

Impact of Cooperative Learning's Group Tasks on Students' Academic Performance During Continuous Assessments

Oluwafunmilola Rebecca Oluwatosin¹, Oluwatoyin Ayodele Ajani²,

¹Department of Educational Foundation, University of Lagos, Nigeria,

²Department of Social Sciences Education, University of Zululand, South Africa. Email: oaajani@gmail.com

This study explored the impact of using group tasks in cooperative learning, for the implementation of continuous assessments. Cooperative learning strategy is an effective approach to encourage collaborative work among a group of students, to derive concrete participatory learning. The strategy promotes independent interaction among the grouped students to achieve tasks. This quantitative study adopted a descriptive design survey to gather data from randomly selected 300 students and 50 lecturers from the Federal College of Education, Osiele, Abeokuta Ogun State. The respondents to this research instrument on the utilisation of Cooperative Learning Strategy for the implementation of Continuous Assessment revealed that the Cooperative learning strategy enables continuous interaction, collaboration, networking and independent knowledge production for the group among the students, during their continuous assessments and prepare them for team work after leaving the school. The result shows that there is a significant impact of group tasks on students' academic performance when cooperative learning is used during the implementation of Continuous Assessment. The study therefore recommends the use of group tasks in continuous assessments for students in higher education institutions, to promote independent learning, participation of all students in group tasks, and also to promote critical thinking in every student-member of a group.

Key words: *Cooperative learning, group tasks, continuous assessment, academic performance, collaboration, networking, independent learning*



Introduction

The assessment systems in the Nigerian educational system is predominantly summative, while continuous assessments in some instances contribute to the final academic assessments of students (Bosch, Mentz & Reitsma, 2019). The use of continuous assessments at various level of educational institutions as part of the students' academic performance became prominent through educational reform in 2004 (the National Policy on Education, 2004). Continuous Assessment can be simply defined as a process of evaluation in which a student's previous performances are taken into consideration in determining his/her final grade or position in a class after a given period of learning or after a course of study (Robert, 2006). An effective Continuous Assessment procedure reduces such incidence as "do or die affair" as in the case of Summative system. Continuous assessment emphasises more on comprehensive information on the cognitive, affective and psychomotor measures of an individual if well implemented. Therefore, class exercises, take-home assignments, projects, seminar presentation etc., are used to assess learners.

According to Dzemidzic Kristiansen, Burner & Johnsen (2019), teachers should always look for better ideas of meeting the many challenges they face in school, especially on the implementation of continuous assessment. Cooperative learning strategy is a kind of teaching learning method that gives room for interaction among learners. There are two major approaches that can be used in classroom teaching at any level of education. They are individualistic task and cooperative task. In the individualistic task, the learners are assessed and rewarded individually while cooperative task gives room for interaction and team building in the class. Cooperative learning can therefore be defined as a form of active learning where students work together to perform specific tasks in a small group (Beth, 2014). The group is expected to be a heterogeneous group, not more than five and not less than three in a group.

Continuous assessment is simply the process in which students are examined continuously throughout the duration of their education, the result of which are taken into account after leaving school (Day, van Blankenstein, Westenberg & Admiraal, 2018; Tadesse, Manathunga & Gillies, 2018). In the process of implementing continuous assessment, teachers calculate students' scores from various types of work such as test and quizzes, homework, term paper, project, seminar presentation etc. (Emunemu, B. O. 2018). The continuous assessment as used in the Tertiary institutions forms part of what is used to assess students' performance (Tlali, Mukurunge & Bhila, 2019). In another study conducted in Ethiopia, Belay and Tesfaye (2020) assert that continuous assessment plays significant role in students' academic performance in higher education institutions. With the use of continuous assessment, students will be assessed right through the learning process. Continuous Assessment enables a teacher to monitor the improvement or otherwise of the learner and gives more support and guidance so that the learner will have more opportunities to improve. Avery, Lees and Russell (2020) avow that continuous assessment provides students with a constant stream of opportunities to prove their mastery of materials, and sends the message that everyone can succeed if given enough time

and practice. This according to Moti (2019) reduces the anxiety and finally around testing and heightens the emphasis on the learning itself. The focus shifts from superficial competition to true understanding and personal learning goals when mastery becomes the point of assessment, instead of competition with other students. Secondly, in a system of continuous assessment, advanced students can progress through material at their own pace and remain engaged by pursuing more challenging work as they pass out of the school system. In this sense, the standards for such students stretch to help each student maximise potential.

The use of cooperative learning's group tasks can foster cooperation among students and promote the spirit of team building (Emunemu, 2018; Avery, et al., 2020). Alrayah (2018) posits that with the use of cooperative learning strategy, students support one another to succeed. Therefore, this study aims at assessing the utilisation of cooperative learning strategy in the implementation of continuous assessment to enhance students' academic performance.

Theoretical framework

This study adopts social constructivism as a theoretical framework to underpin cooperative learning strategy. Social constructivism, a constructivist theory proposed by Vygotsky, provides understanding on the roles of culture and society, language, and interaction, to understanding how humans significantly learn (Ma, 2019). Vygotsky (1980) asserts that knowledge is cultural in a socio-cultural approach study with children. According to Vygotsky (1980), this approach can be briefly described as "cooperative" and "cultural." Furthermore, Vygotsky posits that the development of individual thoughts, languages, and reasoning processes are all result of culture. These abilities are developed through social interactions with others and therefore, they represent the shared knowledge of a given culture. Vygotsky (1980) conducted a study on the growth of children, based on learning from their environment and through their interaction with others, to submit that happenings in their social environment (e.g., dialogues, actions, and activities) help children learn, develop, and grow.

In Vygotsky's social constructivism, according to Ma (2019), social interaction is an important way in which children learn from their culture without reinventing. Hence, parents, adults, caregivers, teachers, and peers play important roles in the process of appropriation in children's learning. The teachers and adults give direction and instructions, comments, and feedback to students to produce knowledge. The students also communicate with teachers, conveying their views or opinions on the problems or provide answers to issues in an interactive manner. Children's abilities to use conversations in working with their peers to handle tasks, exercises, projects, and problems enable them to socially construct meaning out of every situation. In this way, they exchange ideas and receive information, thereby generating understanding to develop knowledge.

This process of learning is important as knowledge is developed through history, and go through appropriation in a social environment. Thus, learning is achieved through the process



of development; where learners are expected to be active participants in the process of learning. Ma (2019) opines that activity is important in learning and it is also a key concept in socio-cultural theories that explains the importance of doing any activity. Engagement in meaningful activities ensures that learners interact with peers and more knowledgeable people. Their interaction makes children develop dialogues within the structure of activities; to attain learning and development. Vygotsky (1980) argues that language plays an important role in learning. Though Vygotsky died at the age of 38 years, by the 1980s, the research of Dewey and The work of Vygotsky was later strengthened with Piaget's work on developmental psychology, to expand the broad approach of constructivism (Ma, 2019). This is why today, some literature refers to Jean Piaget as the founder of constructivism (Hebe, 2017; Nurkholida, 2018; Erbil, 2020). The rationale for this theory is based on its basic tenet that students learn by doing, rather than observing. Seemingly, Ma (2019) and Rubtsov (2020) agree that students bring prior knowledge into a learning situation in which they need to critique and re-evaluate their understanding of it. Stevens-Fulbrook (2020) describes this process of interpretation, articulation and re-evaluation that is repeated until they can demonstrate their comprehension of the subject. However, constructivist theorists have extended the traditional focus on individual learning to address collaborative and social dimensions of learning (Rubtsov, 2020).

There is a great overlap between a constructivist and social constructivist classroom, in which emphasis is placed on learning through social interactions and the value placed on cultural background (Ryder, 2009). According to Vygotsky (1980), culture gives the students the cognitive tools needed for development. Furthermore, the adults in the learners' environment are conduits for the cultural tools, which include language, cultural history, social context and more recently, electronic forms of information access. In social constructivist classrooms, collaborating learning is a process of peer interaction that is structured by teachers. Discussion can be promoted through presentation of specific concepts, problems or scenarios and is guided by means of effectively directed questions, through the introduction and clarification of concepts, information and references to previously learned materials (Hebe, 2017; Ma, 2019; Rubtsov, 2020).

According to Wood (2000), it is possible to see that social constructivism brings together aspects of the Piaget's work with that of Brunner and Vygotsky.

Integration of social constructivism into the classroom practices is an approach where a teacher and two to four students can form a collaborative group and take turns to dialogue or discuss on a topic. The dialogues prompt group members to apply the four cognitive strategies of questioning, summative, clarifying and predicting (Hebe, 2017). This creates an environment in which students gradually assume more responsibilities to get tasks done, through collaboration, to forge group expectations for this level of thinking and acquiring skills vital for learning and success in everyday life (Nurkholida, 2018).

Cooperative Learning Strategy

One of the effective learning strategies is to engage students in activities, where they can learn from their own constructs, usually when working with others in a group (Emunemu, 2018). How students interact with each another is a neglected aspect of instruction. Much training time is devoted to helping teachers arrange appropriate interactions between students and materials (i.e., textbooks, curriculum programs) and some time is spent on how teachers should interact with students, but how students should interact with one another is relatively ignored. It should not be. How teachers structure student-student interaction patterns has a lot to say about how well students learn, how they feel about school and the teacher, how they feel about each other, and how much self-esteem they have.

Students' learning goals may be structured to promote cooperative, competitive, or individualistic efforts (Alrayah, 2018). In every classroom, instructional activities are aimed at accomplishing goals and are conducted under a goal structure. A learning goal is a desired future state of demonstrating competence or mastery in the subject area being studied. The goal structure specifies the ways in which students will interact with each other and the teacher during the instructional session. Each goal structure has its place (Johnson & Johnson, 1989, 1999). In the ideal classroom, all students would learn how to work cooperatively with others, compete for fun and enjoyment, and work autonomously on their own. The teacher decides which goal structure to implement within each lesson. The most important goal structure, and the one that should be used the majority of the time in learning situations, is cooperation (Hortiguera Alcala, Hernando Garijo, Perez-Pueyo & Fernandez-Rio, 2019).

Cooperation is working together to accomplish shared goals (Alrayah, 2018). Within cooperative situations, individuals seek outcomes that are beneficial to themselves and beneficial to all other group members. Cooperative learning is the instructional use of small groups so that students work together to maximize their own and each other's learning (Canabate, Serra, Bubnys & Colomer, 2019). However, Day et al. (2018) opine that it may be contrasted with competitive (students work against each other to achieve an academic goal such as a grade of "A" that only one or a few students can attain) and individualistic (students work by themselves to accomplish learning goals unrelated to those of the other students) learning. Bosch, Mentz & Reitsma (2019) argue that in cooperative and individualistic learning, you evaluate student efforts on a criteria-referenced basis while in competitive learning you grade students on a norm-referenced basis. While there are limitations on when and where you may use competitive and individualistic learning appropriately, you may structure any learning task in any subject area with any curriculum cooperatively.

Johnson and Johnson (2003) argue that cooperative learning can be categorised into: Formal cooperative learning, Informal cooperative learning and Cooperative base groups. The Formal cooperative learning consists of students working together, for one class period to several



weeks, to achieve shared learning goals and complete jointly specific tasks and assignments (Johnson, Johnson, & Holubec, 2008; Casey & Fernandez-Rio 2019). The teachers' role in the formal cooperative learning strategy includes making pre-instructional decisions, to (a) formulate both academic and social skills objectives, (b) decide on the size of groups, (c) choose a method for assigning students to groups, (d) decide which roles to assign group members, (e) arrange the room, and (f) arrange the materials students need to complete the assignment. In these pre-instructional decisions, the social skills objectives specify the interpersonal and small group skills students are to learn. By assigning students roles, role interdependence is established. The way in which materials are distributed can create resource interdependence. However, different types of formal cooperative learning strategies include the Jigsaw technique, assignments that involve group problem solving and decision making, laboratory or experiment assignments, and peer review work (e.g editing writing assignment).

The informal cooperative learning consists of having students work together to achieve a joint learning goal in temporary, ad-hoc groups that last from a few minutes to one class period (Johnson, Johnson, & Holubec, 2008). During a lecture, demonstration, or film, informal cooperative learning can be used to focus student attention on the material to be learned, set a mood conducive to learning, help set expectations as to what will be covered in a class session, ensure that students cognitively process and rehearse the material being taught, summarize what was learned and pre-empt the next session, and provide closure to an instructional session. The teacher's role in using informal cooperative learning is to keep students more actively engaged intellectually in a focused discussions before and after the lesson and interspersing pair discussions throughout the lesson (Casey & Fernandez-Rio, 2019). Two important aspects of using informal cooperative learning groups are to (a) make the task and the instructions explicit and precise and (b) require the groups to produce a specific product (such as a written answer). Following the procedures of Introductory Focused Discussion, where teachers assign students to pairs or triads and explain (a) the task of answering the questions in a four to five minute time period and (b) the positive goal interdependence of reaching consensus (Huang, et al., 2017). The discussion task is aimed at promoting advance organizing of what the students know about the topic to be presented and establishing expectations about what the lecture will cover. Individual accountability is ensured by the small size of the group. Erbil (2020) describes another procedure that is the Intermittent Focused Discussions where teachers divide the lecture into 10 to 15 minute segments. This is about the length of time a motivated adult can concentrate on information being presented. After each segment, students are asked to turn to the person next to them and work cooperatively in answering a question (specific enough so that students can answer it in about three minutes) that requires students to cognitively process the material just presented. The third procedure is the Closure Focused Discussion where teachers give students an ending discussion task lasting four to five minutes. The task requires students to summarize what they have learned from the lecture and integrate it into existing conceptual frameworks. The task



may also point students toward what the homework will cover or what will be presented in the next class session. This provides closure to the lecture.

Conversely, the informal cooperative learning ensures that students are actively involved in understanding what is being presented (Bosch, et al., 2019). Furthermore, it also provides time for teachers to move around the class listening to what students are saying (Dzemidzic, et al., 2019). In a longitudinal study conducted by Emunemu (2018), he opines that listening to student discussions can give instructors direction and insight into how well students understand the concepts and material being as well as increase the individual accountability of participating in the discussions.

The cooperative base groups are long-term, heterogeneous cooperative learning groups with stable membership (Johnson, Johnson, & Holubec, 2008). Members' primary responsibilities are to (a) ensure all members are making good academic progress (i.e., positive goal interdependence) (b) hold each other accountable for striving to learn (i.e., individual accountability), and (c) provide each other with support, encouragement, and assistance in completing assignments (i.e., promotive interaction). In order to ensure the base groups function effectively, periodically teachers should teach needed social skills and have the groups' process how effectively they are functioning. Tadesse et al. (2018) agree that cooperative base groups are heterogeneous in membership (especially in terms of achievement motivation and task orientation), meet regularly (for example, daily or biweekly), and last for the duration of the class (a semester or year) or preferably for several years. Kimmelman and Lang (2019) agree that the agenda of the base group can include academic support tasks (such as ensuring all members have completed their homework and understand it or editing each other's essays), personal support tasks (such as getting to know each other and helping each other solve non-academic problems), routine tasks (such as taking attendance), and assessment tasks (such as checking each other's understanding of the answers to test questions when the test is first taken individually and then retaken in the base group).

According to Canabate, et al. (2019), the teacher's role in using cooperative base groups is to (a) form heterogeneous groups of four (or three), (b) schedule a time when they will regularly meet (such as beginning and end of each class session or the beginning and end of each week), (c) create specific agendas with concrete tasks that provide a routine for base groups to follow when they meet, (d) ensure the basic elements of effective cooperative groups are implemented, and (e) have students periodically process the effectiveness of their base groups.

The longer a cooperative group exists, the more caring their relationships will tend to be, and the greater the social support they will provide for each other (Alrayah, 2018). Similarly, Hortiguera Alcala, et al. (2019) posit that the more committed the group members will be to each other's success, and the more influence members will have over each other. Thus, permanent cooperative base groups provide the arena in which caring and committed relationships can be created for social support to improve attendance, personalize the

educational experience, increase achievement, and improve the quality of school life, as parts of the significance of cooperative learning.

Conclusively, Casey and Fernandez-Rio (2019) agree that the cooperative learning has many limitations that could cause the process to be more complicated than first perceived if not well handled. Sharan (2010) describes the constant evolution of cooperative learning as a threat to some students. Some students may view or experience cooperative learning as constantly changing, where there is a possibility that teachers may become confused and lack complete understanding of the method (Goodyear, 2017). The fact that cooperative learning is such a dynamic practice means that it can be underutilised in many situations (Bodsworth & Goodyear, 2017). Also teachers can get into the habit of relying on cooperative learning as a way to keep students busy. While cooperative learning can consume time, but the most effective application of cooperative learning hinges on an active instructor (Goodyear, 2017). Teachers implementing cooperative learning may also be challenged with resistance and hostility from students who believe that they are being held back by their slower teammates or by students who are less confident and feel that they are being ignored or demeaned by their team (Erbil, 2020). Students often provide feedback in the form of evaluations or reviews on success of the teamwork experienced during cooperative learning experiences (Dzemidzic Kristiansen, et al., 2019). The peer review and evaluations may not reflect true experiences due to perceived competition among peers (Erbil, 2020). Furthermore, students might feel pressured into submitting inaccurate evaluations due to bullying. Therefore, to eliminate such concerns, confidential evaluation processes may help to increase evaluation strength (Tadesse, et al., 2018). Other challenges of cooperative learning strategy may include group hate, where group members may develop hatred against some members due to bullying, control or domineering features of some members; loafing by some members who don't take responsibility for their own role, even if it is the smallest role in the group; and lack of conflict management or resolution among the group members to ensure cohesion (Goodyear, 2017).

Continuous Assessment

Continuous Assessment refers to all forms of assessments that can be used to assess or determine learning competencies in students (Moti, 2019). The continuous assessments may base on weekly tests of the students 'performance in a variety of situations, written and practical works. The assessments are usually cumulative judgment rather than the result of a single examination forms the basis of the final assessment of his capabilities (Belay & Tesfaye, 2020). The National Policy on Education (2004) clearly states that the educational assessment and evaluation will be based on the whole or in part of continuous assessment of the students' progress. Continuous Assessment therefore may be viewed as a method of finding out what the learners have gained from learning activities in terms of knowledge, thinking and reasoning, character development and industry (Ma, 2019). Thus, the continuous assessments may comprise periodic tests, assignments, projects, observations, interviews and questionnaire. The

results from the students' continuous assessments are then used to aid further development in the students (Ma, 2019). While Emunemu (2018) asserts that besides accurate records that continuous assessments present on students' performance, the data can also be used for the purpose of providing information to parents, guardians and others who can use them for the benefit of the students.

Okoli (2005) describes continuous assessment as a mechanism whereby the final grading of a student in the cognitive, effective and psychomotor domains of behaviour systematically takes account of all his/her performances during a given period of schooling. Similarly, Avery, et al. (2020) posit that such assessments involve the use of various modes of evaluation for the purpose of guiding and improving the students' learning and performance. Further description of continuous assessments by Tlali, et al. (2019), view continuous assessments as a variety of mechanism to monitor the progress of students, through various classroom evaluations. Monitoring of students' progress is a continuous process through continuous assessments, since assessments are done on a continuous basis. Students are well monitored as new knowledge is introduced to them in the course of teaching and learning for academic performance, and to establish the rate and quality of progress relatively to exposure (Alrayah, 2018).

The continuous assessment grading system requires the assessment of the change in behaviours, in terms of cognitive, affective and psychomotor domains (Avery, et al., 2020). Changes in cognitive domain reflects the ability of students to perceive a relationship between objects and to understand information through the utilisation of what has been learned. Cognitive learning, therefore involves the ability to perceive a problem situation and be able to apply previous learned knowledge to its solution (Vygotsky, 1980; Rubtsov, 2020). Hence, students are evaluated from one stage to the other through tests or assignments. The assessments can be used to determining the performance or achievement of the students. Thus, these assessment differ from one summative assessments that students are exposed to at the end of a term or year. End of year assessment does not take into consideration the continues assessment's progressive performance of students (Moti, 2019). The use of such summative assessments that do not take into consideration, the continuous assessments of the students are not only fair but dangerous to students' academic performance (Belav & Tesfave, 2020). Certain factors are bound to dictate the performance of such students without continuous assessment marks. Ma (2019) argues that some students may not succeed in written examinations only but can perform excellently when given the opportunity to work with materials relating to their fields of interest.

Conversely, the term 'continuous assessment' is used to describe assessments that are completed during the course module (Belav & Tesfave, 2020). The method is also referred to as curriculum integrated assessment or embedded assessment (Moti, 2019). Continuous assessment can replace the final assessment or can be combined with the final assessment to calculate a final grade for students in higher education institutions. The use of continuous assessment is to secure/enable a continuous and independent work rate and learning for



students during the course (Tlali, et al., 2019). According to Emunemu (2018), it is important that students practice the assessment method before the final assessment. This ‘curriculum embedded’ or ‘continuous assessment’ allows for feedback to students and teachers (Avery, et al., 2020).

Ma (2019) asserts that continuous assessment can be used in two different ways; (summative) assessment on activities/products contributing to the final grade or (formative) assessment on activities/products not contributing to the final grade. In both cases, feedback to lecturers and/or students is part of the process (Moti, 2019). Summative assessments scoring/grading students’ work during the semester is a way to avoid the challenges of long periods of no assessment, which can lead to a single high-risk opportunity to demonstrate learning at the very end of the module. As such, continuous assessment signals to students that engagement throughout the module is needed for successful completion, and that learning is not just about intensive work at the very end of the course (Belay, et al., 2020). For this reason modules with continuous assessment motivates students to work harder, but can also increase stress levels for some students.

Furthermore, continuous assessment can become a very powerful way of introducing feedback to students’ work - especially if students are given a chance to act on feedback so that assessment becomes incremental, e.g. (1) students hand in a draft, (2) students receive feedback on the draft from peers/teaching assistant, (3) students re-submit the improved draft after taking feedback into account, (4) students' drafts are assessed. Examples of assessment types are:

- Small written assignments
- Student presentations/seminars
- Practical skills tests
- Portfolio
- Active participation
- Multiple choice questions (potentially student-generated) and similar
- Peer assessment
- Continuous assessment

The significance of Continuous Assessment

Osere (2010) states that there are 3 main and primary purpose for continuous assessment:

1. **Enhancing the student’s learning.** Continuous and comprehensive assessment of the knowledge that the student acquires during the course of the module is very important. Moreover, this ensures that the students invest considerable time in studying, preparing and building on academic skills (Belay, et al., 2020). This also ensures that the students is in constant touch with the curriculum and all that it has to offer. A constant,

continuous and regular assessment of student performance and learning is the key to building a competent and skilled prospective workforce.

2. **Improving the faculty's teaching skills.** The pressure of continuous assessment can ensure optimum performance of the teachers as well. Let's say that a particular curriculum only has 1 final examination for 100 marks at the end of its course. In this case, the students, as well as the teachers, will find the necessity to consistently perform throughout the term and not only towards the end of the course, making it a great performance improviser.
3. **Improving the education and institutional assessment system.** An education system that understands the importance of comprehensive assessment is great. Not only does this kind of system portray development but also shows how serious they are when it comes to providing opportunities and student performance.

Research methodology

This study employed a descriptive survey design to establish the impact of cooperative learning strategy' group tasks in continuous assessments for students' academic performance. The design followed a systematic approach to collect data from 300 students across the 5 Schools of Education, Vocational Studies, Language, Science, Arts and Social Sciences. Furthermore, the questionnaire was also administered with 50 lecturers across the 5 Schools at the Federal College of Education, Osiele, Abeokuta in Nigeria. The questionnaire was randomly administered with 60 students from each school, while 10 lecturers from each schools received the research instrument, as shown in Table 1 below:

Table 1. Students Sample

	NCE I		NCE II		NCE III		TOTAL
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	
School of Science	10	10	10	10	10	10	60
School of Arts & Social Science	10	10	10	10	10	10	60
School of Language	10	10	10	10	10	10	60
School of Vocational Studies	10	10	10	10	10	10	60
School of Education	10	10	10	10	10	10	60
TOTAL	50	50	50	50	50	50	300

Table 2. Lecturers Sample

	School of Science	School of Arts & Social Science	School of Language	School of Vocational Studies	School of Education	TOTAL
Male	5	5	5	5	5	25
Female	5	5	5	5	5	25
TOTAL	10	10	10	10	10	50

This instrument was self –designed by the researchers to test two hypotheses and was validated by senior and experienced researchers, with test-retest reliability of 0.5% level of significant for 20% of the sample. The two hypotheses are:

Hypothesis One: There is no significant impact of group task on students’ academic performance when cooperative learning is used for the implementation of continuous assessment.

Hypothesis Two: There is no significant impact of group task on students’ retention when cooperative learning is used for the implementation of continuous assessment.

Ethical clearance for the study was obtained from appropriate authorities, while the respondents were duly briefed, before the informed the endorsement of the consent forms. Their voluntary participation with no monetary benefit or influence was emphasised to them. Collected data were coded, scored and analysed with SPSS to establish the Chi-square of the results, as presented in the next section.

Table 3: Impact of group task on students’ academic performance when cooperative learning is used for the implementation of continuous assessment.

Variables	N	Df	X ² -cal	X ² -crit	Remark	
Observed N						
Expected N						
Residual						
SA	112					
A	152	350	3	100.03	7.815	Significant
D	39					
SD	47					
Total	350					

X²-Critical = 7.815; P<0.05

It is evident from table 3 above as X^2 –calculated value of 100.03 is found to be greater than X^2 -critical value of 7.815 at 0.05significance with 3 degree of freedom. Hence, the null hypothesis which states that there is no significant impact of group task on students’ academic performance when cooperative learning is used for the implementation of continuous assessment is rejected. This implies that there is significant impact of group task on students’ academic performance when cooperative learning is used for the implementation of continuous assessment.

Hypothesis Two: There is no significant impact of group task on students’ retention when cooperative learning is used for the implementation of continuous assessment.

Table 4: Impact of group task on students’ retention when cooperative learning is used for the implementation of continuous assessment.

Variables			N	df	X^2 -cal	X^2 -crit	Remark	
Observed N	Expected N	Residual						
SA	103	87.5	-27.5	350	3	29.497	7.815	Significant
A	121	87.5	-21.5					
D	66	87.5	33.5					
SD	60	87.5	15.5					
Total	350							

X^2 -Critical = 7.815; $P < 0.05$

It is evident from table 4 above as X^2 -calculated value of 29.497 is found to be greater than X^2 -critical value of 7.815 at 0.05 level of significance with 3 degree of freedom. Hence, the null hypothesis which states that there is no significant impact of group task on students’ retention when cooperative learning is used for the implementation of continuous assessment is rejected. This implies that there is significant impact of group task on students’ retention when cooperative learning is used for the implementation of continuous assessment.

Based on the result of the tested hypotheses, the following were deduced:

Hypothesis one: hypothesis one which states that there is no significant impact of group task on students’ academic performance when cooperative learning is used to implement continuous assessment is rejected which implies that there is significant impact of group task on students’ academic performance when cooperative learning is used or the implementation of continuous assessment.

Hypothesis Two: Hypothesis two which states that there is no significant impact of group task on students' retention when cooperative learning is used to implement continuous assessment is rejected. This implies that there is significant impact of group task on students' retention when cooperative learning is used for the implementation of continuous assessment.

Discussion of findings

Hypothesis One: This states that there is no significant impact of group task on students' academic performance when cooperative learning is used for the implementation of continuous assessment. Having analysed the data, the null hypothesis was rejected. The findings revealed that there is significant impact of group task on students' academic performance when cooperative learning is used for the implementation of continuous assessment. The result shows that group task helps students to learn better and perform excellently in their academics. The finding agrees with Johnson and Johnson, (2009) in their study on cooperative learning and academic achievement among secondary school students and which showed that cooperative learning accounted for 63.7% of increased in academic performance of students. This significant effect can be further explained that students who fully participate in group activities, exhibit collaborative behaviours, provide constructive feedback and cooperate with their team mates. Cooperative learning has also been found to increase attendance time on task, enjoyment of school and classes, motivation, and independence. Hence, Cooperative learning enables them to have a higher likelihood of receiving higher test scores and course grades at the end of the semester. Cooperative learning can therefore be referred to as an active pedagogy that fosters higher academic achievement.

More so, Jeanie (2001), Erbil (2020) and Avery, et al. (2020) also corroborated the findings in his work on cooperative learning. A synthesis of research by Jeanie about cooperative learning find that cooperative learning strategy improves the achievement of students and their interpersonal relationships. Jeanie also found that cooperative learning increases attendance, motivation and independence.

Furthermore, this result agrees with Felder and Brent (2003) who found that students taught and assessed with the use of cooperative learning strategy exhibit higher academic achievement, deeper understanding of material and less stress. These students have a tendency to demonstrate deeper learning, more critical thinking and a higher level reasoning skills than those taught in more traditional ways. Mourtos and Allen (2001) as well as Alrayah (2018) found that the grades of students taught using cooperative learning showed significant improvement. Smith (2005) states that, in terms of the academic success of students, cooperative learning has significant advantages over individual and competitive learning methods.

Hypothesis Two: Hypothesis two states that there is no significant impact of group task on students' retention when cooperative learning is used for the implementation of continuous assessment. Having analysed the data, the null hypothesis was rejected. This implies that there is significant impact of group task on students' retention when cooperative learning is used for the implementation of continuous assessment. The result reveals that group task positively impacts students' retention. This is possible when students form collaborative groups. These collaborative groups can develop spontaneously among students, or they may be intentionally promoted by instructors and academic-support professionals. Study group will enable the students to approach academic tasks collectively. Students groups that may be formed to accomplish additional learning tasks and also helps to improve retention include the following: (a.) note-taking groups in which students convene immediately after class to compare and share notes; (b.) reading groups in which students collaborate after completing reading assignments to compare their highlighting and margin notes; (c.) library research groups in which students join together to conduct library research and combat "library anxiety"; and (d) test-results review groups in which students review their individual tests together after receiving test results to help members identify the source of their errors and to observe "model" answers that received maximum credit. All these positively impacts students' learning and retention.

This finding supported the result of different studies (Alrayah, 2018; Emunemu, 2018; Avery, et al., 2020) on peer poser and cooperative learning. According to Sullivan & Johnson, (1997), effective academic support programs for first-year students capitalize on the power of peers. Interaction between students has long been known to have a positive impact on students' retention, and intentionally fostering collaboration among students' social integration into the college community. This result also agrees Vygotsky (1980), who also found that peer collaboration advance students' cognitive development. The extensive review of research on critical thinking conducted by Johnson concluded that use of peers as resources is a powerful strategy for promoting the development of students' higher-level thinking skills. Several higher education researches on peer teaching/learning consistently indicate that both the peer learner and the peer teacher experience significant gains in learning as a result of their collaborative interaction. Also, research reported by a variety of institutions points to the positive impact of peer tutoring on students' retention, especially the retention of underrepresented and disadvantaged students with underdeveloped basic-academic skills.

Recommendations

The higher education institutions should encourage cooperative learning strategy to implement continuous assessment so as to enhance students' academic performance. Students should be encouraged to understand the significance of group tasks for learning purpose and also for future group cohesiveness. Participation in various group tasks in school promotes retention. The lecturers should engage students in various activities that can lead to study group, team work for the students in group tasks, to improve their academic performance.



Conclusions

The study examined the use of cooperative learning strategy to implement continuous assessment in Federal College of Education, Osiele, Abeokuta, Nigeria. Three hundred and fifty respondents who were randomly selected from the five schools in the college served as the sample for the study. The two hypotheses were tested using chi-square statistical method at 0.05 level of significance. The result shows that the use of cooperative learning strategy has great impact on the academic achievement of students.



REFERENCES

- Ajani O.A. & Gamede, B.T. (2020). Challenges of high school learners' transition into universities: a case of a South African rural university, *Gender & Behaviour*, 18 (2), 15803 – 15812.
- Ajani O.A. (2020). Correlations between Effective Teachers' Clusters System and Enhanced Classroom Practices in South Africa, *Journal of Social Sciences Research*, 6 (2), 140-146. <https://doi.org/10.32861/jssr.62.140.146>.
- Ajani O.A., Khumalo N.D.F, Maphalala M.C. & Govender S. (2020). Stakeholders' Support for Large Scale Assessment in Schools: A Case of Annual National Assessment (ANA) in South African Schools, *Journal of Social Sciences Research*, 6 (1), 103-113. <https://doi.org/10.32861/jssr.61.103.113>.
- Ale V. M. & Omirin F. S. (2015). *Teachers' Perception and Implementation of Continuous*
- Alrayah, H. (2018). The Effectiveness of Cooperative Learning Activities in Enhancing EFL Learners' Fluency. *English Language Teaching*, 11(4), 21-31.
- Assessment Practices in Secondary Schools in Ekiti-State, Nigeria*. Journal of Education and Practice, ISSN 2222-1735 (Paper) ISSN 2222-288X (Online) Vol.6, No.29.
- Avery, B., Lees, R., & Russell, D. (2020). Empowering students through co-creation, continuity and continuous assessment. *Student Empowerment in Higher Education. Reflecting on Teaching Practice and Learner Engagement*, 1, 439.
- Based Continuous Assessment Scores*. Manager's Journal on School Educational Technology, 71.
- Belay, S., & Tesfaye, A. (2020). Praxis of Assessment for Learning in Ethiopian Higher Education Institutions: The Case of Dire Dawa University. *American Journal of Educational Research and Reviews*, 5, 65-65.
- Bodsworth, H., & Goodyear, V. A. (2017). Barriers and facilitators to using digital technologies in the Cooperative Learning model in physical education. *Physical Education and Sport Pedagogy*, 22(6), 563-579.
- Bosch, C., Mentz, E., & Reitsma, G. M. (2019). Integrating cooperative learning into the combined blended learning design model: implications for students' intrinsic motivation. *International Journal of Mobile and Blended Learning (IJMBL)*, 11(1), 58-73.
- Cañabate, D., Serra, T., Bubnys, R., & Colomer, J. (2019). Pre-service teachers' reflections on cooperative learning: Instructional approaches and identity construction. *Sustainability*, 11(21), 5970.
- Casey, A., & Fernandez-Rio, J. (2019). Cooperative learning and the affective domain. *Journal of Physical Education, Recreation & Dance*, 90(3), 12-17.
- Day, I. N., van Blankenstein, F. M., Westenberg, P. M., & Admiraal, W. F. (2018). Explaining individual student success using continuous assessment types and student characteristics. *Higher Education Research & Development*, 37(5), 937-951.



- Dzemidzic Kristiansen, S., Burner, T., & Johnsen, B. H. (2019). Face-to-face promotive interaction leading to successful cooperative learning: A review study. *Cogent Education*, 6(1), 1674067.
- Emunemu, B. O. (2018). Continuous Assessment and Academic Performance of Secondary School Students in Ibadan North Local Government Area of Oyo State, Nigeria. *African Journal of Educational Management*, 19(01), 79-97.
- Erbil, D. G. (2020). A review of flipped classroom and cooperative learning method within the context of Vygotsky theory. *Frontiers in Psychology*, 11, 1157.
- Goodyear, V. A. (2017). Sustained professional development on cooperative learning: Impact on six teachers' practices and students' learning. *Research quarterly for exercise and sport*, 88(1), 83-94.
- Gore L. O., Abe, T. O. & Adodo S. O., (2011). *Skewness and Comparability of School*
- Hebe, H. N. (2017). Towards a theory-driven integration of environmental education: The application of Piaget and Vygotsky in Grade R. *International Journal of Environmental and Science Education*, 12(6), 1525-1545.
- Hortigüela Alcalá, D., Hernando Garijo, A., Perez-Pueyo, A., & Fernandez-Rio, J. (2019). Cooperative learning and students' Motivation, social interactions and attitudes: perspectives from two different educational stages. *Sustainability*, 11(24), 7005.
- Huang, M. Y., Tu, H. Y., Wang, W. Y., Chen, J. F., Yu, Y. T., & Chou, C. C. (2017). Effects of cooperative learning and concept mapping intervention on critical thinking and basketball skills in elementary school. *Thinking Skills and Creativity*, 23, 207-216.
- International Educational Journal*, 6 (3): 386–399.
- Johnson D. W. & Johnson F. (2005). *Joining together Group Theory and Group Skills* (10th ed.) Boston: Allyn & Bacon.
- Kimmelmann, N., & Lang, J. (2019). Linkage within teacher education: cooperative learning of teachers and student teachers. *European Journal of Teacher Education*, 42(1), 52-64.
- Liu & Matthew, (2005). *Vygotsky Philosophy Constructivism and Its Criticisms Examined*.
- Ma, J. (2019). Hong Kong college students' perceptions of continuous assessment in the context of academic literacy instruction. In *English literacy instruction for Chinese speakers* (pp. 265-280). Palgrave Macmillan, Singapore.
- Moti, G. (2019). Quality Education Assessment in Private Higher Education Institutions: The Case of Private Higher Education Institutions at Mekelle, Tigray Regional State. National Policy on Education, (2004), 4th Edition. NERDC Government printers Press.
- Norah, M. A. (2014). *Effect of Cooperative Learning on the Academic Achievement College Students in Saudi Arabia*. State University of New York at Fredonia, New York.
- Nurkholida, E. (2018). Developing authentic material of listening on higher education based on constructive learning of Jean Piaget and Vygotsky theory. *OKARA: Jurnal Bahasa dan Sastra*, 12(1), 59-74.
- Rubtsov, V. V. (2020). Two Approaches to the Problem of Development in the Context of Social Interactions: LS Vygotsky vs J. Piaget. *Cultural-Historical Psychology*, 16(3), 5-14.



- Stevens-Fulbrook, P. (2020). *Vygotsky, Piaget and Bloom: The Definitive Guide to their Educational Theories with Examples of How they can be Applied*. Paul Stevens-Fulbrook.
- Tadesse, T., Manathunga, C. E., & Gillies, R. M. (2018). Making sense of quality teaching and learning in higher education in Ethiopia: Unfolding existing realities for future promises. *Journal of University Teaching & Learning Practice*, 15(1), 4.
- Tlali, N., Mukurunge, T., & Bhila, T. (2019). Examining the implications of massification of education on quality assurance and assessment in higher institutions in Lesotho. *International Journal of Trend in Science and Research Development*, 3(3), 1561-1568.
- Vygotsky, L. S. (1980). *Mind in society: The development of higher psychological processes*. Harvard university press.