

Good Teaching, the Fajar Way –Using Reflective Journals to Evaluate the Intent and Practice of Teachers Teaching Normal Technical Students

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Abstract

Reflective teaching is a conscious, systematic and deliberate process of framing and re-framing classroom practices, recognizing that the teacher's intents, visions and actions are connected to the outcome of the teaching-learning event. An essential step to good teaching is an attempt to meet the learning needs and style of every child so that his/her heart and mind are reached for learning. Reflective teaching is a multifaceted process of understanding classroom events, pupils' preferred learning styles and teacher's perception of pupils' learning. In the light of recent findings from studies about multiple intelligences, effect of matching teachers' and pupils learning styles and experiences that involve active learning, teachers in IT and mathematics in a Singapore neighbourhood school attempt to pool experiences in teaching the less motivated in a secondary normal technical class. The teachers analysed their own teaching and the students' learning as recorded in the reflective journals. The students logged in their feelings about their learning at the end of every unit of lessons during the same period. Based on teachers' reflection journals and pupils' feedback, interviews with pupils over a period of 8 weeks, teachers' teaching was evaluated to provide evidence of good teaching that reaches the hearts and minds of the students. The results showed that the teachers became more conscious of their teaching and applied different styles to meet pupils' needs. Pupils' feedback showed that they were more focused in the lesson and became more interested in their learning.

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Introduction

The underpinning goal of every teacher should be to bring about learning. Learning is not merely absorption of information mindlessly and regurgitating it during assessment. It is a process whereby behaviour changes as a result of experience. (Merriam and Caffarella, 1991) The central person who would bring about these changes through providing the opportunity in experience is the teacher. Thus a teacher is the catalyst that inculcate in young minds the insatiable curiosity that drives one to absorb everything that he can see, hear or read so as to improve the efficiency and speed of the process of learning. In meeting this role, the teacher needs to take account of the learning processes and learners' characteristics. As learners' characteristics changes, the way lesson is delivered changes. This change is only possible if the teacher is aware of the needs of his learners. Since there is no single method in teaching, the teacher needs to constantly check on his learners' progress as well as their needs and changes. Ultimately, the teacher needs to customize his lesson to suit the needs of the learners.

What is reflective teaching?

The concept of reflective practice was evident in the writings of Dewey (1910) and continuing with the works of Schon (1983). Though this concept is widely accepted by educators, the definition is often debated upon as they differ in the purpose and outcome.

Pennington (1992) defines reflective teaching as the process of analyzing one's own teaching practice and its underlying basis, and then consider alternative means for achieving their ends. Farrell (1995). in his definition of reflective teaching, brought it beyond just looking for alternative ways to teaching. He defined it as a response to a past experience which involves in conscious recall and examination of the experience as a basis for evaluation and decision making and as a source for planning and action.

Osterman (1990) saw a different purpose of reflective teaching. He defines it as a challenging, focused and critical assessment of one's own behaviour as a means towards developing one's own craftsmanship. Through reflective teaching, the teacher is able to develop and sharpen one's skills in teaching thus bringing about improvement in classroom instruction, pupils' learning and education in general. Richards and Lockhart (1994) did not confine reflective teaching to only one's behaviour but broke down one's action and behaviour to one's attitudes, beliefs and assumptions, thus making reflective teaching more soul searching.

Reflective teaching is further broken down into four aspects, each with a different purpose. Technical rationally examines teaching behaviours and skills after an event, such as a class. The focus of reflection is on effective application of skills and technical knowledge in the classroom (VanMannen, 1977) and also on the cognitive aspects of teaching (Schulman, 1987). Reflection-in-action concerns with thinking about what we are doing in the classroom while we are doing it to reshape what we are doing. (Schon, 1983). However, reflection-on-action deals with thinking back on what we have done to

discover how our knowing-in-action may have contributed to an unexpected action. (Hatton and Smith, 1995). And encompassing all the three aspects is reflection-for-action where it takes into account the desired outcome of both previous types of reflection, reflection-in-action and reflection-on-action; however reflection is undertaken, not so much to revisit the past or to become aware of the meta cognitive process one is experiencing but to guide future action. (Killon and Todnew, 1991).

Through all the definitions, it is clear that reflective teaching the purpose of reflective teaching is to make teaching effective through looking into classroom management, instructional behaviour, classroom organization and teacher's expectation which also includes the teacher's disposition and decision making to improve the process of teaching as well as develop and sharpen teaching skills (Giovannelli, 2003).

Why is reflective teaching effective in pupil learning?

How teachers teach is very much related to how they view teaching. Freeman (1996) advocated 3 concepts in teaching. Behavioural view focuses on what teachers actually do and attempts to connect their actions to pupil learning. While cognitive view sees teaching as a combination of thinking and doing. And interpretivist view sees teaching as knowing what to do.

Most teachers teach the way they learn (Stitt-Gohdes, 2001) or the way they were taught (Bailey, et al., 1996). They preferred more content oriented, favouring less pupil involvement and more structured class activities (Hayes and Llinson, 1997, Pithers,

2001). Teaching behaviours reflect the beliefs and values that teachers hold about the learner's role (Heimlich and Norland, 2002).

In order to fully engage the pupils and make teaching effective, one has to look at three aspects in the learning environment, namely, the teacher, the pupils and the classroom. Teachers' awareness of their behaviour in class is the first step towards being able to change their teaching practice (Larsen-Freeman, 1983). When teachers who are new to teaching, experience is insufficient as a basis for development, thus there is a tendency to rely on their experience as a learner to teach (Bailey, et al., 1996).

Reflective teaching provided the opportunity for the teacher to understand his own actions and decision making to carefully select strategies in engaging the pupils in learning. This reflection is essential in ensuring that the lesson is more focused in meeting the learning needs of the pupils. However, the effective reflective practitioner also need to take into consideration the pupil whose learning style and needs may not remain constant.

Learning theories dated as far back as Piaget and Vygotsky showed learning is very much affected by the stimuli present in the environment and the interaction the learner has with the person they come in communication with, mainly the teacher (Seng, et al., 2003). Gardner (1993) suggests that there are a number of distinct forms of intelligence that each individual possesses in varying degrees. The implication of his theory is that learning/teaching should focus on the particular intelligences of each person. Gardner points out that the different intelligences represent not only different content domains but also learning modalities. Teachers' knowledge of each child's inclination would be vital

to planning an effective and engaging lesson. Thus, the understanding of the pupils' learning preference in becomes a part of reflective practice that the teacher cannot overlook.

Classrooms are not passive environments in which teaching and learning happens to take place – they should be designed to promote and enhance learning. (Clegg and Billington, 1994). Physical context, structures and routines, resource management, behaviour, communication are vital elements in a classroom that must be considered in managing the classroom. (Moyle, 1995). Pupils must be comfortable in the learning environment to effectively learning and engaged in their learning. Learning to live in a classroom involves, among other things, learning to live in a crowd (Jackson, 1968). Pupils need to work with others to learn better yet there are individual differences where pupils must learn how to socialize with one another. A classroom that is cold and uninviting does not put pupils at ease and be ready for learning. Teachers must be mindful of the environment that surrounds the classroom. A good lesson intending to meet the learning needs of pupils will be ineffective if the environment around the classroom and outside the classroom have been excluded in the planning of the lesson.

How is reflective teaching effective in changing pupil learning and engaging them?

Reflective teaching advocates the teacher as an active participant in the teaching process capable of making effective instructional decisions and designing curriculum to meet the needs of their pupils (Richardson, 1994). Through understanding the needs of the pupils, the teacher is able to customise the lesson to meet the needs of the pupils. When pupils'

learning preferences match their instructor's teaching style, pupil motivation and achievement usually improve (Stitt-Gohdes, 2003, Miller, 2001).

Reflective process gives teachers the opportunity to examine their relations with pupils, their values, abilities, and their successes and failures in a realistic context (Lange, 1990). In this manner, a teacher's intent in teaching is closely tied in with the pupils' disposition in the classroom and teaching has gone beyond mere delivery of content but engaging pupils in the learning process with their needs in mind. Pupils through the lesson may observe that their learning needs are met, shifts from a passive learner to one that is participative and more active.

Statement of Problem

The purpose of this study is to look at the effect of reflective teaching in enhancing pupils learning in the area of Mathematics and Computer Applications. This research primarily focus on the Normal Technical stream pupils who have often been looked upon as challenging and less academically inclined.

The rationale of the research is to use reflective journals to understand the intent of the teacher in teaching and using feedback from pupils to understand the needs of the pupils as well as a source to reflect on each lesson for planning future lessons.

Findings from research on reflective teaching postulate that teachers tend to be more aware of their teaching style and pupils' learning style and try to change their teaching style to match pupil's learning style to engage pupils in learning.

This research is part of an on-going process of teachers' effort building a culture of providing good teaching and engaged learning in the school. It is not intended to be conclusive nor provide generalization in reflective teaching.

Methodology

This study is comparative in nature. Data is collected on three occasions in each of the subjects taken by the Normal Technical pupils over a period of 8 weeks. Teachers were briefed on the purpose of the study and taught how to complete the reflection forms. Pupils are given a feedback form to complete at the end of each topic taught.

Analysis of the data is based on the percentage of the pupils showed an increase or decrease in their feedback on their liking for the lessons, their observation of the teachers' awareness of the problems they faced and efforts made by teachers in addressing their problems as perceived by them. Teachers' reflection forms are used to surface the intent of the teachers in trying to customise their lesson according to the needs of the pupils. Two interviews were conducted on 9 pupils, 3 for each level of academic ability in each of the two subjects, during and after the period of observation. The purpose of the interview is to gather feedback on their of understanding of the lessons

conducted, their perception of teacher’s intent in the lesson and teachers’ intent as a motivator to attain better results.

Results

The results of the feedback gathered from the pupils are reflected in Tables 1 and 2.

CPA	Like Lesson	Dislike lesson	Problem noticed	Problem not noticed	No problems	word of encouragement	word of discouragement	No response
1st feedback	89.3%	53.6%	53.6%	21.4%	17.9%	53.6%	17.9%	10.7%
2nd feedback	84.4%	53.1%	46.9%	28.1%	15.6%	56.3%	18.8%	9.4%
3rd feedback	96.7%	23.3%	50.0%	10.0%	36.7%	30.0%	10.0%	6.7%

Table 1: Feedback from pupils regarding the lessons conducted by the Computer Applications teacher

Math	Like Lesson	Dislike lesson	Problem noticed	Problem not noticed	No problems	word of encouragement	word of discouragement	No response
1st feedback	61.3%	54.8%	32.3%	45.2%	12.9%	35.5%	6.5%	9.7%
2nd feedback	48.0%	80.0%	24.0%	44.0%	20.0%	32.0%	16.0%	12.0%
3rd feedback	74.1%	59.3%	25.9%	33.3%	40.7%	22.2%	0.0%	3.7%

Table 1: Feedback from pupils regarding the lessons conducted by the Mathematics teacher

Pupils' perception of what they like about the lesson showed an increase for both subjects. However, while their perception of what they dislike about the lesson declined for Computer Applications their perception for Mathematics has increased. Both pupils' perception of their problems during lesson being noticed and not noticed has declined. However, their perception of the presence of problem in their learning has decreased for both subjects. Similarly, their perception of teachers' use of words to encourage or discourage learning has decreased for both subjects.

Teachers' feedback gathered from their reflection forms showed that lessons originally intended to teach content has shifted to one of motivating pupils. Both teachers also showed that they tried to adapt their teaching style to match pupils' learning style through building in more activities that would encourage active and experiential learning. The Computer Applications teacher also designed one of her lesson to provide an opportunity for transformative learning.

Interviews with pupils showed that all 3 levels of academic abilities could recall and retain lessons that were authentic and they had an opportunity to demonstrate or participate in the lessons. They were motivated to achieve realistic target after they had a better understanding of their individual learning deficiency. 6 of the pupils were able to meet their target in the first semester examination while the others were achieving close to their targets.

Discussion

Reflective teaching is one of the many methods adopted by the teachers in providing good teaching and engaged learning. It is more effective to design curriculum so that there is some way learners of every learning style to engage with the topic, so that every type of learner has an initial way to connect with the material, and then begin to stretch his or her learning capability in other learning modes (Delahoussaye, 2002). Reflective teaching has provided an avenue for teachers to design their lessons to meet learners' style and to bridge the gap between pupils' learning to the materials that needed to be learnt.

The findings seemed to indicate that as teachers begin to anticipate pupils' problems, the percentage of problems noticed as well as not notice starts to decline and the pupils begin to find reasons for liking the lessons. The use of words of encouragement also decreases as teachers focused on solving pupils' problems.

In the feedback given by pupils, most of the pupils who indicated that they like the lesson gave noise and disruption as the main reason. This is expected as learning takes place with activities that were adopted by the teachers. Much as the teachers tried to meet the learning needs of the pupils, it is difficult to cater to each individual pupil as each has different learning style.

How educators select their strategies and implement techniques is a function of their beliefs and values regarding the methods and can be modified to fit within the unique belief system of the educator. The manner in which any method, whether lecture or

game, discover-based learning or discussion is used within a learning event is the choice of the educator and should be a reflection of his or her philosophy. (Heimlich and Norland, 2002). Teachers in their reflection forms indicated they build their lesson based on what they perceive pupils need and learn best.

Performance is generally improved when goals are set and prioritized, and strategies planned and developed, for goal achievement. Research evidence suggests that setting specific, challenging (but achievable) goals is more likely to lead to improved performance than general or 'do your best' goals. (Locke and Latham, 1990). During the interviews, pupils were made to set specific goals for their first semester assessment. Most of them were realistic in setting goals and supported their decision with their current achievement as well as their ability to move to a higher target.

From the research findings, it appears that teachers' intent of ensuring engaged learning is reflected in their perception of pupils' needs and meeting their needs. Good teaching is not merely using positive strategies like praising. In cases where teachers focused on addressing pupils' problems, planning their lessons with anticipation of pupils' problems takes centre stage. Praising pupils, using words of encouragement became secondary in ensuring engaged learning. Teachers changed their style and tried to work towards meeting the needs of their pupils became more obvious and intense as teachers reflect on their teaching and using pupils' feedback to plan their lessons. This calls for teachers to be more flexible in the way they teach and may require them to be different each time they enter the same class. However, before teachers can attempt to develop more flexible

teaching style, they must be receptive to the idea of change, beginning with a change in their beliefs about the students' role in the learning environment (Brown, 2003).

The challenges in this research come mainly from two sources, namely, the teachers and pupils. Teachers could not accept the feedback from pupils as they took them as criticism from pupils. At the same time, the feedback form is seen as a chore and is monotonous as the same form is given at the end of each topic. For a learning culture to be prevalent in the school, teachers' mindsets need to be changed. Feedback from pupils should be made use of as data for personal development rather than a threat to one's career development.

For this research, the same form was used for each feedback. As a result, pupils were less forthcoming in providing feedback. Teachers need to look for different means of collecting data, like pupils' journal entries, interviews, etc. Varying the mode of feedback can help in gathering more realistic data. In providing feedback, pupils also learn to assess themselves thereby reflecting on their own learning.

Conclusion

To build a culture of good teaching, it requires teachers need to examine their belief structure regarding education and engage in an ongoing process of diagnosis, with self and with learners, including observation, questioning, obtaining evaluative feedback, and critical reflection (Nuckles, 2000). Reflective teaching forms part of this effort in

ensuring good teaching. Through good teaching, pupils become engaged in their learning, thus building a learning culture.

This research is part of the action learning project the school has undertaken and is intended to be ongoing. This study is exploratory and the findings cannot be generalized due to the small sample used and the short duration of the research. Further research needs to be carried out to confirm its conclusion. This research could also be carried out on pupils of different academic abilities in other courses to see if similar results could be obtained.

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