

Instructional Strategies for Large Classes: Baseline Literature and Empirical Study of Primary School Teachers in Uganda

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Abstract

This article is based on research that investigated the teaching of large classes in primary schools in Uganda drawing on what was entailed in the literature and teachers' practices. Interviews, observations, and document analysis were the instruments used for the study. Twenty government aided schools in Kampala and Wakiso districts; thirty five teachers (four males and 31 females) and 20 school administrators participated in the study. A review of research on teaching of large classes highlighted challenges that both teachers and pupils experience. Solutions for teaching large classes from peer tutoring, novel practices including issues on environment for change are suggested. The empirical data indicated that teachers had devised strategies to cope with the large classes but these needed further development. The implication for these findings is the need for teacher professional development through reflective practice.

1. Introduction

Uganda as a partner of the Education for All (EFA) coalition launched Universal Primary Education (UPE) in 1997. This resulted into the increase of primary school enrolment figures from 2.7 million pupils in 1996 to 5.3 million in 1997, and to 7.1 million in 2005 (MoE&S, 2005; Makubuya, 2005). Even though this was followed by a drastic increase in the number of teachers and classrooms, the current official average pupil-to-teacher ratio is 51:1. The reality, however, is that in many classrooms in various schools across the country, there are over 70 pupils in one classroom (Nakabugo, In-press, O'Sullivan, 2006).

Class size and pupil teacher ratios (PTR) are not the same and not synonymous. Whereas "class size is the number of children in a teacher's room daily for whom the teacher is accountable" the PTR is the total enrolment of students at one location divided by "all educators, including administrators, counsellors, special teachers, and other adults who serve the location" but not just only the number of teachers

(O'Sullivan, 2006). In Uganda the class size is based on teacher to student ratio and population size in class. The average class size is often 10 or more students larger than the PTR. The focus of this research was on class size i.e. the number of children a given teacher was responsible for in a given classroom setting, rather than on PTR.

There is no global definition of what constitutes a large class. The literature, for example, shows large classes as ranging between 25-30 learners in the United Kingdom (Smith and Warburton, 1997), more than 35 learners in the US (O'Sullivan, 2006), and 60 or more learners in developing countries (Valérien, 1991; Michaelowa, 2001). Over the years, thorough research has been done to bring in focus the reasons why smaller classes may lead to improved students outcome than large classes. Reasons such as easier and regular discussions with students, timely and frequent feedback to students, and active problem solving have been pointed out (Bennett, 1996; Billington, 1997, Davies, 2000; Gibbs *et al.*, 1997; Race, 1998). On the other hand, research has also found that smaller classes are more effective not simply because they are smaller, but because they often offer an educational setting in which it is easier and more feasible for active learning to take place. Simply reducing the number of students in a class does not alone improve the quality of instruction, neither does increasing class size lead to poor education (Johnson 1998; Lockheed and Verspoor, 1991; Maged 1997; Nakabugo 2003). Indeed there is a body of knowledge arguing that it is not the class size that has the greatest influence on teaching and learning. What matters most is the quality of the teacher and his/her approach to teaching, specifically the capacity to create a culture for organising large classes in such a manner that learning can be successfully mediated. Researchers such as Blatchford and Mortimore (1994); Blatchford (2003); and O'Sullivan, (2006) have in fact suggested shifting focus from concerns on class size to investigating what kind of teaching in small and large classes actually makes a difference. This position is even more relevant in developing contexts such as Uganda where evidence that links class size and pupils' progress only with classes less than 20 (Nye et al., 2001; Robinson 1990) is almost of no immediate relevance. In Uganda, for example, the presence of large classes is likely to prevail for some time due to the massive resources that need to be invested into the system to bring the pupil-teacher ratio to 35:1 and below. In such a context, there should instead be attempts to investigate possible forms of class organization and teaching styles that are suitable for mediating learning in large classes.

It is against the above background that the current study attempted to establish what instructional strategies could be introduced in Ugandan primary classrooms for improvement of teaching learning in the prevailing large classes. Several international research studies have showed that although effective learning is more possible in smaller classes, large classes do not necessarily mean poor quality education (Gibbs *et al.*, 1997; Maged 1997; Johnson 1998; Baker & Westrup 2000; MacGregor, et. al. 2000). The real obstacle is creating a culture for organising large classes in such a manner that learning can be successfully mediated. Thus, the current study attempted to investigate, through literature review, issues relating to the teaching of large classes, with a specific focus on those providing practical teaching suggestions and examples of good practice. It also sought to analyse and identify the strategies that teachers in Uganda had developed to teach their large classes with a view to illuminating classroom practices that have the potential to promote learning for dissemination to a wider context.

Effective teaching and learning throughout the study was conceptualised as that situated within a social constructivist framework. This understanding was based on the view that much educational research (such as Burbules 2000, Chi 1996, Chi 1994, Cole and Wertsch 2003, Oldfather, et.al. 1999, Selly 1999 and Terwel 1999) supports social constructivism as a theory of knowledge that enables teachers to promote their students' meaningful learning. In the social constructivist view of knowledge, learning is constructed through interactions with others. A social constructivist perspective focuses on learning as sense-making rather than on the acquisition of rote knowledge that is transmitted by the teacher. Social constructivist teachers help their pupils understand that they are co-constructors of knowledge, that they can make sense of things themselves, and that they have the power to seek knowledge and to attempt to understand the world. In social constructivist classrooms, students are also producers, – and not merely consumers – of knowledge.

2. Methodology

This was a descriptive study in design. The literature component of the study utilised a content analysis methodology with a view to identifying strategies of practical application and potential to facilitate learning in large classes. The empirical component of the study adopted a descriptive survey design whereby using the Education Management Information System (EMIS) data, a cross-section of twenty schools were surveyed from Kampala and Wakiso Districts. The districts were selected because they offered a variety of schools with different characteristics such as rural and urban, class size, high and poor performing schools, schools with teachers of varying qualifications, children of various economic, social and academic backgrounds, boarding and day schools, to mention but a few. While the wish was to undertake an in-depth study, the intention was also to study schools representing different variations and characteristics as much as possible to address the question of how different teachers in different contexts mediated learning in a large class.

The Study Subjects

Teachers were the central unit of analysis in this study because in any teaching and learning process, the teacher is the key factor, responsible for promoting or restraining children's learning (Vygotsky, 1978; Koutseline, 1997). The focus was on lower primary (specifically Primary 3) teachers of mathematics and English, teaching classes of sixty pupils and above. It had been planned to select two teachers per school (one English teacher and one mathematics teacher), a total of 40 teachers, but due to unforeseen constraints, only thirty five teachers were studied during the 5-month period (April – August 2006). English and mathematics were preferred because the main purpose of basic education is the achievement of numeracy and literacy, the foundation of which should be nurtured right from the lower classes. The significance attached to mathematics and language in Uganda's education system can also be inferred from the fact that the two subjects, unlike others, appear daily on the time-table. The argument for focusing on lower classes was that they are the foundation of primary schooling. Besides, they are generally free from the Primary Leaving Examination pressure. Most schools start preparing children for the PLE right from primary five, and engaging them in any other kind of activity at this level could be regarded as time wastage.

Socio-demographic Characteristics of the Subjects

Of the 35 teachers studied, 31 (86%) were females and 4 (14%) males. This is not surprising because Uganda's primary education sector is dominated by female teachers, especially in the lower classes. All teachers that formed sample of this study were professionally trained: 2 bachelors degree holders (5%), 17 diploma holders (49%) and 16 Grade III certificate holders (46%). The Grade Three Certificate of Education is currently the lowest qualification in Teacher Education in Uganda, being awarded to students who begin teacher training after Ordinary Level (Senior Four). Seventeen teachers taught English while 18 were mathematics teachers. Apart from two teachers (6%) in one school who had a class of 61 learners (their class of 122 children had been streamed prior to commencement of the study), the rest of the teachers taught classes ranging between 70-80 learners (one teacher – 3%); 81-90 learners (five teachers – 14%); 91-100 learners (seven teachers – 20%); 101-110 learners (9 teachers – 26%); 111-120 (6 teachers – 17%) and 121-130 learners (five teachers – 14%). The majority of the teachers taught in schools that were either located in the urban (12 teachers – 34%) or peri-urban (16 teachers – 46%). Only seven teachers (20%) taught in schools located in rural areas. Due to rural-urban migration, urban and semi-urban schools in Uganda have tended to have an influx of children compared to their rural counterparts.

Data Collection and Analysis

The data presented in the following sections is based on literature review and interviews conducted with 35 teachers, 20 school administrators and 100 lesson observations. Both categories of interviews were conducted using structured interview schedules. The teachers' interview schedule focused on probing their experiences of teaching large classes, and how they went about teaching them. The main focus of the interview schedule for school administrators was a documentation of institutional responses to the issue of large classes. The teachers' lessons were observed and analysed using a structured lesson observation template that enabled the capturing of information on the teacher's type of teaching, how s/he managed the

classroom, what type of resources were used in the teaching and how, the prevailing classroom atmosphere, and learner participation and engagement in the lesson, among others. Data was analysed using the constant comparative method (Glaser and Strauss 1967) that involves a continual process of comparing pieces of data and identifying similarities and differences between them for generating patterns or categories from the data.

Comparisons were made across the teachers being studied and across the different types of data collection instruments. For example, data from lesson observations was used to establish congruence and/or contraction in what the teachers said they did while they taught large classes.

3. Findings

What Practical Suggestions Are Available in Literature for Teaching and Learning in Large Classes?

There is much literature on issues related to the teaching and learning both in small and large classes. This review concentrates on the challenges to the teaching and learning in large classes; the solutions to teaching large classes from peers; and alternative approaches to handling large classes.

Challenges to Teaching and Learning

Ives (2000) has argued that there is no single way to teach large classes, but, one has to consider three things: (1) ones' teaching style; (2) the characteristics of the students; and (3) the goals and the objectives of the course. However, "resource allocation and management is more critical in dealing effectively with large classes than smaller classes" (AUTC, 2003, p.4), which poses additional challenge. Furthermore, some literature has indicated that there are challenges to teaching and learning in large classes both to the teachers and to students that includes limited class time. Table 1 shows some of the challenges that relate to management, feeling of anonymity, lack of flexibility and student diversity that challenge the teachers. In addition, hesitation to ask questions, minimum teacher attention and access to materials, and the need for individual effort challenge the students (Ives, 2000).

Table 1: Challenges to teachers and to students

	Challenges to teachers' teaching	Challenges to students' learning
1.	Management of paperwork: assigning, marking and recording work.	Hesitation of asking questions or other ways of showing lack of understanding.
2.	Management of distractions: discipline (talking), late coming.	Not knowing what is important and relevant information.
3.	Perceived anonymity of students: difficulty to learn names, engagement and participation, providing feedback.	Perceived and feeling of anonymity that prevents them to challenge authority of the teacher.
4.	Lack of flexibility of class activities: difficulty of variation of activities, arranging group work.	Lack of access to the teacher's attention and to shared materials and resources.
5.	Diversity of backgrounds and preparation of students	Need to be self-driven with little external push from the teacher to complete tasks.

Furthermore, Ives (2000) makes several suggestions for teachers on how to promote attendance in large classes, to take roll-call, to minimize the sense of anonymity, to manage class climate in large classes. In addition, approaches to assess students, to improve lessons, to use technology, and to address learning activities in large classes are given.

Solutions to Teaching Large Classes from Peers

The Schreyer Institute for Teaching Excellence (1992) reported the craft of teaching large classes as practiced by teachers at Pennsylvania (Penn) State in the USA. It was pointed out that a lesson presented to 20 students is probably not much different from a lesson presented to 100 students. However, the teachers at Penn State suggest three broad areas of attention in the teaching of large classes that include: (a) creating a small class atmosphere in a large-class setting; (b) encouraging class participation; and (c) promoting active learning, with associated activities, as outlined in Table 2.

Table 2: Teaching-Stance and Suggested Activities

Target Teaching-Stance	Suggested Activities
1. Creating a small-class atmosphere in a large-class setting	- learn student names - move around the classroom - elicit students' feedback - freely interact with the students
2. Encouraging class Participation	- divide class into small groups - plan participation - students contribute materials for the lesson - award participation points
3. Promoting Active Learning	- write the lesson outline and objectives on the board or transparency - give a "think break" - show your own enthusiasm for the subject - design a lesson around a problem-solving model

Alternative Approaches to Handling of Large Classes

Peer Tutoring

Valerein (1991) devotes his entire book on Educational Studies and Documents to teaching large classes. One approach that he explains is peer tutoring. He accredited the formulation of peer-tutoring to Bell, but the concept works as follows: "The basic principle of this method consists in *reciprocal instruction*, the pupils teaching one another and the more able among them acting as teachers for those who are less able", while "the pupils who are acting as teachers instruct themselves as they teach" (Valerien, 1991, p. 36), that encourages learning through teaching. In USA, "interest in peer tutoring...was first stimulated by the urgent problem of providing elementary education for a large number of children without the necessary number of qualified teachers" through the monitoring system in which older children help younger children (Valerien, 1991, p. 39), which is a similar problem Uganda is experiencing. Peer tutoring places responsibility of teaching in the hands of the able, knowledgeable and well prepared students whom the regular teacher would have trained.

Issues Acquiescent for Change

Using the functional approach, Valerian (1991) analysed factors in the classroom and school that could be altered to improve the teaching of large classes. The approach entails describing an actual classroom situation, listing possible solutions or innovations that teachers could introduce in their classrooms; and listing of measures or innovations that administrators and managers could introduce at various levels of the education system. The changes necessitate alterations in: (1) Teaching methodology, (2) the teaching aids, (3) the pupil-teacher ratios, (4) the use of school premises, (5) the use of time, (6) the relations with the education authorities, (7) the improved utilisation of resources of the immediate environment, (8) the introduction of certain practices borrowed from the non-formal education, (9) the search for outside national and foreign aid, (10) the assessments, tests and examinations, and (11) the in-service teachers training.

What Strategies have Ugandan Teachers Developed to Promote Learning in Large Classes?

The thirty five teachers were interviewed about their experiences of teaching in large classes and what strategies they had developed to enhance learning in their classrooms. The findings, consistent with previous research, indicated that a number of challenges were experienced by the teachers in trying to promote learning in their large classes. These included:

- Classroom control and management difficulties resulting into indiscipline e.g. excessive noise and children dodging exercises
- Difficulty to prepare teaching and learning materials enough for the big numbers.

- Difficulty to reach out and interact with all learners, especially those with learning disabilities and the slow ones. Classroom movement was usually restricted to the front zone.
- Few learners are able to participate within the lesson, and feedback is restricted to a few learners.
- Difficulty to assess and give immediate feedback.
- Difficulty to give comprehensive helpful feedback - usually restricted to ticks, crosses and marks.
- Marking difficulties leading to less exercises and practice given for purposes of reducing marking burden.
- Difficult to develop children's good handwriting skills and neatness because writing space is limited due to overcrowding.
- A healthy hazard e.g. easy spread of infectious diseases such as flu and cough due to overcrowding.
- Time constraints and failure to complete the syllabus if one attempts to give individual attention.
- Limited space for group work.
- Lack of affection for individual learners. All learners are viewed as a whole group and it is difficult to establish personal relationship with individual learners.

In response to the challenges, different teachers in different contexts had developed strategies to cope with the large classes and "promote" learning. Some of the strategies are institutional while others are particular to individual teachers. A critical analysis of the strategies resulted into two major classifications: strategies with great potential to enhance learning if well developed, and strategies with limited pedagogical merit.

Strategies with Pedagogical Merit and Potential to Promote Learning in Large Classes

Group Work

In interviews conducted with the teachers they reported employing group work to enhance learning in their large classes. In fact some kind of group work was observed in thirty one of the studied lessons (31%). Much of the group work was employed to ease work management, for example, sharing the limited resources such as text books and other instructional materials. In some classrooms where the desks had been pre-arranged to aid a group work atmosphere, the strategy helped teacher movement and classroom control because of the corridors that had been left in-between the various groups. In such a situation, it was possible for the teacher to monitor and supervise children in the different groups, especially to control voice levels. What was noted, however, was that little, if any, discussion went on among the group members. In most cases children attempted the work individually within the group without any sharing or discussion. In some cases, even if the children had been required to discuss and produce a group product, the more able child within the group ended up doing the work alone while the rest of the children watched. It was apparent from the lessons observed that such a strategy needed to be developed further if the teachers were to tap its great potential to promote learning. Group work, if well arranged, can enable all children in their small groups engage with the task at hand, share their views, and learn from one another.

Team Teaching

Some teachers reported engaging in team teaching and/or co-teaching to manage their large classes. It was an arrangement in all the schools visited that each classroom had two teachers, who were supposed to assist each other in each lesson. In seventeen of the observed lessons (17%), presence of a co-teacher was noticed. The co-teachers in some instances assisted with keeping order and discipline in the class, by moving around and ensuring that no child talked or disrupted the ongoing lesson. They also helped in the distribution of materials and marking classroom exercises. In many other instances, the co-teacher just stood or sat quietly at the back of the class till the end of the lesson. Team and/or co-teaching is another strategy that this research feels needs developing further so that teachers go beyond merely using it to enforce discipline and manage work in the classroom, to viewing it as a potential strategy of enriching teaching and learning. The co-teachers can, for example, plan, teach and reflect on lessons taught together. They can also use it as a mean of strengthening group work in the classroom whereby each of the teachers would be in charge of guiding specific groups. It is also a strategy that can ease the difficulty of one teacher reaching out to the weak and/or slow learners.

Attracting Learners' Attention

It was mentioned by some teachers that they managed to promote learning in their large classes by being enthusiastic and attracting children's attention through story telling, singing and question and answer. Lesson observations in fact also revealed, consistent with O'Sullivan (2006)'s findings that several teachers possessed generic teaching skills, and managed to keep their classes warm and alive in general. Such an approach would be a catalyst for promoting active learning in Uganda's large classes. Teachers can strengthen this by engaging with suggested strategies in the literature such as those developed by the Schreyer Institute for Teaching Excellence (1992) including: writing the lesson outline and objectives on the board or transparency, giving a think break and designing a lesson around a problem-solving activity. Out of the one hundred lessons observed, it was only in 4 lessons that some kind of problem-solving was noticed. Otherwise the rest of the lessons were built on factual and rote activities. In none of the observed lessons did the teachers clarify the lesson objectives to the learners. Yet as Clarke (2001: 13) asserts, "with a clear learning intention/objective children are also clear about what they are really supposed to be learning". In this way, both the teacher and the pupils become focussed on the attainment of the intended learning.

School-Based Staff Development

One of the institutional strategies reported by administrators in 13 of the 20 schools surveyed (65%) was staff development through seminars organised by the school administration. It was reported that teachers were trained in several teaching strategies at least twice a term, the most prominent strategies being group work and instructional materials development. It was not possible for the research team to participate in any of these seminars, but they were reported by the teachers and administrators as having built the capacity of the teachers in dealing with large classes. One reported major strength was in the area of instructional materials where teachers had minimized dependency on materials provided by the school, to the development and utilization of low-cost materials. Indeed in 37 of the lessons observed (37%), teachers were seen utilizing varied instructional materials including beads, toilet paper, fruits, cut-outs, charts, and so on as illustrations. All these materials were provided by the teachers, but in most cases they were not enough for the big classes. This notwithstanding, the few available materials assisted in enhancing children's understanding of the concepts being taught. Teachers would in future do better by working hand in hand with the children in the development and provision of materials to be used in a given lesson.

As already mentioned elsewhere, group work is not yet a well developed teaching strategy even though the schools have endeavoured to train teachers in its use. Perhaps the approach used in the training is one of theoretical transmission, and teachers see little relevance of its application to their daily practice. This could be an entry point where university-based researchers and teacher educators collaborate with the schools in enhancing the staff development approaches. One proven staff development approach in terms of quality and impact is the reflective practice (in some contexts also referred to as action research or lesson study). Schon (1983) describes reflective practice as the need for professionals including teachers to reflect when faced with new problems or difficulties for which they have not been specifically trained. Elliott (1991) and Kember and Kelly (1993) have equated reflective practice to action research and/or action learning respectively. The "learning" or "action" refers to the use of reflection to become a better teacher. In other words, reflective practice requires the practitioner to contemplate on his/her current practice with a view to making it better. Reflective practice helps the trainer to desist from merely transmitting new teaching skills to the trainees, to continuously allowing them to make sense of the new material in relation to their existing practice. Indeed as Biggs (2003: 7) has noted: "Learning new techniques for teaching is like the fish that provides a meal today; reflective practice is the net that provides meals for the rest of your life".

Strategies with Minimal Potential to Promote Learning

Some strategies that teachers and schools have adopted to cope with large classes have got minimal pedagogical merit and may be counterproductive.

Lesson Duration

A number of teachers (48%) of those studied had resorted to extending lesson duration from the official recommended 30 minutes for lower classes (P1-3). Both interviews and lesson observations revealed variations in lesson duration ranging from 30 minutes to up to 90 minutes in some cases. Justification for prolonged lessons included catering for distribution of textbooks, covering as much content as possible, and ensuring that a number of learners participated in the lesson by way of answering questions. While this favoured the teachers in as far as content coverage was concerned, it was not a conducive strategy for the young learners whose concentration span doesn't normally exceed thirty minutes. This is more so in classrooms where there are limited activities, and children are only expected to listen and respond to teacher-initiated activities.

Daily Homework

Some teachers reported engaging in comprehensive daily homework for purposes of giving children practice, and also to enable them get individual assistance from their parents/guardians. Giving children practice is a pedagogically acceptable practice, but children too, especially those in lower primary, need time to rest and play. This practice also presupposes presence of literate parents/guardians with time to attend to their children's homework. There is also a possibility of homework being attempted by the parent, guardian or able peers at home, at the expense of the child him/herself getting hands-on.

Little Classroom Exercises Given to Reduce Marking Burden

It was also reported by a number of teachers in interviews (but was also observed as a common scenario in lessons) that they had resorted to giving few numbers as classroom exercises to ease the marking burden. While this would be a pedagogically acceptable strategy, especially given that the young learners may be strained by comprehensive exercises, the type of exercises given usually left a lot to be desired. There was a tendency to resort to one right answer questions, and regurgitation of questions and answers that had already been given by the teacher during teaching. This practice encouraged recall and rote learn, at the expense of promoting critical thinking. It was contrary to the social constructivist perspective that focuses on learning as sense-making rather than on the acquisition of rote knowledge that is transmitted by the teacher (Selly 1999).

Increased Number of Exercise Books

In sixteen of the twenty schools surveyed (80%) children reported being required by the school to possess two to three exercise books per subject (one for class exercises, one for homework and one for tests). This was instituted to enable the children be organised in their work, and also to reduce teacher pressure. If, for example, the teacher had not yet marked homework by the time lessons commenced, s/he was not too much pressurized as children had another set of exercise books for classroom exercises. Such a strategy would be strenuous to children from socio-economic poor backgrounds, and may, therefore, not be replicable.

Extended School Opening and Closing Time

The other strategy was extension of school programmes, particularly for upper classes (P5-7). Instead of beginning at 8:00 am and closing at 3:20 pm, schools had resorted to beginning from 7:00 am to 5:00 pm. This was to ensure that teachers gained some time to cover more content. This, as was the case with extended lesson duration time, was at the expense of children's time to rest and to play.

4. Conclusion and Way Forward

The issue of large classes is indeed a pressing matter to many primary school teachers in Uganda. Many teachers have realised the negative influence that class size can have on the quality of teaching and learning, and have devised strategies of coping with the situation. Some of the strategies developed have great potential to facilitate meaningful learning if well nurtured. These include group work, team teaching and attracting children's attention, among others. Other strategies adopted, such as increased lesson

duration, have got minimal potential to facilitate learning, because they are mostly employed to aid content coverage. As teachers grapple with the large class problem, there is need to shift focus from content coverage to quality and quantity of what is covered. The Ministry of Education and Sports can play a crucial role. If it emphasises syllabus coverage, teachers will also focus on completing the syllabus rather than on the quality of learning. However, if the Ministry's focus is on the quality and coverage of what is covered in the classroom then teachers will also shift focus from coverage to cultivating understanding and meaningful learning in the classroom. What was noted throughout the course of this study was that teachers were pressurized to cover as much content as possible (breadth as opposed to depth). What is required now is cultivating strategies that ensure not only broader coverage of content, but are also capable of promoting deep understanding and application of what is covered. Some of these strategies are entailed in literature, and others are already part of the teachers' practice, but only need further development through reflective practice.

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Effective classroom management strategies and classroom management programs for educational practice: A meta-analysis of the effects of classroom management strategies and classroom management programs on students' academic, behavioural, emotional, and motivational outcomes. Groningen: RUG/GION. An example of a widely used and generally effective preventive strategy among teachers in primary education is that classroom rules are negotiated instead of imposed (Marzano et al., 2003). Teachers, however, also frequently use reactive strategies (e.g., punishing disruptive students; Rydell & Henricsson, 2004; Shook, 2012), whereas it is unclear whether these strategies effectively change student behaviour. The instructional strategies teachers use help shape learning environments and represent professional conceptions of learning and of the learner. Source for information on Instructional Strategies: Encyclopedia of Education dictionary. Nineteenth-century instructional strategies were teacher centered, intended mainly to transmit basic information clearly. Presentation enables teachers to organize and convey large amounts of information efficiently. It is an appropriate strategy for instructing students about the key ideas in a subject, for acquisition and retention of factual information linked to these ideas, and for comparing similarities and differences among ideas.