

Using Active Learning Approaches with Early Learners: Perspectives of Kindergarten Teachers in Techiman Municipality

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To cite this article:

Bidzakin Yenpad Mercy. Using Active Learning Approaches with Early Learners: Perspectives of Kindergarten Teachers in Techiman Municipality. *International Journal of Elementary Education*. Vol. 12, No. 2, 2023, pp. 37-42. doi: 10.11648/j.ijeedu.20231202.12

Received: June 3, 2023; **Accepted:** June 27, 2023; **Published:** July 11, 2023

Abstract: Children are active learners in their own learning and learn best through acting, doing and interacting in the learning environment. This research study aimed at exploring kindergarten teachers' perspectives on the concept 'active learning approach' to teaching in Early Grade classrooms. The study was guided by the constructivism theory of learning postulated by Vygotsky. This study employed a case study design to collect qualitative data. Purposive and convenience sampling techniques were used to draw 20 kindergarten teachers from public basic schools. Data were gathered through semi-structured interview from 15 kindergarten teachers and classroom observation of 20 teachers. The descriptive analysis was the procedure applied for the data analysis. The findings of the study revealed that majority of kindergarten teachers have fair understanding of the concept active learning approach to teaching but used teacher-centred approach mostly in Early Grade classrooms. The finding revealed that, kindergarten teachers understanding and positive perception of active learning do not influence nor translate in their teaching practices. The findings from this study therefore shows that teachers' attitude and teaching practices in Early Grade Learners classrooms is not based on how teachers perceive the concept active learning approach to teaching. Finally, based on the findings, it was recommended that, Techiman Education Directorate should provide regular in-service training to teachers, encourage them to use active learning in teaching while the supply of learning materials to schools should be made prompt.

Keywords: Active Learning, Kindergarten Teachers, Early Grade Learners and Teacher-Centred

1. Introduction

Children are active learners in their own learning and learn through acting, doing and interacting. Therefore, the pedagogy that promote children's active involvement in the learning process should be used to facilitate children's learning. For instance, a research study revealed that active learning has shown a significant increase in learners' achievement indicating efficiency and effectiveness of the teaching method in terms of learners' academic performance [1]. In supporting this view, Burke, Luu, Lai, Hsiao, Cheung, Tamashiro, & Ashcroft [2] research findings noted that active learning environments helped learners to increase their academic achievement. As such, the traditional 'chalk and talk' approach with children as recipients of knowledge may not be suitable for today's generation. This is why many nations in the world including Ghana has moved from learning that is made up of facts to a

new model of active learning approach which emphasises experiences, understanding, making connections in the world around us, collecting and using information in active manner. This is because the world is becoming a more dynamic place and so individuals need to have problem solving skills in order to be able to function effectively as living beings. Additionally, Alemu [3] argued that learners construct their own apprehension and understanding of knowledge through experiences and interaction. It is in this regard that, many theorists and practitioners have attempted to make what goes on in the classroom more consistent with the reality of the world outside the classroom. Moreover studies have revealed that children prefer activity based learning to traditional direct teaching [4]. Active learning approach is one of such approaches that can be used to help children develop problem solving skills, critical- logical thinking skills and function effectively as human beings. As such, child-centred approach to

teaching like active learning approach is accepted globally to be one of the best approaches to use in facilitating children learning including Ghana. It is in view of this information that, Ghana Ministry of Education introduced active learning approach to teaching in Ghanaian educational institutions [5]. Hence, the reason behind the adoption of active learning approach teaching policy in Ghanaian basic schools.

However, many teachers in Ghana appear to still be using teacher-centred approach mostly in teaching pupils. For instance, the study findings of Ghana Early Grade Reading Assessment and Early Grade Mathematics Assessment [6, 7] results seem to have revealed that most of the pupils' in the Bono East region lack reading comprehension and find it difficult to solve simple mathematical concept due to the instructional strategies employed by teachers in teaching these pupils. The report suggested that, many teachers seem to use rote memorisation approach in teaching children mostly [6, 7]. Supporting this idea, National Education Assessment [8] report stated that many teachers in Ghana appear to be using rote memorization in teaching pupils which is leading to poor pupils' academic performance. This appears to be the attitude and practice of most of the teachers in the Ghana especially in Techiman. Again, Ampiah [9] study results suggested that, many Ghanaian teachers seem to prefer teachers-centred approach to teaching due to their teaching beliefs and certain factors in the schools. Hence, this study sought to find out how Techiman kindergarten teachers perceive the concept active learning approach to teaching and how this perception is translated in their attitudes towards the practice of active learning in Early Grade Learners classrooms. Specifically, the study intends to address the following research questions;

How do teachers perceive the concept active learning approach to teaching in the Techiman Municipality?

What is the attitude of teachers towards the practice of active learning approach in classrooms?

2. Literature Review

This study was guided by the constructivism theory of learning postulated by John Dewey (1859-1952), Jean Piaget (1896-1980), Lev Vygotsky (1896- 1934) and Jerome Bruner (1915- 2016). The constructivist theory of education was first developed by Dewey, Piaget and Vygotsky. Vygotsky's theory was centred on the principles of social constructivism, while Bruner combined Vygotsky's theories with those of Piaget, to discover the constructivist theory of learning. They developed the "child-centred" theory and challenged didactic teaching, which is more of authoritative approach to teaching.

The perception and knowledge of teachers regarding a specific concept may or may not influence their approach towards the application of that concept. For instance, according to Morgan [10], as cited in Adugna [11] perception of an individual refers to the way any event in the world and the world itself looks, sounds, feels, tastes or smells to him or her. It is vital that teachers have a thorough going discernment and comprehension of the nature and characteristics of the appropriate teaching learning methods to be utilised in

conjunction with curricular materials. For instance, someone's perception about a concept, idea, an object, event, or group of people determine his or her attitude towards it [12].

However, knowingly or unknowingly, some teachers discourage the use of active learning activities in classrooms because they perceive that it brings an extra demand in the planning and preparation of lessons. While other teachers feel that it is time consuming and demands the usage of instructional materials. Some teachers even feel that they are bounded by overcrowded subject matter and so are pressurised by the limited time they have to instruct. Other teachers believe that active learning takes too much time and so covering the whole syllabus may be difficult or impossible. These teachers even draw a conclusion that active learning may be good in theory but unrealistic in practice. However, various research findings confirmed that there is a strong tie between teachers' perception towards active learning and their effort in practicing it. For instance, teachers who have positive perception towards active teaching methodologies will try to practice active learning approach in their teaching practices [12]. It means that an individual view of something may or may not influence his or her attitude towards it.

With regards to the attitude of teachers towards the practicing of active learning in classrooms, teachers' perception about something may reflect in their attitude towards it and their practices. In supporting the above idea, Drew & Mackie [13] argued that, active learning might be difficult for some teachers because they are unfamiliar with the method although they are key agents in discussing and endorsing active learning matters, they do not take a principal position. This may make them create negative attitudes towards active learning among the teachers. Nevertheless, in Ghana, research that were conducted by NALAP [14] showed that most teachers use teacher-centred method such as discussion, question and answer methods in Ghanaian lower primary classrooms. The result of the study by NALAP [14] revealed that teachers attitude in classrooms include playing an active role in the classrooms, they are the main decision makers in the learning environment, and children are passive learners. The teachers put great effort to teach constantly by posing questions, writing on the black boards and reading from textbook, correcting or commending the learners. But they do not engage learners actively in learning activities as individual learners.

Similarly, UNESCO [15] report noted that, many Ghanaian teachers prefer to use teachers-centred approach in teaching instead of first hand-on method of learning. The study concluded that it was attitudinal on the part of the teachers. Thus, teachers' perception may influence their attitude and teaching practices in classrooms. Therefore, teachers who exhibited positive attitudes towards the application of active learning strategies in classrooms may have perceived active learning approach as the best method that promotes children learning. Those teachers who do not apply active learning approach in their classrooms may have negative attitude towards active learning. Active learning approach to teaching is the process of learning by means of involving the learners in learning activity that requires them to reflect upon their thoughts and use of those thoughts. [16]

3. Research Methodology

The main purpose of the study was to ascertain how kindergarten teachers in the Techiman municipality of the Bono East region of Ghana perceives the concept active learning approach to teaching and their attitudes towards practicing active learning in their classrooms. However, because, the study was a case study of 20 kindergarten teachers, the research instruments employed was semi-structured interview guide and classroom observation guide. An interview guide with open-ended questions was designed to elicit specific information from the respondents in order to answer the research questions. The interview questions were made up of three specific questions about active learning such as: How do you view the concept active learning approach to teaching in kindergarten classrooms? What are active learning methods and do you think that active learning can be practiced in your class? What is active learning approach to teaching? An audio recorder was applied as the major recording equipment to get the interview session with the teachers. The interview session lasted for approximately 20 minutes for each teacher.

Classroom observation (guide) was used as a data-gathering instrument in this study since, the study sought to identify teachers practices of active learning in the classrooms. The classroom observation was conducted in classrooms during instructional periods to identify the type of teaching approaches used by the teacher, the instructional materials use, the interaction between teachers and children and among children. Each kindergarten teacher was observed for thirty minutes during. In all, 20 observations were marked using the checklist developed for the purpose (YES or NO). For each observation, checklist variable were marked, ticked and recorded. Yes represented (1 mark) while No represented (0 mark).

The purposive sampling technique was used to select 20 teachers for the classroom observation. These were trained teachers who have learnt about the best pedagogy to use in teaching children. While convenience sampling technique was used to select 15 teachers for the semi-structured interview, which was manageable.

The descriptive analysis procedure was the method used for the analysis of the data collected. The observation data was analysed using frequency distribution count tables, percentages, and description after the responses were coded for easy identification were tabulated using excel software. While the interview data was analysed using a description. However, in order to reduce the data, the recorded interview session was manually transcribed. Thus, the interview data were coded and categorised into groups based on the pattern of the responses. Again, the analysis in this approach adopted another technique; "verbatim quotes" where the respondents' exact words are quoted. In the case of quoting, every respondent, was given a number as an identifier, such as T1, T2, and so on.

4. Findings and Discussion

The data in Table 1 shows that (4) teachers representing 20% have Teachers' Certificate "A". Ten (10) of the

kindergarten teachers representing 50% have diploma certificate. While six (6) teachers representing 30% have degree certifications.

Table 1. Educational Background of the Kindergarten Teachers.

Qualifications	Number of Teachers	Percentages%
Teacher cert "A"	4	20%
Diploma	10	50%
Degree	6	30%
Total	20	100%

Source: Field Data, November (2019).

5. Teachers Perception of Active Learning Approach to Teaching

This research question sought to establish how kindergarten teachers perceive active learning approach to teaching. Respondents were asked, what is active learning approach to teaching? How do you view the concept active learning approach to teaching? What are active learning methods and do you think that active learning can be practiced in your class? Based on the responses of the respondents, the teachers conceptual understanding and perception of the concept active learning approach to teaching can be categorised under 5 broad headings, following the themes and patterns that emerged from the teachers responses in respective to research question 1. Responding to this question, the following themes emerged from the respondents, which are categorised based on its similarities and difference.

Active learning is a method of teaching that engages children actively in class.

Active learning means making children active in class learning activities.

Active learning as a method of teaching that is time consuming.

Active learning add more workload to teachers.

Active learning sometimes make it difficult to cover the entire curriculum.

Category 1: Teachers (T1, T5, T8, T10 and T12) this category of respondents believe that active learning simply means making children active in the learning activities to ensure their learning. Below are some of the response of the teachers:

T1: Is a method of teaching where children are actively involved in the lesson.

T5: Is a method of teaching that engage children in the lesson.

T8: It involves allowing children to participate in the lesson.

T10: It means children are active in class.

Category 2: Teachers (T3, T6, T14 and T15) this category of the respondents feel that active learning simply implies that, engaging and making children active in learning activities during instruction. Below are the teachers' verbal responses:

T3: Active learning approach to teaching means making children active.

T6: Active learning is a way of involving children actively in class.

T14: It means letting children to be active in class.

T15: Is making pupils active in class.

Category 3: Teachers (T2, T4 and T9): these respondents think that active learning approach to teaching requires a lot of time to practice. For example,

T2: Active learning is a method of teaching that is time consuming.

T4: Active learning approach to teaching waste instructional time.

T9: It involves a lot of time.

Category 4: Teachers (T7, and T13) this category of respondents feels that in active learning, teachers need more time to prepare the class for different learning activities and therefore add more workload to teachers. For example,

T7: Active learning approach to teaching add workload to teachers.

T13: Active learning is stressful for teachers.

Category 5: Teachers (T5 and T11): This group of teachers believe that active learning can make it difficult for the teacher to cover the whole curriculum within the academic year.

(T5): Active learning sometimes make it difficult to cover the entire curriculum.

(T11): It is a method of teaching, which makes it difficult to control children during instruction.

Thus, the responses of the respondents' clearly show that majority of the teachers have fair understanding of the concept active learning approach and perceive it positively. While a few of the respondents perceived it negatively.

6. Teachers Attitude Towards the Use of Active Learning Approach in Classrooms

Research Question 2: What is the attitude of teachers' towards the practising of active learning approach in classrooms?

This question sought to assess and establish teachers' attitudes towards the practising of active learning approach in classrooms. The respondents were observed in classrooms in order to establish teachers' attitudes towards the practising of active learning activities in their classrooms.

Table 2. Teachers Learner Activities in classrooms.

BEHAVIOURS MONITORED	YES		NO	
	NO	%	NO	%
1. Does the teacher prepare the class for different learning activities and lessons?	4	20%	16	80%
2. Does the teacher use some active learning activities during instruction?	5	25%	15	75%
3. Does the teacher encourage collaborative or group learning among children?	2	10%	18	90%
4. Does the teacher motivate children to become active participant during instruction?	6	30%	14	70%
5. Is the teachers more active than the children are during instruction?	18	90%	2	10%

Source: Field Data, November (2019)

Table 2 shows that 4 teachers representing 20% of the teachers observed prepared their classes for different lessons with is in line with active learning principles. While 16 teachers representing 80% of the teachers did not prepare their classes for different lessons. Teachers taught children without putting the classrooms in a manner that will promote children active participation and learning in the class. This means they just come and teach children without putting the classroom in a manner that will promote children active participation in class. However, 5 teachers representing 25% of the observed teachers use active learning activities in their classrooms. 15 teachers representing 75% of the observed teachers showed that they do not use some active learning activities. Instead, teachers were seen using teacher-centred approach mostly in teaching children.

Only 30% of the teachers observed were encouraging and

motivating children to participate actively in the learning process or activities. Whereas 70% of the teachers do not encourage children active participation. The interview results confirmed that some of the teachers did not used some active learning activities in the classroom due to the period allocated for the teaching of each subject and shortage of instructional materials.

Nevertheless, 2 teachers representing 10% of the teachers observed, encourage children to participate in group activities. 18 teachers representing 90% of the observed teachers were active throughout the lessons and children were passive. This shows that most teachers use direct transmission of knowledge (teacher-centred approach) in teaching children. In conclusion, from the classroom observations it was apparent that majority of the teachers do not use active learning approaches to teach but rather employed teacher-centred approaches in teaching children.

Table 3. Teachers' Utilisation of Instructional Materials in Classrooms.

BEHAVIOURS MONITORED (VARIABLES)	YES		NO	
	NO	%	NO	%
1. Are the teachers using concrete instructional materials?	0	0%	20	100%
2. Are there learning centres, charts, posters, diagrams displayed in classroom?	6	30%	14	70%
3. Does the teacher use variety of instructional materials other than books, pictures and chalkboard illustrations?	0	0%	20	100%
4. Does the teacher illustrate ideas, concepts with the aid of different instructional materials?	6	30%	14	70%
5. Does the teacher use variety of developmentally appropriate instructional materials?	3	15%	17	85%

Source: Field Data, November (2019)

Table 3 shows that 20 observed teachers representing 100% of the teachers taught children without using real materials. This means that majority of teachers that were observed did not use concrete teaching and learning materials in teaching. Again, 14 of the observed classes do not have learning centres, wall charts, posters, diagrams displayed in the classrooms. Only 6 classes representing 30% of the observed classes have these teaching and learning materials displayed.

In terms of teacher illustrating ideas and concept using variety of teaching and learning materials, only 6 teachers representing 30% of the observed teachers were observed illustrating concepts and ideas using different teaching and learning materials. Whereas 14 teachers representing 70% do not use variety teaching and learning materials in illustrating concepts and ideas. This implies that most of the teachers taught children in abstract.

With the use of developmentally appropriate teaching and learning materials, in teaching, only 3 teachers representing 15% of the observed teachers used appropriate teaching and learning materials in teaching. While 17 teachers representing 85% of the teachers do not use teaching and learning materials in teaching. Most of the teachers resorted to chalkboard illustrations and drawings. Even with that, some of the teachers do not use colour chalk to make their drawing bright and appealing to the kindergarten child's eyes. In fact, from the observations, children were taught in abstract due to lack of learning materials and teachers' lack of innovation and creativity skills.

However, according to Kokoroko [17] appropriate use of teaching and learning materials make a lesson practical, tangible, easy to learn and enjoyable. Thus, the utilisation of instructional materials in the observed classes was found to be at a lower point. This might have been due to lack of resources in the schools. Hence, many teachers probably find it difficult to practice active learning approach because of lack of resources in their schools.

7. Conclusion

Based on the findings of the study, the following conclusions are drawn.

Firstly, kindergarten teachers have fair understanding about active learning and perceives active learning approach to teaching positively but used teacher-centred approach in teaching children. However, in spite of their positive perception of the concept, majority of the kindergarten teachers exhibited negative attitudes towards the use of active learning approach in the classrooms.

Secondly, the findings of the study revealed that the majority of the children are not active participants during instruction because most kindergarten teachers used chalkboard illustrations and drawing in teaching children.

Thus, Techiman kindergarten teachers understanding and positive perception of active learning do not influence nor translate in their teaching practices. The findings from this study therefore shows that teachers' attitude and teaching

practices in class is not based on how teachers perceive the concept active learning approach to teaching. Therefore, the study findings confirmed Ampiah [9] study results, which shows that most Ghanaian teachers prefer to use teachers-centred approach to teaching due to their teaching beliefs and certain factors in the schools.

8. Recommendations

Based on the findings of the study, the researcher makes the following recommendations.

Firstly, Techiman Education Directorate should encourage kindergarten teachers to use child-centred approach such as active learning in teaching children by organising regular in-service training courses for teachers in order to give the teachers the opportunity to update and upgrade their knowledge and become abreast with modern trends and methods of teaching children.

Secondly, Techiman Education Directorate should use motivational strategies such as rewards and incentives to help teachers to develop positive attitude towards the use of active learning activities such as group work, demonstration method, problem solving and discussion methods in their classroom.

Finally, this research is only an initial explorative work, and as such, further studies should be considered in the area of assessing the impact of teacher-centred approach to teaching on children learning outcomes. Another area the researcher would consider for further studies is the attitudes of children towards active learning pedagogy in kindergarten classrooms.

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