of the team act jointly with the principal according to social norms - shared understandings of the space available to manoeuvre - which are created and negotiated as agents act according to them.

The author is not suggesting that the influence of the animated images or the action-research project as a whole is the sole source of influence on the participants in the schools. Many other agencies, authorities, processes, information etc. have an impact on the

thinking of principal and teachers, but I think that this short article has demonstrated that the animated images method can be used for the purposes intended, i.e. action learning and action research. Action research needs methods that can both record the situation and the processes while simultaneously functioning as facilitators of the actions intended. The excerpts in this article demonstrate that the method works. When the images were presented to stakeholders, they were able to recognise their schools, the relations and leadership and in this way validate the images as valid descriptions of aspects of their schools.

At the same time, the images were used as tools for reflection and negotiation of meaning within the school and the school development process between the principal, teachers and critical friend. As mentioned previously, looking back in time from the present position also indicates a possible future (Weick, 2001).

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CULTURAL CENTRES' SUPPORTING TEACHING AND LEARNING

Ian Bowell

New Zealand primary schools' arts education programmes are becoming marginalised by a combination of an expanded curriculum, national testing and a lack of curriculum support. Using data from two studies, this paper examines the role played by museums and galleries (cultural centres) in supporting teaching and learning and teacher development within local primary schools. Using Lave and Wenger's theory of 'communities of practice' to describe museums and galleries, this paper examines the dynamic relationship between cultural centres and primary schools. Analysed data from both projects point to the importance of 'situated learning' in enabling students to develop creative and critical thinking skills and support teachers as they develop confidence in teaching.

INTRODUCTION

Primary schools' arts education programmes in Australia, the US and United Kingdom are under pressure from a combination of an expanded curriculum, national testing, and a lack of curriculum support. Garvis and Pendergast (2010) came to the conclusion that the arts were becoming marginalised, following the introduction of a national assessment programme in Australia. Barnes and Shirley (2007) recognised that the Arts in primary schools in the UK suffered after the government pushed for a rise in literacy and numeracy standards in 1997. In the US, a study of the 'No Child Left Behind' policy's impact on art education reached the conclusion that the policy had a negative effect on school art education programmes (Sabol 2010).

In Aotearoa New Zealand, primary schools face a similar challenge. An expanded curriculum, the withdrawal of professional

development in the arts, and the introduction of national numeracy and literacy standards threaten arts education in primary schools. Traditionally, New Zealand primary schools have relied on a teacher advisory service to provide specialist curriculum support, this service ceased in 2010. Price (2010) said that New Zealand primary school teachers face a challenge of finding suitable support to increase their understanding of art educational practice.

This paper, through qualitative data, considers the role played by three museums and one gallery and their educators in enhancing the delivery of art-based curricula programmes. Given the need to respond to the challenges described above, and the need to evidence our practices and policies, it is important that the impact of educators working in museums and galleries be better understood. Using the model of communities of practice as described by Lave and Wenger (1991), the purpose of this paper is to shed light on the impact of these educators. To date, there has been a dearth of published work in the area to which this paper is a response.

Comparing analysed data (questionnaires, semi-structured interviews and focus group discussions) from two studies, this article looks at how museums / galleries support primary schools in their communities. The two studies are: a pilot project using museums and galleries to develop the confidence of newly qualified primary school teachers to teach visual art and a study examining the relationship between museums and galleries and primary schools that frequently use them. The interviews, questionnaires and focus group discussions gauged the project participants' perceptions of the role played by museums / galleries in primary school education.

MUSEUM AND GALLERY EDUCATION

Examples of cultural centres providing support for teachers and teaching can be seen in many countries where museum and gallery

education is offered. In the United Kingdom, Davies (2010) described the use of cultural centres (children's theatres and museums) to help student teachers develop confidence in the teaching of the arts. Also in the UK, the 'Out of Art into Literacy' (2010) exhibition at the National Gallery showcased a project between the National Gallery and local primary schools that used artworks to develop children's literacy skills. Often cultural centres provide professional development programmes to teachers such as New York's Museum of Modern Art (2011) where courses are offered in incorporating contemporary art in classroom programmes. Museums / galleries often offer a comprehensive range of practical activities for students like the Museum of Contemporary Art (2011) in Sydney that provides a range of practical visual art activities associated with its exhibitions.

During a recent visit (September 2010) to the Tate Modern, the author observed school-age students working in all the gallery spaces. Fold-away stools made it easy for students to sit with art works while completing research projects that often included drawing processes. These gallery spaces had become an extension of the students' traditional classrooms.

Good practice in the classroom is often exhibited by student participation, inquiry and collaboration. Often the role of the museum / gallery educator is to replicate this good practice in a setting outside the traditional classroom. According to Hughes, Jackson and Kidd (2007), museums are places of learning and memory increasingly attempting to engage visitors' emotions. Vallance (1995) said that the role of a museum educator is to enable the visitor to connect back to the museum or gallery artifact and make meaning from the curator's selection and arrangement and the visitors' own selection and sequence of exploration. This view could describe the role of a teacher helping students make sense of the world around them using the content presented to them and the knowledge and understanding they bring to the classroom.

Tools used by teachers to engage students often involve a series of questions designed to help them analyse and reflect upon the content making connections to their developing understanding. Museum educators also use a series of questions designed to enable students to engage with artifacts within the cultural centre and analyse their content.

The term 'cultural centres' has encompassed everything from sports stadiums to museums. In this paper, the author uses the term to describe museums and art galleries whose programmes are available to the public. Vallance (2007) viewed cultural centres as essential components in formal arts education. She makes the point that they may provide remedial support for schools who have omitted arts learning opportunities. In New Zealand, the programmes offered to schools by cultural centres are funded under the 'Learning Experiences Outside the Classroom' (LEOTC) programmes which are partly funded by the New Zealand Ministry of Education and are described by them as curriculum support projects. The Ministry makes the point that LEOTC (2011) contributes to curriculum-related programmes benefiting New Zealand school students. It seems, therefore, LEOTC programmes that receive government funding are designed to support the delivery of the New Zealand National Curriculum (Ministry of Education, 2007).

CULTURAL CENTRES AS COMMUNITIES OF PRACTICE

The term 'communities of practice' has grown from an original description by Lave and Wenger (1991) to describe vehicles of learning. They described a process, where a newcomer to a community learns from experts within that community, gradually becoming a full community participant. According to Hildreth and Kimble (2008), one of the key components of a community of practice is that they are ideal environments for developing and sharing knowledge. Viewed through the lens described by Hildreth and Kimble, cultural centres can be seen as a community of practice

with the museum / gallery educator performing a key role enabling community newcomers to develop their knowledge.

In describing communities of practice, Islam (2008) and Lave and Wenger (1991) use the lens of social-cultural theory to understand them. Learning processes are situated in social situations. Lave and Wenger make the point that a community of practice is socially situated with new community members learning through a process of acculturation.

Us e of this view of communities of practice places cultural centres in a key position to help students develop their knowledge outside the traditional classroom environment. The research and examples described above suggest learning in cultural centres is likely to be situated within a social experience as described by Lave and Wenger.

The following sections describe the two projects that provide the empirical basis for this paper. The personal views of primary school principals, teachers and museum / gallery educators (expressed in the questionnaires, interviews and focus groups) describe the use of cultural centres and their role in students' education.

PROJECT DESCRIPTIONS

Project One: Supporting Provisionally Registered Teachers

In January 2010, a two-year pilot project was initiated in Wellington, New Zealand to explore ways to increase the confidence and expertise of newly trained primary school teachers in the teaching of visual art. Drawing on the experiences described by Andrews (2006), Davies (2010) and Hudson (2005), the project used a network of existing visual art expertise within the community to support Provisionally Registered Teachers (PRTs). To become a fully registered teacher in New Zealand, PRTs must be employed in a teaching position and complete a two-year programme of advice and guidance, supervised by a fully registered teacher. Given that the first two years are recognised as a time when

teachers develop their teaching confidence and expertise, this was viewed as an opportune time for teachers to develop their confidence in the teaching of visual art.

The project was funded by Ako Aotearoa, New Zealand's National Centre for Tertiary Teaching Excellence. Throughout the project, Ako Aotearoa reviewed and disseminated the project's findings for the benefit of other tertiary educators and learners. Prior to starting the project, ethics approval was granted by the Human Ethics Committee at the [Institution]. The community network supporting the PRTs comprised of four institutions, each responsible for developing and delivering workshops related to the use of visual art within the classroom.

Each institution had at least one visual art education expert who was either a gallery or museum educator, a visual art specialist teacher, or a practising artist. The expert designed and delivered two workshops. Thus, the PRTs participated in eight workshops during the two years of the project. The experts worked as a team to develop and evaluate the workshops, based on the feedback given by the PRTs. Each workshop focussed on developing practical understanding and confidence in visual art and its teaching in the classroom. In addition, three of the four visual art experts acted as mentors to the PRTs, using both face-to-face and online mentoring. The online setting enabled PRTs to share and develop visual art teaching resources based on the content of the workshops.

Each practical workshop, which used specialist visual art teaching workspaces provided by the institutions organising them, focused on developing understanding of and confidence in visual art and its teaching. Each workshop was structured around a range of practical visual art activities interspersed with informal discussions about the ways these activities could be used within a teaching context. Following the workshops, the participants were encouraged to use the ideas and techniques explored in the

workshops within their own teaching. After the first workshop, the participants were encouraged to bring examples of visual art work their students had completed, as a result of their teaching, to share ideas and discuss their teaching of visual art. Images of work completed by both the participants and their students were posted and shared online. Twelve volunteer PRTs took part in this project, all from the same one-year postgraduate primary teaching diploma course and teaching in the Greater Wellington region. A control group of volunteer PRTs was also established to compare data.The central research question in this project was:

> To what extent can a community support network develop the confidence and expertise of a group of provisionally registered teachers in the teaching of visual art?

A mix of qualitative and quantitative data was collected and analysed, using a multi-method approach (Anderson 1998; Best & Kahn 2006; Cohen & Manion 1994; Yin 2006), enabling triangulation to address the above question. Data collection followed each of the eight phases. Data from the semi-structured interviews and questionnaires, focusing on both the PRTs' self-reported confidence in the teaching of visual art and their previous visual art experience, were collected at the start of the project, and at the end of each workshop, the PRTs completed another questionnaire that focuses on the effectiveness of the workshop in developing their confidence in teaching visual art. At six-monthly intervals (6, 12, 18 months), focus group discussions and questionnaires were used to monitor any change in the PRTs' perceptions of their confidence in teaching visual art. At the conclusion of the project, each participating PRT took part in another semi-structured interview focusing on their confidence in the teaching of visual art. Data from questionnaires were collected from the control group half-way and at the conclusion of the project. The questionnaires are the same as those used in the study group, focusing on teachers' self-reported confidence in the teaching of visual art. The data collected from the interviews and focus group discussions were to validate the data from the questionnaires, and to identify any common themes and issues that emerged.

Project two: Museum and Gallery

The second project (also two years and beginning January 2010) used four centres (three museums and one gallery) to investigate the relationship between museums and galleries and the primary schools that use their education programmes. Prior to starting this project ethics approval was applied for and gained from the Human Ethics Committee at the institution.

Research Design

The central research question in this project was:

> What support is provided by museums and galleries to local primary schools?

Semi-structured interviews were conducted with three principals and six teachers from primary schools that regularly use education programmes offered by the museums / galleries. Eight museum/ gallery educators who designed and developed these programmes were also interviewed. These semi-structured interviews were analysed using a system of open coding (Glaser 1992).

Initially, interview transcripts were analysed to identify themes within each participant group – principals, teachers and museum educators. Identified common themes were then used to re-analyse the transcripts. This paper draws upon the perceptions of the participants contained within the qualitative data in project one and compares these with the perceptions of the participants contained within the qualitative data in project two.

Project one themes

Supporting PRTs

Evidence from the analysed data suggests the confidence of primary school teachers to teach visual art increases when there is a combination of: 1. Practical visual art experiences; 2. Using museums/galleries; and 3. Reflecting on, and discussing, visual art practice and teaching. Participant PRTs referred to practical visual art experiences as one of the main factors enabling them to

develop confidence in the teaching of visual art:

> *It (practical activities) has definitely helped with what I can do with regards visual art. I have been able to take what I have learnt on the course and use it with whatever topic I am doing at the time.* (PRT)
> *We are doing practical things then it gives you more confidence to go on and do that at school…* (PRT)

PRTs' comments confirmed the analysis of data collected from the post-workshop questionnaires, where practical activities were identified as the most important element in enabling them to develop confidence and expertise to teach visual art. Practical visual art experiences formed the core of the workshops, and confirmed findings of literature that point to the importance such experiences play in enabling teachers to develop their understanding of visual art education and confidence in teaching it (Alter, Hays & O'Hara 2009; Andrews 2006; Davies 2010; Hudson 2005; Lowenberg & Cohen 1999).

As the project progressed, the expertise found within the museums/ galleries used for the workshops and the participants' opportunities to reflect upon their own practice and share this reflection with others became increasingly important:

> *If I needed any support or had questions I could email her* (Gallery educator)
> *I found really valuable was meeting with other PRTs and talking about your experiences.* (PRT)

The developing relationship between the participating PRTs and the cultural centres involved in the project increased the PRTs' confidence to teach visual art and enabled the cultural centres to strengthen links with primary schools within their community.

Data analysis also revealed practical visual art experiences was enriched by the ability of the PRTs to discuss and share ideas, and the availability of resources and expertise provided by the cultural centres. It became evident that the PRTs' confidence to teach visual art also developed as a result of the resources and expertise provided by the cultural centres taking part in the project.

According to Talbert and McLaughlin (2002), collaborative teacher communities improved teaching practice as a result of teachers sharing knowledge, evaluating new practices, and sharing a repertoire of practice. The opportunity and environment created by the cultural centres taking part in this study enabled the PRTs to develop their expertise in the teaching of visual art. The participant PRTs became a collaborative teacher community developing their confidence in the teaching of visual art by sharing knowledge and evaluating new practices.

Project Two Themes

Use of Museum and Gallery Educators

Analysis of the semi-structured interviews with principals, teachers and museum / gallery educators from project two revealed several themes (See Table 1), some of which were common to all three groups.

Table 1
Semi-structured Interview Themes

Teachers	Principals	Museum and Gallery Educators
Practical activities Development of creative and critical thinking skills Transferability of skills in range of curriculum areas Student engagement Gallery educators' expertise	Motivation (student) Transferability of skills in a range of curriculum areas Critical thinking Building relationships	Practical activities/authentic experiences Supporting school programmes Developing relationships with local communities Teacher professional development

Practical activities/Student engagement

Discussing practical activities, teachers and principals made the connection between these activities and engaging students:

A whole new richness, it makes it come alive for them, it's hands-on experiences. (Teacher).

They have built up quite an ability to be able to respond to art works. (Principal)

The museum / gallery educators referred to practical activities as authentic experiences that motivate students:

There has to be a hands-on practical component which schools really like,. (Museum and gallery educator)

You want it to be a memorable experience, enjoyable and fun. You want them to feel a spark of imagination making them more motivated to learn. (Museum / gallery educator)

The connection between practical experiences and student motivation links to the theory of situated learning. Lave (1988) suggested that a great deal of what is learnt is specific to the situation in which it is learnt, arguing that learning in a natural setting contrasts with classroom settings. He made the point that learning occurs as part of the activity, culture and context in which it is situated.

Development of creative and critical thinking skills

The teachers and principals interviewed linked cultural centre visits to the development of students' creative and critical thinking skills, believing that the programmes offered encouraged these:

The depth of thinking, it certainly helps with critical thinking. (Teacher)

The richness of the discussion and the inquiry, they become inquiry learners. (Principal)

You want students to become life-long learners and make connections between various bits of knowledge by asking questions. (Museum / gallery educator)

It is unclear from the analysis of these semi-structured interviews whether the cultural centre visit enables students to develop their critical thinking skills or the way the museum / gallery educators facilitate student learning. What is evident is the participant teachers and principals believe students' critical thinking skills are developed as a result of the cultural centre visit. Commenting on the expertise of the museum / gallery educators, one teacher said:

> *....for the less experienced teachers it is extremely good models of teaching..*

It may be that a combination of practical experience and the expertise of the educators in facilitating student discussions enables the students to develop their critical thinking skills.

Transferability of skills in a range of curriculum areas

The teachers also talked about the benefits of the museum / gallery visit back in the classroom. Not only did the teachers discuss the development of creative and critical thinking skills but also the enrichment of students' language and writing skills. The following comments refer to the students two weeks after their LEOTC visit:

> *Lots of language. In their writing. They are talking about it all the time.* (Teacher)
>
> *Their literacy programme, definitely in their writing. Particularly around their stories and the reading.* (Principal)

The principals talked about the links between the cultural centre visit and the development of a range of student expertise. When talking about a visit, the whole school had made to an exhibition of abstract painting, one principal said:

> *It is going to be linked to Maths and the work they are doing (Visual Art) tied up with what they did at the art gallery.*

Analysis of the data indicated that for both teachers and principals, an important aspect of the cultural centre visit is how students built upon the expertise they gained during the visit on returning to school.

Building relationships within local communities/Professional development for teachers

The teachers and the principals talked about how schools and cultural centres had developed a working relationship with each other. One museum/gallery educator talked about their role in forming a working relationship with local schools to develop activities to supporting school programmes:

> *Ultimately I'd like them to have an ongoing relationship with using us as a part of their visual art or social science or other programmes.*

The cultural centres see their role in developing programmes as one of collaboration with local schools. Their focus is responding to the needs of the schools as well as responding to the changing exhibits within their institutions.

In developing a working relationship with schools in their community, one museum/gallery educator talked about developing connections within the wider community:

> *…facilitating connections especially arts in the community.*

The cultural centre associated with the last comment has organised many projects involving artists from Fiji, Papua New Guinea, Australia, Canada, USA, as well as New Zealand working with students from local schools. It seems the connections and expertise associated with the cultural centres can be used to develop working relationships with schools within the cultural centre's community. Museums / galleries are cultural hubs and the educators' brokers making connections between artists and schools.

Discussing their relationship with schools, the museum / gallery educators talked about the ways they support teachers:

> *Teachers also see that going to the gallery is another way of opening learning for the kids it is good for them to see other educators with specialist knowledge teaching and interacting with the kids. We have a secondary teachers' visual arts cluster group; Teachers' drawing courses; and Open days for teachers.*

The museum and gallery educators see part of their role as providing professional development to teachers. As mentioned earlier, at present in New Zealand, there is a lack of professional development available to primary school teachers in a range of curriculum areas, partly due to the removal of national advisory curriculum support. Museum and gallery educators could provide curriculum support to schools within their local communities. The advantage would be the ability of cultural centres to respond to the needs of local schools targeting professional development.

Themes common to both projects

Analysis of the themes from both projects reveals two main categories (the role the cultural centre plays in student learning and in supporting teachers through professional development) and one overarching theme, connecting communities. (See Fig.1)

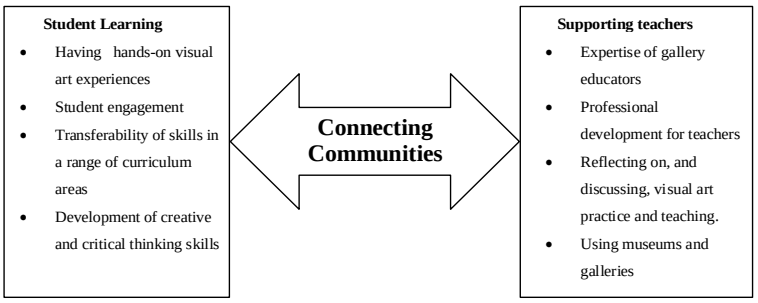

Fig.1 Common Themes

Student learning

Analysis of the data points to the role cultural centres play in supporting student learning. Lave (1988) argued learning, as it normally occurs, is a function of the activity, context and culture in which it occurs (i.e., it is situated). Situated learning contrasts with most classroom learning activities which involve abstracted

knowledge out of context. A critical component of situated learning is social interaction, where learners become involved within the site and activities associated within that site. Brown, Collins and Duguid (1989) have further developed the theory of situated learning, emphasising the idea of cognitive apprenticeship. This is described as students acquiring, developing and using cognitive skills in an authentic setting. Learning, both outside and inside school, advances through collaborative social interaction and the social construction of knowledge.

Analysis of data from both projects reveals the importance interviewees attach to the practical activities associated with the cultural centre visits. The PRTs emphasised the importance of working as a group in developing their understanding of teaching visual art. This would confirm the importance Brown, Collins and Duguid (1989) place on collaborative social interaction in the development of expertise. The PRTs talked about the importance of practical activities allowing them to develop their expertise in teaching visual art, and the teachers and principals talked about practical activities enabling students to develop creative and critical thinking skills. Analysis of situated learning by Lave and Wenger (1991) described a process where novices gradually acquire knowledge and skills from experts in the context of everyday activities. Analysis of data from the PRT project points to them gradually developing their confidence to teach visual art as they become more familiar with the cultural centres and the educators within those centres. The cultural centres become increasingly important as a place to gain and develop expertise and a place to inquire and discuss professional practice.

Supporting Teachers (Learning Communities)

Earlier I referred to cultural centres as communities of practice. Riel and Polin (2004) differentiated between communities of practice and other learning communities that focus entirely on completing specific tasks or gaining specific knowledge as being engaged in improving joint practice. The PRTs developed into a

community of practice as they worked towards improving joint practice. They belong to two distinct learning communities, firstly as one of a group of participant PRTs involved in developing expertise in teaching visual art, and secondly as a member of the school in which they teach. The PRTs talked about sharing their developing expertise in visual art with school colleagues:

> *... tell other teachers and give other teachers ideas…show them my work book and show them what we did.* (PRT)

When asked, if this had been done in any formal way, by organising school professional development, the following comment was made:

Yes. I will be doing it on the masks. We did it with the drawing. Taking ideas especially with the portraits we were doing. (PRT)

Developing confidence enabled the PRTs to develop the confidence of their school colleagues in the teaching of visual art. The two communities, of which each PRT is a member, were intersecting. Schwen and Hara (2004) made the point that fully functioning communities of practice are not designed but evolve naturally. The group of participating PRTs involved in the research project evolved into a functioning community of practice supporting its members in their developing expertise and supporting the schools in which they teach.

When talking about taking students to visit cultural centres, the principals and teachers also talked about the opportunity teachers had to view good professional practice exhibited by the museum / gallery educators. It would seem the teachers involved in taking students to cultural centres are given the opportunity to develop their own practice through the observation of the museum / gallery educators. The two communities of practice are intersecting.

Connecting Communities

The developing relationship between cultural centres, local primary schools and local communities became an overarching theme linking the two projects. Analysis of data from both projects points

to the importance the teachers, principals and museum/gallery educators attached to the relationship between the cultural centres and the schools within their community. The principals and teachers talked about the role cultural centres play in the development of teacher expertise, student creativity and student learning. Teachers and students using the cultural centres build upon the knowledge and experience gained during a visit and the cultural centres develop as they respond to the needs of the schools and their own context. The key to this relationship is the cultural centre educator striking a balance between the needs of the school, the local community and the context of the cultural centre.

CONCLUSION

With arts programmes in primary schools being squeezed by a combination of an expanded curriculum, national testing and a lack of curriculum support, this paper sets out to consider the role played by museums/galleries and their educators in enhancing the delivery of art-based curricula programmes. Evidence based upon the perceptions of participants from two research projects points to the important role cultural centres play in supporting student learning and teacher development. Vallance (1995) made the point that cultural centres are important in providing remedial support for arts learning in schools. The evidence presented in this paper supports this view and suggests that cultural centres are important in providing schools with teacher professional development. Using Lave and Wenger's (1991) description of communities of practice, the evidence describes the importance of the working relationship between schools and cultural centres. Hildreth and Kimble (2008) highlighted the importance of communities of practice as ideal environments for sharing and developing knowledge. It was this process of sharing knowledge that was described by the participants as they discussed how they developed their professional expertise.

Analysed data from both projects demonstrate the importance of situated learning in motivating students, enabling them to develop

creative and critical thinking skills. The data also found that situated learning was important in enabling the PRTs and teachers to develop confidence in teaching. Lave (1988) described situated learning as a process of the gradual acquisition of knowledge from experts in everyday activities. The data support this view as the PRTs and teachers described the acquisition of knowledge in a situated learning environment. Brown, Collins and Duguid (1989) emphasised the importance of social interaction in enabling students to acquire knowledge in situated learning. The evidence would support this view as the participants emphasised that the working relationship between the teachers and the museum / gallery educators enabled them to develop their professional practice.The important role played by cultural centres in supporting arts-based curriculum programmes was highlighted by the data. The key to this support was the ability of the cultural centre educators to respond to the needs of the schools within their communities using their expertise and ability to help schools make meaning of exhibits. Hughes, Jackson & Kidd (2007), Valance (1995) and Ross (2007) highlighted the increasing importance played by cultural centres in providing support to schools. The evidence presented in this paper reinforces this view. Although the focus of both projects has been the arts curriculum, other curriculum areas could also benefit from the support of cultural centres. A greater understanding of the role played by cultural centres in supporting student learning and teacher development would encourage all primary schools to use them as an integral part of their programmes.

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UNDERSTANDING MULTIPLE DISADVANTAGES FOR INCLUSIVE EDUCATIONAL DEVELOPMENT OF SCHEDULED TRIBE CHILDREN

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An attempt has been made in this paper to understand the challenges the Scheduled Tribe children faced for more than six decades in India. References have been made to the functioning of Ashram schools in the states of Andhra Pradesh, Chhattisgarh, Kerala, Maharashtra, Odisha and Madhya Pradesh in order to understand some of the disadvantages they face and which need to be addressed in order to bring about holistic and inclusive development among the Scheduled Tribe communities.

INTRODUCTION

The Government of India is committed and deeply concerned for the development of the Scheduled Tribes of the country. Continuous efforts were made in the Five Year Plans. Special programmes are formulated and the central government extends adequate resources for developmental programmes in the tribal habitations. However, the percolation of these programmes and plans at the grass roots has happened to suffer from some hindrances. The population of Scheduled Tribes (STs) according to the 2001 census is 8.43 crores, constituting about 8.2 per cent of the country's total population grown at the rate of 24.45 % during 1991-2001. Of these, about 1.32 million (1.57 per cent belong to Primitive Tribal Groups (PTGs). The percentage of population of the Scheduled Tribes varies among the states. More than half of the Scheduled Tribes population is concentrated in the states of Madhya Pradesh, Chhattisgarh, Maharashtra,

Odisha, Jharkhand and Gujarat. However, the tribal percentages of these states' population vary from about 8 to 22 per cent. On the other hand, several smaller states, notably in the north-east of the country, have much higher percentages (ranging from 64 to 95 per cent), but account for a small proportion of Scheduled Tribes. .

DEVELOPMENT OF THE SCHEDULED TRIBES – AN OVERVIEW

In this land of ethnic and cultural diversity, at one hand of the spectrum, we have instances of tribes whose numbers are hardly distinguishable from the non-tribals, who are economically as advanced as other members of Indian society. A few advanced tribal groups are the Meena, the Gond and the Naga. At the other end, are the Onge, and the Jarawa tribes of Andaman and Nicobar Islands, the Juang and Bondo of Odisha and the Muria and Madia of Madhya Pradesh. A picture of any of their representative bears a stark contrast to a Naga or the Meena who are considerably acculturated and even advanced economically and organisationally strong. On the other hand, the other communities cited are small in number, weak in organisation and economically poor. The common salient feature of the Scheduled Tribe communities in India is that they occupy tracts of sloppy land, hills and forests, having been ousted from the great fertile valleys. They are, thus, in command of only poor resource regions, which affects immediately their economic conditions. The soil is impoverished and rainfall is erratic. At present also, shifting cultivation has impoverished in these regions. The communication system and other infrastructure in the area is little developed which has led to the isolation of the Scheduled Tribes both from the outside world and from one another. The level of utilisation of technology in the tribal areas has remained abysmally low. The combination of poverty, lack of resources,

and low level of technology available has led to almost subsistence economy in greater part of the tribal land.

Agriculture is the most important economic pursuit of a vast majority of the tribal communities. With the given agro-climatic conditions and low level of technology, the productivity is low and the return supports a low quality subsistence economy. The crops mostly grown are maize, millets, oilseeds and pulses. There is considerable scope for raising the standard of productivity. The second major occupation is linked with forest economy. The tribal communities tend to seek employment as daily wage earners from the forest department and contractors in forestry operations. Equally important, they collect minor forest produce, particularly after the agricultural harvest, and sell it to various agencies. With the near extinction of wild life in the forests, hunting is now more of a pastime then a livelihood. So is the case with fishing. But these two pursuits, namely, hunting and fishing, are still followed by very small communities who are more or less cut off and who may still be considered as in the pre-agricultural stage.

It will be very apt to refer to Pandit Jawaharlal Nehru, the first Prime Minister of Independent India who had a key role to play in the planning and implementing various programmes for tribal development, and bringing them into the fold of nationalism. Pandit Jawaharlal Nehru's Panchsheel (*Five principles*) envisaged the development of people in the lines of own genius, respect of tribal rights in lands and forests, encourage self-management, work through tribal's own social and cultural institutions; and indicator of success to be sought in quality of man and not in the amount of money spent remains the most important reference point in the formulation of tribal policies in India. Despite the fact that it is more than five decades of independence and many committees as well as commissions have

evolved during these few decades but the Panchsheel propounded by Nehru remains to be very much appropriate for the development of the Scheduled Tribes of India. All the five principles are like five parables protecting the rich culture, tradition and rights of the Scheduled Tribes of India. The doubts with which the Panchsheel has been visualised has been found to be coming true, as there has been continuous exploitation of the Scheduled Tribes, their rich mineral resource forests which being habitations of these tribal groups, their displacement due to developmental work although there are forest acts in place which are deviated in the name of development while there are restrictions for extending the rights to tribal groups for utilising minor forest products have remained a bone of contention due to age old forest acts. It gives abysmally a poor image of development of the Scheduled Tribes in the independent India.

TRIBAL GROUPS, HABITATIONS AND ACCESS TO SCHOOL FACILITIES

There are 573 major tribal groups in India, each one associated with a specific geographic area, some more dispersed than others. Most have their own language, which is generally different from the 'mainstream' language of the state in which they live. There are a total of 270 such tribal languages. Tribal people tend to live in two main types of situations: (a) in 'mixed' (tribal and nontribal) rural communities, within reach of educational and other opportunities and resources, and (b) in habitations that are small in size and located in relatively inaccessible hilly or forested areas of the country. About 22 per cent of tribal habitations have a population of less than 100 people, a further 40% have 100-300 people, and the rest around 300-500 people. The distribution of tribal people in these types of settlements varies markedly by state, district and even block, calling for different strategies to be used in different areas to provide elementary education to tribal

children. The proportion of children out of school in remote tribal areas is usually higher than among tribal children living in non-tribal areas. The main reasons for this are the limited educational infrastructure available in tribal areas because of their remoteness; tribal hamlets being cut off from main villages or well-populated rural areas by geographic features; the difficulties faced by children living in smaller habitations in accessing existing formal schools; and so on.

Other reasons for low school enrolment among Scheduled Tribe children include the reluctance of Scheduled Tribe families to educate their children - in addition to the high illiteracy among Scheduled Tribe parents; they may not value the education available, particularly in relation to its opportunity costs. Children are crucial family workers in the tribal economy which includes agriculture as a main occupation, cattle grazing, labour on work sites, collecting firewood or other minor forest produce, stone quarrying, mining, and home-based work such as processing forest produce. Low levels of learning are found among tribal children not only because of household factors and problems with the language of instruction where this is not their mother tongue, but to other school-related variables. The District Primary Education Programme has shown that the achievement gap between tribal and non-tribal children can be narrowed by attention to classroom transactions and the school environment.

THE TRIBAL POLICY - FOCUS ON FORMAL EDUCATION

Realising that Scheduled Tribes are one of the most deprived and marginalised groups with respect to education, a host of programmes and measures were initiated ever since Independence. Elementary education has remained a priority area in all the Five Year Plans and received special attention from the Tribal sub-

plans (TSP) from the 5th Five Year Plan onwards. Education of Scheduled Tribe children is considered important, not only because of the Constitutional obligation but also as a crucial input for total development of tribal communities.

Formal education is the key to all-round human development. Despite several campaigns to promote formal education ever since independence, the literacy rate among Scheduled Tribes has remained low and the female literacy rate still lower compared to the national female literacy rate. Alienation from the society, lack of adequate infrastructure like schools, hostels and teachers, abject poverty and apathy towards irrelevant curriculum have stood in the way of Scheduled Tribes in getting formal education. In order to extend the benefit of education to the Scheduled Tribes, the policies for the Scheduled Tribes envisages that Scheduled Tribes are included in the national programme of Sarva Shiksha Abhiyan run by the Ministry of Human Resource Development. Schools and hostels are opened in areas, where no such facilities exist. At least, one model residential school is located in each tribal concentration area. Education is linked with provision of supplementary nutrition. Special incentives like financial assistance, pocket allowance, free distribution of textbooks and school uniforms are provided. Teaching is imparted in the mother tongue of Scheduled Tribes, at least up to the primary level. Educated tribal youths are given employment as teachers, wherever possible. This will obviate the need to employ teachers belonging to far-off places who find commuting is as difficult as staying in a village with no basic amenities. Pedagogy is made relevant so that the Scheduled Tribes do not find it as alien. Curriculum and co-curriculum include aspects of meta skill up gradation of tribal children. Curricula for meta skill up gradation are to include aspects of tribal games and sports, archery,

identification of plants of medicinal value, crafts art and culture, folk dance and folk songs, folk paintings etc.. Emphasis is laid on vocational / professional education. Polytechnics are set up for studies in subjects like forestry, horticulture, dairy, veterinary sciences etc.

The National Policies on Education 1968 and 1986 have made special mention relating to education of the Scheduled Tribes. NPE 1986 recognised the heterogeneity and diversity of the tribal areas, besides underlining the importance of instruction through the mother tongue and the need for preparing teaching/learning material in the tribal languages. This policy document stated that

- Priority will be accorded to opening primary schools in tribal areas.
- There is need to develop curricula and devise instructional material in tribal language at the initial stages with arrangements for switchover to regional languages.
- Scheduled Tribe youths will be encouraged to take up teaching in tribal areas.
- Ashram schools / residential schools will be established on a large scale in tribal areas.
- Incentive schemes will be formulated for the Scheduled Tribes, keeping in view, their special needs and lifestyle.

The Focus of Sarva Shiksha Abhiyan (SSA)

The infusion of the SSA programmes into the tribal habitations has greatly helped in overcoming the problems of managing the schools and reaching the unreached habitations, regular training to teachers and availability of SSA funds to the teachers for developing teaching learning material etc. The BRC/CRC facilities have been extended to tribal habitations for continuous monitoring of the schooling activities in the tribal habitations.

What does the Quantitative Data on Literacy Reveal?

The literacy scenario of the Scheduled Tribes in general is below the literacy rate of the general population of the country. However, there are tribal groups across the States/Union Territories, where the literacy rates are not abysmally bad and in fact are either at par or higher than that of the literacy rates of general population. For instance, in the State of Assam, the Kachan Tribe has a literacy rate of 81.4%, Rabha Tribe has a literacy rate of 76.2%, and Mikir has 61.3%. In case of the state of Chhattisgarh, Halba Tribes has 74.1%, and Oraon has 62.2%. In Gujarat, the Rathawa Tribe has 75.9%, and the Dubla Tribe has 62.4%. In the State of Rajasthan, the Dhanka Tribe has 61.8% and in the State of West Bengal, the Bhutia Tribe has 72.6%. A study of literacy position of these tribal groups in various states can show the path of development that can be suggested for application in other tribal areas and the success stories can be replicated in order to achieve literacy among the Scheduled Tribes

There is a definite improvement in terms of the literacy rates when compared to the 60s when the literacy rate was only 8.53% and has gone up to 47.1%, in 2001. However, this literacy rate is below the national literacy rate of the country. There is a need for bringing the Scheduled Tribes at par with the general population at the earliest as the gap between the general population and traditionally marginalised social groups - namely Scheduled Tribes and Scheduled Castes – refuses to disappear (Govinda 2001).

The gap between the general and the Scheduled Tribe children in terms of literacy rate during 1960s was 19.77, while it was 23.15 in 1971, 27.22 in 1981, 22.59 in 1991 but has decreased to 17.90 during the year 2001. The various educational interventions in terms of school provision and enrolment drives by roping in the out-of-school children has enabled to contain

the enlarging gaps of literacy between the general and Scheduled Tribe population. There is also a decline in the dropout rates among the Scheduled Tribe children in the primary and elementary stages compared to the past years. The percentage of out-of-school children has also showed decreased tendency.

A look at the literacy rates of the Scheduled Tribe population in various states indicate that except for the North Eastern States, the literacy rates in various states tend to be below the literacy rates of the nation. However, the proportion of the tribal population varies from state to state. Some states have low population and low literacy rates while some have high tribal population and low literacy rates and vice-versa. For instance, the state of Andhra Pradesh has 6.6 per cent tribal population and the literacy of the Scheduled Tribes is only 37.04%, while the state of Arunachal Pradesh has 64.2% tribal population and has literacy rate of 49.62 %. Assam seems to have a better literacy rate which has tribal population of 12.4% and literacy rate of 62.52%. It will be observed that there is disparity in the literacy rates in the states. Some ought to have literacy rates far below the national literacy rate while some are making efforts to be at par with the national level. Perhaps the gap between the general and Scheduled Tribe population in the 2011 census in terms of their literacy rates will come down.

Educational Programmes in the Tribal Areas - Interventions

The tribal habitations are generally devoid of any other private schooling structures. In the absence of the entry of these private schools, the government schools whether they are managed by the education departments or the tribal welfare departments have to take up the challenges of educating the Scheduled Tribe children. So far, the residential Ashram schools and small schools exclusively created in the tribal habitations have been instrumental

in providing schooling facilities to the tribal children. But to due to sparse population spread and inaccessible terrain habitations creating residential schools was not possible. Some of the specific interventions being promoted for tribal children under Sarva Shiksha Aviyan (SSA) are:

- Setting up schools, education guarantee schools (EGS) and alternative schools within one kilometre of all habitations for non-enrolled children and dropouts;
- Alternative schools provide flexibility in terms of timing, learning modalities, etc.;
- Upgrading EGS schools to regular schools after two years;
- Attaching Crèches and pre-school sections *(anganwadis* and *balwadis)* to schools in tribal areas to relieve girls of sibling-care responsibilities.

Several states have relaxed the norms to set up schools - for example, in Andhra Pradesh, habitations with 20 school-age children can have a school; in Karnataka, the norm has been reduced to 15 children for an EGS school especially for tribal areas. In remote tribal habitations in the north-eastern states and Jammu & Kashmir, EGS schools can be opened with only 10 children. Andhra Pradesh has already set up community schools in all habitations with 15 children or more, Kerala with 20, and Madhya Pradesh with 40 children. Other innovative approaches to covering tribal children include "contract schools", "forest schools", summer camps, seasonal hostels, and mobile teachers.

Strategy for Tribal Participation

The SSA programme calls for community ownership of educational activities through effective decentralisation. This involves Panchayati Raj Institutions (in case of ST habitations, PESA), School Management Committees (SMCs), NGOs and women's groups. Programmes can involve tribal people in decision-making at several levels. At the district level,

representatives of tribal people can participate in the annual planning and local-level decision-making, in overseeing a variety of educational activities, and in providing feedback on the programme to higher authorities. At the block and village levels, locally-elected Scheduled Tribe representatives and teachers can be members of School Management Committees (which include the Scheduled Tribe members of the local village *panchayats)*. In predominantly tribal areas, Scheduled Tribe men and women are involved in community mobilisation efforts which include enrolment drives, village meetings, etc. Traditional tribal organisations and local leaders are often involved in these activities. Local approaches to community mobilisation are tribal fairs and festivals to promote education, and traditional media and art forms for communication. Finally, there is an emphasis on recruiting tribal teachers as well as on selection of tribal candidates to fill vacant teacher posts in formal schools. Teachers are also to be consulted in the preparation of district plans. The Right to Education Act (2009) has laid emphasis on providing qualified trained teachers in each and every school of tribal habitations without recruiting any private or contractual teachers. This is another major challenge for the Tribal Development Departments in the tribal dominated states in ensuring qualified teacher force in the schools, besides many other basic school entitlements of RTE.

Institutional Arrangements

The District and State Education Offices have officers specifically designated to ensure that the provisions for the special focus groups and for tribal areas and children are implemented. When necessary, the district units can draw on the expertise of NGOs and other institutions which have worked with tribal people in the field of education. Such expertise is available and is particularly useful in the community mobilisation and pedagogical dimensions.

Specialised institutions (such as the District Institutes of Education and Training etc.) are also available to assist in the development, implementation and management of activities as required. Trained staff is required to carry out the special activities in tribal areas with the necessary sensitivity and diligence. The educational system and several of the related institutions have outreach capacity which can be utilised and developed as needed to serve tribal areas. Specialists in tribal education are often engaged in the planning and monitoring activities of the SSA programmes.

Monitoring and Evaluation

The educational progress of Scheduled Tribe children are monitored through the project Education Management Information System (EMIS). EMIS data are analysed at district and state levels. The EMIS relates school-level data to community information gathered through surveys. Schools are encouraged to share all information with communities (including information on grants received). Notice boards are put up in schools for this purpose. This intends for both transparency and accountability to communities. In addition, the SMCs or user groups, including tribal people, are responsible for continuous monitoring of activities in their areas, and provide feedback to local teachers and officials. The user groups can interact with local groups during their activities, such as village meetings, enrolment drives, etc. Data on indicators enables monitoring of progress. These indicators are: 1. Opening and functioning of schools in tribal habitations in tribal and non-tribal areas; 2. Enrolment and retention of tribal children in schools in tribal and non-tribal areas; 3.Learning achievements of tribal children compared with other groups; 4. Availability of tribal teachers, teachers speaking the local tribal language, teachers trained to deal with tribal children (attitudinal training), and administrators sensitised to tribal issues; 5. Availability of instruction and instructional materials in the local tribal languages;

6. Functioning of facilities such as CRCs and BRCs serving the needs of tribal children; and 7. Availability of other schemes and incentives to facilitate school attendance of tribal children.

Ashram schools – A Context Specific Intervention

One of the major interventions in the field of educating the Scheduled Tribe children is that of the Ashram schools which have been in vogue for the past many years, and have been functioning in the tribal areas. The main objectives of the Ashram schools as envisaged by the various committees and commissions are: 1. To wean the children away from an atmosphere which is generally not conducive for the development of their personality and outlook; 2. To impart general formal education; 3. To impart training on socially useful vocational/crafts along with the general education; 4. To encourage tribal traditions like folk dances so that the schools are not only mere learning places but also centres of cultural activities; 5. To provide close interaction between the teacher and taught through increased individual attention; and 6. To reduce the dropout rate and to improve the retention capacity of the schools. Ashram schools are, in general, residential in nature and the inmates are provided with facilities of boarding and lodging. Moreover, they function within highly structured and systematic framework. The broad policy guidelines for the Ashram schools as envisaged by various committees and study groups on tribal welfare programmes are: 1. Ashram schools should be inter village schools; 2. Ashram schools should be opened in such areas where normal schools cannot be opened; and 3. Most backward tribal groups should be covered. The working pattern, structure and level of education in Ashram schools differ widely among states. In some of the states like Maharashtra and Gujarat, they are mostly run by voluntary organizations as private aided schools. Whereas in the states of Andhra Pradesh, Chhattisgarh, Jharkhand, Odisha, Madhya

Pradesh and Rajasthan, Ashram schools are exclusively under the Tribal Welfare Department of respective state governments. Both primary and post basic levels of education are available in Maharashtra, Gujarat and Odisha. In case of Madhya Pradesh, Ashram schools are usually up to middle stage and at the secondary stage, these are called 'Model Schools'. In Rajasthan, all the Ashram schools cover either primary or middle school stage. In Andhra Pradesh, Ashram schools have primary, upper primary and secondary stages of education. In Maharashtra, Gujarat and Andhra Pradesh, Ashram schools are co-educational, whereas in Rajasthan, Madhya Pradesh and Odisha, the Ashram schools are separate for girls and boys. Ashram schools in Odisha are provided at primary, upper primary and secondary levels. Vocational education is imparted in some of the secondary schools (Sujatha 1983; Patel 1991; Panda 2000).

Status of Ashram schools in the States of Andhra Pradesh, Chhattisgarh, Kerala, Maharashtra and Odisha

The states of Andhra Pradesh, Chhattisgarh, Kerala, Maharashtra and Odisha have Ashram schools functioning for more than four to five decades. The efforts by these state governments in creating special provisions in these scheduled areas through the TSP, MADA and SCA. The tribal development departments are working towards the development of the Scheduled Tribes and are also providing them education. In order to ensure proper development, the central government is also providing special funds for educational pursuits of these tribal dominated states. These Ashram schools have been established with a special cause of fitting into the culture of these tribal societies and provide education to them with a purpose of holistic development of these children and bringing them to the mainstream of the society has a wide range of facilities.

In 2006-07, there were 597 Ashram schools serving the primary, middle and higher levels of schooling in the state of Andhra Pradesh. They have different terminologies such as *Gurukulas* and Ashram schools specifically serving in the tribal areas. These schools are under the purview of the Tribal Development Department of the State and the funds are provided by the state government and Special Central Assistance provided to manage these schools. The Ashram schools in Andhra Pradesh are mostly having good physical facilities and the day-to-day necessities of the tribal children are taken care by the school. It has specific time table and the State government has initiated primers in various tribal languages with the SCERT, Education Department and Tribal Development Department for the benefit of the predominant tribal groups (around 9 primers for tribal groups are being developed). The SSA is deeply involved in providing academic support to these Residential Schools of Andhra Pradesh.

The State of Odisha has also Ashram schools since 1950s. In 2006, there were 143 residential Sevashrams and 457 non-residential Sevashrams at the primary level, 112 residential Ashram schools having classes 1- 10 and 5-10, and 155 boys Ashram High Schools and 91Ashram High Schools for girls with classes 5-12 and 8-12 etc. Residential Ashram schools of Odisha are also managed by the Tribal Welfare Department and the State Education Department is supposed to provide the academic support. The SSA has enabled these schools to obtain certain grants/funds to the teachers and the schools, as well as the BRC/ CRC personnel have started visiting these schools for providing academic support. The State government has recently embarked upon creating Model Residential Ashram schools / Central Ashram schools by upgrading the existing Ashram schools.

The State of Chhattisgarh is one of the youngest states and was carved out from the state of Madhya Pradesh. Unlike the Ashram schools of Madhya Pradesh, where the residences are separate and the schools are separate, the Residential Ashram schools of Chhattisgarh have both the residence and the schools together as has been envisaged in the objective of the Ashram schools in the country. In 2006-07, there were 389 Ashram schools for tribal boys and 247 for tribal girls and 251 co-educational Ashram schools at primary and middle levels with strength of 51,785 students. The state has taken great initiative in improving the facilities of the old schools and has tried to create good physical facilities for the schools. The SSA intervention has been prominent in terms of providing funds and teaching learning material to these Ashram schools. However, there are no institutional arrangements for providing training to these teachers in the state. There are teacher vacancies, which needs to be filled on urgent basis. The schools serving in the interior and particularly the Primitive Tribal Groups need more attention and special programmes for their development, and there are certain tribal groups where the population is under threat (Hill Korbas).

The Tribal Development Department of the government of Kerala has taken initiatives in providing 13 Model Residential Ashram schools (up gradation) and improving the facilities of the existing Residential Schools in the state. The SSA has also initiated process of providing academic inputs to the Ashram schools in the state. The Central Assistance for the Ashram schools which are being provided to these schools is being utilized positively. The other free ships to the children and facilities are provided as per the norms of the Ashram schools with full days food provisions etc.

The state of Maharashtra has government managed Residential Ashram schools as well as aided Residential Ashram schools

under the Tribal Development Department for the Scheduled Tribe Children. In 2007-08, there were 449 government managed Ashram schools and 507 Ashram schools under the government aid category. The total strength of the government managed schools was 1, 62,702 students and the aided Ashram schools had1, 69,000 students. The aided schools receive 100 % grant on account of the salary of the teaching and other staff, grant @ Rs.500 per child per month for hostel, food and other provisions as well as contingency and annual building maintenance grant. In addition to these two categories of Ashram schools, the Zilla Parishad also provides schools in the tribal habitations. There are 8445 ZP managed primary schools, 864 secondary schools and 151 Hr. Secondary schools. Out of the 449 existing government Ashram schools, 328 schools had been upgraded to Ashram Secondary schools with a provision of higher classes. The state has 144 Kendirya Ashram schools (Central), which have additional facilities in order to provide support to the neighbouring schools and function as leading schools.

The Challenge on the part of State Level Administration

The tribal development departments in the states get state level funds and central assistance. However, their administrative mechanisms need revamping. As the education wing is only looked after by certain officials with additional charge and the checking of schools is carried out only in order to check whether the funds provided are being utilised properly or not, while the various academic activities to be performed by the Ashram schools are left unchecked. Only the enrolment and disbursement of funds as per the strength of the children are taken into consideration for providing the funds etc, but the important question of effective management of the Ashram schools - provision of training to teachers, filling of the vacant posts of teachers, provision of teaching learning material in time, maintenance of the classrooms

are left uncared. In addition, the requirement of the Ashram schools in terms of various physical facilities such as good class rooms, separate hostel rooms for the children, school boundary wall, provision of safe drinking water either in the form of bore wells or tap water and storage of water, kitchen, grounds for sports, lavatories and bathrooms for the children (especially for girl children) residences for the teachers and hostel superintendent and regular maintenance of these physical facilities remains a major problem. The children have to use the classroom for hostels in the night, protection in the form of boundary walls are not available, basic facilities of drinking water, electricity is also a major problem. The Tribal Development Department of Maharashtra during 2007-08 has initiated school building renovation activities for the Ashram schools. In case of Madhya Pradesh, the concept of Ashram school is different. The hostel (Ashram) is separate from the school and the hostels have no linkages with the schools. At times, the children are free to attend the EGS centres or other schools available in the vicinity. The Ashram schools in the State of Odisha also suffer from resource crunch and the physical condition of the school building is starving from lack of maintenance. Vacancies of teachers and lack of teaching learning material are also impediments in the effective functioning of the Ashram schools. The age old unrevised rules still are applicable for the up gradation and development of schools as well as allocation of funds for schools which do not serve the present situation of education and schooling and the RTE act provisions. The school heads function with hardships and are responsible for the low performance of the schools (Panda, 2008).

Challenge in terms of providing continuous Training

Another biggest hurdle is lack of provision of capacity building and training of teachers serving in the Ashram schools in general

in all the states. The Education Departments of various states have made no provision of training and orienting the teachers and the heads of Ashram schools. The Tribal Development Departments have not created such structures and facilities. Moreover, they have not created adequate linkage with the SCERTs and DIETs. The National University of Educational Planning and Administration (NUEPA) has been continuously involved in providing training to the administrators and heads of Ashrams schools in many of the states of the country. However, these efforts needs to be replicated at the state levels. A variety of researches conducted on the planning and administrative issues in the Tribal areas of the country by NUEPA, provides a plethora of inputs in effectively managing the schools in the tribal areas.

Challenges faced in utilisation of reservation in education and employment

When a tribal child compares himself / herself with that of the non-tribal child studying in a college or a higher education institution, the tribal child remains aloof and avoids participating in many of the learning activities, as they feel in secured of their levels of participation in the learning process. They lack confidence because, they understand the multiple disadvantages they have faced and the way they have learnt in the schools at the initial levels is not adequate enough to compete with the advantaged groups, some may dropout, some may just reach the levels of pass percentages, and some of them try to get into some lowly paid employment where, they are comfortable without any competition. Perhaps this kind of inadequate participation and obtaining access to the new knowledge is difficult for them to obtain at higher levels of education makes them feel inadequately equipped to continue leading to lower participation and utilisation of facilities in higher education and employment.

Facilitating Inclusiveness in Educating Tribal Children

The poor tribal child gets excluded in terms of getting support from home, family, peers and siblings. The parents in general have no check on the learning of the child. None of the family members ensures whether the child is regular at school, attendance, home work, class work, and learning at home. The parents seldom meet the teachers or go to the school in order to interact with the school staff in order to understand the performance of their child. The parents remain excluded and generally avoid interacting with the teachers as majority of them do not have minimum literacy to understand what is being taught in the school. Here begins the cycle of exclusion among the tribal children. This gradually snowballs to dropping out among the tribal children are to settle down with little education from the school as well as lower employment levels, and this process has been repeating from generation to generation resulting in the low levels of participation among the tribal children in education over the past six decades leading to exclusion from the main stream of development in the country.

CONCLUSION

In order to achieve inclusiveness among the tribal communities in the various developmental pursuits of the country, a holistic approach of understanding the multiple disadvantages faced by these tribal communities is necessary. As well as all the developmental activities such as education, adult education, health, food and employment should be interlinked and have a combined influence on the tribal communities as a whole. Multipronged strategies of initiating basic education in the tribal areas have to be created to address the issue of multiple disadvantages faced by the tribal communities as well as the tribal children. The provision of residential Ashram schools is only one of the many strategies to bring about inclusive development in the tribal areas.

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DECENTRALISED MANAGEMENT OF EDUCATION IN INDIA

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Management of education has to be decentralized in order to achieve the goal of Education For All, through devolving authorities from higher to lower level. Therefore, Decentralised Management in education can be a way to equality. This paper delineates the decentralized setup of educational management, its rationale, existing situation and prospects.

INTRODUCTION

Equality and inclusiveness are the basic features of a true democratic society. Equality is among one of the four pillars of democracy. This is why it is imperative for democracy. In Indian democracy, this pillar has somewhat weakened over the times, as a result, democracy itself has weakened. Inequality exists due to various demographic variables such as religion, ethnicity, geographical conditions etc. Democratic setup is the only way to cater to this heterogeneity and to maintain the unity of the nation. This heterogeneity creates inequality which is a big threat to democracy - which requires equal participation of every one. Peoples' participation is conditional, they should have ability to understand it in a true sense. It means every person has equal rights and duties, but in India most of the citizens are unaware to their rights and duties; many do not observe them intentionally. Only quality education has a catalytic power to unite the two i.e. unity of the nation and diversity of the culture. But here lies the great irony that the quality education, as a fundamental right is not in reach of more than half of the population of the country. The contributing factors behind this inequality in education are again geographical, ethnic and religious one. This diversity expresses the need of democratic decentralisation to increase the people participation in every sphere of national life. Consequently 73rd

and 74th Constitutional Amendments (Gov. of India, Ministery of Law and Justice, 2007) assure the mass participation in democracy.

Taking cognizance of *73rd and 74th Constitutional Amendment*, educational management system has also been decentralized corresponding to the three tier system of Panchayati Raj Institutions (PRIs). Granting, that local institutions and agencies can better understand local priorities, problems and their solutions so all the responsibilities of school management have been devolved to these local bodies. Democratic management of educational institutions has hoped to increase equal access (equality) in education through creating inclusive setup which would cater to the local needs. This decentralisation has been proposed as a way to equality and '*quality in education*' (Dash & Panda 2009, p.95). This equality in education will ultimately lead to equality in other walks of life and will result in inclusive society.

Decentralisation has also been termed as '*democratic decentralisation'* (Mukundan 2003, p. 27; Govinda & Bandyopadhyay 2010, p.1) as a part and parcel of democratic system. In other words, it is an essential component of democratic system. The basic tenets of democracy are equality, liberty, fraternity and justice. Owing to this nature of the system, it (democracy) needs decentralisation in all its aspects i.e. social, political and economical. Therefore, democracy is also known as *social democracy*, *political democracy* and *economical democracy* (Fotopoulos 2000, pp.211-251). Decentralisation in educational management is visualised to promote and concretise social democracy through political and economical democracy.

Decentralisation which is defined as *"the transfer of decision making authority, responsibility and task from higher to lower organizational levels or between organizations"* (Hanson 1998, p.112); also has variations in its form (see Figure No.-1) which

varies according to its purposes and depends upon the economic-socio-political goals of the nations.

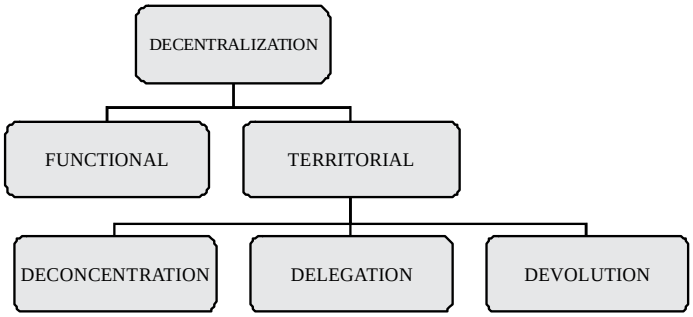
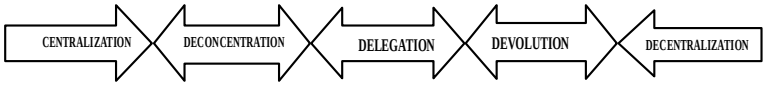


Figure 1: Forms / Dimensions of Decentralisation
(Bray & Mukundan 2004)

Decentralisation has different aims in different countries. In Spain, aim of decentralisation is to confront regional problems, seeking economic development is the aim in Venezuela and in India decentralisation aims to foster democracy (Fiske 1996, p.12). Thus, in Indian perspective decentralisation is a specific call for democracy. But decentralisation in education is a very complex enterprise. The road from concept to its implementation is by no means straight and simple. This decentralisation cannot be achieved over night as many policy makers hope. Decentralisation and centralisation exist on the two poles of the continuum. Between the two, there are phases which are also known as types of decentralization.



Deconcentration is the process through which a central authority establishes branch offices, staffing them with its own officers. Delegation: decisions are made at local level, but power in a

delegated system basically rests with the central authority, which has chosen to lend them to local one and can withdraw at its own will. Devolution of powers are formally held at sub-national levels, the officers of which do need to seek higher level approval for their actions. Privatisation or localisation is the transfer of government functions to private sector or to local enterprises (Therefore in some aspects privatisation can be considered as another form of decentralisation). (Bray & Mukundan 2003, p.3)

In India, responsibilities and authorities in many democratic sphere, including education, have been devolved to local bodies i.e. Panchayati Raj Institutions (PRIs) since 1993. According to 73rd Constitutional Amendment Act 1992, tasks in following areas have been devolved to PRIs: Education, including primary and secondary schools (Clause 17); Technical training and vocational education (Clause 18); Adult and non-formal education (Clause 19); Libraries (Clause 20) and Cultural activities (Clause 21).

Under the light of 73rd and 74th constitutional amendment and the emphasis laid by National Policy on Education 1986, following three tier system evolved.

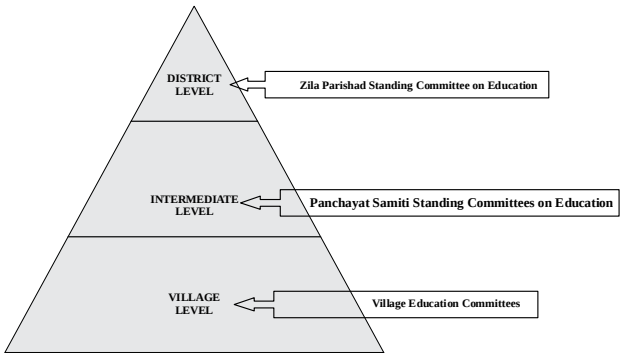


Figure 2: Three Tiers of Educational Decentralisation.

This decentralisation in education is a complex process as it can result in substantial changes in educational system, in educational management, teacher -training, designing curriculum etc. Changes in education system indisputably cause changes in social system because education is potential sub-social system responsible for socialisation and social change. This can directly promote social democracy.

In the whole country PRIs, the local level political bodies are established to manage economic, academic and administrative tasks in educational management along with their other socio-political responsibilities. This is a *reestablishment, (*as education never was centralised in India) is sought to redress historical inequalities by explicitly identifying the representation of traditionally underserved groups, women, schedule castes and scheduled tribes. Unlike other countries of the world, India is facing multiple problems. As regards geographical problems, many regions are hard to reach with reference to providing educational services. Some sociological issues such as caste, religion, ethnicity, gender etc., which also transform social status into educational status in the long run. Rural-urban division also affects the delivery of educational services and causes multiple inequalities in the society. Considering all these problems of inequality, decentralisation becomes imperative in the quest for equality. This system has been considered as a way to social justice. In decentralised system, local communities can manage the educational services delivery according to their local needs. Local level problems can be identified without delay and quick solution can be provided in their own way, which might never have been understood by the authorities in the centre. Central and state government and their administrative machinery facilitate in the terms of resources, monitor their management as well as provide technical support to these bodies.

This increased capacity of decision making at the local level has been hoped to improve the educational delivery system and its

quality directly by increasing the amount of input and its quality in the schooling. Programmes designed at this level are guaranteed to be relevant and also can reduce inequalities in access to education of quality. As the functionaries are under direct observation of the planners / authorities , decentralisation improves the operation of the education system in the terms of efficiency of resources allocation and utilisation. This territorial decentralisation benefits the central and state governments by relieving them of political and financial problems.

Even after one and a half decade of the evolution of the decentralised educational management system in India, it will not be early to raise the question on the efficiency of the system. It is necessary to deliberate over the issues of inequality in education which was thought to be solved by decentralisation of education system. It is well evident in some part of the nation that the situation is in a very sorry state. What are the reasons behind it? Which are the contributing factors? What are the major issues that need deliberation beforehand? It has also been identified that it is failure of implementation, not of policy (Banerjee, Banerji, Duflo, Glennerster & Khemani 2006, p.29; Leclercq 2003, p.21)**.** The major issues which are creating obstacles in the way of democratic decentralization and posing threat before the national goal of equality and social justice are noted below.

PROBLEMS IN THE SYSTEM

Local elitism

Local elitism is a major problem. Bhatnagar and Williams (1992) observed "sometimes resources for development can be captured by local elites and used primarily for their own benefits rather (that of) intended beneficiaries" (Bhatnagar & Williams 1992, p.4)

Decreasing interest of community members.

Decreasing interest of community member**s** is also a big threat in the way of decentralization. Individual or community management

of education has been a cultural phenomenon in India from ancient period to present time, but it is reversing when it is formally assigned to the community. Bray (1996, p.15) states that "one result of increased government input has been decreased community involvement and control".

Illiteracy and low educational level

Illiteracy and low educational level have cumulative impact on the actualization of the democratic participation/decentralization. Illiteracy bars the flow of information to the some definite section of the community and makes them unaware about their roles, rights and responsibilities.(Sethy 2006, p.50)

Lack of interest on the part of political leaders and bureaucrats

Political leaders and bureaucrats also do never attempt seriously to include the all sections of the societies in the management of the education. Some socially economically deprived groups dare not to raise their voices and communicate their educational needs. Political leaders and bureaucrats use to maintain secrecy regarding public rights and their roles in the systems.

Dearth of human resources fit for the work is a major problem of the field.

Education sector is deprived of the administrative leaders who have firsthand experience of the system as well as interest to improve the system. It needs self motivated personals who can realize the existing policies like decentralised management and can conceive innovative plans and strategies to implement them.

Rampant corruption in Indian culture.

The pandemic of corruption has also caught Indian education system in its grip. Although the democratic decentralisation in the form of democratic participation is potentially able to check the mal practices but owing to lack of thoughtful planning (because of

dearth of planners) and lack of will power in the administrative machinery it has come up in the form of decentralisation of corruption.

Lack of expertise in the planning

The loopholes in the policies adopted by states and local governments have made the situation grimmer. Gap between schools and local community/ society is increasing while connections between the two must be increased.

Lack of appropriate propaganda and ensuing awareness

Thare has been inadequate government initiatives in popularisation of the law and policy through different type of media. It becomes imperative as a large number of populations in every community are not aware about the decentralised system and their role in it. Banerjee et al.(2006, p.7) in their research work on people's participation in educational management found that most of the parents are not aware of the existence of such type of committees. Sometime even when they are supposed to be member of it and committee members are found unaware of the key roles they are empowered to play in education services.

All these problems are interrelated, such as dearth of experts and planners causes bad planning, lack of awareness and illiteracy in the public decreases community participation and control. All these situations and lack of propaganda raise elitism and corruption in the system. To deal with all such types of hindrances in the way of democratic participation and in realization of equality and inclusiveness in the society, the concerted effort should be made. One of these problems cannot be solved separately. Following areas need substantial changes simultaneously.

SUGGESTIONS FOR IMPROVEMENTS

Problem related to human recourses and planning can be solved by initiating special services in education also suggested by National

Policy on Education 1986. For this, government should start Union Educational Services. Corruption and local elitism can be eliminated through propaganda via various media networks. Also the culture of information secrecy by such groups can be eradicated through the use of mass media. Substantial improvements are necessary in educational delivery services. Various types of programmes related to mass literacy, adult education and informal education have been launched, but have failed to reach their goal. Wholistic plan should be launched targeting the achievement of the goal in the terms of learning and awareness, not in terms of maintaining budget of the programme. Reputed self help groups and non government organisations should be encouraged for participation in the educational management activities. Transparency in the system should be maintained through initiation of programmes like e-governance in educational management**.** Use of technology should be widened in educational programmes, especially in the programmes of mass literacy and informal education. Technology use in education is itself a problem in education, but should be tackled through joint efforts.

CONCLUSION

The above mentioned solutions cannot be effective, if enacted separately. Therefore, combined efforts should be made in all the areas. Administrative restoration, community mobilisation, propaganda and restructuring committees in the combined way can be beneficial in the achieving the democratic decentralisation, which is essential for 'inclusive society', free from all types of inequalities, despite existing demographic variations. Without equality, democracy is not more than an illusion. Thus, equality and democracy are complementary to each other. Democratic management in education is needed to ensure equality and quality in education, which in turn will foster democracy.

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ASSESSING SECONDARY SCHOOL TEACHERS' ATTITUDE TOWARDS TEACHING PROFESSION

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Teaching is a complex activity carried out in a social environment. Teacher has to interact with groups of students where the teaching as well as the teacher's attitude and enthusiasm affect the pupil. How a teacher performs his/her duty as a teacher is dependent, to a great extent, on his/her attitudes, values and beliefs. A positive favorable attitude makes the work not only easier but also more satisfying and professionally rewarding. A negative, unfavorable attitude makes the teaching task harder, tedious and unpleasant. In addition, a teacher's attitude also influences the behavior of his students. Effective and productive learning on the part of pupils can be achieved only by teachers with desirable attitudes. Thus assessment of secondary school teacher's attitude towards teaching profession has been attempted in this study.

INTRODUCTION

When we ask someone about her/his attitude towards something, say her/his job, we are primarily interested in finding out how s/he feels about his job and, in particular, whether s/he likes or dislikes her/his job. Attitudes have been defined in a number of ways. The simplest definition is that, it is a feeling for or against something (Remmers, Gage & Rummel, 1960, p. 67). According to Britt (1958, p. 52) it is a mental set of response. Fishbein, (1967, p.12) defines it as a mental disposition of the human individual to act for or against a definite object. Allport (1935, p.34) defines it as a mental and neural state of readiness, organised through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related. Thurstone (1946, p.39) has defined an attitude as the degree of

positive or negative affect associated with some psychological object. By a psychological object, he means any symbol, phrase, slogan, person, institution, ideal or idea towards which people can differ with respect to positive or negative affect. A particular job, for example, may be a psychological object.

In the literature of psychology, the terms 'affect' and 'feeling' are used interchangeably. An individual who has associated positive affect or feeling with some psychological object is said to like that object or to have a favourable attitude towards the object. An individual who has associated negative affect with the same psychological object would be said to dislike that object or to have an unfavourable attitude towards the object. The above definitions show that an attitude is a preparation or readiness for response. It is incipient rather than overt and consummatory. It is not behavior, but the pre-condition of behavior.

Characteristics of Attitudes

Favourableness: Favourableness is the degree to which a person is for or against a psychological object. This dimension determines the direction of attitude. A person may have positive or negative attitude. S/he may like or dislike an object. S/he may approve or disapprove certain practices. When people say that family planning is a must it indicates their favourable attitude.

Intensity: Intensity refers to the strength of the feeling. How strongly a person feels about something, reveals the strength of her/ his feeling. For example Reeta disagrees with co-education system, while Sita strongly disagrees with it. It can be inferred that Sita's feelings are stronger against co-education system. Moreover, two people may have attitudes of equal intensity, but their direction may differ. Mohan strongly approves reservation policy, while Rohan strongly disapproves it. Intensity is equal but in opposite direction. The more favourable or unfavourable an attitude the more intense it is. However, people who are neutral in

their feelings have the least intense attitudes.

Salience: Salience means how freely or spontaneously an individual expresses his attitude. It is the readiness or promptness with which the individual gives vent to her/his feelings. A person may express her/his attitude freely toward caste system or rising prices, but may not express her/his attitude about sex. Salience is affected by cultural permissiveness.

Attitudes are acquired: Attitudes are not inborn or innate. They are not inherited by the individual but are acquired by her/him during the growth process. At the time of birth the child does not inherit any preference for food, but as s/he grows s/he develops positive and negative attitudes towards certain types of foods.

Attitudes are more or less permanent: Attitudes once acquired become permanent. They are lasting and enduring. They become stable over a period of time. Since they are more or less permanent, an individuals' future behaviour can be predicted on the basis of his/her attitudes.

Attitudes involve subject object relationship: Attitudes are not formed in vacuum. They are always formed in relation to some person, object or situation.

Attitudes involve affective, cognitive and action components: Affective refers to feelings, cognitive to knowledge and action to predisposition. A person will have some idea or knowledge about psychological object; will also have feelings toward it and predisposition to act positively or negatively.

Attitudes are inferred: Attitudes of a person cannot be known directly because he will not express them frankly. Attitudes therefore can be inferred from individual's actions, behavior or words.

'Teaching is a profession' is not as important an issue as important is this that 'teachers are professionals'. Maximum problems related to teaching-learning can be handled safely without giving too much financial inputs, if our teachers possess healthy professional attitude. In India teaching covers third largest workforce; thus a large number of people enter in this profession. Lack of professional attitude among this group has made it difficult to ensure uniform standards. The increasing demand for professional service with quality has put the onus on the teaching profession to be responsible and more accountable to the needs and conditions of service. It is lack of professional attitude among us that is why continuous and adequate efforts are not made to recognise the best ideas in time, practice and role in action for self renewal and sustenance.

Teachers have to carefully understand the new prominent characteristics of professional modern age viz. scientific temper, objectivity, achievement motivation, merit excellence and faith in change. The teacher who will have a healthy professional attitude will not act in a manner that will bring bad name to herself/himself or her/his profession. S/he is proud of the fact that s/he belongs to this profession. S/he will always conduct herself/himself as becomes a member of her/his profession. The professionals will not wait for or allow regulation of their professional work by others. They will regulate their conduct themselves. Remuneration is not considered as important as to overshadow the sense of satisfaction which a good professional gets when s/he has done the work as it ought to have been done. These are some of the dimensions which reflect professional attitude in teachers.

NEED FOR THE STUDY

Teachers who are generally unenthusiastic about the teaching profession (i.e. having a negative job orientation) reported in one study, that they were more distressed about their teaching situation than were teachers who were enthusiastic (Litt & Turk 1985,

p.180). Thus, for the professional growth of the teachers and improvements in education, the attitudes held by them are very important. How a teacher performs his/her duty as a teacher is dependent, to a great extent, on his/her attitudes, values and beliefs. A positive favourable attitude makes the work not only easier but also more satisfying and professionally rewarding. A negative, unfavourable attitude makes the teaching task harder, tedious and unpleasant. In addition, a teacher's attitude also influences the behavior of her/his students. Thus effective and productive learning on the part of pupils can be achieved only by teachers with desirable attitudes. Thus, teacher's attitude towards teaching profession forms the major variable for the present study on secondary school teachers.

Operational Definition of Professional Attitude: In this study professional attitude is the teacher's attitude towards teaching profession. An attitude is a more or less stable set or disposition of opinion, interest or purpose, involving expectancy of a certain kind of experience and readiness with an appropriate response. In the present study, attitude of teachers towards the profession of teaching is assessed as 'Favourable' and 'Not-so-Favourable'.

OBJECTIVES OF THE STUDY

1. To assess the professional attitude of secondary school teachers.
2. To compare the professional attitude of different groups of secondary school teachers made on the basis of gender, subject stream taught and medium of instruction.

HYPOTHESES FOR THE STUDY

Aims and objectives of the study are the driving force for the formation of hypotheses. According to Best and Kahn (1996, p.27), "the null hypothesis relates to a statistical method of interpreting conclusions about population characteristics that are inferred from the variable relationships observed in samples." The null hypothesis

merely states that no significant difference or relationship exists between variables under study. However if differences or relationships are observed, they merely result from chance errors or fluctuations inherent in the sampling process. Keeping this in mind, the investigator formulated the following null hypotheses for achieving the objectives of the present study:

1. Male and female teachers do not differ significantly in their professional attitude.
2. Arts and Science subject stream teachers do not differ significantly in their professional attitude.
3. Hindi medium teachers and English medium teachers do not differ significantly in their professional attitude.

DELIMITATIONS

1. The present study was confined only to the teachers of recognized secondary and higher secondary schools situated within Lucknow city.
2. Only those teachers who were teaching Arts and Science subject streams were included in the study.
3. Only those teachers who were teaching class IX to XII were included in the study.
4. The schools imparting general education were taken in the study. The institutions giving special or any other type of education (i.e. sports, technical, professional, minority/ religious etc.) were not included in this study.
5. The private, unaided schools (i.e. schools where students appear as private candidates in the final examinations of X & XII) are beyond the purview of this study. Evening and night schools are also not included in this study.
6. The present study focuses on professional attitude as perceived by the individual and not through the indicators of professional attitude.
7. The tool used for the quantitative study is self-reporting device and thus has an inherent limitation due to its nature.

RESEARCH METHOD

This study falls under the category of descriptive research. Thus, survey method was adopted to carry out the work. In this study, emphasis has been given on inferential quantitative approach to compare the different variables.

POPULATION AND SAMPLE

Looking at the nature of this study stratified random sampling technique was used to select the required sample of teachers. There are 323 secondary schools in Lucknow city. Out of these 323 schools, 15 were randomly selected. The required number of teachers (i.e. 160 male teachers and 160 female teachers) was chosen from these schools using stratified random sampling procedure. Further, each group comprised of 80 science stream (40 Hindi medium and 40 English medium) and 80 arts stream (40 Hindi medium and 40 English medium) teachers. In total the number of units (teachers) chosen as a sample was 320.

TOOLS

A self developed tool namely Professional Attitude Scale for Teachers was used.

PROFESSIONAL ATTITUDE SCALE FOR TEACHERS

It might seem logical to assume that if we want to know how individuals feel about some particular psychological object, the best procedure would be to ask them directly, but many individuals with negative attitudes might not care to express their attitudes publicly because of fear of social disapproval. Only when the social atmosphere is free from felt or actual pressures toward conformity might we expect to obtain evidence about a person's attitudes by means of direct questioning. Some individuals may not be aware of their feeling towards a given psychological object. In other cases, some individuals who profess great dislike of something may in fact be reacting against unconscious impulses of the opposite nature. Also, sometimes our feeling about a

psychological object are so mixed and confused that it is difficult for us to evaluate how we feel. We may, for example have both positive and negative affect associated with the same psychological object.

Another approach to the problem of investigating attitudes has been to observe the behaviour of individuals with respect to a psychological object. There are limitations to this approach also. A research worker interested in the attitudes of a large number of individuals towards some object may not have the opportunity to observe in detail the behaviour of all interested, he/she might spend considerable time waiting for the desired behavioural interactions between the individuals and the psychological object towards which the attitude is to be measured. If the behavior with respect to the object does eventually occur, it, of course, may also fail to reveal the feelings of the individual. In many cases behaviour is designed to conceal feelings. We are all aware of situations in which we have acted contrary to the way in which we felt because of various reasons.

A quick and convenient measure of attitudes that could be used with large groups has led to the development of attitude scales. Attitude scales also provide us with one means of obtaining an assessment of the degree of affect that individuals may associate with some psychological object. A well constructed attitude scale consists of a number of items or statements. An individual responds to these statements by indicating his/her agreement or disagreement with that statement. Though many limitations of attitude scales have surfaced, however, until more precise measures are developed, the attitude scale or opinionnaire remain the best devices for the purpose of measuring attitudes and beliefs and therefore are widely used in the fields of Education and Psychology. They determine the direction and intensity of a person's feelings for or against some belief or practice. They are also used to survey the attitude of a large number of individuals.

Scale Construction

The researcher wanted to measure the attitude of teachers towards teaching profession. Though several readymade teacher attitude scales constructed and standardised by different psychologists and educationists were available but they were found to be focused on the 'active' stage of teaching and were confirmed to teacher's role within the boundaries of a classroom. The researcher wanted to measure the attitude of teachers who were already in the 'trade'; their holistic viewpoint on teaching as a profession, its status in society; role in future building, code of conduct, ethics, requirements etc. along with classroom interactions and dealings with students. After a thorough scrutiny of the available tools, it was deduced that they did not suit the purpose of this study i.e. they could not measure the professional attitude of the teachers according to its operational definition. Thus, the researcher constructed her own tool.

There are basically two major types of scaling techniques and they go with the names of their authors. They are: (i) Thurstone's method of scale construction which is also known as method of equal appearing intervals and (ii) Likert's method of scale construction which is also known as method of summated ratings.For the present study, the researcher opted Likert method of scale construction i.e. the method of summated ratings, to measure attitude of teachers towards the teaching profession. The steps involved in its construction are described below:

Planning: This included setting up the objectives of the test and analysis of the source material pertaining to it. The first step towards it was to understand the nature of teaching as a profession and determine its dimensions. After browsing and scanning a lot of literature on teaching as a profession and also discussing with the field experts following ten areas were considered as best covering the aspect of teaching as a profession.

- Professional identification: Pride in belonging to teaching profession and belief that it provides important service to the society.
- Ethics: Belief in possession of sound moral character.
- Maintenance of standards and belief in the regulation of professional work by its members.
- Code of conduct: Belief in setting of rules regarding behaviour in a manner that it does not bring bad name to the profession.
- Lack of mercenary interest: Belief that monetary reward or remuneration is not important in return of services rendered.
- Professional commitment: Belief that practitioners feel a life-long sense of calling and sense satisfaction when work is done as it ought to have been done.
- Cause positive changes: Showing positive difference between input and output.
- Autonomy: Belief that individuals should have the right and freedom to make decisions in their work without the approval of others and contribute to policy making by not just criticizing but suggesting remedies too.
- Belief in preparation of a satisfactory scheme of valuation/ planning before commencing any work.
- Sensitivity to the needs, interest and welfare of the children.

Development and Selection of Statements: To prepare the first draft of the scale, eight to ten statements related to each of the above mentioned dimension were framed. While wording the attitude statements, the suggestions of Wang (1932), Thurstone and Chave (1929), Likert (1932), Bird (1940), and Edward and Kilpatrick (1948), as summarized by Edward (1969, p. 54), regarding the construction of attitude scales were followed. The summary of their suggestions is presented below.

- Avoid statements that refer to the past rather than to the present.

- Avoid statements that are factual or capable of being interpreted as factual.
- Avoid statements that may be interpreted in more than one way.
- Avoid statements that are irrelevant to the psychological object under consideration.
- Avoid statements that are likely to be endorsed by almost everyone or by almost no one.
- Select statements that are believed to cover the entire range of the affective scale of interest.
- Keep the language of the statements simple, clear, and direct.
- Statements should be short, rarely exceeding twenty words.
- Each statement should contain only one complete thought.
- Statements containing universals such as all, always, none, and never often introduce ambiguity and should be avoided.
- Words such as only, just, merely, and others of a similar nature should be used with care and moderation in writing statements.
- Whenever possible, statements should be in the form of simple sentences rather than in the form of compound or complex sentences.
- Avoid the use of words that may not be understood by those who are to be given the completed scale.
- Avoid the use of double negatives.

In all 104 statements were framed covering all the dimensions of professional attitudes of teachers.

Collection of Opinion of the Experts: The opinion of the experts from the field of teacher education, regarding the validity and weightage of these dimensions to assess the attitudes of teachers was sought. Suggestions regarding content coverage, language and nature of the items were also gathered from them. On the basis of the expert opinion, the researcher made needful changes

in the scale. Six items were discarded leaving 98 items in the scale.

Pre-testing of the Preliminary Draft: The retained dimension-wise items were reshuffled from the view-point of the content. The scale so prepared was administered to 15 secondary school teachers to see whether they felt any problem in the test scale. Their opinion about the content and the items was sought after they completed the test. This helped the researcher to discover whether the language of the scale was ambiguous to the respondents and whether they understood and followed the instructions clearly. Changes in the instructions, language and content were made after considering the reactions and comments of these teachers.

Try-out of the scale for Item Analysis: Instructions for administration and scoring procedure were finalised and the scale was made ready for tryout. For tryout, the scale was administered on a group of 100 secondary school teachers who were asked to respond to each item in terms of their own agreement or disagreement with the statement. The administration procedure of the scale was not a difficult one. The instructions given on the front page were self explanatory and needed no further guidance.

First of all, the teachers were expected to fill up the personal data sheet. For each item there were five response categories namely strongly agree, agree, uncertain or undecided, disagree, and strongly disagree. The teachers were asked to mark their responses on any one of the five responses which described their attitude best. There was no time limit for filling the test. The respondents were permitted to return it as soon as they completed it.

The items were then scored. In the cases of positive items (favourable attitude) the strongly agree response was given a score of 5, the agree response a score of 4, uncertain response a score

of 3, the disagree response a score of 2 and the strongly disagree response a score of 1. In the case of negative items, scoring procedure was reversed i.e. the strongly agree response was given a score of 1, agree a score of 2, uncertain a score of 3, disagree a score of 4, and strongly disagree a score of 5. A total score for each individual was obtained by adding up scores on each item.

Selection of Items: In Likert method the items are selected on the basis of their discriminative values. The total scores of each subject on all the items were arranged in descending order i.e. from highest to lowest. Taking 25 percent of the subjects with the highest total score and also the 25 percent of the subjects with the lowest total scores, two criterion groups were formed. The responses of both the groups on each item were compared by 't' test. The t value is a measure of the extent to which a given statement differentiates between the high and low groups. As a crude and approximate rule of thumb any t value equal to or greater than 1.75 shows that the responses of high and low groups differ significantly (provided that in each groups there are 25 or more subjects). Thus this criterion was adopted to select the items for the final scale.

The Final Scale: In the final scale 42 statements which differentiated between high and low groups were selected. This was done by arranging the t values from highest to lowest and then taking the items with high t values (i.e. 1.75 and above). The final draft so prepared was printed and used for data collection. The selected items in the final scale were of both types - positive and negative.

Each item was rated on a five point scale as per the scheme followed at try-out level. This scheme of scoring assured that favourable attitude on each item fetched 4 or 5 points irrespective of the fact that the item was positive or negative. Thus with 42 total items in the final scale, the range of scores for each respondent

was 42 to 210 (minimum 42x1=42 and maximum 42x5=210). Range of scores for favourable attitude was 168 (42x4) to 210 (42x5) and respondents who were uncertain 126 (42x3). Those who held unfavourable attitude ranged between 42 (42x1) to 84 (42x2) scores. For categorising each respondent into Favourable attitude or Not-so-favourable attitude group, the cut-off point was arbitrarily determined by the researcher as 168 because this score as well as scores above it denoted clear-cut favourable attitude. Scores below 168 showed either mixed trend or uncertainty or unfavourable attitude towards teaching profession and thus they were all clustered together under the group Not-so-favourable.

Logical Validity: Logical validity of the developed scale was established. At the outset, all the accumulated knowledge on the construct was critically studied and on the basis of this, the components which constitute the construct were identified. The identified components were defined by specifying the universe of behaviours which may describe the construct. Such identified components of the construct and universe of behaviours of each of the components were referred to experts for their reactions. Incorporating the suggestions of experts, the construct was operationalised. Following this, a pool of statements representing each one of the components identified to constitute professional attitude towards teaching were developed. These statements along with specifications of behaviours which may be sampled under the components and specific directions for making the judgment regarding the representatives of the statements developed, acted as the guideline against which judgments were made by competent persons. On the basis of the opinions and suggestions and discussions with competent persons suitable modifications were brought in the format.

Reliability: The reliability of the developed scale was estimated by split-half technique. The reliability coefficient obtained by correlating scores on the odd numbered statements with those on the even numbered statements was found to be 0.86.

DATA ANALYSIS, INTERPRETATION AND RESULTS

Objectives of the study were to assess the professional attitude of secondary school teachers and compare the professional attitude of different groups of secondary school teachers made on the basis of gender, subject stream taught and medium of instruction. Null hypotheses were framed to test whether significant difference occurred amongst the sub groups of teachers.

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METHODOLOGY

On the basis of the scores obtained on the Professional Attitutde Scale the teachers were categorized under two heads; Favourable (score 168 & above) and Not-so-Favourable (score below 168). Percentages of cases for favourable and not-so-favourable professional attitude were calculated for the total sample as well as for its sub groups formed on the basis of gender, subject stream taught and medium of instruction which are given in Table No. 1 and their 't' values for significance of difference between means is given in Table No. 2 (a) (b) & (c). Bar graphs are also drawn for comparative assessments.

Table No. 1
Number and Percentage of Teachers of Different Groups on Professional Attitude

Category	Gender				Subject Stream				Medium				Total Sample N=320	
	Male N=160		Female N=160		Science N=160		Arts N=160		Hindi N=160		English N=160			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Favourable	46	28.75	72	45.00	50	31.25	68	42.50	47	29.38	71	44.38	118	36.88
Not-so-Favourable	114	71.25	88	55.00	110	68.75	92	57.50	113	70.62	89	55.62	202	63.13

Analysis and Interpretation:

Table No. 1 reveals that the total sample of teachers has a tilt towards Not-so- favourable attitude towards teaching profession as 63.13% of cases come under this category and only 36.88% cases are showing a positive or Favourable attitude. Similar trend is visible in all the sub-groups of teachers. This means that most of the teachers (63%) irrespective of their gender, medium or subject stream do not have favourable attitude towards teaching profession.

Within sub-groups, females have more number of cases (N =72) with favourable attitude than males (N =46). The Arts subject stream teachers are more positive in their attitude towards teaching profession (N =68) than their counterparts i.e. science stream teachers (N =50). Hindi medium teachers, on the other hand, are less favourable (N=47) than English medium teachers (N=71) who are possessing a favourable attitude towards their profession. Fig. Nos. 1 (a) (b) & (c) show the graphical representation of these comparisons.

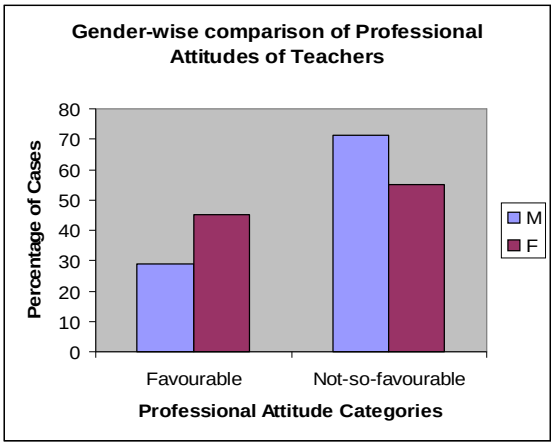

Fig. No. 1 (a)

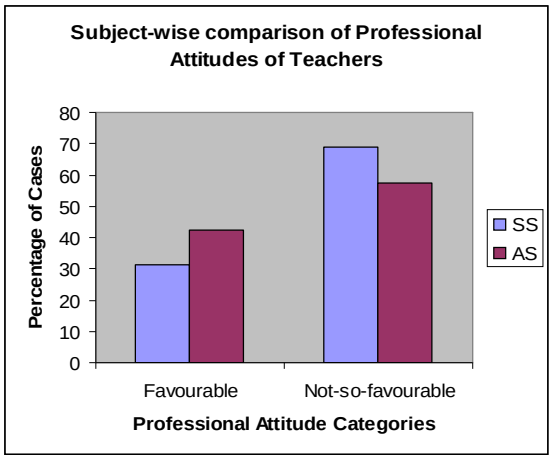

Fig. No. 1 (b)

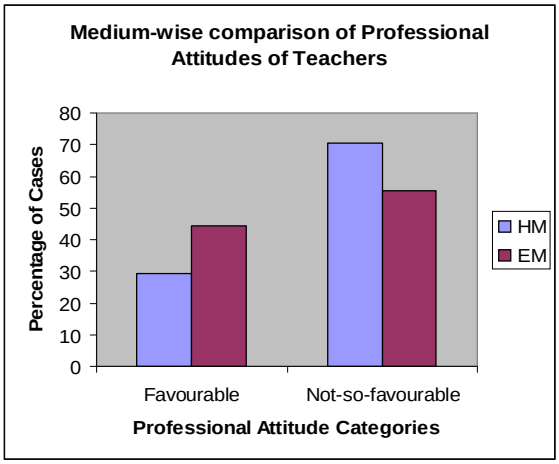

Fig. No. 1 (c)

Through Table No. 1 number and percentage of teachers who have favourable attitude and who have not-so-favourable attitude towards teaching were presented and studied. It is also necessary to compare the different subgroups for their attitude means. For this 't' values were calculated which are presented in Table No. 2

Table No. 2
Significance of Difference between Means of Different Subgroups of Teachers for Professional Attitude

Demographic variables		N	Mean	SD	t	Level of sig.
Gender	Female	160	162.97	14.50	2.6	.01
	Male	160	158.33	17.31		
Subject stream	Science	160	158.33	15.92	2.60	.01
	Arts	160	162.97	16.02		
Medium of instruction	Hindi	160	159.26	15.12	1.55	Not sig.
	English	160	162.04	16.98		

Table No. 2 shows that out of the three 't' values, two 't' values are significant at .01 level. The 't' values for significance of difference between mean values of professional attitude of male and female teachers and between science stream teachers and arts stream teachers are significant at .01 level, which denotes that there is significant difference in professional attitude of Males and females and also between science stream and arts stream teachers. Mean value of females is higher than males. This means that female teachers have comparatively more favourable professional attitude. So far as science teachers and arts teachers are concerned, Arts teachers have higher means and more favourable attitude. The t' value for Hindi medium and English medium teachers is not significant, thus the observed difference in their means could be due to chance or sampling error.

The study found that most of the secondary school teachers

irrespective of their gender, medium or subject stream do not have favourable attitude towards teaching profession. Male and female teachers differ significantly in their professional attitude as females possess more favourable professional attitude than males. The Arts subject stream teachers are more positive in their attitude towards teaching profession and differ significantly from than their counterparts i.e. science stream teachers. Though Hindi medium teachers are displaying less favourable attitude towards their profession than English medium teachers, but the difference between them is not significant and may be due to chance factor.

CONCLUSION

A very significant area explored in the present study was professional attitude of teachers where it was found that majority of secondary school teachers displayed lack of positive or favourable attitude towards their teaching profession. Teachers subdivided on the basis of gender showed difference in their level of professional attitude. Males had less positive professional attitude than females. This connotes that professional attitude of male teachers is highly negative than of female teachers. Healthy attitude of teachers towards their profession is a pre-requisite for a healthy school system. If teachers will lose faith in their profession and its contribution in making of the mankind and causing progress in the society; if the honour of the 'noblest of all' profession is not acknowledged and respected by the teachers, then their job satisfaction level will go down and the high position of teaching community will also be lowered. The implication of current state of teachers holding less favourable or positive attitude towards their profession is very dangerous as it not only kills the 'professional self' of a teacher but also dampens the spirit of the school life. Teachers performing their duty only for the sake of salary and not liking or respecting the job in which they are engaged bring forth a catastrophic situation taking the school system nowhere.

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DEVELOPMENT OF AN ATTITUDE SCALE TO MEASURE COMPUTER APPLICATION OF SECONDARY SCHOOL TEACHERS

Samson R. Victor
S. Srikanta Swamy

This paper explains the procedure of developing and standardising an attitude scale constructed by the authors to measure the computer application of secondary school teachers. The scale has been constructed by using Likert's method of summation to obtain a five point judgment on each item. After critical study related to computer application, four dimensions namely personal, affective, teaching-learning and usage confidence were selected for constructing the tool. The pilot study had 54 items, related to all the four dimensions mentioned above. The newly constructed scale had face validity, content validity and construct validity and reliability.

INTRODUCTION

The use of computers in education opens a new area of knowledge and offers a tool that has the potential to change some of the existing educational methods. The teacher is the key to the effective exploitation of this resource in the educational system. As computer use continues to increase in society, teacher educators must also equip themselves for the use of computers within the classroom. This involves all levels of education (McCannon & Crews 2000). Supportively, UNESCO (2002) also stated taht in order to ensure that all countries, both developed and developing, have access to the best educational facilities necessary to prepare young people to play full roles in modern society and

to contribute to a knowledge nation. In many developed and developing countries, nearly all schools are getting equipped with the infrastructure to conduct computer mediated teaching and learning. But the success, of any initiative to implement technology in an educational programme depends strongly upon the support and attitude of teachers involved. One of the major reasons, for studying teachers' attitude towards computer application is that it is a major predicator for future computer use in the classroom (Myers & Halpin 2002). Supportively, Timothy (2008) found that there was a significant association between years of computer use, level of confidence, and computer attitudes. Kumar and Kumar (2003) also reported that most teachers believe that the amount of computer experience has a positive effect on attitude towards computers. Today, there is generally a widespread feeling that teachers, especially at the secondary school level, are in a state of unrest due to the fast growth of technology and varied task in implementing computers in teaching and learning process. The implementation of computers in teaching and learning process being a recent evolution in the 90's, still remains in the evolving state in the state of Karnataka and grievances of teachers in implementing are one and more. Hence, the authors decided to construct an attitude scale to measure computer application, so that the newly constructed scale may contain all the factors pertaining to computer application of secondary school teachers.

METHODLOGY

Normative survey was employed for the study.

Sample

For the pilot study, the sample consisted of 20 secondary school teachers of Bangalore District, Karnataka State, selected by using simple random technique.

Instrument

The first part of the scale is captioned by general information, which includes the variables: gender, age, experience, qualification, subject handling, type of school, locale and type of management. The second part of the scale was framed after reviewing many related studies done in the field of computer application both in India and in other countries. Following dimensions, reported as positively or negatively correlated to attitude, were selected.

Personal

Teacher's knowledge and skill related to computer application provides adequate opportunities for professional achievement and advancement related to computer application in teaching. The inadequate knowledge and skill may cultivate a negative outlook towards computer application. Hence, statements regarding this dimension were added in the tool.

Affective

One of the key factors associated with the attitude of computer application was reported to be the affection towards computers. Hence, positive and negative statements were constructed through careful procedure belonging to this dimension which measures feeling towards computers.

Teaching and Learning

Teaching and learning process is a highly creative task, which involves variety and novelty. Computer application is enriching the novelty and interest in teaching and learning process. Hence, statements measuring this dimension were included in the tool to find out whether teaching and learning is a key factor in identifying the attitude.

Usage Confidence

The fear of doing mistakes may create unnecessary stress and fear in the minds of teachers and by this, a teacher may be unable to apply the computer technology effectively. Hence, statements related to usage confidence associated with computer application were included.

While selecting and editing statements**,** the statements of the following types were excluded, which : (a) refer to the past rather than the present; (b) are factual or capable of being interpreted as factual; (c) may be interpreted in more than one way; (d) are irrelevant to the psychological object under consideration; (e) are likely to be endorsed by almost everyone or by almost none; (f) lack clarity, directness and simplicity; (g) include words that may not be understood by those who are to be given the completed scale; and (h) are double negatives and statements which contain universals such as always, none and never and thus resulting in ambiguity. After a careful scrutiny of the statements by the experts, 54 statements (26 favourable and 28 unfavourable) were selected for the pilot study.

PILOT STUDY

After constructing the computer application scale, a pilot test was conducted on a random sample of 20 higher secondary school teachers in Bangalore district, Karnataka State, India. The test was conducted with a view to find out the reliability and validity of the tools and also to eliminate any ambiguity so that teachers do not have any difficulty in responding to the items in the computer application scale. Scoring was done on the five point scale as suggested by Edwards. Total score for each subject was calculated. The sum of the item credits represents the individual total score.

SCORING

The scale was constructed by the use of Likert's methods of summation to get a five point judgment on each item. Against each statement, five alternative responses, namely, "Strongly Agree" (SA), "Agree" (A), "Undecided" (U), "Disagree" (D) and "Strongly Disagree" (SD) were given. Weights of 5,4,3,2 and 1 were given for favourable statements in the order of their favourableness and for unfavourable statements, scoring system is reversed. Thus, if one chooses 'Strongly Agree' response for a favourable statement, s/he gets a score of '5' and for the same response; if the statement is unfavourable one gets a score of '1.' Only for the 'Undecided' response, one gets always a score of '3' whether a statement is favourable or unfavourable. An individual's score in this scale is the sum total of the scores for all the statement by the subject (Summated Ratings).

ITEM ANALYSIS

Cronbach's Alpha was used to assess the degree of internal consistency among all sets of items. Then the task value was calculated. Items with 'r' values less than 0.30 were rejected, According to de Vaus (2004), anything less than 0.30 is a weak correlation for item analysis purposes. As many as 43 statements having the 'r' value greater than 0.30 were chosen in order to form the final scale. The scores in the final scale of computer application ranged from 0 to 215 in the direction of increasing levels of computer application. An individual's score in this scale is the sum total of the scores for all the statements by the subject. (Summated ratings). The higher the score in this scale, the greater will be the attitude towards computer application.

RELIABILITY AND VALIDITY

The scale had the 'Universe of Content' as it included statements from all the selected domains of computer application namely

personal, affective, teaching learning and usage confidence. Due weightage was given to all the domains while selecting items. The scale had 43 statements representing the universe of content. Hence, it had face validity. It also had construct validity as items were selected having the 'r' values more than 0.30 (de Vaus 2004). The scale was given to experts in the field of education and they agreed that the items in the scale were relevant to the objectives of the study. Hence, it had content validity also. The reliability of the split half test was found to be 0.925 by the use of Spearman - Brown prophecy formula. The reliability of the whole test was found to be 0.910.

CONCLUSION

The attitude scale to measure computer application developed and standardised by the authors can be used to study the computer application of secondary school teachers to find out and analyse various factors associated with positive or negative attitude, so that necessary steps can be taken to create an environment in which the emphasis can be given to enhance the attitude of teachers in using computers in their teaching and learning process.

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NOTICE FOR AIAER GENERAL BODY MEETING

Next meeting of the General Body of the AIAER shall be held on 17th November 2012 at 4.30PM at Sahauran, Mohali, Punjab at the venue of the Annual Conference.
Agenda
1. Confirmation of proceedings of the last Annual General Body meeting held at Gwalior.
2. Consideration of Audit report for 20111-2012
3. Election to various posts in the Executive Body
4. Consideration of amendment of the Constitution
5. Any other matter

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