TEACHERS' PERCEPTIONS OF DEALING WITH MIXED ABILITY CLASSROOMS

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The paper reports a qualitative study of the perceptions of secondary school teachers towards mixed ability classrooms. Semi-structured interviews and classroom observations were conducted to gauge teachers' ideas about incorporating quick learners and slow learners in the same classroom. Teachers' perceptions of ability grouping and their own application of proven instruction methods for inclusion, like collaborative projects, open ended questions and interaction in classroom have been reported. The study found that while teachers were aware and had practiced various possible classroom strategies to deal with mixed ability situations in classrooms, they felt incapable of implementing these strategies consistently due to constraints such as limited time, extensive syllabus and huge class size. Some possible solutions are recommended to take into account the day to day classrooms problems for effective learning.

Keywords: mixed ability classrooms, ability grouping

INTRODUCTION

Mixed ability classrooms that accommodate students having different learning styles, interests, prior knowledge, attitudes, strengths, personalities and skills, are commonly found. There is a pedagogic challenge associated with providing equal opportunities to different groups of students, who may be high-ability students consisting of 25% of the class, low-ability students consisting of 25% or the average-ability students constituting the rest 50% percent of the class (Webb, 1991). At the same time, achieving quality standards has led to performance based segregation known as ability grouping. The implications of ability grouping include negative effect on the self-concept of low-ability students (Oakes, 1985; Hallam & Deathe, 2002).

To deal with mixed ability classrooms, teachers resort to group activities, consciously creating heterogeneous groups with the motive of having the quick learners act as mentors for the slow learners (Webb, Baxter & Thompson, 1997) thereby aiding learning in slow learners. This technique does not affect the progress of the quick learners (Lou, et al., 1996; Saleh, Lazonder & De Jong, 2005). Interactive classroom environment, where precise and thought-provoking questions are put forth (King, 1998) are an effective teaching strategy, and instructors play the role of active guides by recognizing slow learners and assisting their process of learning. Differentiated instruction is a teaching method that takes into account different learning styles, pace, skills, knowledge and attitudes of different students (Koutselini, 2008). Using differentiated instruction coherent with different students' readiness, interests and learning styles (Landrum & McDuffie, 2010; Murawski & Hughes, 2009; Regan, 2009), teachers can maximize students' academic as well as personal growth.

Pedagogical Knowledge (PK) refers to teachers' expertise with reference to teaching-learning aspects, such as understanding how learning works, keeping students engaged and knowledge of how skills are acquired in differentiated ways (Harris, Mishra & Koehler, 2009). Shulman (1986) describes it as application of broad principles and strategies of classroom management, knowledge of learners and their characteristics. The concepts of Pedagogic Content Knowledge (PCK) elaborated by Shulman (1986) and Technological Pedagogical Content Knowledge (TPCK) (Harris, Mishra & Koehler, 2009) have been immensely discussed for the past two decades. In the current context, we shall ponder upon pedagogical knowledge specific to dealing with performance gap in classrooms, different learning speeds of children and assessment practices.

Ensuring maximum results while teaching a mixed ability classroom is a very challenging task. In many schools in Mumbai, one finds classes divided on the basis of students' achievements, that is, the A division may comprise of the very bright students, B and C may comprise of average students and the D division may include those who are doing poorly. Such ability grouping allows teachers to focus on a homogenous class and develop a teaching strategy accordingly. Often this system helps the schools achieve very good results in the final Board examinations. Research suggests that ability grouping has cognitive, behavioural, emotional and social repercussions (Ireson & Hallam, 2009; Marsh, 2006).

The current study explores the application of proven teaching strategies in real life scenarios and focuses on teachers' perceptions that in turn directly influence their classroom practices (Pajares, 1992). In this study a semi-structured interview schedule (Creswell, 2007) targeting the specific sections of pedagogy was conceptualized and teachers were observed in their regular teaching conditions to get a fair idea of the practices. The interview schedule included hypothetical situations (often extreme) to gauge the perceptions of the teachers about mixed ability. We conclude with pragmatic solutions that could be implemented to resolve the gap between existing research and actual classroom practices.

RESEARCH QUESTIONS

The following research questions (RQs) were addressed in the study:

- What are teachers' perceptions about having quick and slow learners in the same classroom?

- What are the teachers' perceptions about ability groupings and new pedagogic strategies to avoid such groupings?

- How do teachers act upon the mixed ability problem while teaching and designing assessments for the students?

Participants

The participants included 12 secondary school teachers teaching grades 6-9/10 in 3 urban schools of Mumbai. The teachers, who had different subjects of expertise, such as, Science, Mathematics, English, Hindi and Social Studies, voluntarily participated in the study after being approached. Nine of the 12 participants were female, and the teaching experience of all teachers varied widely, ranging from 2 years to 37 years. All the teachers held a B.Ed. Degree (some by distance learning) and many held a Master's Degree in one or more subjects.

Convenience sampling was used while choosing the sample due to practical constraints and limitations of the study. Thus the sample is subset of teachers in established schools in an urban set-up where there are no constraints based on infrastructure or availability of

resources. We shall refer to the participants as teacher 1, teacher 2 and so on, to maintain anonymity.

METHODOLOGY

To serve the purpose of the study and find natural perspectives of the teachers, a qualitative research methodology was chosen. This methodology employs a less structured data collection process by means of direct observation and semi-structured interviewing of participants in real-life settings. One of the major drawbacks of qualitative research is experimenter bias (Kerlinger & Howard, 1999), thus extreme care was taken so that the interview protocol (questionnaire) would be free from the opinions of the researcher.

Interview Schedule

Interview questions were designed based on primary themes coherent with the research questions that included perceptions about performance gap, classroom practices to deal with mixed ability students, designing assessments for such a class and views about ability grouping. Hypothetical questions, for instance extreme doubts, as if put forth by weak students and very bright students were posed by the researcher to gauge the teachers' reaction toward different groups of students. Also, teachers were asked about their willingness toward implementing innovative activity based teaching-learning methods for better learning.

Prior to interviewing school teachers, pilot interviews were conducted with doctoral students of a prestigious institute who had prior teaching experience. The questionnaire was modified on the basis of the pilot to ensure clarity and conversational form of interviewing. While conducting the interviews, minor adjustments were made to the questions to incorporate examples relevant to the instructor's subject of expertise. The natural flow of the questions was ensured and depending on the individual interviewee's answers redundant questions were avoided.

Interviews with teachers lasted around 30 minutes. The interview consisted of open ended questions free from any bias of the researcher and the teachers gave answers according to their views and practices. Questions were formulated so that there was no unique socially acceptable answer but the teacher was asked to think before answering and reflect on their own classroom practices. Some of the questions were:

- Have you identified the problem of huge diversity in learning speeds of various students?

- What measures do you take to incorporate the slow learners and quick learners in the same classroom? If none, why?

- How do you design assessments for such a mixed ability classroom?

- What, in your opinion, are the pros and cons of ability grouping? Should it be practiced more often by schools and colleges?

- Would you try novel teaching methods for example instead of an official letter writing class assignment, get students to look for actual problems in their community and give a task of writing an actual letter to an official?

Classroom Observations

Direct classroom observations were carried out in an unobtrusive manner to maintain the authenticity of the data collected. A total of 6 classrooms conducted by 4 teachers were observed. The grades ranged from grade 6 to grade 9 and subjects taught were mathematics

and science. The classroom interactions were audio recorded and the observations were targeted towards the instructor's way of conducting the classroom, as well as his/her reactions towards learners.

The interviews were audio-recorded with the consent of the participants and the recordings were then transcribed verbatim by the first author. The transcriptions were analyzed to find common themes in the perceptions of the teachers. We focused on the constraints of the teachers. Secondary themes were recognized to find similar views and practices. Classroom observations were correlated to the teachers' interviews and thus their opinions about the mixed ability classrooms.

FINDINGS

Most teachers mentioned the problem of dealing with differentiation in classrooms and suggested solutions of their own to tackle the same. While some teachers were more sensitive towards the slow learners and wanted to ensure that they were on-board before moving on to the next topic, others were also concerned about the quick learners getting disengaged and thus kept them busy with extra Higher Order Thinking (HOT) questions.

Classroom Practices

The classroom practices mainly employed have been categorized into three major categories:

(a) *Peer learning in mixed groups*: Teachers laid stress on the importance of peer learning. For instance, teacher 10 said that she made mixed study groups and allowed them to appoint their own leaders, with the slow learners learning from the bright students. Teacher 2 said that she consciously seated the students in a manner such that an average learner would sit beside a bright student to improve learning even in her absence. Teacher 10 also believed that such practices would also help students learn team work and embrace academic and social differences in a better manner. Some of the actual quotes are reproduced below.

> "*Moreover, it is a double benefit for those who are teaching… Apart from that we are also inculcating the value of helping in the class*." (Teacher 2)

> "*Sometimes I ask another student to explain. He may be able to explain better than me, so that he (weak student) can understand in a different way.*" (Teacher 8)

(b) *Nominal separation*: Another common practice was dealing with the weak students inside the classroom itself after engaging the rest of the class in some other exercises (Teacher 11 and Teacher 3). Nevertheless, teacher 1, teacher 4 and teacher 9 conducted remedial classes for the weak learners giving personal attention to them and two of them (Teacher 4 and Teacher 9) believed that this was the best possible solution for the extremely weak students.

(c) *Interaction based/activity based practices*: Some teachers use a positive interaction based approach to scaffold learning especially for the weak learners. For instance, teacher 5 intentionally involved the weak learners in a discussion and specifically directed questions at them to ensure that they understood the concepts. A practical activity based learning approach was used by teacher 3, who formed groups for weekly presentations by students encouraging wider participation, so that students could learn by seeing others' work.

> "*I know a few children, I know the names fairly well, may not have understood… I ask those children to answer.*" (Teacher 5)

Views about Ability Grouping

With the exception of two teachers (Teachers 4 and 9), the rest were against the idea of ability grouping. Some of the teachers engaged in loud thinking and weighed the pros and cons of ability grouping and finally voiced their opposition to it. The three main themes that emerged out were:

(a) *Effect on academic learning*: According to teacher 2, creating divisions on basis of academic performances would cause the quick learners to think that they are very intelligent and thus stop putting in greater effort. On the other hand, teacher 1 believed that in separate classes the excellent group could be given extra work and taught in a manner so that they could achieve maximum results. However he had concerns about the performance of weak students being hampered in the absence of regular interaction with brighter and more motivated students. Teacher 8 believed that the bright students would perform well academically regardless of segregation.

(b) *Psychological effects*: The repercussions of ability grouping on social, behavioural and emotional aspects (Ireson & Hallam, 2009; Marsh, 2006) of the students were also mentioned by some of the teachers. The brighter students often look down upon the lower section students (Teacher 3) and develop arrogance or a superiority complex which is not good (Teacher 10). On the other hand the weak students, who shall one day all go out and work in the society, shall develop inferiority complex (Teacher 10). Such a practice affects the mental growth of the child as it is very demotivating and humiliating for the child to be in the lower performing section (Teacher 7). An advantage of mixed classes would be to inculcate values such as working with people difficult to get along with, accepting the academic and social differences and being empathetic toward others' weaknesses (Teacher 10).

> *"They feel that they don't know, and once the child believes that he doesn't know something, it is really difficult for him to cope up with it."* (Teacher 5)

> *"(when an easy question is explained again)…the intelligent ones get very impatient, make all kinds of noise and even try to pull the other person down."* (Teacher 4)

(c) *Teachers' perspective about teaching homogenous classes*: As mentioned earlier 2 of the 12 teachers were for ability grouping practice and one of them, teacher 9, had concerns about no teacher wanting to teach the weaker section. Although teacher 6 was not in favour of ability grouping, felt that a homogenous class could be easily taught as all the students would be at the same thinking level. On the other hand teacher 7 felt that it would be a challenge to teach a class of low achievers alone, as teachers generally use the help of quick learners for the same.

Assessment and Innovation

While talking about assessment most teachers did keep in mind the classroom diversity and designed the question papers in order to cater to the majority, i.e., the average students. But, this did not stop them from including a couple of high order thinking questions for the above average students. Also, the teachers said they try and include some very simple questions to ensure that majority of students can pass the exams. The major constraint faced by the teachers is the CBSE (Central Board of Secondary Education) rule of promoting all kids till 8th grade, which makes it important for the teacher to ensure that everyone passes the exam.

When asked their opinions about implementing an innovative active learning method in the classroom, some teachers had doubts about its feasibility due to practical constraints like

limited 40 min lectures (Teacher4), length of syllabus as compared to shortage of time and huge class strengths (Teacher 8) to name a few. Teacher 10 and teacher 12 had concerns that all students might not end up participating whole heartedly in the assignment/assessment and create chaos in the process. Nevertheless, teacher 8, along with many others, was keen on using innovative practices as it would help students relate textbook content to their everyday lives. Teacher 1 also felt that such an activity would prepare them for the kind of work they would be doing in the future.

CONCLUSION

The participants who volunteered for the study belonged to various age groups, backgrounds but almost similar urban school environment. But, being a qualitative study (Kerlinger & Howard, 1999), the results really be extrapolated to the vast group of teachers belonging to different school settings.

School dropout is a major problem in India, and while various factors like adverse school environment, financial aspects and out-of-school employment are responsible (Jordan, Lara & McPartland, 1994), major contributing factors are student's academic failure and losing interest in school (Watt & Roessingh, 1994). The problem of mixed ability and performance gap in students can thus eventually lead to the weak students dropping out of schools. The objective solution for improving results via ability grouping tends to worsen the classroom environment and is detrimental for the holistic development of the child. In a democratic society, our aim should be to provide equity in education, which means equal opportunities for all students. Some possible ways to achieve the above are stated below.

Firstly, more autonomy should be given to the teachers and their opinions should be given weight as many teachers have years of experiences of dealing with various classroom problems all at the same time. In our study, we found that the teachers already had a fair idea of various classroom practices for mixed ability classes and were employing the best possible strategies. Bringing a few representative teachers on board is crucial while making policy decisions.

Secondly, teachers as well as parents should actively be involved in the implementation of the policy changes. For instance the practice of CCE itself can help tackle the mixed ability problem if implemented successfully. The students can be assessed using several means and thus the students can develop a practical approach of learning. The practice aims to helping all students as their strengths can be highlighted in one way or another. The teachers and parents should thus be conveyed to look at such a practice with the sole purpose of better learning for students.

Lastly, there is a huge divide between the existing research and the awareness of the teachers and parents about the same. There should be a platform that brings together the educationists, researchers and teachers to find ways to broaden the reach of research with the help of existing institutions. The implementation could be done by means of several workshops where teachers could discuss their specific classroom problems and all possible solutions for the same. Teachers could then implement these solutions according to their local scenario.

Acknowledgements

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