Comparative Efficacy of Diverse Instructional Practices towards Enhancing the Academic Achievements of Students having Varied Learning Styles with Special Reference to Auditory Learners

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Abstract

Differentiated instruction and learning styles are closely related concepts in education. Differentiated instruction refers to the practice of tailoring instruction and learning experiences to meet the diverse needs and abilities of students in a classroom. It recognises the different modes of learning such as visual, auditory and kinesthetic based on their sensory modalities. Effective differentiation takes into account students' learning styles as one of the factors influencing their learning. Educators can design instructional strategies and activities that better align with how students process information and engage with the learning material. It may offer different options for students to demonstrate their understanding of a concept. A teacher can address different learning styles and provides multiple entry points for students to access and express their learning. This experimental study explains the efficacy of select three differentiated practices on auditory students.

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Introduction

Multisensory experiences refer to experiences that engage multiple senses simultaneously, providing a more immersive and engaging encounter. These experiences leverage various sensory modalities to create a more comprehensive and impactful perception. It helps to evoke deeper emotional responses by engaging multiple senses. Howard Gardner's landmark study of Multiple Intelligences has opened many avenues for improving the process of learning and challenges teachers to explore new instructional practices in schools. By ensuring an environment where students are nurtured and learn to look within themselves and motivate them to build self-confidence and faith in their talents. Students in today's classroom are more diverse than ever and this diversity poses the need for inculcating differentiating instruction in the classroom.

It is based on the learning styles of the students. It helps encourage, enrich their motivation, and challenge them to learn smarter. Making use of multisensory teaching is one of the key factors that ought to be considered for helping the learners retain the given information. It incorporates three main learning styles: visual, auditory and kinesthetic. This stylistic pattern of learning is based on the idea of individuation, which implies that all students have strengths and abilities and that each student may learn in a different way. The concept of learning styles advocate that teaching and learning methods should be adapted to suit how individual learners prefer to interact with the information being presented to them (Kolb, 1984). Dunn and Dunn (2002) points out that learning styles are the way in which each learner begins to concentrate on process, internalise, remember, and retain new and difficult academic information.

In the present study the investigator detailed learning style as the crucial component in constructing a favourable learning environment for the learners and the chief componential dimensions of sensory preferences refer to the perceptual learning channels with which the learner is most comfortable to receive and retain the information. Hence, based on this definition the learners are classified into three categories namely visual, auditory and kinesthetic. A series of research evidences support this view and a substantial number of studies have reported that learning styles can engage and provoke the learner in a productive manner to learn and make a tremendous difference in the behavior and learning of students. (Doss and Muthiah, 2002; Dry Dale et al, 2001; Tileston, 2004). Differentiated instructional practices facilitate students to keep the track of learning, stimulates intellectual curiosity, and helps to maintain motivation in the learning task. Instead of being distant observers of questions and answers, students become immediate practitioners

through the articulation of such practices in the classroom set up. It also helps the students who have different learning styles. The investigator witnessed this in classrooms several times. It motivates her to conduct this type of experimental study. In this study the investigator made use of three differentiated practices viz, practice on self questioning, graphic organisers and problem solving.

Review of Related literature

Verma and Sharma (1987) studied academic achievement in relation to learning styles of adolescents. They observed that the group of dependent learning style is significantly better than the group of independent learning style students so far achievement is concerned. Malohotra (1993) studied the learning outcomes among adult learners in the Union Territory of Chandigarh as related to goal orientation, persistence, and learning styles. They found that the goal of reading and writing had a positive effect on the learning outcomes of the learners. Lemire and David (1998) through their research describe the psychometric issues associated with three different learning styles models (visual, auditory, and kinesthetic) and the instruments designed to assess these models. They also present some backgrounds to the learning styles idea along with suggestions for utilising this information with developmental students. Kopsovich (2001) in his study investigated the correlation between learning styles of students and their mathematics scores in the Texas Assessment of Academic Skills Test. Malathi and Malini (2006) conducted a study which revealed that there is high correlation between learning style and achievement, which implies that higher the achievement scores, the better was the learning style among higher secondary students.

Gohel (2009) explored the effect of learners' learning style based instructional strategy on science achievement of Secondary School students. He found out the impact of varied instructional strategies in accordance with their learning styles namely: visual, auditory and kinesthetic. Martin (2010) conducted a descriptive phenomenological study explored qualitatively the lived experiences of freshman nursing students who were taught with teaching strategies that were different from the strategies to which they were accustomed. Further the study explored whether or not the teachers' teaching strategies complemented the learning styles of the learners. Joshua Cuevas (2015) conducted a study on comprehensive analysis of recent research on learning styles (*Theory and Research in Education*) They opined that there was a lack of empirical evidence supporting the concept of learning styles-based instruction and provided guidelines for the type of research design necessary to verify the learning styles hypothesis. This article examined the literature since 2009 to ascertain

whether the void has been filled by rigorous studies designed to test the matching hypothesis and identify interaction effects. Correlational and experimental research recently published on learning styles is reviewed, along with an examination of how the subject is portrayed in teacher education texts.

The investigator couldn't find any study which reveals the impact of differentiated practices among any specialised groups of students with regard to their learning styles. In Identifying the research gaps from this review of related studies the lies rationale for undertaking this type of research. The other notable thing is that no studies have been conducted in Malayalam language learning area. Herein lies the rationale of this study.

Operational Definitions

Diverse instructional practices

A framework or practice for effective teaching involves providing all students diverse classroom experiences and a range of different avenues for understanding concepts. In this study three types of differentiated classroom practices viz, self questioning, graphic organiser and problem solving were given.

Academic achievement

Academic achievement is the extent to which a student, teacher or institution has attained their short or long-term educational goals. In this study it means, the achievement produced by the selected students.

Statement of the problem

Comparative efficacy of diverse instructional practices towards enhancing the academic achievement of students having varied learning styles with special reference to auditory learners.

Objectives of the Study

1. To identify the learning styles based on the sensory modalities of students selected for the study.
2. To find out the efficacy of select classroom practice, graphic organiser towards enhancing the academic achievement of auditory students.
3. To find out the efficacy of select classroom practice, self questioning towards enhancing the academic achievement of auditory students.
4. To find out the efficacy of select classroom practice, problem dolving towards enhancing the academic achievement of auditory students.
5. To compare the efficacy of select classroom practices namely, graphic organiser, self questioning and problem dolving on the academic achievement of auditory students.

Hypotheses of the Study

1. There is no significant difference in the academic achievement of auditory students with regard to the implementation self questioning strategies

2. There is no significant difference in the academic achievement of auditory students with regard to the implementation of problem solving strategies
3. There is no significant difference in the academic achievement of auditory students with regard to the implementation of graphic organiser strategies
4. There is no comparative effectiveness of select classroom practices namely, graphic organiser, self questioning and problem solving on the academic achievement of auditory students.

Sample selected for the study: 90 Secondary School students (based on their learning style) from three schools of three districts of Kerala namely, Pathanamthitta, Alappuzha and Kottayam were selected for the study. Simple random sampling was used in this study.

Tools Employed for the Study

Learning Style Inventory

Lesson transcripts based on self questioning, graphic organiser and problem solving.

Methodology Adopted for the Study

In the present study, a mixed method of research design, incorporating both quantitative and qualitative data collection and analysis was used.

Theoretical Framework of the Study

Instead of yanking the learners to the classroom, it is better to provide them with a wide variety of learning experiences focusing on nurturing them from the inside by honoring their interest, learning styles, uniqueness so that they can learn the content in a meaningful way and help them to grow into lifelong learners. These inspiring possibilities in the classroom will allow their inner beauty to be established and foster their confidence in learning. The Australian Council of Educational Research (ACER) proposed, students' involvement with differentiated activities likely generates high quality learning (ACER, 2008). The National Task Force on learning styles and brain behavior has defined learning style as 'a consistent pattern of behavior and performance by which an individual approaches education experiences'. It is the composite of characteristic cognitive, affective, and physiological behaviours that serve as relative stable indicators of how a learner perceives, interacts with, and respond to the learning environment. Students enter in classrooms with a wide range of background knowledge, experiences, cognitive abilities and dispositions. These dispositions create varied orientation and learning experiences students

(Saxena, 2012). To maximise the development of individual potential, it is essential to provide the learner with suitable learning experiences which are challenging, enlightening, and captivating to meet the diverse learning needs of them.

It is important to remember that significant efforts are needed to accept diverse students and create learning style structure in classrooms to manage all types of learners. In order to attain a degree of self-sufficiency in learning and equip different learners to become much more competent in learning, there is a great need for indentifying the prominence of learning style possessed by the learners. It will help to design the multifaceted instructional process in a fruitful manner to accommodate the variety of learning styles and it enables the learner to integrate their preferred style in the process of learning which will automatically heighten confidence and lead to the independent learning. Coffield et al (2004) says that the knowledge of learning styles can be used to increase student's self awareness and meta cognition of their strengths and weaknesses as learners. A plethora of research was conducted in the area of learning styles which resulted in a myriad multidimensional models representing learning styles.

Framework for Categorising Learning Styles: VARK Model

Also known as VAK learning style it is a popular framework that categorises individuals' preferred learning styles into three modalities as visual, auditory and kinesthetic. Learners have different preferences for receiving and processing information. By understanding their dominant learning styles, they can enhance their learning experiences. Gardner's theory of multiple intelligences underpins the principles of accelerated learning developed by Alistair Smith. The accelerated learning methods centre on a range of visual, auditory and kinesthetic (VAK) strategies which are designed to support the three types of learners identified by Neuro-linguistic Programming (NLP) which is rooted in both psychology and neurology. It is based on the work of John Grinder, a linguistic professor and Richard Bandler, a mathematician at the University of California at Santa Cruz (UCSC) around 1975. NLP identifies six ways in which individuals perceive information which arrives via the senses. These form the basis of what we now know as 'VAK'. NLP also recognises the importance of non-verbal communication, particularly eye contact, posture, breathing and movement. Smith suggests the need for encouraging the development of a full range of intelligences towards

promoting lifelong learning. A supportive and productive classroom practice enables the learners to be receptive to new ideas and to set themselves with high personal targets.

Structural Design of Selected Instructional Practices

Graphic Organisers

Graphic organisers are visual tools that help organise information and ideas in a clear and concise manner. They are commonly used in education and can be helpful for brain storming, note taking and summarising information. They come in various forms and formats, and their specific designs depend on the purpose and content being organised. Venn diagram. mind maps, flow charts, concept maps KWL chart timeline are some of the examples of graphic organisers. The choice of a graphic organiser depends on the specific purpose and the information or ideas we want to organise visually. Research suggests that the implementation of graphic organiser results in increasing the retention and comprehension of students. It also incorporates active learning which have also been linked to higher learner motivation, increased confidence, and improved critical thinking (Cherney, 2008). An emerging body of research makes it clear that learners will learn best and make unprecedented outcome when they get opportunities to practice with graphic organisers.

Self questioning

It is a valuable method for self discovery and personal development. It can lead to increased self awaremess, clarity of purpose and the ability to make more informed decisions. Through this technique learners can deepen their understanding of themselves and cultivate a greater sense of well-being and fulfillment. It is also a reflective process in which individuals ask themselves probing questions to gain insight, understanding, and clarity about their thoughts, beliefs, behaviours, and goals. It is a method of self exploration and self inquiry that can b euesed for personal growth, decision making, problem solving and self improvement. It also involves open ended questions to oneself and taking the time to contemplate and explore possible answers. It is a rich resource to promote intellectual involvement of learners in the learning task to advance student thinking, learning, achievement, and provide valuable feedback. Effective use of questions serves as the first foundational skill for active processing of information and it helps students to deeply engage in orchestrated learning experience which are needed for absorbing and retaining a great deal of information. A good question reflects a genuine desire to find out, a deep feeling or waiting to know more than we already know and it helps us think.

Problem solving

It is the process of finding solutions to difficult or challenging situations. It involves identifying the problem, analysing it, and developing and implementing effective strategies to overcome it. Providing clear explanations in disseminating knowledge and solving problems equip the learners to become better performers in the learning task. The challenge of education is to design learning environments and processes which help to sharpen their abilities for solving problems, which is the most authentic forms of human activity (Jonassen 2004). Regular mental exercises enable the learners to solve the problems they encounter in their learning scenario and it acts as resurgence from oxymoron modes of learning.

Procedure adopted for the study

The investigator prepared a learning style inventory with special reference to the sensory modalities (VAK) of Secondary School students for assessing their preferences in learning. The finally selected statements were arranged from 1–60 numbers in such a way that the first 20 (1–20) statements were meant for 'visual' learning style group, the next 20(21–40) for the 'auditory' learning style group and the last 20 (41–60) for 'kinesthetic' learning style group.

Assorted instructional practices

This type of instruction is a teaching approach that tailors instruction to all students' learning needs. All the students have the same learning goal. But the instruction varies based on students' interests, preferences, strengths, and struggles. The objective of differentiation is to lift the performance of all students. Differentiation benefits students across the learning continuum, including students who are highly able and gifted. Understanding student learning's strengths and weaknesses and to know student interests are the core element in differentiated instructional practices. Here the investigator classified the students in accordance with their learning styles by using a learning style inventory.Students were classified as auditory, visual and kinesthetic.

The purpose of this study was to compare the effectiveness of select Instructional practices namely, graphic organiser, self questioning and problem solving on the academic achievement of auditory students.

A unit from the Malayalam terxtbook was selected for the study which includes three lessons. All of these lessons deal with the need for conglomeration of agriculture. The three lessons were taught by using the selected three differentiated practices. The select graphic organiser strategy consists of varied graphical representations of the content like charts, graphs, diagrams, maps, and the like. Video clippings of the content material, posters, and animations were also used for the demonstration

of the content. The investigator effectively used circle words, use of high lighters, OHP transparancies, and newspapers workbooks towards making the content more clear. For practicing the strategy, self questioning, the investigator made use of activities like group work, read to self aloud, oral reports and study groups, group discussions using audio tape, brain storming sessions, panel discussions, and question answer methods. Students were made to practice preparing different types of questions and demonstrate the purpose of them in the classroom settings. Field trips, hands-on test, role-playing, studying in short breaks, using flash cards to memorise the topic, problem-solving activities, developing editorials, etc. were given as part of the select practice, problem solving. Learning by doing experiences was given more importance with regard to this particular practice. After implementation of the three practices, investigator conducted a post-test for the students and compare the extent of effectiveness of selected differentiated practices on auditory students.

Comparison of the extent of effectiveness of the select practices namely, graphic organiser, self questioning and problem solving on auditory students

In order to analyse the extent of effectiveness of select classroom practices namely, graphic organiser, self questioning and problem solving among auditory students, the post test scores of the experimental group treated with the experimental intervention were compared pair-wise and it is detailed as follows.

Descriptive Statistics of Pre-test and Post-test Achievement Scores

This section describes the comparison of the extent of effectiveness of the select classroom practices namely, 97 graphic organiser, (G.O.) self questioning (S.Q.) and problem solving (P.S.) among the auditory students. The descriptive statistics of pre and post-test achievement scores of auditory students exposed to the select three classroom practices were found out and described in Table 1.

Table 1

Descriptive Statistics of Pre-test and Post-test Achievement Scores of Auditory Students Exposed to the Select Three Classroom Practices.

Variable	Group	N	AM	SD	SE	LCL	UCL
pre	G.O	33	4.27	1.97	0.34	3.57	4.97
	S.Q	28	4.96	1.79	0.34	4.27	5.66
	P.S	29	4.93	2.17	0.40	4.11	5.76
	Total	90	4.70	1.99	0.21	4.28	5.12

post	G.O	33	20.24	2.18	0.38	19.47	21.02
	S.Q	28	25.00	2.88	0.54	23.88	26.12
	P.S	29	19.41	1.62	0.30	18.80	20.03
	Total	90	21.46	3.30	0.35	20.76	22.15

From Table 1, it is understood that the pre-test achievement scores in G.O. group have AM 4.27 with SD 1.97. The SE value is 0.34 which is very small indicating that the sample AM is approximately equal to the population mean. The S.Q. group have AM 4.96 with SD 1.79. The SE value is 0.34, which is very small indicating that the sample AM is approximately equal to the population mean. The P.S. group has AM 4.93 with SD 2.17. The SE value is 0.40 which is very small indicating that the sample AM is approximately equal to the population mean. For the G.O. group 95% confidence interval varies from 3.57 to 4.97 and for the S.Q. group it is from 4.27 to 5.66 and for the P.S. group it is from 4.11 to 5.76.

The post-test achievement scores in G.O. group have AM 20.24 with SD 2.18. The SE value is 0.38 which is very small indicating that the sample AM is approximately equal to the population mean. The S.Q. group have AM 25.00 with SD 2.88. The SE value is 0. 54 which is very small indicating that the sample AM is approximately equal to the population mean.The P.S. group have AM 19.41 with SD 1.62. The SE value is 0.30, which is very small indicating that the sample AM is approximately equal to the population mean. For the G.O. group the 95% confidence interval varies from 19.47 to 21.02 and for the S.Q. group it is from 23.88 to 26.12 and for the P.S. group it is from 18.80 to 20.03.

ANOVA of Pre-test and Post-test Achievement Scores

ANOVA was carried out to find out whether there is any significant difference between the pre-test and post-test achievement scores of auditory students belonging to the select three experimental groups. The detailed description is given in Table 2.

Table 2

ANOVA of Pre-test and Post-test Achievement Scores of Auditory Students Belongs to the Three Experimental Groups.

Variable	SV	SS	df	MSS	F	P
pre	BV	9.53	2.00	4.76	1.21ns	0.30
	WV	343.37	87.00	3.95		
	T	352.90	89.00			

post	BV	521.23	2.00	260.61	50.49**	<0.01
	WV	449.10	87.00	5.16		
	T	970.32	89.00			
*ns: not significant (P>0.05), **:Significant at 1% level (P<0.01*						

ANOVA shows that the three experimental groups do not differ significantly in their pre-test achievement scores (F=1.21, p=0.30 >0.05). The three experimental groups exposed to the three experimental treatment differ significantly in their post-test achievement scores (F=50.49, P<0.01). This indicates that the three experimental groups who were exposed to the three classroom practices namely, graphic organiser, self questioning and problem solving showed varied levels of impact in improving the academic achievement in learning of Malayalam language.

Genuineness of the Difference in Performance of Auditory Students Belong to the Select Three Experimental Groups

The analysis of the post-test achievement scores of auditory students in three experimental groups revealed that the auditory students in the experimental group performed at varied levels with regard to the selected three classroom practices. Thus, the investigator concluded tentatively that the select classroom practices play a significant role in their academic achievement of Malayalam language. But it cannot conclusively say that the performance of experimental groups varied significantly by simply comparing the post-test scores of the three groups. Since it was highly inconvenient to sort out the students from different classes to form equated groups, the investigator selected intact class groups for experimentation. Hence, it was difficult to ascertain whether the varied levels of performances of experimental groups in their post-test scores resulted from the experimental factor or from other intervening variables. So it become necessary that the scores had to be analysed using the technique of analysis of co-variance (ANCOVA) for much more reliable results.

ANCOVA of Post-test Achievement Scores of Auditory Students in Three Experimental Groups

ANCOVA was employed to compare the extent of effectiveness of the select three metacognitive classroom practices namely, graphic organiser, self questioning and problem solving in improving the academic achievement of auditory students. The details are given in Table 3.

Table 3

ANCOVA of Post-test Achievement Scores of Auditory Students in three Experimental Groups by Eliminating the Effect of Pre-test Achievement Scores.

Variable	SV	SS	df	MSS	F	P
Adj.post	BV	520.65	2.00	260.33	49.89**	<0.01
	WV	448.72	86.00	5.22		
	T	969.37	88.00			

***: Significant at 1% level (P<0.01), R Squared=0.988 (Adjusted R Squared = 0.923)*

ANCOVA shows that the three experimental groups differ significantly in the post-test scores after eliminating the effect due to their initial pre test scores (F=49.89, P<0.01). Moreover using the ANCOVA model 78.7% variation in the post test scores can be explained (R Squared=R Squared=0.988, Adjusted R Squared=0.923). This indicates that the auditory students in the three experimental groups differ significantly in their post-test achievement scores in Malayalam language learning.

Adjusted Mean of Post-test Achievement Scores

The adjusted AM of post test achievement scores of auditory students in three experimental groups after eliminating the effect due to pre-test scores are given in Table 4.

The Adj. AM of post-test scores of the G.O. group is 20.23 with SE 0.40 and 95% confidence interval ranges from 19.43 to 21.03. For the S.Q. group Adj. AM of post test scores is 25.01 with SE 0. 43 and 95% confidence interval ranges from 24.15 to 25.87. For the P.S. group Adj.AM of post test scores is 19.42 with SE 0.43 2 and 95% confidence interval ranges from 18.58 to 20.27. This result indicates that the adjusted AM of post achievement scores of auditory students who were exposed to the three experimental treatment showed differences in their academic

Table 4

Descriptive Statistics of Post-test Achievement Scores of Auditory Students in the Three Experimental Groups by Eliminating the Effect of Pre-test Achievement Scores.

Group	Adj. AM	SE	LCL	UCL
G.O	20.23	0.40	19.43	21.03
S.Q	25.01	0.43	24.15	25.87
P.S	19.42	0.43	18.58	20.27

achievement in Malayalam language which again implies that the three select classroom practices have varied impact on the auditory students in Malayalam language learning.

The comparative bar diagram of Adj. post-test achievement scores of auditory students who were exposed to the select three meta cognitive classroom practices namely, graphic organiser, self questioning and problem solving is shown in Figure 1.

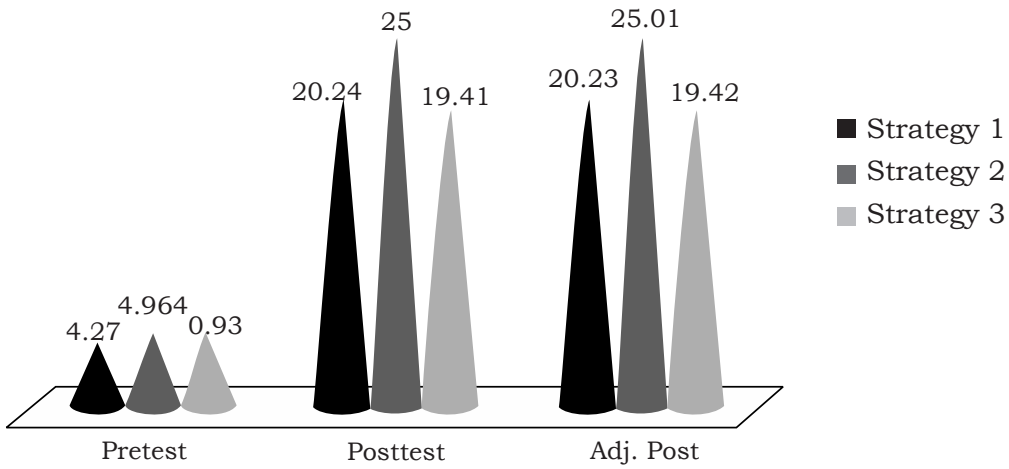

Figure 1: Comparative bar diagram of adj. post-test achievements scores of auditory students who were exposed to the select three meta cognitive classroom practices namely, graphic organiser, self questioning and problem solving.

The graphical representation shows the varied impact of select classroom practices among Auditory students.

Pair wise Comparison by using LSD.

In addition to the above analysis, LSD test was also conducted for comparing the extent of effectiveness of the select classroom practices namely, graphic organiser, self questioning and problem solving for enhancing the academic achievement in Malayalam language of auditory students at Secondary level. It enabled the investigator to test whether there is any significant difference between the Adjusted A.M. of the post-test achievement scores of select experimental groups. The details of the test are given in Table 5.

Table 5

Pair wise Comparison (LSD) among Auditory Students in Experimental Groups namely Graphic Organiser, Self Questioning and Problem Solving.

Group 1	Group 2	MD	LCL	UCL
G.O.	S.Q.	–4.78**	–5.96	–3.60
G.O.	P.S.	0.81ns	–0.36	1.97
S.Q.	P.S.	5.59**	4.38	6.79

*ns: not Significant (P>0.05), ** Significant at 1% level (p<0.01)*

Since ANCOVA shows significant difference, LSD test has been administered for testing significant pair wise difference between the effect of select classroom practices namely, graphic organiser, self questioning and problem solving in enhancing the performance of auditory students in their achievement in Malayalam. If the 95% confidence interval for difference in means contains zero, those pairs are not statistically significant. Thus, from the table it is clear that the classroom practices, graphic organiser and problem solving do not differ significantly (P >0.05). It can be concluded from the LSD test that, the select classroom practice, self questioning exercised marked influence on the achievement of auditory students compared to other two practices namely, graphic organiser and problem solving. This shows that the self questioning practice was more beneficial for auditory learners. This may be due to the impact of auditory representation of course material like group discussion, debriefing sessions, reading activities, brain storming sessions, verbal interaction, and tape recording of the content material throughout the instructional practice.

Discussion of the Findings

The tangible results of the study shows that designing differentiated instructional practices will be helpful for making them independent and autonomous to a greater extent. Although it is difficult to meet the needs of entire students of a class at a stretch, it is important to meet as many of them as possible. The unlocking of the potentialities of these practices integrated with students' learning styles is viewed as a vehicle for promoting greater success and achieving autonomy in language learning. The findings of the present study have implications for instructional practitioners towards implementing differentiated instructional strategies towards providing valuable space for deep success in the learning of Malayalam language.

The study reveals that even auditory students favor all of the select classroom practices. They show a special inclination towards the strategy, self questioning strategy. This particular strategy begins by an explicit explanation about the significance and remarkable benefits incorporated in the particular modes of learning experiences. It helps to cognitively reexamine and reorganise their understanding about the learned content. The guided practices inculcated in the classroom instruction offered a gradual release of responsibility from the part of the teacher, which is the corner stone of constructivist paradigm. The study points out that the successful completion of the journey of learning process requires the needs to bolster up the varied learning styles of the students and booster the corresponding

instructional strategies, which lead to the transformation of knowledge and empowerment of learners.

Learning strategies are procedures that facilitate a learning task in a lively and mindful manner, and are sensitive to the learning context which help the learner to become competent learners of the language. Integration of language learning strategies into classroom instruction that are closely tied to learning preferences of students enable to capacitate the learners to gain more confidence and independence in learning. The investigator made use of three classroom practices namely, graphic organiser, self questioning and problem solving towards enhancing academic achievement of students at Secondary level. Graphic organiser will capacitate the students to build an explanatory framework which led to the articulation and processing of information. It will help to spark enthusiasm, promote retention of the content material and thereby, help the learner to become higher achievers in learning. Use of questioning practices and self-generated questions advances student thinking and learning. 'Problem Solving' trained the students to formulate some problematic issues through the process of discussing certain events related to the social context. Timely scaffolding and meaning making of the contextualised scenario facilitated learners' understanding and accelerated the process of constructing and extending knowledge structures.

Preferred learning styles will be helpful for making them independent and autonomous to a greater extent. The conscious effort to practice these strategies stimulated learners' attention and expanded their horizons of language proficiency in an appreciable manner. Although it is difficult to meet the needs of entire students of a class at a stretch, it is important to meet as many of them as possible. The study shows that the academic performance of students in the learning of Malayalam language is highly related to the instructional practices based on differentiated instructional activities. In order to internalise the process of language learning, a reorientation is needed to explicate the underlying features of classroom practices. The new trends in innovative practices and instructional designs need to focus on the higher order forms of thinking which depict the process of learning rather than the product of learning. Differentiating instruction occurs when teachers produce several avenues to challenge the needs of students having varied learning styles and learning requirements. This instructional approach gives the students a sense of ownership over the learning process and focuses on individual needs. Differentiated practices will certainly plays a key role in the improvement of academic achievement of students.

Conclusion and Educational Implication of the Study

The qualitative endeavor of the present study substantiated the fact that the expositions of the classroom practices sharpened the power of learners and sparked their interest towards enhancing improvement and intellectual capacities with regard to the specific content. It also helped them to engage and focus on transformation of information in an innovative set up, become alert and efficacious in the process of learning, provide confidence to manage their own learning and empowering them to be inquisitive and fervent in their pursuits. The general impact of the study reveals that it is high time to orient towards differentiating instruction for creating an enriching environment. Differentiating instruction occurs when teachers produce several avenues to challenge the needs of students having varied learning styles and learning requirements. This instructional approach gives the students a sense of ownership over the learning process and focuses on individual needs.

In order to internalise the process of language learning, a reorientation is needed to explicate the underlying features of classroom practices. The new trends in innovative practices and instructional designs need to focus on the higher order forms of thinking which depict the process of learning rather than the product of learning. One advantage of this approach is that it helps to clarify the theoretical concepts of effective learning with practical clarity. Developing a self directive as well as a self reflective behavior acts as the key attributor of such type of learning. In addition to that, identification of learning preferences of students also floor ways of continual achievement. The 21st century demands lifelong learners who are keen in their learning process as well as their individual strengths and weaknesses.

The study also reveals the fact that learners have different styles of learning as well as different attitudes, experiences and motivation. Learning to learn can address their diversity and personalise their learning which enable them to take ownership of their own learning and make academic excellence. In order to spur the learners to their highest potential and incredible results in learning, it is needed to tailor the content material in accordance with their preferred learning styles. The results clearly show that the differentiated instructional practices are capable to support and strengthen multiple competencies of learners towards expanding their existing knowledge and allow them to become more enthusiastic and motivational in their learning process and thereby, ensure the optimal academic success.

The findings of the study have important implications for organising the instructional practices for students who show varied learning preferences towards the acquisition of information in a language classroom.

In the present context, the results indicate that the select classroom practices namely, graphic organiser, self questioning and problem solving showed significant differences with regard to their academic achievement. The study also reveals that the students having auditory earning style preferences show varied levels of inclination towards the differentiated classroom practices. The auditory students performed optimally in the classroom instruction, based on 'self questioning' integrated with discussions, debriefing sessions, verbalisation of the processes and teacher explanations. In the light of the findings, the investigator concluded that differentiated instructional classroom practices had a facilitative effect on the development of learner mastery, autonomy in learning and increased expertise in language learning. The responsive changes which occurred in the classroom enabled them to rethink the pedagogic practices and increase their proficiency level with regard to their academic achievement.

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