

Impact of Participatory Teaching on Generic Skills

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Abstract

Outstanding academic achievement and development of generic skills much depend on the instructional strategies. It has been observed that participatory teaching enhances both student achievements and generic skills. Participatory teaching approaches are those, which put students at the center of the learning process. Through participatory teaching strategies, the acquisition of generic skills becomes more enjoyable, meaningful and exciting. The purpose of this study was to explore how to foster Generic Skills (employability skills) and improve student academic achievements through Participatory Learning. This study was longitudinal in which third year students in the faculty of ICT and Computing were used as respondents. The generic skills among students were assessed using the Generic Skills Inventory. The study established that participatory teaching has significant influence on development of students' generic skills. The study recommends the adoption of Participatory Teaching Strategy in fostering Generic Skills and improving student academic achievements.

Keywords: *Students, Participatory teaching, Generic Skills, Academic Achievement*

1.1 Introduction:

Advocates of Participatory Teaching attribute a range of advantages to it. Among them are that PT promotes deep, or rather than surface approach to learning, encourages higher order thinking, foster self-directed learning and increases collaborative interaction between students and teachers (David 2004). Most research on PT however, has focused largely on improvement of student learning outcomes or achievements instead of other skills. Such studies have tended to define student achievement narrowly in terms of academic progress measured through test scores at the

expense of other equally important learning outcomes (Newman 2003). Other qualities or learning outcomes such as problem solving, communication skills and teamwork are generally less examined in relation to PT in the research literature. However, learning outcomes are not only academics, generic skills are equally important ().

Qualities of graduates are generic skills acquired during the course of academic life and are important for success in employment and life. According to Mayer (1992) and Finn (1991) identified the following as being required by graduates: working in teams, communicating clearly, personal and interpersonal skills, problem solving, understanding technology and using mathematical concepts efficiently. In this study, these skills are referred as generic skills.

There is a high demand for graduates with outstanding academic achievements as well as desired generic skills for workplaces at all levels. Graduates at all levels must be competitive and marketable to be employed and academic achievement alone does not sufficiently reflect other skills required for the job market (). Generic skills add value to one's academic qualifications (). Academic achievement clues up one has a rich knowledge in subject matter, eases one to pursue further education, but does not help much for employment ().

This paper investigated generic skills vis-à-vis participatory teaching in Amoud University. Participatory learning is the act of sharing teaching and learning activities to foster mutual learning (Seel (2011)). Academic achievement is the outcome in a course, or an average for a group of courses in a particular subject area, or an average outcome for all courses expressed on a 0-to-100 or other quantitative scale. This paper used the Grade Point Average (GPA) as a scale to measure academic achievement. GPA is the grade point average of the course by the credit hours of the courses for semester. Cumulative GPA is the cumulative aggregate of the average GPA of all semesters.

According to Dewey (1964), participatory learning (Cooperative learning; Interactive learning) is the action of taking part in teaching and learning activities in the classroom. Seel (2011) defined Generic skills as person's capability to get employment due to his/her skills, competencies

and enthusiasm to work but not because of his/her certificate is known as Generic skills. Generally, Participatory Teaching is putting students at the center of teaching and learning process; which students are given opportunity to apply gained knowledge in social settings. It entails bringing in the classroom activities and providing students with relevant skills to demonstrate their knowledge. Students are engaged with teaching and learning activities both in classroom and outside of the classroom. Participatory learning is characterized by teamwork and group discussions among other features.

1. Problem Statement:

The general feeling/observation over time has been that university students in Somaliland are not competitive in the job market because they lack generic skills needed in the job market. Public feeling has been that graduates of universities in Somalia/Somaliland do not have appropriate generic skills. Attempts has been made and suggestions advised that generic skills required to boot academic achievement can be developed through PL. however, the actual effect of PT in developing generic skills has not been thoroughly investigated. As such the actual import of PT in the development of GS is unknown.

3. Research Questions:

This case study was guided by the following set of objectives:

1. To explore the influence of Participatory Teaching on improving students' communication, problem solving, team working skills and critical thinking analysis.
2. To propose strategies to foster students' generic skills through teaching and learning process.
3. To identify the correlation between Academic Achievement and possession of Generic Skills

4. Purpose of the Study:

The purpose of the study was to determine the effect of Participatory Teaching on the development of student's generic skills. foster students' generic skills through participatory teaching and propose to higher education institutions adopt participatory teaching to ensure qualities of graduates needed in the market job.

5. Methodology:

The study was conducted through a cross-school survey research design on a single of 75 students randomly selected from junior students of the ICT and Computing Faculty at Amoud University. Data was collected using questionnaire filled by the students. This study is a longitudinal, which explores how specific instruction method (participatory teaching) affects students' academic achievement and their generic skills at a given semester. The questionnaire of the study consists of four sections. The first section is about demographical data, the second section measures academic achievement , the third section is about participatory teaching while

the fourth section focuses on generic skills. Both descriptive and correlation analysis were employed to analyse data collected. Moreover, particularly bivariate analysis was employed to identify the correlations between participatory learning, academic achievement and generic skills. Each section in the questionnaire has several variables and was transformed into single variable (computation of variables). Pearson correlation and frequency tables were used to present the findings. The internal reliability of the instruments was realized through Cronbach's Alpha statistics.

6. Findings:

This paper was intended to measure the relation or the impact of participatory learning on students' academic achievement and generic skills, Amoud University case study. The questionnaire employed consisted of three parts; academic achievement (GPA), participatory learning (PL) and generic skills (GS). Instruments intended to measure participatory learning were computed as single item, likewise other measuring instruments for GPA and GS were also transformed. In order to check reliability of the items in table 1, a reliability analysis was conducted to ensure internal correlations of the instruments used. Hair et al. (1998) recommended that Cronbach Alpha values from 0.6-0.7 were deemed the lower limit of acceptability. An alpha more than 0.7 would indicate that the items are homogenous and measuring the same constant.

Table 1: Cronbach's Alpha (Reliability)

Reliability Statistics	
Variables	Cronbach's Alpha Value
GPA	0.789
PL	0.792
GS	0.853

The above table 1 presents the reliability of the measurement instruments. Cronbach's alpha reliability scores were all over 0.7. As a result of that, the questionnaire is reliable and can be used in other research. As mentioned in the methodology, descriptive statistical analysis was employed to present the percentage distribution of respondents by gender and GPA. The following par chart exhibits respondents by gender.

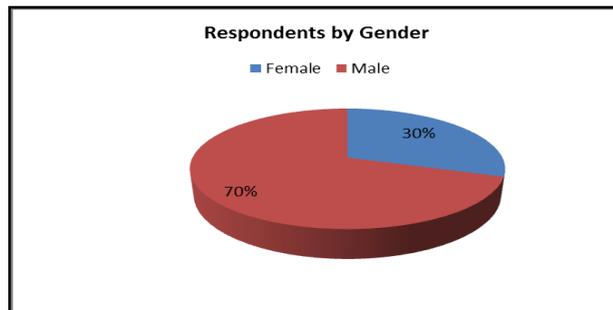


Figure 1: Respondents by Gender

As presented in the above diagram, 70% of the respondents were male students and 30% were female students. This clues up the nature of the respondents in the class and as usual, majority of the students are male students. A separate descriptive analysis was performed to present respondents' grade distribution represented by letter grades. The following figure 2 shows respondents' percentage distribution by course grade.

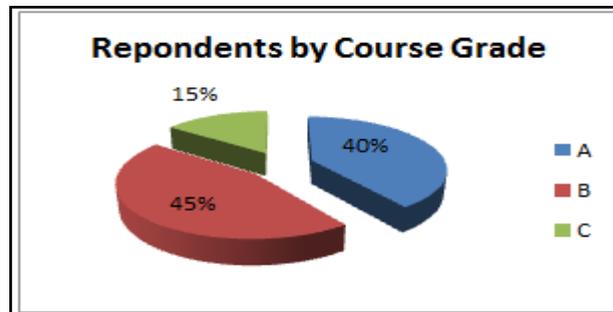


Figure 2: Respondents by Course Grade

According to the above exhibit which shows percentage distribution of student course grades suggests that 40% of the students scored grade A, similarly 45% of the students had B grade while 15% of them scored C and there were no failed or students gained D grades. This indicates that the majority of the students performed well in that course since 85 % of the students' grades were A and B.

The researcher performed regression analysis in order to show the impact of participatory learning on students' academic achievement and generic skills. A bivariate correlation analysis was conducted to ensure the relationship between three variables including academic achievement , generic skills and participatory learning. Therefore, the first regression analysis was to discover relationship or the impact of participatory learning on student academic achievement while the second regression analysis was performed to show the correlation between participatory learning and student generic skills and the third bivariate analysis was to identify the impact of students' achievement and generic skills.

The following correlation matrix presents the correlation between two sets of variables namely participatory learning, academic achievement and generic skills. Here, participatory learning was considered independent variable while students' GPA is described to be the dependent variable. This correlation matrix shows the direction of the correlation which is the coefficient of

the correlation and the P value indicates the significance of the relationships between the stated variable. The following table 1.0 demonstrates the results of bivariate regression analysis.

TABLE 2. CORRELATION ANALYSIS OF GPA AND PL

variables		GPA	PL
GPA	Pearson Correlation	1	0.786(**)
	Sig. (2-tailed)		0.025
	N	75	75
PL	Pearson Correlation	0.786(**)	1
	Sig. (2-tailed)	0.025	
	N	75	75
Correlation is significant at the 0.05 level (2-tailed)			

The above table 2, which is the bivariate matrix, shows that there is a strong positive impact of participatory learning on students' academic achievement . The coefficient of the correlation between the two variables is 0.786, which indicates that participatory learning increases 78.6 percent of students' academic achievement and this value is significant at 0.025 error value level. As a result, students' academic achievement is much depends on type of instructional strategy used for teaching them. For example, in this case, participatory learning improves students' academic achievement .

Another correlation analysis was performed to investigate relationship between participatory learning and generic skills. Bivariate analysis was used to represent the correlation between the variables mentioned were participatory learning in this case acts as the independent variable while the generic skill is treated as dependent variable. The following table shows the bivariate matrix with r and p values. As explained above, r stands for the coefficient of the correlation while p value indicates the significant of the correlation.

TABLE 3. CORRELATION ANALYSIS OF GS AND PL

variables		GS	PL
GS	Pearson Correlation	1	0.679**
	Sig. (2-tailed)		
	N	75	75
PL	Pearson Correlation	0.679**	1
	Sig. (2-tailed)	0.043	
		75	75
Correlation is significant at the 0.05 level (2-tailed)			

The above table 3 demonstrates a matrix of bivariate analysis to investigate the impact of participatory learning on students' generic skills (employability skills). As indicated in the matrix, r-value is 0.679, which suggests that there is positive correlation between participatory learning and generic skills. P value is 0.043 and proves the significance of the relationship between the

mention nominal variables. Therefore, the above result concludes that participatory learning has significant impact on students' generic skills.

Similarly, a separate bivariate analysis was performed to explore correlation between students' academic achievement (GPA) and generic skills (GS). The following table 4, which is correlation matrix which consists of two variables; GS being dependent variable while GPA here acts as independent variable. The matrix also presents the value of r, which is coefficient of correlation, and p value, which shows the significance of correlation.

TABLE 4. CORRELATION ANALYSIS OF GS AND GPA

variables		GS	GPA
GS	Pearson Correlation	1	0.479
	Sig. (2-tailed)		0.062
	N	75	75
GPA	Pearson Correlation	0.479	1
	Sig. (2-tailed)	0.062	
		75	75
Correlation is significant at the 0.05 level (2-tailed)			

Therefore, the data shown in the above table indicates that there is very weak relationship between GS and GPA since the coefficient of the correlation is less than 0.5 with p value of 0.06 which indicates that the relationship is not significant at 0.05. As a result, this data suggests that GPA of the students do not determine their GS and this result strongly supports the theory of fostering students' generic skills through participatory learning.

7. Conclusions:

Over all, the findings of this study suggest that students' academic achievement and generic skills much depend on type of instructional strategy used. Specifically, the study investigated impact of participatory learning on students' academic achievement and their generic skills. The results of this study are encouraging by concluding that students' academic achievement as well

as their generic skills could be fostered through participatory learning, which puts students at the center of teaching and learning process. Based on the findings presented, there is a positive impact of participatory learning on students' academic achievement and generic skills. In short, results of this study recommend suitability of participatory learning towards improving students' academic standings and their generic skills. This improvement is statistically significant in evaluating instructional strategy by students' GPA and generic skills.

8. References:

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