CUSTOMS FOR CONSTRUCTING A CULTURE OF THINKING AND ASSESSMENT MODALITIES IN CLASSROOMS- AN EXPERIMENTAL STUDY

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ABSTRACT

Meta cognitive learning activities immerse students in challenging tasks and it creates a space for students to discuss, debate new ideas and allows them introspecting, assessing and set targets for learning. The intellectual dimension of student learning enters to their cognitive readiness through the mode of self-regulated learning which is capable for making them responsible for managing their own learning. Objectives of the study were 1. To implement Meta cognitive practices towards constructing a culture of thinking in classrooms 2. To capacitate the students to self assess their learning performance in a systematic manner. 3. To analyze the impact of self-assessment technique through the creation of a strategy evaluation performa on the select classroom practice, Self Questioning. The analytical pathways derived from the analysis of the appropriateness of Self Questioning as a Meta cognitive classroom practice provided a route to the understanding of the effectiveness of Self Questioning practices towards making the learners efficacious and self regulated which is the heart of Meta cognition and the way to exultation in the learning process. Generating and answering their own questions, checking their outcomes by utilizing self-evaluation activated their understanding and helped to become owners and operators of their own learning. The study also reveals that this type of assessment technique will enhance creative thoughts of students as well as promote the thinking capabilities in a worthy manner.

INTRODUCTION

Worldwide efforts are increasing to infuse thinking skills into the curriculum, which are part of cognitive behavior, and to include them in the instructional strategies, which make the learner producers of knowledge and help to create a sense of responsibility among them. The ripple effects of these practices are excellent models for students towards developing thematic units and help them to think more critically about what, why and how they learn. By providing variety of learning experiences, constructive working relationships, schools can keep them fully involved in the learning task. Meta cognitive learning activities immerse students in challenging tasks and it creates a space for students to discuss, debate new ideas and allows them introspecting, assessing and set targets for learning. Above all, it enables them to strive to excel in their areas of responsibility and acts as a viable tool for self directed learning (OKoro, 2011).Planning, Monitoring and Evaluating are the basic Meta cognitive strategies help to promote a culture of thinking which is the priority of educational programmes. (Salmon, 2008).

In order to broaden students' active engagement through adoption of conducive strategies which helps to lessen exclusion from the learning task, provide students ample opportunities to change the script of classroom and develop their own abilities and take advantage from the learning task in a fruitful way. The intellectual dimension of student learning enters to their cognitive readiness through the mode of self-regulated learning which is capable for making them responsible for managing their own learning. It is believed that good language learners exhibit greater autonomy than weak learners and they indicate their efficiency to learn the language and are quite capable of learning in a self-directive pattern. The changing role of pedagogical approach needs to focus on 'How and Why phrases of learning'. 'How' answers the need for figuring out the maximum learning potential of learners.

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STATEMENT OF THE PROBLEM

Customs for constructing a culture of thinking and assessment modalities in classrooms-An experimental study

OBJECTIVES OF THE STUDY

1. To implement Meta cognitive practices towards constructing a culture of thinking in classrooms
2. To capacitate the students to self assess their learning performance in a systematic manner.
3. To analyze the impact of self-assessment technique through the creation of a strategy evaluation performa on the select classroom practice, Self Questioning

Sample selected for the study: 45 Secondary school students from three schools belong to three districts of Kerala namely; Pathanamthitta, Alappuzha and Kottayam were selected for the study.

PROCEDURE ADOPTED FOR THE STUDY

The curriculum transaction procedures prevalent in the school setup had been interlinked through the development of a lesson design based on the Meta cognitive practice, Self Questioning towards improving the quality of learning. The lead Meta cognitive skills like Planning, Monitoring and Evaluation have been entailed in the earmarked contexts of Malayalam language learning. Before implementing the select practice, the investigator made a holistic vision of the basic Meta cognitive strategies that can lead to more effective learning and improved performance in the learning of language. This awareness enabled the learners to perform a specific learning task with consistency and take control about what they are doing through the process of learning rather than focusing attention solely on learning the content material.

Self Questioning: In Self Questioning, students ask questions by themselves that enhance the development of Meta cognitive skills. This practice is opted in tune with the Duke and Pearson's Apprenticeship Model for developing questioning practices which consisted of a four phased schema orientation namely, Describing, Modeling, Scaffolding and Prompting towards empowering the learning strength of students. The five phases are Describing, Modeling, Scaffolding, Prompting, and Evaluating. The sequencing of the model is given in Figure given below.

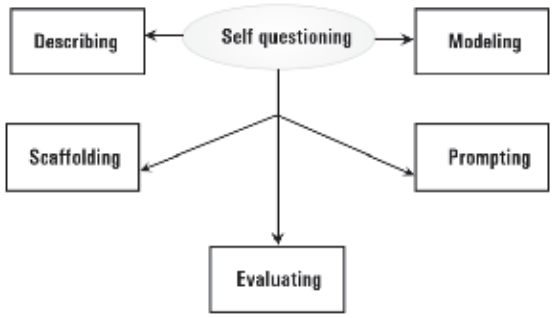

Figure 1. Apprenticeship Model A Syntax of automatically generated self-questioning.

Stage 1. Describing.

The initial phase of the Self Questioning practice begins by an explicit explanation about the significant and remarkable benefits incorporated in this particular mode of learning experiences. Pre attempts for Self Questioning practices, varied dimensions of questions and Meta cognitive practices are described in detail.

Stage 2. Modeling.

'Modeling' gives the learners a real lesson context with a commitment to continuous improvement in learning. This carefully designed and structured pattern entails to gain a deep understanding of the procedures needed for completing the desired learning task. Explicit instruction and observational learning are the intended outcomes of 'Modeling'.

Stage 3. Scaffolding.

'Scaffolding' is intended to help the students to apply the classroom practice in a particular learning context through constructing their own questions. It is an instructional technique where by the teacher models the desired learning strategy or task, then gradually shifts the responsibility to the students. It follows an intelligent feedback from the part of the investigator towards guiding the learners in creating a productive classroom set up and mitigates the errors committed by them.

Stage 4. Prompting.

'Prompting' enables the students to generate questions and engages in self-monitoring with

the help of prompts .The self-monitoring sheets were given by the investigator. The noticeable attempt in this stage is that learners are encouraged to promote higher levels of engagement through teacher prompts.

Stage. 5 Evaluating.

'Evaluating' enriches learners' self-monitoring capabilities and changes the classroom dramatically through the active participation of the students. Evaluation and follow up comments reinforce student understanding and long-term retention of the schema modifiability.

Implementation of alternate assessment technique

In order to analyze the worthiness of the select meta cognitive classroom practice, Self Questioning ,in making improvement in the academic achievement of secondary school students in the learning of Malayalam language and fortifying their meta cognitive awareness, a Strategy Evaluation Proforma which as administered to the total students who were exposed to the classroom practice.The data collected through the Strategy Evaluation Proforma for Self Questioning is detailed in the Table given below.

Table 1.Self evaluation of the appropriateness of Self-Questioning as a Meta cognitive classroom practice

observations	Responses of students in % To a greater extent	To some extent	Not at all
This practice helped me for actively engaging in the learning process.	85	15	-
Through this practice, I have learned to create higher order questions in a skillful manner.	86	14	-
It has helped me to stimulate interest in participating in-group discussion.	90	10	-
I have learned that asking questions plays a highly significant role in facilitating classroom interactions between the teachers and students.	95	5	-
It enabled me to learn smarter, quicker and deeper	92	8	-
It equips me to become more efficient thinker in every phase of the learning process.	95	5	-
It is a privilege for me to understand this practice			
It serves as a form of self checking to assess if the material is understood	82	18	
Meta cognitive skills attained through self-questioning allowed me to transfer of knowledge into a new situation.	89	11	
Meta cognitive and cognitive discussions enabled me to check the worthiness of the learned classroom practice.	92	8	

The responses collected through the administration of the strategy evaluation proforma shed light on the extent of impact of the select classroom practice towards creating quality questions and enabling the learners to move to the internalization level of engagement. Among the participants, 90% opined that carefully constructed questions helped them to develop confidence and stimulate interest in generation of questions. Providing generic question stems and signal words encouraged them to think more deeply about the content material. Among the respondents, most of them (82%) agreed that self-questioning serves as a fundamental tool for self-checking about what they have learned and this feedback optimized the learning, which acts as a merit of scholarship. Most of the learners (95%) are of the opinion that group discussions and thoughtful interactions enabled them to expand and clarify the questions cited by peers in the classroom. Most of the students (92%) are of the opinion that Meta cognitive discussions enabled them to check the worthiness of the classroom practice in a fruitful manner.

The analytical pathways derived from the analysis of the appropriateness of Self Questioning as a Meta cognitive classroom practice provided a route to the understanding of the effectiveness of Self Questioning practices towards making the learners efficacious and self regulated which is the heart of Meta cognition and the way to exultation in the learning process. Generating and answering their own questions, checking their outcomes by utilizing self evaluation activated their understanding and helped to become owners and operators of their own learning.

Concluding thoughts: The meta cognitive classroom practice, namely 'Self Questioning' exposed to the students admits the efficacy of the practice towards attaining a better outcome in the learning of Malayalam language and producing a higher quality in the learning process at varied levels. Coaching to assist students in framing, structuring, soliciting and reading good questions mainly intended to focus on the improvement of classroom questioning practices and learners have acquired a number of benefits from them. The investigator felt an added benefit that the questioning practice enables the learners to build relationships among them and allow expression of affect through becoming better listeners and more present for another person towards taking them to new heights. Properly sequenced questions allow the learners to clarify and share learning intentions towards building the criteria for success. Independent level of verbal instructions by consciously using conversations and instructional dialogue help them to become competent as question framers in the process of learning. The investigator felt that this questioning process, classroom discussions and sharing of thoughts help them to internalize quality practices in questioning and the appropriate wait time allows them to make thoughtful responses towards attaining improvement in learning.

The study also reveals that this type of assessment technique will enhance creative thoughts of students as well as promote the thinking capabilities in a worthy manner. From the observations made by the students Research suggests that when the brain is challenged, it becomes engaged in intense activity and search for patterns and connections (Cain and Caine, 1991). Practice on developing these patterns in the form of G.Os enables the learners to interact with information and makes the thinking visible to others. Such type of enriched environment helps the students to flourish the learning process and engage their brain with intriguing and inviting intellectual challenges.

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