

Website: <u>www.jriiejournal.com</u> ISSN 2520-7504 (Online) Vol.6, Iss. 3, 2022 (pp. 410 - 420)

## Effectiveness of Group Assignments in Assessing Knowledge Acquired among University Students in Arusha Region, Tanzania

#### Salim Ally

Head of School; Gidahababieg Secondary School, P.O Box 233- Endasak. Hanang' District Email: arajigaamani 2014@gmail.com

#### Dr. Paul Raphael Kitula

Lecturer; St. Augustine University of Tanzania (SAUT), Arusha P.O Box 12385 - Arusha, Tanzania Email: kitula07@gmail.com

**Abstract:** The study assessed the effectiveness of group assignments on assessing knowledge acquired among university students in Arusha region. Specifically, the study investigated the effectiveness of university lecturers on monitoring group assignments and identifying methods used by university lecturers to ensure effective use of group assignments. Qualitative and quantitative approaches were employed. Eighty university students, 40 lecturers and 4 examination officers were sampled using stratified and purposive sampling techniques. Questionnaires were used to collect data from lecturers and students, while interview guides helped the collection of qualitative data from the examination officers. The instruments were validated using experts and the reliability was determined using split half method and the calculated reliability coefficient was 0.82. Data were analyzed using descriptive analysis whereas mean scores, frequencies and percentages were generated by use of SPSS. Qualitative data was analyzed thematically alongside research questions and the results were presented in words supported by direct quotations. The study found out that lecturers perceived themselves as competent on using group assignments but most of the students were not satisfied with how the whole process of group assignment was conducted. However, both students and lecturers acknowledged the importance of group assignments on assessing the acquisition of knowledge. Despite the shortfalls, the study concluded that group assignments are effectively used to assess learning acquisition among university students. The study recommended for more seminars and workshops for the lecturers so as to enhance their competence in using group assignments while assessing the acquisition of knowledge among students.

Keywords: Assessment, Assignment, Group, Effectiveness, Knowledge

#### How to cite this work (APA):

Ally, S. & Kitula, P. R. (2022). Effectiveness of Group Assignments on Assessing Knowledge Acquired Among University Students in Arusha Region, Tanzania. *Journal of Research Innovation and Implications in Education*, 6(3), 410 – 420.

## 1. Introduction

One core role of an educator at all levels of education is to provide evidence on whether learning is taking place or not. The process by which information is to answer this question is called assessment. According to Gronlund and Linn (2009) assessment involves the collection of data to determine what a person knows and what he can do. Assessment is categorized into two broader aspects namely formative and summative

assessment. Formative assessment is conducted periodically to provide feedback on learning success or failures while summative assessment is conducted at the end of the course to provide evidence on whether the learning objectives have been achieved (Kitula and Ogoti, 2018; Sulaiman, et al., 2020). In higher learning institutions, the two categories of assessment are also used and sometimes formative assessment is referred to as continuous assessment (CA) or coursework and the summative assessment is referred to as the university exam (UE).

Formative assessment in universities takes a number of forms, including individual and group assignments, take home assignment, projects, presentations and practicum with the main aim of providing constructive feedback about the achievement of learning outcomes (Sulaiman, et al., 2020). This study however concentrated on the use of group assignments as one of the formative assessment methods. The use of group assignments has gained momentum in higher learning institutions within Tanzania and beyond, whereby both students and lecturers prefer such form of assessment to other forms (Daba et al., 2017). Literature shows that the use of group assignments has a number of advantages to both the learners and the lecturers. For instance, Dicker et al., (2020) observed that the use of group assignments helps students to develop personal and interpersonal skills as they work in groups. This enhances their ability to cooperate with others.

Group assignments also allow interaction between students of different abilities as it increases students' hands of tasks (Chang & Brickman, 2018). Additionally, group assignments have positive impacts on students' acquisition of knowledge and skills (Meng, 2017). The use of group assignments also reduces the assessment burden to lecturers instead of responding to the individual learner's need, the lecturer will have to respond to the groups. Moreover, the course activities are likely to be done within a short time when groups are used compared to when such activities were to be done by individual students (Daba et al., 2017). Due to the number of advantages, both lecturers and students in higher learning institutions feel more comfortable with group assignments compared to individual assignments.

Though group assignments are preferred by lecturers and students, it is important for lecturers to ensure that the method used yields valid results. According to Bravo et al., (2019), there should be maximum participation of individuals in the group activities for such method to give results which present the true ability of the members. If some students participate fully and others do not, the obtained scores may not be effective as there is a possibility for strong students to score lower grades due to the weak students (Yadgarovna & Husenovich, 2020). However, in the Tanzanian context, there is no research conducted to determine whether group assignments are effectively used in assessing knowledge acquired among undergraduate students. Thus there was a need for a study to be conducted to fill the existing gap.

Effective use of group assignments also calls for lecturers to be careful in making the groups. According to Kitula & Ogoti (2018), the groups should not be too large because it may be difficult for each student to participate effectively. Moreover, lectures should consider the characteristics of students in making the groups so that each learner benefits from the group members (Bravo et al, 2019). If lecturers do not make deliberate efforts to ensure that the groups are well constructed, there is a possibility of some groups to have members who are all strong and some groups may have members who are all weak. This situation may hinder the chances for weaker students to be helped during the courses. As long as group assignment is one form of

formative assessment, its major role should be to improve teaching and learning. Hence lecturers are urged to ensure that students' characteristics are considered when forming the groups. However, in universities within Tanzania there is limited literature on how groups are formed and hence the effectiveness of this method on assessing knowledge acquired is in question. This being the case, there was need for a study to be conducted to assess the effectiveness of group assignments on assessing knowledge acquired.

## 1.1 Research Questions

- i) To what extent are university lecturers equipped with skills on using group assignments to assess knowledge acquisition among students?
- ii) To what extent do lecturers ensure that group assignments are effectively implemented in assessing knowledge acquisition among students?

## 2. Literature Review

## 2.1 Theoretical Framework

According to Sax (1997) validity is the extent to which measurement results are useful in making decisions and providing explanations relevant to a given purpose. This means that for meaningful use of assessment results tools, there needs to be evidence that they are measuring what has been intended to be measured. Sax (1997) further states that a trait that fails to measure its own objectives serves little purpose no matter how reliable it may be. The concept of validity is grounded in the validity test theory that postulates that a students' score on an achievement test reflects his/her ability on the measured area.

Based on the theory it therefore can be expected for a graduate who scored high grades on teaching method examinations during his/her time of university studies to demonstrate high abilities on using different and relevant teaching methods. For an assessor to be sure if the test results are useful in explaining competencies; Gronlund and Waugh (2009) suggested for one to ask four questions:

- 1. What extent does the sample of measurement tasks represent the domain of tasks being measured?
- 2. How accurately does the performance on assessment predict future performance on some valued measure?
- 3. How well can student's performance on assessment be explained in terms of psychological traits?
- 4. How well can the use of assessment serve the intended purpose and avoid adverse purpose?

In answering the four questions, five kinds of validity do emerge; these are content validity, predictive validity, concurrent validity, construct validity and consequent validity. In this study, the researcher concentrated on two kinds of validity that are content and predictive validity as they are more relevant to the study.

Content validity refers to the adequacy with which the content of a test represents the content of curricular aims about which the inferences are to be made (Popham, 2008). It may not be possible for a lecturer to include in an assignment everything that has been taught in a particular course. Therefore, one needs to sample some aspects that can represent all the other aspects. Content validity then helps a lecturer to compare the assessment tasks to the specifications describing the task domains under consideration (Gronlund and Linn, 2000). Content validity also helps lecturers to find out how well the assessment tasks adequately represent all the tasks that need to be assessed. A good assignment therefore, needs to have an appropriate content and appropriate process to be applied to that content.

Predictive validity is concerned with how accurately test scores predict future performance (Aiken, 2000). According to Nitko and Brookhart (2007), individual's performance on a certain criterion can be predicted using the test performance. This means that through observing persons' performance, one can predict his/her success in the place of work. That is why the grade point average (GPA) is highly considered when a graduate applies for work. In the teaching profession also, especially in private schools, graduate's GPA is considered for one to be employed as a teacher. However, there is evidence from literature that some graduates with good grades fail to deliver what is expected of them (Low, Chong and Ellis, 2014). This may come with the use of group assignments, which are preferred by most of the students and lecturers. For instance if students are not participating in group assignments, there is a possibility for them to be awarded scores that do not reflect their true abilities and at the end the grades they achieve may not be a true reflection of their abilities. Therefore, the theory will help the researcher to find out the extent to which group assignments are effectively used by lecturers to measure students' acquisition of knowledge.

The limitation of validity test theory is that it is difficult to practice (Wolming & Wiksotrom, 2010). This is because the theory sees the validation procedure to consider the whole assessment process that ranges from the planning stage to the use of assessment results (Gafni, 2016). Despite the promising advantages of the theory, this limitation made it difficult for the researcher to adopt the theory as the guiding theory in assessing the efficacy of assessments used in universities since it demands too much time and requires a lot of efforts to be put into practice. Apart from the limitations, the theory will be of great help to the current study as it will help the researcher to find out the extent to which lecturers in universities ensure that validity is maintained in the group assignments.

## 2.2 Empirical Review

A systematic literature review by Khalid et al., (2021) on assessment literacy agenda in Malaysia revealed that there were clear disconnection between education, assessment literacy and teacher practice. The study suggested that there should be emphasis on the

importance of educational assessment literacy programme taking into account the concept, the manner in which values are formed and their effect on efficient practice. The study show that literacy assessment does not guarantee the needed skills for conducting assessment such as constructing group assignment because not all task can be provided as group assignment therefore, it require skills to conduct effective assessment of students including group assignment construction.

A quantitative study by Rezaei (2018) was conducted to explore effective group work strategies; faculty and students' perspectives in USA. The study employed cross sectional survey design to collect data from 308 respondents through questionnaire. The study found out that course instructors ensure effective group assignment by using different strategies such as carefully explaining to students how groups operate and how students will be graded, introducing group work early in the semester to set clear student expectations, establishing rules for misconduct, cheating, and plagiarism, establishing ground rules for participation and contributions, helping students develop the skills they need in doing group activities and by planning for each stage of group work. Also in USA, Rezaei (2017) found out that effectiveness of group work depends on how the effectiveness is measured, how the group is formed, and what type of task is assigned to learners. The studies show how effectiveness of group assignment can be ensured.

There are concerns about how to form and monitor the group assignments. According to Gronlund et al., (2009), groups of four-five members give a good opportunity for each member to participate while larger groups decrease such an opportunity. Too large groups may distort the quality of discussion as members may be arguing without listening to each other. Since members are many, it may not be easy to control the groups. Moreover, having many members per group activity may not guarantee chance for each member to present. Also, the division of activities among group members becomes problematic as the tasks may not be enough to all members and thus there is a possibility of some members to be given works that are purely not academic such as typing and printing.

A literature review done by Wilson et al., (2018) conducted on group work in USA revealed that instructors should form small groups and the formation of the group should consider characteristics of students that contribute to effective group. Moreover, the study revealed that instructors should avoid provision of uneven workload. Instructor should provide effective group assignment which challenge groups to solve highly complex problem that require collaboration of the group to solve. Furthermore, to make group assignment to be effective, instructors should provide opportunity for group member to know one another, set group norms, assign specific roles to students within groups and implement methods to monitor group assignment.

Brown (2019) conducted study to explore an authentic learning approach to group assignments: an analysis of student attitudes in USA. The study found out that project managers' approach, likely due to its increased authenticity, yields improved student attitudes toward group scheduling, group formation, and group grading processes. The study show that use of group leaders approach that give opportunity for group leader to recruit group members influence effective group assignment in acquisition of skill and knowledge among students. The groups were formed according to the characteristic of students that contribute to effectiveness of group assignment. However, the study was implemented in undergraduate agricultural finance courses.

In Tanzania, Kimaro and Kapinga (2020) conducted study to assess instructors' classroom assessment practice in selected higher learning institutions.. The study employed both qualitative and quantitative research approaches, whereby case study design was used to collect data from 112 respondents by using questionnaire and interview. The study found out that assessment practices considered being appropriate in improving learning and acquisition of knowledge among higher education learners. The study also revealed out that group assignment was provided by lecturers. Kimaro and Kapinga (2020) show that group assignment was important and appropriate in improving learning and acquisition of knowledge among higher education learners.

Another study in Tanzania was conducted by Kitula et al., (2018) who assessed the assessment literacy of university lecturers in conducting assessment among selected universities in Tanzania. The study employed mixed research approach whereby data were collected from 48 lecturers by using self-reporting questionnaire. The study revealed that lecturers' level of literacy was moderate in educational assessment. The study indicated that most of university instructors in Tanzania possessed skills for conducting assessment which has positive impact to learner.

## 3. Methodology

This study used a descriptive survey design which mainly aims at describing the characteristics of people, place or subject being investigated. The design therefore helped to describe the possession of assessment skills by lecturers and different strategies used to ensure effectiveness in the application of group assignments. The study was conducted in four higher learning institutions in Arusha Region -Tanzania selected by simple random sampling. The targeted population included university lectures, undergraduate students and examination officers. From this target population, a sample of 132 respondents (4 examination officers, 40 lecturers and 80 undergraduate students) was selected using purposive and stratified sampling techniques. The sampled students and lecturers responded to questionnaires which had both open and closed ended questions while the examination officers were interviewed. Prior to data collection, the questionnaires and interview guides were validated through the use of experts in the fields of research and assessment.

The collected data from questionnaires were analyzed using descriptive statistics by the help of SPSS whereby frequencies, percentages and means were generated and presented using tables. Qualitative data was analyzed using thematic analysis whereby the data from interviews were transcribed, coded and then the major themes were identified. The presentation of qualitative data was done in words supported by direct quotations.

## 4. Results and Discussion

The findings were discussed with regard to research objectives.

# 4.1 The Extent Universities Instructors in Arusha are Equipped With Group Assignment Construction Skills

The first research question found out the extent universities instructors in Arusha are equipped with group assignment construction skills. To answer this question, lecturers, students and examination officers were involved. The responses from the respondents are presented in table 1.

Table 1: Lectures' Responses on the Extent to which they Are Equipped with Group Assignment Construction Skills

| Statements  |   | SD   |    | D    |   | U   |    | A    |    | SA   | Mean  |
|---|---|------|----|------|---|-----|----|------|----|------|-------|
|   |   | %    | f  | %    | f | %   | f  | %    | f  | %    | score |
| i. I consider myself to be equipped in group assignment   | 0 | 0    | 0  | 0    | 0 | 0   | 18 | 45   | 22 | 55   | 4.55  |
| ii. I do provide feedback on time   | 0 | 0    | 0  | 0    | 0 | 0   | 24 | 60   | 16 | 40   | 4.4   |
| iii. I do provide group task which<br>challenge groups and require<br>collaboration of the group to solve | 0 | 0    | 0  | 0    | 0 | 0   | 26 | 65   | 14 | 35   | 4.35  |
| iv. At this university, enough time is provided for group assignment to be done                           | 3 | 7.5  | 5  | 12.5 | 0 | 0   | 11 | 27.5 | 21 | 52.5 | 4.05  |
| v. Workload is fairly distributed to every group  | 0 | 0    | 6  | 15   | 3 | 7.5 | 28 | 70   | 3  | 7.5  | 3.7   |
| vi. I do form groups with small size  | 0 | 0    | 9  | 22.5 | 3 | 7.5 | 24 | 60   | 4  | 10   | 3.58  |
| rii. Marks allocation depends on effectiveness of individual participation                                | 0 | 0    | 14 | 35   | 3 | 7.5 | 15 | 37.5 | 8  | 20   | 3.43  |
| ii. I always monitor participation of every group member  | 5 | 12.5 | 13 | 32.5 | 0 | 0   | 20 | 50   | 2  | 5    | 3.03  |
| ix. In forming groups, I do consider characteristics of students  | 8 | 20   | 14 | 35   | 0 | 0   | 13 | 32.5 | 5  | 12.5 | 2.83  |
| x. I always provide time for group members to know one another  | 8 | 20   | 13 | 32.5 | 0 | 0   | 16 | 40   | 3  | 7.5  | 2.83  |
| Grand mean score  |   |      |    |      |   |     |    |      |    | _    | 3.67  |

Source: field data (2022)

Key: SA = strongly agree, A = agree, U = no option, D = disagree, SD = strongly disagree

Results from table 1 show that 18 (45%) and 22(55%) of lectures who participated in this study agree and strongly agreed on the study statement "I consider myself to be equipped in group assignment" respectively. This implies that all lectures agreed that they were equipped in group assignment construction skills. It is very important for lecturers to have enough knowledge and skills in group assignment construction to make group assignment to be effectively used in assessing students as is the mostly preferred formative assessment method in university due to large number of students in a course. Lectures with group assignment construction skills may be in a good position to use group assignment effectively that helps students to develop personal and interpersonal skills as they work in groups. However, sometimes may fail to due time limit, number of students, shortage of learning and teaching resources and other related reasons. This finding is in line with Sulaiman et al., (2020) who found out that lecturers were absolutely aware of formative assessment practices.

The findings were also confirmed by Examination officer in one university in Arusha during interview said that;

We have lecturers with great experience and have enough knowledge and skills including group assignment constructions skills. Also to maintain quality of education we do provide training programs and workshop in our university that makes most of lectures to be well equipped (Personal interview with Examination officer A on 25<sup>th</sup>April, 2022)

Results from interview imply that most of the lectures have high experience and some of universities do prepare training program and workshop to equip their lectures with different skills including assignment constructions skills for the purpose of maintaining the quality of education provided in university. This is what may differentiate quality of education provided between one university and other for the reason that teaching experience and training programs for lecturers affect quality and performance of lecturers hence lead to quality education though there is other factor which influence quality of education provided. Therefore, a university with high experienced lecturers and providing training programs workshop cannot be compared with university with few experienced lecturers in terms of quality of education provided.

Results from table 1 show that 8(20%) of lecturers disagreed and 32(80%) of lecturers agreed on the statement "At this university, enough time is provided for group assignment to be done." This implies that majority of lecturers (80%) who participated in this study do provide enough time for group assignment to be done and few lecturers (20%) disagreed on the same statement. This indicted that students are provided with enough time to accomplish group task provided have to find time that every group member will be ready to

participate. Therefore for effective group assignment, enough time should be provided to allow students apart from having hard college timetable should devote time for group task. Sometimes group task is given with very limited time that lead to only a few group members work for the group task, therefore lecturers with assignment construction skills do provide enough time to submit group work. Similar finding was found by Kitula et al., (2018) who found out that most of universities instructor in Tanzania possessed skills for conducting assessment which has positive impact to the learner.

Also the study indicated that some of lecturers (20%), do not provide enough time for students to perform group ask. Failure of lecturers to provide enough time for group task affects negatively the effectiveness of the group assignment in learning and acquisition of knowledge among students because students will do the group task just to meet the deadline and not to acquire knowledge which is contrary to Kimaro and Kapinga (2020) who argued that group assignment was important and appropriate method in improving learning and acquisition of knowledge among higher education learners. Effective group task improves learning and acquisition of knowledge among learners to comply with the limited time needed for group work.

Also this was confirmed by examination officer from one university in Arusha during interview who said that;

Sometimes we do receive complains from students for being given group work with unrealistic deadline, it very hard for students to gain knowledge from such assignments (Personal interview with Examination officer C on 27<sup>th</sup> April, 2022).

This implies that some lectures do provide group task with unrealistic deadline that force only few group member to work on behalf of the entire group. Only few students who participated would gain knowledge but most of group member are noted as participants but nothing much was gained from such group task. Group work with unrealistic deadline is not effective in improving students' knowledge.

Results in table 1 show that 18(45%) of lecturers disagreed and 22(55%) of lecturers agreed on statement "I always monitor participation of every group member" respectively. This implies that most lecturers (55%), agreed that they do monitor participation of every group

member and good number, (45%), of lecturers disagreed on the same statement. The findings indicate that most of lecturers do monitor participation of every group member. Monitoring participation of students in group assignment requires enough skill and experience as most of students tend not to participate in group work that make group task to be ineffective in improving and acquiring of knowledge among students. Lecturers have to apply their experience and skills to monitor students' participation in group work. However, the results also indicate that a good number of lecturers do not monitor participation of every group member because 45% of lecturers who participated in this study accepted that they do not monitor participation every study in group task that may be because of large number of students and time limit and sometimes may be lacking skills for monitoring students participation. This was supported by Gronlund et al., (2009), who found out that too large groups may distort the quality of discussion as members may be arguing without listening to each other. Since members are many, it may not be easy to control the groups. Moreover, having many members per group activity may not guarantee chance for each member to present. Also, the division of activities among group members becomes problematic as the tasks may not be enough to all members and thus there is a possibility of some members to be given works that are purely not academic such as typing and printing.

In order group assignment to be effective lecturers should make sure every group member participate in group task; this is only possible when lecturers have enough skills in monitoring students' participation in group task (Personal interview with Examination officer B on 25 April, 2022)

This implies that lecturers with enough skills in monitoring group assignments will easily monitor participation of group members. When groups are well monitored students do participate effectively that make them to gain more knowledge from group task because in acquiring knowledge from group task depend on the extent you have participated.

To confirm the findings from lecturers, students were asked the same question and were requested to indicate the extent to which they agree or disagree on with the provided statements and their responses were summarized in table 2.

Table 2: Students' responses on the Extent Lecturers Are Effectively Equipped with Group Assignment Construction Skills

|  |   | SA   |    | A    |   | U   |    | D    |    | SD   | MEAN  |  |
|--|---|------|----|------|---|-----|----|------|----|------|-------|--|
|  | f | %    | f  | %    | f | %   | f  | %    | f  | %    | SCORE |  |
| <ul> <li>i. Groups are formed by considering students' abilities</li> </ul>    | 9 | 11.3 | 18 | 22.5 | 8 | 10  | 21 | 26.2 | 24 | 30   | 2.59  |  |
| ii. Time is provided for group member to know one another                      | 4 | 5    | 4  | 5    | 4 | 5   | 28 | 35   | 40 | 50   | 1.80  |  |
| iii. work load is always fairly to every group                                 | 2 | 2.5  | 12 | 15   | 4 | 5   | 29 | 36.3 | 33 | 41.3 | 2.01  |  |
| iv. group task do challenge<br>group and require<br>collaboration of the group | 4 | 5    | 25 | 31.3 | 4 | 5   | 11 | 13.7 | 36 | 45   | 2.38  |  |
| v. Lectures always monitor<br>participation of every group<br>member           | 4 | 5    | 8  | 10   | 0 | 0   | 28 | 35   | 40 | 50   | 1.85  |  |
| vi. Marks allocation is done<br>fairly to every group<br>member                | 6 | 7.5  | 12 | 15   | 0 | 0   | 21 | 26.3 | 41 | 51.3 | 2.01  |  |
| vii. Enough time is provided for group assignment to be done                   | 5 | 6.3  | 13 | 16.3 | 4 | 5   | 21 | 26.2 | 37 | 46.2 | 2.10  |  |
| viii. Feedback are provided on time  | 3 | 3.8  | 12 | 15   | 3 | 3.8 | 21 | 26.3 | 41 | 51.3 | 1.94  |  |
| TOTAL MEAN SCORE   |   |      |    |      |   |     |    |      |    |      | 2.08  |  |

Source: field data (2022)

Key: SA = strongly agree, A = agree, U = no option, D = disagree, SD = strongly disagree

Results from table 2 show that 27(33.8%) and 45 (56.2%) of students agreed and disagreed on statement "groups are formed by considering students' abilities" respectively while 8(10%) of students undecided. This implies that majority of students, (56.2%), disagree that groups were formed by considering abilities of students. These indicated that groups were formed without considering abilities of students. Effective group assignments depend much on strength of the groups formed. When forming groups without considering students' abilities probably very few formed groups would be very strong and majority of them will be weak depending on their abilities that lead to group assignment to be not effectively in assessing and improving knowledge among university students. This also indicates that most of lecturers were not well equipped with group assignment constructions skills in Arusha universities. Probably they have low literacy on group assignment construction. The findings are contrary to Sulaiman et al., (2020) who found out that lecturers were absolutely aware of formative assessment practices.

Results from table 2also show that 29(36.3%) and 47(58.7%), of students agreed and disagreed on statement "group task do challenge group and require collaboration of the group" respectively. While 4(5%) of students were undecided, this implies that majority of students (58.7%) disagree on group task do challenge group and require collaboration of the group. This indicate that most of group assignment provided does not bring challenge that require the collaboration of all group members probably may affect the effectiveness of

group assignment in assessing knowledge acquired among university students as supported by one examination office in one university in Arusha during interview said;

Group task should challenge the entire group and requires their solidarity to move out. It's meaningless to provided group assignment which does not provide any challenge that influence togetherness of all group members (Personal interview with Examination officer D on 27th April, 2022).

This implies that lecturers are required to provide group work with the target to assess knowledge acquired. Group work that challenges the entire group motivates students to search information that could help them to solve the problem. Also, all groups could organize their member to participate as no one could be able solve the problem alone. For effective group assignment it is important for group task to be challenging.

Generally, university instructors in Arusha were found not effectively equipped with group assignment construction skills. According Classical test theory developed by Lord and Novic (1968), each form of measurement consists of errors. It is very important for universities to equip their lecturers so as to avoid errors when using group assignment in performing assessment. Since lack of skills among lecturers in group assignment construction may negatively affect the effectiveness of group assignment.

## 4.2 Methods Used by University Lecturers Use to Ensure Effectiveness of Group Assignment on Assessing Knowledge Acquisition among Students

The second objective of this study aimed at finding out the extent to which lecturers ensured that group assignments were effectively implemented in assessing knowledge acquisition among students. Lecturers and students were asked to indicate whether different strategies were applied in their respective universities. Table 3 summarizes the responses from lecturers.

Table 3: Lecturers' Response on Methods Used To Ensure Effectiveness of Group Assignments

|       |   | NA |      | S  |      | A  |      | ]  | MA   |
|-------|---|----|------|----|------|----|------|----|------|
|       |   | f  | %    | f  | %    | f  | %    | f  | %    |
| i.    | Explaining to students how groups will operate and how students will be graded, | 0  | 0    | 0  | 0    | 19 | 47.5 | 21 | 52.5 |
| ii.   | Introducing group work early in the semester to set clear student expectations  | 2  | 5    | 0  | 0    | 30 | 75   | 8  | 20   |
| iii.  | Establishing rules for misconduct, cheating, and plagiarism                     | 0  | 0    | 3  | 7.5  | 29 | 72.5 | 8  | 20   |
| iv.   | Selecting group leaders   | 14 | 35   | 10 | 25   | 7  | 17.5 | 9  | 22.5 |
| v.    | Establishing ground rules for participation and contributions                   | 0  | 0    | 0  | 0    | 32 | 80   | 8  | 20   |
| vi.   | Checking participation of members in group assignments                          | 3  | 7.5  | 8  | 20   | 21 | 52.5 | 8  | 20   |
| vii.  | Provision of group assignment which require collaboration of the group to solve | 0  | 0    | 7  | 17.5 | 19 | 47.5 | 14 | 35   |
| viii. | The groups are formed according to the abilities of students                    | 11 | 27.5 | 4  | 10   | 17 | 42.5 | 8  | 20   |
| ix.   | Formed group is small in size   | 0  | 0    | 9  | 22.5 | 25 | 62.5 | 6  | 15   |
| х.    | Provision of feedback on time   | 2  | 5    | 3  | 7.5  | 26 | 65   | 9  | 22.5 |

Source (field data, 2022) f = frequency, % = percentage, NA = not applied, SA = somehow applied, A = applied, MA = much applied

Data in table 3 show that 52.5% of the lecturers indicated that the issue of explaining to students on how groups will operate and how students will be graded is much applied. The remaining percentage (47.5%) of them indicated to apply the same concept. These findings imply that all the lecturers in public and private universities in Arusha region do explain to their students on how to operate when provided with group assignments and how each group will be graded. According to Rezaei (2018) effective application of group assignments requires course instructors to explain to the students on what is expected to be done in groups and also to state how much scores will be awarded to the group activities. Having all the lecturers admitting to explain to the students is a good indication that group assignments in universities within Arusha region are well used.

Data in table 3 also show that 20% of the lecturers who participated in the study indicated to be much applying the concept of introducing group works earlier in the semester to set clear expectation to the students. Meanwhile 75% of the lecturers also indicated to apply the same concept. However, 5% of them indicated not to be introducing the group work earlier in the semester. These findings imply that most of the lecturers in public and private universities in Arusha region do provide group assignments early at the beginning of semester. Providing group assignments to the students at the earlier time makes the students to plan on how to perform the provided activities and hence improves the

efficiency of group assignments. This is further supported by Rezaei (2017) who indicated that effectiveness of group assignments depends on the time at which the activities are given. Thus, it is recommended for instructors to provide the assignments earlier so that the students can have enough time to reflect and perform the tasks.

However, data from the same table show that 5% of the lecturers do not provide the group assignment earlier. These findings suggest that though a large number of lecturers in public and private universities in Arusha region provide group at the starting of each semester, there are some of them who delay to provide such activities. Such a delay may negative affect the effectiveness of group assignments. This is because students may not have enough time to work and reflect on the provided tasks. Due to limited time, the students may not make use of library and internet resources in the speculation of relevant information and therefore hinder their understanding. This argument is further supported by Daba et al., (2017) who found out that adequate time should be given for students to work on the group assignments so as to have positive impact on the acquisition of skills and knowledge.

Data in table 3 also show that 62.5% of the lecturers indicated to be forming group assignments according to the abilities of students. 27.5% of them indicated to sometimes forming groups according to students' abilities while, 10% of them indicated not forming

groups based on students' ability. These findings imply that a large number of lecturers in public and private universities in Arusha region consider students' ability while forming groups for different assignments. According to Bravo et al., (2019), it is important for lecturers to be skilled in group formation by considering the characteristics of students. Considering the level of students will make the group to have mixed abilities and thus providing chances for the strong students to help the ones who are weak. Moreover, the findings are in agreement with Wilson et al., (2018) who recommended for instructors to form groups by considering the ability of students so as to improve participation of group members and hence to improve the effectiveness of group assignments.

Despite the large number of lecturers who indicated to be forming groups according to the characteristics of students, results in table 3 shows that 10% of the lecturers who participated in the study indicated not to be considering the characteristics of students when forming the groups. These findings imply that there are some lecturers in public and private universities in Arusha city who form groups without considering the ability of learners. This may be due to the lack of skills in group formation. Forming groups without considering the characteristics of students may hinder the effectiveness of group assignments. This is also supported by Bravo (2019) who indicated the importance of considering the characteristics of students

in forming groups. If lecturers do not make deliberate efforts to ensure that the groups are well constructed, there is a possibility of some groups to have strong members while others may have weak members. This situation may hinder the chases for weaker students to be helped during the courses.

Results in table 3 also show that 68.5% of the lecturers indicated to be providing timely feedback while 7.5% of them indicated to be doing such an activity sometimes and 5% of them indicated not to be providing timely feedback. These findings imply that a large number of lecturers in public and private universities do provide group assignments feedback on time. Providing group assignments on time is an indication for effective application of group assignments. However, data in the same table show the existence of some lecturers who do not provide timely feedback. These findings are in agreement with what Kitula and Ogoti (2018) found out that some lecturers in Tanzanian universities to not provide assessment feedback to students on time. Failure of lecturers to provide group assignment feedback on time makes the students not to know what they have achieved and therefore the formative role of group assignments may not be achieved to the fullest.

The same question was asked to the students so as to confirm what teachers indicated. Therefore, in their respective questionnaires students also responded to this question and their responses are summarized in table 4.

Table 4: Students' Response on Methods Used To Ensure Effectiveness of Group Assignments

| Statan | Statements  |    | N    |    | S    |    | A    |    | MA   |  |
|--------|---|----|------|----|------|----|------|----|------|--|
| Staten |   |    | %    | f  | %    | f  | %    | f  | %    |  |
| i.     | Lecturers do explaining to students how groups will operate and how students will be graded | 0  | 0.0  | 4  | 5.0  | 32 | 40.0 | 44 | 55.0 |  |
| ii.    | Group work are introduced early in the semester   | 4  | 5.0  | 20 | 25.0 | 16 | 20.0 | 40 | 50.0 |  |
| iii.   | Rules for misconduct, cheating, and plagiarism are established                              | 4  | 5.0  | 16 | 20.0 | 28 | 35.0 | 32 | 40.0 |  |
| iv.    | Group leaders are selected  | 0  | 0.0  | 4  | 5.0  | 16 | 20.0 | 60 | 75.0 |  |
| v.     | ground rules are established to monitor participation and contributions                     | 4  | 5.0  | 8  | 10.0 | 28 | 35.0 | 40 | 50.0 |  |
| vi.    | Lectures do check participation of members in group assignments                             | 4  | 5.0  | 8  | 10.0 | 20 | 25.0 | 48 | 60.0 |  |
| vii.   | Provision of group assignment which require collaboration of the group to solve             | 0  | 0.0  | 8  | 10.0 | 32 | 40.0 | 40 | 50.0 |  |
| viii.  | The groups are formed according to the abilities of students                                | 44 | 55.0 | 4  | 5.0  | 12 | 15.0 | 20 | 25.0 |  |
| ix.    | Enough time is provided for group assignment  | 8  | 10.0 | 16 | 20.0 | 16 | 20.0 | 40 | 50.0 |  |
| х.     | Formed groups are small in size   | 16 | 20.0 | 16 | 20.0 | 24 | 30.0 | 24 | 30.0 |  |

Source (field data, 2022) f = frequency, % = percentage, NA = not applied, SA = somehow applied, A = applied, MA = much applied

Data in table 4 show that responses of students were in support of what was responded by the lecturers. However, there was a difference in the responses

concerning the formation of groups by considering the learning abilities of students. Most of the students (55%) who participated in the study indicated that lecturers do

not form groups by considering the level of students' ability. Therefore the groups that are formed may not be effective to facilitate group discussions as long as the chances for weaker students to be helped by the stronger ones are minimized. These findings are in agreement with what was observed by Kiasi et al., (2021). who put forward that some lecturers do not have skills in group formation and thus they do not consider the level of students' abilities in forming the groups.

Another huge difference between the responses of students and lecturers was observed in the aspect of group size. While all lecturers indicated to be forming small groups, some students (20%) on their side indicated that the formed groups are small. These findings imply that some lecturers make big groups even bigger than the recommended size. According to Wilson et al (2018), lecturers should form small groups which consider the characteristics of students for the group assignment to be effective. Moreover, Gross (1993) recommended that a group should have four to five members for effective implementation of group activities. Therefore, lecturers who make too large groups of students in group assignments do not make effective use of group assignments as long as the intended formative role of such assignments may not be achieved.

### 5. Conclusion and Recommendations

### **5.1 Conclusions**

Despite the fact that lecturers are equipped with most of the skills needed for effective construction and implementation of group assignments, most of them do not follow all the recommended actions. This is because in the study it was found out from the students that lectures do not consider the level of learners when forming the groups. Moreover, students reported that some of the lectures do not provide timely feedback and some of them do not give adequate time for students to perform the group assignments.

University lecturers do not take much effort to ensure effectiveness of group assignments in assessing knowledge acquisition among students. Not all of them were found to be monitoring students' participation in group activities and only few lecturers reported to be using different methods such as random picking of students to present so as to ensure that every student participates in the group activity.

## **5.2 Recommendations**

From the findings, the following recommendations are made:

 Lecturers should be involved in group formation instead of leaving the students to form their own groups. The involvement of the lecturer will help to mix the abilities of students in the groups. Having groups with mixed abilities will facilitate the discussion and also

- the possibility of weaker students to be helped by the stronger ones.
- 2. Lecturers should use a variety of methods to ensure that each person participates in the group assignments. These may include random picking of students to present, selection of group leaders and monitoring of the group activities. This will help in improving the validity of the scores awarded to the groups.

## References

- Aiken, L. R. (2000). *Psychological testing and assessment* (10th ed). Boston: Allyn and Bacon.
- Bravo, R., Catalán, S., & Pina, J. M. (2019). *Analyzing Teamwork in Higher Education: An Empirical Study on the Antecedents and Consequences of Team Cohesiveness*. Studies in Higher Education, 44(7), 1153–1165.
- Brown, R., Zuo, N., Shockley, J., & Buck, S. (2019). An Authentic Learning Approach to Group Assignments: An Analysis of Student Attitudes. *Applied Economics Teaching Resources (AETR)*, 1(2226-2020–129), 1–13.
- Chang, Y., & Brickman, P. (2018). When group work doesn't work: Insights from students. CBE: *Life Sciences Education*, 17(3), ar52.
- Daba, T. M., Ejersa, S. J., & Aliyi, S. (2017). Student Perception on Group Work and Group Assignments in Classroom Teaching: The Case of Bule Hora University Second Year Biology Students, South Ethiopia--An Action Research. *Educational Research and Reviews*, 12(17), 860–866.
- Dicker et al., (2020). *Psychological testing and assessment* (10th ed). Boston: Allyn and Bacon.
- Gafni, R. (2016). Engagement Matters: Student Perceptions on the Importance of Engagement Strategies in the Online Learning Environment. *Online Learning*, 22(1), 205–222.
- Gronlund, N. E., & Linn, R. L. (2009). Measurement and assessment in teaching (8th ed). Upper Saddle River, N.J: Merrill.
- Gronlund, N. E., & Waugh, C. K. (2009). Assessment of student achievement (9th ed). Upper Saddle River, N.J: Pearson.
- Khalid, N. H. M., Latif, A. A., & Yusof, I. J. (2021). Assessment Literacy: A Systematic Literature Review & Research Agenda. Annals of the Romanian Society for Cell Biology, 4668–4696.

- Kiasi, G. A., & Rezaie, S. (2021). The Effect of Peer Assessment and Collaborative Assessment on Iranian Intermediate EFL Learners' Writing Ability. *Journal of English Language Teaching and Applied Linguistics*, 3(13), 08–16.
- Kimaro, A. R., & Kapinga, B. B. (2020). An Assessment of Instructors' classroom Assessment Practice in Selected Higher Learning Institutions, Tanzania. Tengeru Community Development Journal, 7(1), 54–66.
- Kitula, P. R., & Koda, M. G. (2018).Perceptions of Students on the Fairness of Formative and Summative Assessments in Tanzanian Universities.International Journal of Innovative Research and Development, 7(8), Article

  https://doi.org/10.24940/ijird/2018/v7/i8/AUG 18039
- Kitula, P. R., & Ogoti, E. O. (2018). Effectiveness of implementing continuous assessments in Tanzanian Universities. *International Journal of Contemporary Applied Researches*, 5(7), 1–18
- Kitula, P. R., Kireti, P., & Wambiya, P. (2018).

  Perceived efficacy of university lecturers in conducting assessment among selected universities in Tanzania. International Journal of Education and Research, 6(6), 121.
- Low, F. M., Chong, M. R., & Ellis, M. (2014).
  Statistical theories of mental test scores.
  Reading, MA: Addison-Wesley. (Low, Chong and Ellis, 2014).
- Meng, J. (2017). An Empirical Study on the Application of Cooperative Learning to Comprehensive English Classes in a Chinese Independent College. English Language Teaching, 10(2), 94–99.
- Nitko, A. J., & Brookhart, S. M. (2007). Educational assessment of students (5th ed). Upper

- Saddle River, N.J: Pearson Merrill Prentice Hall.
- Novic, C. (1968), The Walls speak; the interplay of quality facilities, schools climate and student achievement, *Journal of Educational Administration*, 46(1), pp 55-73.
- Popham, W. J. (2008). *Classroom assessment: what teachers need to know* (5th ed). Boston: Pearson/Allyn and Bacon
- Rezaei, A. (2017). Features of Successful Group Work in Online and Physical Courses. *Journal of Effective Teaching*, 17(3), 5–22.
- Rezaei, A. R. (2018). Effective Groupwork Strategies: Faculty and Students' Perspectives. *Journal of Education and Learning*, 7(5), 1–10.
- Sax, G., & Newton, J. W. (1997). Principles of educational and psychological measurement and evaluation (4. ed). Belmont, Calif.: Wadsworth.
- Sulaiman, T., Kotamjani, S. S., Rahim, S. S. A., & Hakim, M. N. (2020). Malaysian Public University Lecturers' Perceptions and Practices of Formative and Alternative Assessments. International Journal of Learning, Teaching and Educational Research, 19(5), 379–394.
- Yadgarovna, F. & Husenovich, N. (2020). *Classroom assessment: what teachers need to know* (5th ed). Boston: Pearson/Allyn and Bacon
- Wilson, K. J., Brickman, P., & Brame, C. J. (2018). Group Work.CBE—Life Sciences Education, 17(1), fe1.https://doi.org/10.1187/cbe.17-12-0258
- Wolming, S., & Wiksotrom, C. (2010). The Concept of Validity in Theory and Practice. *Assessment In Education: Principles, Policy & Practice*, 17(2), 117–132.