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## Contribution of Constructivism Seminar Series to Postgraduate Students' Academic life in Uganda: A Case Study of Kampala International University

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#### **Abstract**

The constructivism seminar mode of knowledge delivery is known to improve learners' attitudes and bring more interest to the learning process. Seminars are a means of sharing knowledge and skills beyond the university curriculum where students gain societal practices. This study aimed at evaluating the postgraduate seminar series that is carried out at Kampala International University to establish their constructivism and their benefits to the learners. A descriptive survey and qualitative methods were employed, and self-administered questionnaires were administered on 52 respondents, and a literature review was also carried out on similar studies to draw conclusions in this study. Findings revealed that students were using seminars for collective academic problem solving, putting into practice their experiences, innovation, and gaining new knowledge. This study's findings revealed that 35% (R Square =.035) of the effective learning of postgraduate students was explained by seminar series that they had gone through. Based on this study's findings, it is recommended that universities and other higher intuitions of learning offering postgraduate programs, should adopt seminar series mode of learning for effective learning outcomes.

### Keywords: Constructivism, Postgraduate seminar series, Higher education, Effective Learning

### 1. Introduction

This paper draws experiences from Kampala International University postgraduate seminar series. It aims at highlighting the importance, challenges, recommendations for improvement of postgraduate seminars for student's retention, completion, and effective learning using constructivism theory. Postgraduate education has never been easy for most students, especially at the Ph.D. level. Postgraduate students have stories to tell how their journey to attain doctorate, master degrees have proved tedious and almost impossible Scherto Gill (2007); Sylivia., et al, (2001). In Uganda, especially most Ph.D. learners say it takes them more than five years to get their doctorates and four years to attain a Master's degree. Others start and drop out when the journey becomes long. Due to the challenges that come with postgraduate studies especially research Mayer et al., (2014).Universities have improvised postgraduate seminar series as a way to make the students come together to discuss their study progress to ensure student retention, persistence to graduation, and better academic performance.

Baird & Munir (2015) suggest that a word seminar originates from constructivism theory forwarded by Jean Piaget and John Dewey which emphasize that learning is active, not passive means of knowledge absorption. Postgraduate students are adults that learn actively by adding knowledge to the experiences they have. Through a seminar, students interact and construct new ideas that are added to their existing knowledge. Arthur (2001), Rideout et al. (2002), and Choi (2004) say that seminar mode of knowledge delivery improve learners' attitude toward learning and bring more interest in the learning process. Meanwhile, seminars are also means of sharing knowledge and skills beyond the university curriculum where students gain societal practices (Hauke, 2007).

Names given to these seminars vary from university to university. Some call them research seminars, postgraduate seminars, graduate seminars, project seminar, and other student seminars. Some universities the seminars are organized, directed, and facilitated by students while other universities faculty administrators organize them. These seminars can be done in a physical or online environment. Most of the online seminars are known as webinars (Hauke, 2007).

The general aim of a seminar is to share knowledge and skills about various topics that are not covered during class time such as presentation and writing skills, publishing, proper ways to disseminate research findings, and so forth. While other universities, seminars are ways of teaching where students are gathered, supervisors present a lecture and they discuss the lecture in groups. Some university seminars are forums of discussing projects, hands-on practices, and other contemporary issues(Hauke, 2007). Hunter and Linder (2005); Edwards( 2018) add that seminars are good for first-year university learners because they provide support to the new university learners to cope with university education which is quite different from secondary or lower-level education. However, if seminars are not well organized and supervised can instead make the learners become lazy in the learning process and not contribute effectively. They can also make learners who like to dominate the learning deny other opportunities to provide their contributions or innovations(Baird & Munir, 2015).

## 2. Review of Related Literature2.1 The Origin of Constructivism Theory

Buckland M. (2018) explains that a theory is an understanding of the origin of phenomena and its behavior in totality. Therefore in order to understand a seminar as a concept, it is important to understand constructivism theory where it originates. Constructivism theory is a behavioral learning theory where a learner is actively involved in the learning and keep on building knowledge from the previous knowledge and experiences. Constructivism philosophy encourages learners to construct knowledge as they work on a project collectively and collaboratively. Scholars agree that Socrates originated the idea of constructivism in teaching and learning. Socrates believes that learners' cognitive abilities play a key role in personal knowledge acquisition. Dewey, Piaget, and Vygotsky advocated for learners' experiences and background abilities as part of constructivism in the process of knowledge acquisition(Jia, 2010).

## 2.2 Basic ideas behind constructivism theory in relation to learning

**a.** Personal cognition: Learners actively construct personal understanding and knowledge during the learning process. The learning is personally initiated.

- Therefore during learning individuals active participation is paramount.
- b. Previous experience and knowledge: When learning is going on knowledge is constructed, therefore the interaction between learners' background experience and new learning should be considered in constructivism.
- c. Teachers' and students' relationships in the learning should be that of a facilitator and a self-learner who directs their own learning.

## 2.3 Relationship between Constructivism theory and Seminars in Higher Education

The word seminar originates from the Latin word "seminarium", which means "seed plot"(Wikipedia, 2019). Evensen and Hmelo (2000) and Baird & Munir (2015) argue that a seminar is a mode of learning originating from the constructivism theory of learning which emphasizes that learning is active, not passive means of knowledge absorption. Constructivism philosophers (Jean Piaget and John Dewey) say that learners direct their learning by adding knowledge to the experiences they have. Through a seminar, students interact and constructor generates new ideas that are added to the existing knowledge rather than consuming the teacher's knowledge. Seminars are innovative ways that educators used to implement constructivism in learning in a way of creating a conducive environment for learning.

Seminars were used for learning from Socrates' times whereby Socrates prepared scenarios and questions that inculcated higher order thinking and use of previous experiences in the learning (Al'Adawi, 2017). Gardner, Barefoot, & Swing (2001) coined the first year seminar concept many years ago at the University of South Carolina. Hunter and Linder (2005) define a seminar, as a small discussion-based course in which learners and their instructors share ideas and information in a classroom environment.

Constructivists in higher education imply that the adult learning environment should have problem-solving activities that are relevant to the interest of the adult learners who have plenty of experiences. The adult learners are encouraged to learn in a collaborative manner so that each learner share experiences and bring out a collective solution. Therefore group learning, presentations, and meaningful assessments are crucial in such learning environments for better understanding and acquisition of knowledge(Jia, 2010 & Sjøberg 2010),

In North American universities, the term "seminar" means a course of deep study which is a student's major subjects or discipline of specialization. These seminars involve semester or term workload of assignments, exams, research papers, presentations, and graduation credits. More so Gardner, Barefoot, and Swing(2001) report that 94% of accredited four-year colleges and universities in

the United States over the years have used seminars as a tool to support new university students to cope with new life in the university which is different from secondary education. Authors in the literature such as Barefoot, Warnock, Dickenson, Richardson, & Roberts, 1998; Fidler, 1991; Fidler & Moore, 1996; Starke, Harth, & Sirianni, 2001; Tinto, 1993; Gardner, Barefoot and Swing(2001) and Permzadian & Credé, (2016) agree that first-year university seminars contribute to student retention, persistence to graduation and academic performance.

In the UK and Australian universities, seminar participants are all types of students. UK universities use a seminar as a lecture course which is facilitated by an expert or a renowned thinker(Clemson, 2015). In Africa and other parts of the world, seminars are also embraced in universities for various reasons such as first-year orientation, content delivery, and active learning. The term seminar also means a research talk by a visiting researcher where participants can be postgraduate students, lecturers, and researchers which sometimes such talk is known as colloquium and project seminars. Sometimes a seminar is also used interchangeably with a word workshop which means a meeting where people gather to address, learn, discuss, and agree on a certain topic of interest (Hauke, 2007).

All in all, a seminar is a mode of learning which is learnercentered where a learner participates in the learning and is encouraged to actively learn in a group environment just as the constructive model of education said, learning should be active, not passive. A seminar is understood and implemented in variedly worldwide. However, proper preparation for the seminars should be prior done so as to achieve a seminar purpose(Al'Adawi, Postgraduate seminars differ from university to university. Some universities use postgraduate seminars for experiments or incubating of some ideas while others use them to cover gaps in the curriculum and delivering practical training. Some postgraduate students lack a research skills background which was not nurtured in undergraduate therefore research seminars are used to cover such gaps(Willison & Buisman-Pijlman, 2016).

Some universities structure seminars within the semesters and are organized by faculties while others are organized by students(Hauke, 2007). Some faculties give doctoral students a research paper of another student as a discussant while the other student can be the presenter of a PowerPoint presentation. This exercise makes the postgraduate students have thorough prior preparation which includes knowing well the content of the paper, preparing questions and comments for the presenter on the side of the discussant and knowing the content to be able to answer the questions and the comments on the side of the presenter (Friedrich, 2017).

# 2.4 Example of Postgraduate Seminar Practices Among Universities In The Globe

Below is a summary of examples of educational institutions which have postgraduate seminar series with different aims.

- a) The University of Copenhagen have variety seminars such as Research Seminar mediated by Center for Subjectivity which is weekly seminars for center staff to share research progress and the Ph.D. Seminars organized by the university to facilitate presentations of various nature like posters from students research, discussions and lectures from experts on topics of interest. Additionally, these seminars are an opportunity for new students to present their research proposals for discussion (University of Copenhagen, 2018).
- b) Oxford University doctoral seminars are informally organized by students as ways of providing supportive means for the students to share their research with peers and interested university staff. These seminars make students improve their research and produce good work and become ready for viva and contributors to society. The informal seminars help students to practice theories, network, and gain writing and communication skills (Oxford University, 2019).
- c) University of Leicester seminars are known as College Seminars organized by colleges and departments for sharing new ideas and technology (University of Leicester, 2018).
- d) Uppsala University seminars are known as courses and seminars organized by the university administration as avenues for peer to peer interaction and engagement (Uppsala University, 2019).
- e) Stanford University seminars are known as student seminars organized by students for peer to peer interaction, discussion, networking, and engagement (Stanford University, 2019).
- f) Makerere University doctoral seminars are known as graduate seminars organized by various university colleges/faculties/departments as course units or avenues for sharing knowledge and skills on various topics and research projects (Makerere University, 2019).
- g) Victoria University, Kampala, Educational institutions today are using various knowledge delivering methods which include the use of learning materials such as books, lectures, discussion meetings, workshops, seminars, and conferences. Some institutions have seminar series every semester tackling various topics of interest. These seminars have proved beneficial to students and instructors.

# 2.5 Implication of Postgraduate Seminar Series at Kampala International University

At Kampala International University (KIU) postgraduate seminars are held every semester once a week. Various

topics are discussed after PowerPoint presentations from key speakers with various expertise in research. An evaluation study was carried out among the postgraduate students who participated in the seminar series with the aim of soliciting opinions and views about the importance of these seminars in relation to their academic life.

3. Material and Methods Empirically, the study used a descriptive survey design through a self-administered questionnaire to collect views, opinions, and ideas from the respondents. This study draws its findings from 52 respondents who included postgraduate diploma, Master, and Ph.D. students who were selected using a purposive sampling The study also employed the constructivism ideas such as active learning, background experience, group problem solving and cognitive to probe the respondents. Statistical Package for Social Sciences (SPSS) was used to analyze the data for meanings and conclusions. Qualitative methods were used in this study by drawing conclusions from previous studies on the same subject as presented in this study.

### 4. Results

## 4.1 Demographic Details

The study started by establishing the demographic characteristics of the respondents who were postgraduate students at Kampala International University and the results are as indicated in table 1.

**Table 1: Demographic Characteristics of the Respondents** 

Sex						
Variable	Frequency		Percent			
Male		29	55.8			
Female		23	44.2			
Total		52	100			
Level	of Course of Stu	dy				
	Frequency		Percent			
PGDs		16	30.8			
Masters		24	46.2			
PhD		12	23.0			
Total		52	100.0			
Cor	urse Study Level					
	Frequency		Percent			
Course Work		12	23.1			
Research Proposal		18	34.6			
Data Collection/Field		16	30.8			
Awaiting Viva- voce		6	11.5			
Total		52	100.0			
How many of the coming govies have you offended?						

### How many of the seminar series have you attended?

	Frequency Percen	
One	11	21.2
Two	6	11.5
Three	10	19.2
Four	13	25.0
Five	12	23.1
Total	52	100

Table 1 revealed that according to sex, the study was dominated by males who were 29 representing 55.8% of the participants while the females represented 44.2% of the respondents. The majority of the participants were masters students representing 46.2% of the participants, this was followed by postgraduate diploma and Ph.D. students with 30.8% and 23% respectively. According to the course study level, 34.6% were at the proposal stage, 30.8% were at the data collection stage, 11.5% were due for viva-voce defense while 23.1% were still at the coursework level. There was also evidence that the participants in this study had at least attended a seminar with only 11 participants attending only one semester which represented 21.2%. These results revealed and confirmed that the respondents were in a good position to respond to the questions pertaining to this study.

# 4.2 The Contribution of the University Constructive seminar series to Postgraduate students' Effective Learning

The respondents were asked to mention why they chose to participate in the seminars. The results were collected through open-ended questions as presented in table 2

**Table 2: Reason for Constructive Seminar Series** 

a.	Share experiences and sharpen each other
b.	Solve academic problems and flowing together
c.	Covering topics which not addressed in the lecture rooms
d.	Gain new academic ideas
e.	It is an obligation as a postgraduate student to participate
f.	Reduce the pressure of working on my research in isolation

## Pearson Linear Coefficient Correlation for Seminar Series and Effective Learning of Postgraduate students

For a study to consider its data valid for parametric tests like regression analysis, in statistics it is advisable to test for the correlation. Since this study wanted to establish the effect which was determined by regression results, the researcher carried out a Pearson linear coefficient correlation as per the results in table 3.

Table 3: Pearson Linear Coefficient Correlation Results for Seminar Series and Effective Learning Correlations

		Seminar Series	Effective Learning
Seminar Series	Pearson Correlation	1	.591**
	Sig (2-tailed)		.000
	N	52	52
Effective Learning of	Pearson Correlation	.591**	1
postgraduate students	Sig. (2-tailed)	.000	
	N	52	52

\*\*. Correlation is significant at the 0.01 level (2-tailed). Results in table 3 revealed a correlation coefficient of .591 which indicated a positive correlation between seminar series and postgraduate Students' effective learning in universities in Uganda. The strength of correlation of r =.591, p=.000 suggested that there is a large correlation between seminar series and effective learning of postgraduate in universities. Since the data were significantly correlated with the study variables, the researcher went ahead to carry out regression analysis as shown in Table 4.

**Table 4: Linear Regression Analysis Results** 

Model Summary <sup>b</sup>							
Model	R	R Square	Adjusted R Square	Std. error of the Estimate			
1	.591ª	.350	.337	.5615			

a. Predictors: (Constant), Seminar Series

b. Dependent Variable: Effective Learning of Postgraduate Students

## ANOVA a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	8.479	1	8.479	26.896	.000b
	Residual	15.763	50	.315		
	Total	24.242	51			

- a. Dependent Variable Effective Learning of Postgraduate Students
- b. Predictors: (Constant), Seminar Series

#### Coefficients a

		Unstandardized Coefficients		Standardized Coefficients			
		Coci	Helents	Coefficients			
Model		В	Std. Error	Beta	t	Sig.	
1	(Constant)	1.874	.385		4.871	.000	
	Seminar	.389	.075	.591	5.186	.000	
	Series	.309	.073	.591	3.180	.000	

a. Dependent Variable: Effective Learning of Postgraduate Students

Results in Table 4 revealed an R Square of .350, this indicated that according to this study, 35% of Effective Learning of Postgraduate Students was explained by variations in seminar series. Results also revealed that the seminar series significantly contribute to the Effective Learning of Postgraduate Students at Kampala International University ( $\beta$ =.389, p=.000). Beta value of .389 indicated that an improvement in seminar series by one unit will lead to a 0.389 increase in the Effective Learning of Postgraduate Students, whereas a constant value of 1.874 indicated that when seminar series is zero, Effective Learning of Postgraduate Students is equal to 1.874 and significant 0.00 level

### 5. Discussion

# **5.1** Contribution of constructive seminar series to Postgraduate Students academic life

Findings revealed that the constructive seminar series contributed positively to postgraduate students' effective learning as discussed hereunder:-

a) Sharing experiences and sharpen each other: Seminars have the ability to bring together quick learners and slow learners to sharpen each other. Topics not well understood in class can be discussed and in-depth learning is experienced. Reis (2019) points out that those students who have never stood before a crowd of people to make a presentation will be able to practice before peers and eventually gain presentation skills that are needed later in life. Friedrich (2017) add that seminars contribute to the improvement of student's language of communication during presentations

- b) Solving problems and flowing together Some students have difficulties in the research work which they think they are abnormal and fail to share but during these seminars, they can share them and discuss them and come up with solutions that can push their studies forward.
- c) Covering topics which may not be addressed in the lecture rooms: Project seminars provide hands-on experiences that are beyond the curriculum. For example, the seminar which was offered by Petra Hauke, Lecturer at the Department for Library and Information Science at Humboldt University Berlin where students participated in changing their ideas into making books for publishing which could not be done in lecture time(Hauke, 2007).
- **Innovation and new discoveries:** Respondents say the seminars were avenues for technology and innovation updates in the field of interest. Technology is keeping on changing every now and then, new things are coming up in almost all fields. Industries are implementing these new technologies and innovations which training institutions and students need to be abreast of. It's not always possible to include these new things in the student curriculum in the shortest time therefore seminars are seen as the best avenues for updates. In addition Hunt, (2010) and Nyerere & Friso, (2013) agree that through seminars, educational institution and industry can be able to interface and therefore give confidence to the students that the knowledge and skills they are getting are the exact ones needed in the workplace depending on their field of specialization
- e) Ph.D. students requirements to graduate: Ph.D. students are motivated to engage in doctorate seminars as a requirement for graduation. Some educational institutions have included graduate seminars as part of the curriculum which a student participates, makes presentations, discusses other peer projects and earn graduation credits
- f) Reduce the pressure of working alone as a Ph.D. student: Ph.D. work especially by research only can easily make students work in an isolated manner in that a student can feel lonely and bored. Through seminars, students can interact, share, and break the boredom and those who were off track can be brought on track.

# **5.2** Relationship between Constructive semina series and a Class lecture

The study revealed that there was a close relationship between the doctoral seminars and a class lecture because the content discussed in the seminars was the continuation of the class lecture whereby practical and further understanding is done. They were quick to say most times topics related to research and academic writings were discussed.

## 5.2.1 Challenges of Postgraduate Seminars Series

- a) Time-consuming therefore not all postgraduate students are interested to attend and because some universities the seminars are not for any credit the students prefer to use their time for lectures or credit unit courses.
- b) Some of them require financial budgets
- c) If not well organized, students fail to get the opportunity to develop their high order thinking capabilities and even share their experiences.

### 5.2 Recommendation

- a) Doctorate seminar participation should be examinable, this means a student who participates should gain some credits for graduation. This will encourage many students to participate.
- b) For the case of KIU, students should be allowed to facilitate and discuss their research projects so that they get input from peers as a way to improve on their research and also a way to encourage students to gain presentation and public communication skills.
- c) Additionally, the seminars at KIU can be used to connect the students to the industry as a way to share or gain new technologies and knowledge of the industry to sharpen their skills.
- d) It is also good that practical and tangible outcomes come out of the seminars like what is done at the Humboldt University Berlin where book publishing is done at the end of a semester there are books published out of the project seminars.

### 6. CONCLUSION

Seminars, Conferences, workshops, and colloquiums are very important constructive education delivery modes that every university should not ignore. They contribute to the overall learning process of a university student not only postgraduates but also undergraduates. University students get exposed to knowledge, experiences, and skills which would not have been possible in normal class lectures. However proper planning and administration of these seminars will go a long way to ensure their aim and objectives are achieved.

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