International Journal of Research in Education Humanities and Commerce

Volume 02, Issue 04 " July - August 2021"

EXAMINATION OF THE KNOWLEDGE PRE-SERVICE TEACHERS HAVE ON THE ADAPTATION OF THE CURRICULUM CONTENT TO MEET THE LEARNING NEEDS OF PUPILS IN INCLUSIVE CLASSROOMS

SEMORDEY CHARLES REDEEMER
Mount mary college of education, somanya ghana
Department: depatment of education

YVONE EMEFA ASEMPA
Mount mary college of education, somanya ghana
Department: depatment of education

ADU GYAMFI BENJAMIN
Akrokerri college of education
Department: pedagogy department

ABSTRACT

Inclusive education is the adaptation and modification of the learning environment and instructions to promote the academic performance of all learners irrespective of race, class, gender, disability, sexual preference, religion, culture, learning styles, and language. Opoku (2015) explains inclusive education as the adaptation of the school curriculum to make it equally accessible to students with special needs. This study examined the knowledge pre-service teachers have on the adaptation of the curriculum content to meet the learning needs of pupils in inclusive classrooms. The study employed the cross-sectional design to recruit 287 respondents made up of 272 level 300 pre-service teachers and 15 tutors for the study. In selecting the sample, the researcher used non-probability sampling involving quota sampling technique to select 20% of the pre-service teachers, while a purposive sampling technique was adopted for the selection of tutors in the Colleges of Education. Data from the questionnaire were fed into Statistical Package for Social Sciences (SPSS) version 22.0 software and the mean scores were computed and used for the analysis and interpretation. The results of the study showed that the majority of the pre-service teachers agreed with the statements on curriculum adaptations to meet the learning needs of pupils in inclusive classrooms. Based on the findings, it was recommended that Inclusive education should be incorporated in the curriculum of the Colleges of Education to expose pre-service teachers to the concept prior to their completion.

Keywords: Adaptations, Academic performance, Curriculum content, Pre-service teacher, Instructional strategies, Curriculum modification

PUBLIC INTEREST STATEMENT

In a survey, Brew (2011), on the views of tutors of colleges of education on pre-service teacher preparation, the results revealed that the curriculum content designed for pre-service

teacher preparation is not well developed to match up to the standard to ensure equity and inclusivity with regards to adequate skills in teaching pupils with special needs in inclusive classrooms. The results of this study would help in finding out what knowledge pre-service teachers have in the adaptation of the curriculum content to meet the learning needs of pupils in inclusive classrooms. This would also enable the Colleges of Education to find out means of preparing their pre-service teachers to have knowledge on how to adapt the curriculum to meet the learning needs of pupils with special needs in inclusive classrooms.

1.0 INTRODUCTION

Inclusive education is when all students, regardless of any challenges they may have, are placed in age-appropriate general education classes that are in their own neighborhood schools to receive high-quality instruction, interventions, and supports that enable them to meet success in the core curriculum (Alquraini & Gut, 2012; Bui, Quirk, Almazan, & Valenti, 2010).

The school and classroom operate on the premise that students with disabilities are as fundamentally competent as students without disabilities. Therefore, all students can be full participants in their classrooms and in the local school community. Much of the movement is related to legislation that students receive their education in the least restrictive environment (LRE). This means they are with their peers without disabilities to the maximum degree possible, with general education the placement of the first choice for all students (Alquraini & Gut, 2012).

The United Nations has adopted inclusive practices and has set basic principles underpinning the best practices of inclusive education through various treaties and conventions guiding the practices of inclusive education. For instance; The Dakar Framework for Action adopted a World Declaration on Education for All (EFA) in 2000, which established the goal to provide every girl and boy with primary school education by 2015. It also clearly identified inclusive education as a key strategy for the development of EFA. The Salamanca Statement and Framework for Action, endorsed by 92 governments and 25 international organizations at the World Conference on Special Needs Education, June 1994 in Salamanca, Spain proclaimed that every child has unique characteristics, interests, abilities, and learning needs and that "those with special education needs must have access to regular schools which should accommodate them with a child-centered pedagogy capable of meeting those needs. The Salamanca Statement also asserted that educational systems that take into account the wide diversity of children's characteristics and needs are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society, and achieving education for all; moreover, they provide effective education to the majority of children and improve the efficiency and ultimately the cost-effectiveness of the entire education system.

The fundamental principle of the inclusive school is that all children should learn together wherever possible regardless of any difficulties or differences they may have. Inclusive schools must recognize and respond to the diverse needs of their students, accommodating both different styles and rates of learning and ensuring quality education to all through appropriate curricula, organizational arrangements, teaching strategies, resource use, and

partnerships with their communities. There should be a continuum of support and services to match the continuum of special needs encountered in every school (UNESCO, 1994).

Successful inclusive education happens primarily through accepting, understanding, and attending to student differences and diversity, which can include the physical, cognitive, academic, social, and emotional. This is not to say that students never need to spend time out of regular education classes, because sometimes they do for a very particular purpose for instance, for speech or occupational therapy.

The driving principle of inclusive education is to make all students feel welcomed, appropriately challenged, and supported in their efforts. It is also critically important that the adults are supported, too. This includes the regular education teacher and the special education teacher as all other staff and faculty who are key stakeholders; and parents.

2.0 LITERATURE REVIEW

Pre-Service Teachers' Knowledge on Adaptation of the Curriculum to meet the Needs of Pupils in an Inclusive Classroom

2.1 Curriculum adaptation

Curriculum adaptations refer to modifications that relate specifically to instruction or content of a curriculum and any adjustments to learning, teaching, and assessment environment, assessment techniques, that enhance a learner's performance or allow at least partial participation in a learning activity, structured learning programs, and assessment (Department of Education, 2005). Miller (2009: pg 466) added that adaptations involve changes to the curricular content, changes to the conceptual difficulty level of the curriculum or changes to the instructional objectives and methodology. Hewitt (2006) on the other hand believes that curriculum adaptations imply actions at the classroom and teacher level. It is to take the curriculum and adjust it to fit the needs or to modify and use existing materials for insertion in a regular curriculum for very specialized reasons.

Although the concept of curriculum adaptation is fairly straightforward, it can take many different forms. In essence, teachers and curriculum specialists adjust and modify curricula according to student needs and the goals set forth by that student's Individualized Education Programme (IEP).

With the continued push toward the inclusion of students with special needs in the general education classroom, the curriculum must be adapted to meet the needs of the students with disabilities.

2.2 Curriculum Enhancement and Curriculum Modification

2.2.1 Curriculum enhancement

Curriculum enhancement is when teachers use the existing curriculum in the general education classroom but adjust the methods and media of input and output to suit the student's needs and IEP goals. Implementing differentiated instruction techniques, using adaptive technologies, changing the student's physical environment, and integrating

culturally responsive language and content into curriculum content are all examples of curriculum enhancement.

2.3 Curriculum modification

Curriculum modification implies a greater level of adjustment to the existing curriculum. In general, teachers often accomplish this by adjusting the depth or type of content within the existing curriculum. Perhaps a student whose learning disability prevents him from reading at the same rate or depth as other students need more time to read the materials, a shorter piece to read, or an alternative piece covering the same content in simpler language. If a student has more severe cognitive disabilities, the teacher might further modify that student's curriculum by changing their course material at a conceptual level. This is similar to altering reading materials to be simpler, but can also include changing the actual conceptual content of those materials towards different subjects more appropriate to that student's cognitive abilities and goals.

Armstrong (2000) cited in Asempa (2013) also describes curriculum adaptations in four primary categories as follows: Curricular content, Instructional strategies, Instructional materials, and Assessment practices.

2.4 Curriculum content

The adaptation of the content of the curriculum according to Armstrong (2000) involves varying what is taught, that is, the complexity and nature of the content presented during the course of a unit of study. This type of curriculum adaptation results in an adjustment of the cognitive demand of a learning task for particular learners. Armstrong (2000), explained that adjustment of the cognitive demand in a lesson typically involves an adaptation to the attention, thinking and or memory requirements associated with particular content. He further explains that, in partnership with hierarchical questioning techniques, this approach can result in a larger number of students meaningfully participating in a lesson drawn from the general curriculum. Reisburg (1990) has examples of the modifications of content such as simplifying concepts or reading levels, teaching different sets of knowledge and skills. Furthermore, Reisburg explains that objectives are the foundation upon which you can build lessons and assessments that you can prove meet your overall lesson goals. Objectives guide the content materials and the teaching methods. They are designed to increase an individual's knowledge. This includes knowledge or information, recall, comprehension or conceptual understanding, the ability to apply knowledge, the ability to analyze a situation, the ability to synthesize information from a given situation, ability to evaluate a given situation and the ability to create something new.

Amstrong (2000), further explained that adapting the content of the curriculum might involve applications as straightforward as reducing the number of vocabulary words assigned to an individual child having a learner complete only the odd-numbered problems on a mathematical assignment, holding a learner responsible for learning three facts about one animal, instead of two facts about each of five different species, or affording learners the choice of taking a spelling pre-test to opt-out of spelling for a particular week. Individualized adaptations of content can also be achieved by restructured concept-based teaching.

King-Sear (2001) suggested that a variation of this type of lesson can be providing learners with special needs fewer or less work and pointed out that reducing the number of tasks seen in an accommodated instruction should be differentiated from that provided in adapted instruction. From the above, an adaptation of curriculum may include a slight change or modification in conceptual difficulties that are later introduced to the learners. King-Sear further suggested that though there are modifications in the concept of the curriculum, adaptation must take place within the same learning contents and must be part in place when teachers have come to a conclusion that a special needs learner is able to learn the same content and to gain knowledge as others.

2.5 Instructional strategies

Adapting instructional strategies are the modifications the classroom teacher makes during lesson delivery. This includes providing additional instructions or using different presentation formats, varying the type of practice activities, modifying task demand or testing procedures or regrouping students with instructional activities.

According to Wade (2000) cited in Brew (2011), many educators still tend to think that it is correct to use the 'one size fit all' approach to teaching but the success of inclusive education depends on the regular classroom teachers' ability to adapt the instructions when students have difficulty in the acquisition of skills and information. The curricula and the method of instruction must meet the needs of all students. Students with special educational needs require instruction in most of the same skills that other students need. Many of the same instructional procedures appropriate for other students are just as appropriate for students with special needs (Choate, 2004). Several strategies can be used to adapt the curriculum and instruction. Regular classroom teachers should be equipped with these strategies in order to perform effectively. Okyere and Adams (2003) is of the view that, teachers can adapt or modify these strategies to enable pupils with disabilities also benefit from the learning task. Moreover, Choate (2004) postulates that special needs students require instructions in most of the same skills that other students are also appropriate for children with special needs. However, variations of some validated methods effectiveness for teaching these special students. These methods include:

2.6 Instructional differentiation according to students' needs

The inclusive teacher should use a variety of methods when teaching. He should consider the abilities of individuals in the classroom thereby blending different methods to enable the individual with hearing impairment to benefit from the inclusive classroom. Choata (2004) explains that the inclusive teacher manages differentiated instructions by blending individual instruction, small cooperative learning groups, teacher-directed groups, and the whole class instructions. For example, in a single lesson, an effective teacher may provide learning activities at different levels of complexities, assign the different tasks of projects for students to demonstrate learning, and place students at different points on the curricular continuum providing different levels and types of support and accommodation to supplement and facilitate individual progress. Okyere and Adams (2003) postulate that teaching procedures should be changed if modification of instruction does not help the student. They suggest that the next step is to adapt the teaching procedures which can be done through the following:

- Presenting the teaching materials again. The skills and information of the original presentation are repeated with a more complete or simpler explanation using more examples.
- Proving additional guided practice. Increase practice by requiring more students' responses or lengthen practice sessions.
- Making the consequences for successful performance more attractive meaningful. Give positive feedback or reinforcement such as a smile, pat or verbal phrase of a successful completion of a task.
- Slowing the pace of instruction. The learning task and the time allotted for instruction remains the same, but the amount of materials presented and practiced is reduced (Okyere & Adam, 2003, p.53).

To ensure effective instructional adaptation, Pierangelo and Giuliani (2012) provided the following principles to guide teachers as they make decisions when planning, implementing, evaluating, and modifying instruction for the students with special needs in the general education classrooms.

2.7 Selection of appropriate learning tasks

2.7.1 The selection of the learning task is a critical instructional decision. No matter how

excellent the teaching procedures, instruction will not be effective if the task selected is inappropriate for the learner. Task selection is even more critical for students with special needs because they may learn new information and skills more slowly than their peers. The teacher should choose the most important portions of the general education curriculum as target behaviors. In making these decisions, priority should be given to skills and information that are useful both now and in the future. Special educators often use the term functional to refer to such learning tasks, whereas general educators may talk about authentic tasks.

In addition, tasks should be described as precisely as possible. Mager (1984) advocated the use of instructional objectives, which are statements of the desired students' behaviour in specific, observable terms. They spell out the conditions under which the behavior should occur and the criterion for successful performance of the behavior. Objectives help clarify the goals of instruction. Unlike broad goals such as 'student will become better readers,' instructional objectives are stated with precision: "When presented with a 100-word passage from a book or story written at the grade 3 level, students will read the passage aloud with not more than 5-word recognition errors."

After the desired student behaviour is identified, the teacher chooses instructional activities to present the skills and information required for task performance. Most teachers use commercial programs and supplement them with teacher made-materials and activities. The teacher must be sure that ready-made programs present all necessary skills and information and do not include extraneous or irrelevant materials. The teacher must also consider the current performance level when placing a student in a program sequence. For example, grade 9 texts may not be appropriate for ninth graders who read at the seventh-grade level. Students should be placed in educational programs at a level at which they can succeed, that is, at their instructional level.

2.8 Breaking the learning task into teachable sub-components

Tasks often require several skills or many different kinds of information for successful performance (Pierangelo & Giuliani, 2006). When the components of the task are identified, they can be presented to students in a systematic fashion as follows:

First, the prerequisites for learning the task should be considered. For example, students who have not learned to solve multiplication problems will encounter difficulty when trying to calculate the area of a room. If necessary prerequisite skills are not present, instruction should begin with them.

Next, the learning task is divided into sub-tasks. The sub-tasks may be a series of sequential steps or a collection of important sub-skills. An example of a task that can be broken into steps is the addition of three-digit numbers; in the tens column, and finally the numbers in the hundreds column.

Other tasks made up of a sequence of sub-tasks include building a model and locating a reference in the library. Writing a friendly letter is a task that can be divided into components sub-skills: handwriting (or keyboarding), spelling, capitalization, punctuation and paragraph writing. Other such tasks are telling time, making change,s and reading with comprehension.

The identification of sub-tasks and sub-skills allow the teacher to make decisions about the order in which skills and information will be presented. With tasks that are sequential in nature, sub-tasks are generally taught in the order in which they occur. With tasks made up of several components, the easier subskills are presented first. For example, in cursive writing instruction, simpler letters such as lowercase ‘a’ and ‘o’, are taught before more difficult letters, such as uppercase F and G.

2.8 Instructional Materials

Adapting instructional materials involves making changes to the resources (equipment, assistive devices and or learning materials) to which learners have access during the course of instruction to facilitate the teaching and learning process. Resources are very important in the education of persons with disabilities wherever they may find themselves. The use of appropriate resources in the classroom can go a long way to help pupils with special needs to learn and succeed these resources range from technological devices to the traditional teaching and learning materials in the classroom. Colorful and nicely arranged classrooms that have ample and appropriate instructional materials help establish an environment that is conducive to learning and promotes teacher and student satisfaction. For inclusive education to fully gain its grounds, resources must be available to enable pupils with special needs to participate in the teaching and learning process.

According to Ocloo (2011), practical representation of abstracts, symbols, and signs is a must for children with special needs who most often are found to be more creative than pupils without disabilities. Graphic or diagrammatic pictogram, bringing in concrete objects or things is very much essential. Materials must be used in teaching all topics. These materials include toys, counters, bottle caps, rings, scissors, thread plastics, muddy sands, newspapers, stone counters, stick counters, water paints with brushes, crayons, cardboard, leather

materials, wood materials, etc. Are but a few improvised materials that can be easily used. More sophisticated materials such as computers, talking calculators, adapted computers, alphabetizers, symbol synthesizers, among others can be used in teaching special needs pupils in the inclusive classroom (Avoke, Hayford, Ihenacho, & Ocloo, 1998).

The textbooks and the reading materials for pupils should be modified. Modification usually involves highlighting the information in the textbook, tape recording the textbook or providing the student with high interest or low vocabulary alternative (Frieberg, 1997). The efforts of regular education teachers are vital if students with learning disabilities are to be successful in the mainstream class in which the textbook is the primary means of dissemination of information.

According to Carnine Silbert and Kameenui (1990) adapting the textbooks to meet the needs of these students can be complex talk. For example, some children with learning disabilities may have attention deficits affecting their ability to differentiate what information they should attend to. The cluttered (disorderly) appearance of many textbooks complicates the decision as to what does or does not warrant attention. Other children are reading at a level far below the textbook. Their reading problems are compounded by the complex sentences and organizational structures, difficult vocabulary, and concept density typically found in expository text material. Still, other students may lack the skills to comprehend and remember textbook reading assignments (Seidengerg, 1989). Special education teachers do not have the time to rewrite textbooks. They can however provide adaptations based on the needs of individual students, the demands of the textbooks, and the needs of the regular classroom teacher.

3.0 METHODOLOGY

In order to explore how pre-service teachers are prepared towards inclusive education in Ghana, the researcher made use of a quantitative approach to enable him to collect data from pre-service teachers and tutors in selected Colleges of Education in the Eastern Region of Ghana. A quantitative research approach relies primarily on the collection of quantitative data. According to Creswell (2014), quantitative research is “an inquiry approach useful for describing trends and explaining the relationship among variables found in the literature” (p. 58). O’Neill (2006) states that the use of standardized methods in quantitative research allows for greater objectivity and accuracy of results.

Prior to the administration of the questionnaire to pre-service teachers and tutors, a letter of introduction from the Head of Department of Special Education of the University of Education, Winneba was obtained to introduce the researcher during the data collection to the principals of the Colleges of Education selected for the study. The purpose of the study was made known to them. Seeking permission before accessing the schools or site is a major consideration in a research study before interviewing participants or embarking on observation (Avoke, 2005). Data collection was conducted in April 2019. A period of one month was used to select participants and the administration of the questionnaire. In each college, the head of the department of education who acted as a coordinator for the data collection directed the researcher to the various basic schools where the pre-service teachers were having their internship. At the basic schools, the researcher sought the consent of the

pre-service teachers and made known the purpose of the study and procedure for responding to the questionnaire to them.

The questionnaires were personally administered to the pre-service teachers. Clear instructions were given to enable participants to give their responses meaningfully. Each participant was permitted to ask questions relating to the completion of the questionnaire, and their concerns were clarified. The participants were given four days to complete the questionnaire. This was to give them enough space and time to complete the questionnaire to avoid putting pressure on them considering their busy schedule. The participants were asked to hand over the completed questionnaire to a previously named coordinator latest by 6:00 pm. The exercise lasted one week in each college with the completed questionnaires retrieved from the coordinators in each college two days later. The researcher assured respondents that their responses would be kept confidential and used only for research purposes. With regards to the tutors, the questionnaires were personally administered to them with clear directives. Tutors were asked to respond to the questionnaire within four days and hand them over to the coordinator latest by 6:00 pm.

Data from the questionnaire were fed into Statistical Package for Social Sciences (SPSS) version 22.0 software and the mean scores were computed and used for the analysis and interpretation.

3.1 Reliability

Reliability refers to the consistency of results generated by a research instrument. According to Cresswell and Cresswell, (2018) reliability refers to the consistency or repeatability of an instrument.

To ensure the reliability of the research instrument, it was pre-tested on twenty (20) pre-service teachers and five (5) tutors of Abetifi College of Education. The pre-test results were subjected to Cronbach's alpha reliability analysis using Statistical Package for Social Sciences (SPSS) version 22.0 software to determine the reliability coefficient (r) in order to establish the reliability of the instrument. A Cronbach's alpha reliability coefficient of 0.931 for pre-service teachers and 0.937 for tutors were obtained which implied high reliability. Devellis (2003) pointed out that the acceptable variables for alpha range from 0.70 to 0.95. Since the Cronbach's alpha is greater than 70 (DeVellis, 2003) the instrument is good for use.

3.2 Findings/Results

What knowledge do pre-service teachers have on the adaptation of the curriculum content to meet the learning needs of pupils in inclusive classrooms?

Table 1: Pre-Service Teachers' Views on Curriculum Adaptations (N=272)

Statement	Strongly Agree F (%)	Agree F (%)	Not Sure F (%)	Disagree F (%)	Strongly Disagree F (%)	Mean Score	Interpretation
Pre-service teachers are able to design curriculum for pupils with special needs.	85 (31.3)	114 (41.9)	39 (14.3)	27 (9.9)	7 (2.6)	3.89	Agree

Pre-service teachers are able to adapt lessons to meet the unique needs of pupils.	81 (29.8)	132 (48.5)	33 (12.1)	21 (12.1)	5 (1.8)	3.97	Agree
Pre-service teachers are able to set individualized objectives.	80 (29.4)	132 (48.5)	31 (11.4)	24 (8.8)	5 (1.8)	3.95	Agree
Pre-service teachers are exposed to variety of teaching methods.	116 (42.6)	108 (39.7)	28 (10.3)	16 (5.9)	4 (1.4)	4.16	Agree
Pre-service teachers are able to adjust instructional duration to individual learning needs.	81 (29.8)	108 (39.7)	43 (15.8)	35 (12.9)	5 (1.8)	3.83	Agree
Pre-service teachers are exposed to tasks analysis.	94 (34.6)	113 (41.5)	33 (12.1)	26 (9.6)	6 (2.2)	3.97	Agree
Pre-service teachers are exposed to modifying teaching and learning materials.	99 (36.4)	108 (39.7)	32 (11.8)	31 (11.4)	2 (0.7)	4.00	Agree
Pre-service teachers are able to adapt the classroom for pupils with disabilities to move reely.	101 (37.1)	106 (39.0)	34 (12.5)	23 (8.5)	8 (2.9)	3.99	Agree
Pre-service teachers are able to adapt the learning environment to facilitate participation.	69 (25.4)	121 (44.5)	44 (16.2)	30 (11.0)	8 (2.9)	3.78	Agree
Pre-service teachers are able to help pupils work on same content but less complex material.	48 (17.6)	112 (41.2)	64 (23.5)	39 (14.3)	9 (3.3)	3.56	Agree

Source: Field Data (2019)

Key: F = Frequency, % = Percent

*Mean Score of 5.00 = Strongly Agree, 4.00 = Agree, 3.00 = Not Sure, 2.00 = Disagree, 1.00 = Strongly Disagree

Table 1 presents the data on pre-service teachers' views on curriculum adaptations to meet the learning needs of pupils in inclusive classrooms. From the data, it could be concluded that the majority of the pre-service teachers agreed with the statements on curriculum adaptations to meet the learning needs of pupils in inclusive classrooms. This was evident from the data obtained from the respondents. For example, 73.2% of the pre-service teachers agreed to the statement that pre-service teachers are exposed to how to design a curriculum to suit all pupils with special needs in the class, compared to 12.5% who disagreed. Also, 77.9% of the pre-service teachers indicated their agreement to the statement that pre-service are able to set objectives that are based on individual needs. Again, on the statement about whether the pre-service teachers are exposed to use a variety of teaching methods during lesson delivery, 82.4% of the respondents agreed, while 7.3% disagreed. The remaining 10.3% were not sure of the statement.

Furthermore, the majority of the pre-service teachers (76.1%) agreed that the pre-service teachers were exposed to how to break tasks into smaller teachable and learnable parts. This statement was disagreed with by 11.8% of the pre-service teachers, while the remaining 12.1% indicated that they were not sure of the statement. Furthermore, 69.9% of the pre-service teachers agreed that the pre-service teachers can make changes to the learning environment or learning location to facilitate the participation of all pupils in the classroom. However, 16.2% of them were not sure, while the remaining 13.9% disagreed with the statement. Lastly, it was observed that the majority of the pre-service teachers (58.5%) agreed that the curriculum exposes them to enable pupils to work on the same content but with less complex materials, with the remaining 17.6% and 23.5% disagreeing and not being sure respectively.

4.0 DISCUSSION

Table 1 revealed the data on pre-service teachers' views on curriculum adaptations to meet the learning needs of pupils in inclusive classrooms. From the data, it can be concluded that the majority of the pre-service teachers agreed with the statements on curriculum adaptations to meet the learning needs of pupils in inclusive classrooms. This is evident from the data obtained from the respondents. For example, 73.2% of the pre-service teachers agreed to the statement that the curriculum exposes pre-service teachers to how to design a curriculum to suit all pupils with special needs in the class, compared to 12.5% who disagreed. Okyere and Adams (2003) were of the view that teachers can adapt or modify these strategies to enable pupils with disabilities to also benefit from the learning tasks. Moreover, Choate (2004) postulated that special needs students require instructions in most of the same skills that other students are also appropriate for children with special needs.

Again, on the statement about whether the curriculum exposes pre-service teachers to use a variety of teaching methods during lesson delivery, 82.4% of the respondents agreed, while 7.3% disagreed. The remaining 10.3% were not sure of the statement.

In view of the above, Choate, (2004) cited in Brew, (2011), opined that Several strategies can be used to adapt the curriculum and instruction. Regular classroom teachers should be equipped with these strategies in order to perform effectively. The author further stipulated that

The inclusive teacher should use a variety of methods when teaching. He should consider the abilities of individuals in the classroom thereby blending different methods to enable the individual with hearing impairment to benefit from the inclusive classroom.

Again, the majority of the pre-service teachers (76.1%) agreed that they are exposed to how to break tasks into smaller teachable and learnable parts. This statement was disagreed with by 11.8% of the pre-service teachers, while the remaining 12.1% indicated that they were not sure of the statement. According to Pierangelo and Giuliani (2006), tasks often require several skills or many different kinds of information for successful performance. When the components of the task are identified, they can be presented to students in a systematic fashion

4.1 Views of Tutors on Curriculum Adaptations

The views of the tutors on curriculum adaptations to meet the learning needs in inclusive classrooms were positive. From the data, it came out that 80.0% of the tutors agreed with the statements that pre-service teachers can adapt lessons to meet the unique needs of pupils with special needs in the classroom.

Okyere and Adams (2003) were of the view that teachers can adapt or modify these strategies to enable pupils with disabilities to also benefit from learning. Moreover, Choate (2004) postulated that special needs students require instructions in most of the same skills as other students, which are also appropriate for children with special needs.

Choate, (2004), cited in Brew, (2011), opined that several strategies can be used to adapt the curriculum and instruction. Regular classroom teachers should be equipped with these strategies in order to perform effectively. The author further stipulated that

The inclusive teacher should use a variety of methods when teaching. He should consider the abilities of individuals in the classroom thereby blending different methods to enable the student with hearing impairment to benefit from the inclusive classroom.

Again, on the issue of task analysis, 73.4% of the tutors agreed that the curriculum exposed pre-service teachers to how to break tasks into smaller teachable, and learnable parts. This assertion was supported by Pierangelo and Giuliani (2006), who stated tasks often require several skills or many different kinds of information for successful performance.

5.0 CONCLUSION

It can be concluded from the findings of the study that the pre-service teachers could adapt the curriculum content, instructional methods, resources, and the environment to meet the learning needs of the exceptional children in an inclusive classroom.

6.0 RECOMMENDATIONS

The study recommends that Inclusive education should be incorporated in the curriculum of the Colleges of Education to expose pre-service teachers to the concept prior to their completion.

REFERENCES

Alquraini, T., & Gut, D. (2012). Critical components of successful inclusion of students with severe disabilities: Literature review. *International Journal of Special Education, 27*(1), 1-26.

Armstrong, T. (2000). *Multiple intelligence in the classroom* (2nd ed.). Alexandria, VA: ASCD.

Asempa, E. Y. (2013). *Adaptations for enhancing inclusion of pupils with disabilities in selected schools within Yilo Krobo District*. An unpublished M. Phil thesis, University of Education, Winneba.

Avoke, M. (2005). *Special educational needs in Ghana: Policy, practice and research*. Winneba, Ghana: Special Educational Books.

Avoke, M. K., Hayford, S. K., Ihenacho, I. J. & Ocloo, M. A. (1998). *Issues in special education.* Winneba: Department of Special Education.

Brew, B. (2011). *Views of tutors of colleges of education on pre-service teachers' preparation towards inclusive education in Ghana.* An unpublished M. Phil thesis, University of Education, Winneba.

Bui, X., Quirk, C., Almazan, S., & Valenti, M. (2010). *Inclusive education research & practice.* Maryland Coalition for Inclusive Education.

Carnine, D. Silbert, J., & Kameenui, E. J. (1990). *Direct instruction reading* (2nd ed). Columbus, OH: Merrill.

Choate, J. S. (2004). *Successful inclusive teaching: Proven ways to detect and correct special needs* (4th ed). New York: Pearson Education, Inc.

Cresswell, J. W. & Cresswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed) Thousand Oaks. CA Sage.

Cresswell, J. W. (2014). *Research design*: *Qualitative, quantitative, and mixed methods approaches* (4th ed) Thousand Oaks. CA Sage.

Department of Education (2005). *Guidelines for inclusive learning programmes. Education White Paper 6*: Building an inclusive education and training system. Pretoria: Government Printers.

Frieberg, K. L. (1997). *Educating exceptional children* (9th ed.). Guilford, USA: Dushkin Publishing Group/Brown & Benchmark Publishers.

Hewitt, T. W. (2006). *Understanding and shaping curriculum*: *What we teach and why*. New Delhi: Sage.

King-Sear, M. E. (2001). Three steps for gaining access to the general education curriculum for learners with disabilities. *Intervention in School and Clinic 37*(2), 67-76.

Mager. R. F. (1984). *Preparing instructional objectives.* Belmont, CA: Pitman Learning.

Miller, S. P. (2009). *Validated practices for teaching students with diverse needs and abilities (2nded.)*. Upper Saddle River: Pearson.

Ocloo, M. A. (2011). *Effective education of persons with visual impairment in Ghana.* Accra: Distinctive Publishers.

Okyere, B. A., & Adams, J. S. (2003). *Introduction to special education. An African perspective*. Accra: Adwinsa Publications.

O'neill, R. (2006). The advantages and disadvantages of qualitative and quantitative research methods. Retrieved from http://www.learnhigher.ac.uk/analysethis/main/quantative1.html

Opoku, M. P., Badu, E., Amponteng, M., & Agyei-Okyere, E. (2015). Inclusive education at the crossroads in Ashanti and Brong Ahafo regions in Ghana: Target not achievable by 2015. *Disability, CBR & Inclusive Development, 26*(1), 63-78.

Pierangelo, R., & Giuliani, G. A. (2012), *Assessment in special education: A practical approach* (4th ed.). Boston: Allyn & Bacon.

Pierangelo, R., & Giuliani, G. (2006). *Assessment in special education: A practical approach* (2nd ed.). Boston: Allyn & Bacon.

Reisburg, L. (1990). Curriculum evaluation and modification: An effective teaching perspective. *Intervention in School and Clinic, 26*(2), 99-105.

Seidengerg, P. L. (1989). Relating text-processing research to reading and writing instruction for learning disabled students. *Learning Disability Focus, 5*, 4-12.

UNESCO (1994). *Salamanca statement and framework for action on special needs education.* Salamanca Spain: World conference on special needs education: Access and quality, Salamanca Spain.

Wade, S. E. (2000). *Inclusive education: A casebook and reading for* prospective *and practicing educators*. New Jersey: Lawrence Erlbaum Associates.

