

PERCEPTION OF EDUCATORS TOWARDS USING MODULAR OBJECT ORIENTED DYNAMIC LEARNING ENVIRONMENT (MOODLE) FOR TEACHING

Adesope, R. Y.

Department of Curriculum Studies/Educational Technology
Faculty of Education
University of Port Harcourt, **NIGERIA**

&

Ahiakwo, R. O. M.

School of Vocational Studies
Department of Home Economics
Federal College of Education (Technical), Omoku, **NIGERIA**

ABSTRACT

The study was carried out to find out teacher's attitude towards using Moodle for teaching. The study was conducted in two departments of Faculty of Education, University of Port Harcourt. The sample comprised 100 teachers randomly selected from two departments in the Institution. Three research objectives and three research questions were used for the study. Mean scores and standard deviation were the statistical tools used in the study. The study found that using Moodle to teach benefits teachers and help them collaborate with students effectively; Moodle can help teachers enhance their teaching with online supplementary activities, both remedial and extension, Moodle provides a place where you can easily create web pages with information about your course and provide links to word documents, slides, and other resources that your students will want to access. It also found that teachers show positive usage of Moodle for teaching. Also, the study found that teachers use Moodle to upload video, audio and link to a lesson, Create, conduct and guide quizzes, prompts students with survey questions, post classroom blogs, Create and maintain a classroom glossary related to a lesson and assign, collect, review and upgrade assignment. Furthermore, the study found that teachers show positive attitude towards using Moodle for teaching. Based on these findings, the study recommends that Schools should consider course maintenance as a priority while using Moodle for teaching, Internet connectivity should also be made available and workshop should be organized to train more teachers on the use of Moodle to enhance teaching

Keywords: Moodle, teacher's attitude.

INTRODUCTION

Moodle is an open source learning management system that is provided freely and can be run on many operating systems. It is an acronym for Modular Object Oriented Dynamic Learning Environment. It is free to download, change, share, improve and customize to whatever you want it to be, according to the Moodle website. Therefore any educator can use it to build or supplement a course. It is a web- based learning management system for delivering course content and learning activities online. It is basically used for online or hybrid courses but can be used to supplement a face to face course. Moodle is a PHP based software product. This means that it runs in a browser. If you install it on a web server it will be accessible for anyone who has an internet connection. Basically Moodle can substitute a complete learning environment with a digital version. Teachers can set up discussions, publish course materials and other resources, hand out and mark assignments and create quizzes with automatic

grading. Students will always be able to see exactly what the assignment is, can discuss the course with their colleagues and have all the aspects of the course in one easy space with a clear layout. Most digital learning environments have a front- end and a back- end, or they have a special configuration or administration page but Moodle doesn't have it. Teachers can just turn editing on or off. The first option shows icons to edit, delete and toggle visibility learning elements; the second option hides these icons. Moodle integrates pedagogical features missing in many learning management system tools, allowing instructors to construct customizable, online courses or a wide range of course modules on a flexible platform. Moodle can be downloaded to any computer and used to support a single instructor site or a system of thousands of students. It is licensed by the open source initiative under a general public (Wheeler, 2010).

One major benefit of Moodle is its enormous economy in terms of time and resources. Instead of having classrooms filled with worksheets, books, and audio and video cassettes, all these can be supplied electronically. This vastly reduces the numbers of CDs, photocopies and other physical supplies that have to be generated, though students can access these whenever they require. Because of its ease of use, Moodle is excellent for distance learning, but it is really designed to work best with face to face classroom teaching. Although it certainly saves paperwork and time for teachers, the more important reason why teachers like to use it is that it enables students to learn more independently- that is, have more control over their learning and also more co-operatively. Virtually all educators acknowledge that Moodle provides a highly cost- effective solution for all types of learning, both individual and classroom-based, and throughout the age spectrum (GSS, 2015).

Moodle provides a place where you can easily create web pages with information about your course and provide links to word documents, slides, and other resources that your students will want to access. Moodle can also be used to provide links directly to the resources that will be most useful for your students whether e-library resources, skills courses, or information. It helps students and staff to know each other at the start of the course, also hold information about course team and students in one place, post up slides, record lectures as podcasts or even arrange for videos of lectures or special events- posting them online and making it available to students. It can also help teachers collaborate with each other.

It is clear that new technologies have been used in every field of education. Computers enable students to study individually, and to overcome disadvantages that may arise from their individual differences. Thus, computers provide fast and permanent learning using elements such as sound and animation. In addition, the internet facilitates access to and sharing of information, Varol (1999), thus, incorporating ICTs, particularly the internet, into teaching and learning in higher education has become an important issue in both economically developed and rapidly developing countries, Li and Kirkup (2007).

In a broader sense, although the use of ICTs undoubtedly offers new educational experiences for both teachers and students, how teachers and students perceive such reform efforts- their thoughts and experiences about ICTs, their attitudes towards instructional applications and their expectations- are important factors in the plan for increasing ICTs in education, Lim, and Khine, (2006). In other words, successful integration of computers into educational setting depends, to a great extent, on teachers' and students' attitudes towards ICTs and computers, Selwyn (1999). It is also clear that investments in ICTs require integrations of programs in classrooms and orienting students towards determining their knowledge and their attitudes towards these technologies.

The studies indicate that teachers' attitudes can be defined as either positive or negative with respect to computer technologies and computer supported applications, Smith, Caputi and Rawstorne (2000). The earliest research that examined attitudes towards computer was conducted by Lee (1970), who identified two dimensions of attitude: (1) the belief in the computer as a beneficial tool and (2) belief that computers are autonomous entities. Furthermore, the studies demonstrate that there are several factors that affect the use of ICTs and attitude of an individual towards ICTs, demographic factors such as gender, age, years of teaching experience, teachers' levels of self-efficacy, anxiety, and belief, teachers' experience with the use of ICTs, their learning and teaching styles and their frequency of access to ICTs seem fairly limited.

Moodle gives an electronic version of all school settings like a school staffroom, teaching materials in one corner, registers with names and students' scores, in trays, notice board, rogue's gallery, supplementary material shelf, library, audio cassettes, videos, worksheets etc. It is an e-learning tool that can offer simple and safe solutions to any institution, no matter how large or small, be it an individual teacher or a huge university. Moodle facilitates online collaborations, which can be teacher- to- student, teacher- to- teacher or student- to student. Moodle focus on interaction and collaborative construction of content and in continual evolution. It is used in environment such as education training and development and business settings. Assignment submission can be done in Moodle. Files can be downloaded and grading can be done. Moodle instant message can be gotten; online calendar, online news and announcement can be done.

Statement of the problem

Moodle is a very effective virtual learning environment or a learning management system but not withstanding there are some issues to be addressed. Moodle has a great notification system, it is possible for a teacher or student to be notified of new forum posts, assignment uploads and so on. Most schools have multiple groups sharing one course in other to limit the amount of course maintenance and this can lead to issues. Another issue with Moodle is that it takes a long time to enroll students in courses; it also sends too many notification emails. Moodle tends to have difficulty with uploading multiple files too.

Objectives of the study

1. To find out the benefits of using Moodle for teaching
2. To find out lecturer's usage of Moodle for teaching
3. To find out lecturer's attitude towards using Moodle for teaching

Research Question

1. What are the benefits of using Moodle for teaching?
2. What are lecturer's usage of Moodle for teaching?
3. What are lecturer's attitude towards using Moodle for teaching?

Methodology

The study is a descriptive research designed to find out lecturer's attitude towards using Moodle for teaching. The population of the study comprises of 100 lecturers in University of Port Harcourt, Rivers State. A sample of 100 lecturers including Ph.D. students in the

department of curriculum studies and educational technology was involved in the study from University of Port Harcourt, Rivers State. 50 lecturers were randomly selected for the study. The Instrument used to collect data from respondents is a structured questionnaire. Simple Random sampling technique was applied in the selection process.

Data Presentation

1. What are the benefits of using Moodle for teaching?

Table 1.1 Benefits of using Moodle for teaching

S/N	ITEM	Mean	Standard Deviation	Remark
1.	Moodle can help lecturers enhance their teaching with online supplementary activities, both remedial and extension	3.40	0.49	Agreed
2.	Moodle can be used to provide lecturers with links to websites relevant to a course	3.33	0.47	Agreed
3.	Upload series of learning activities created in some authoring software	3.43	0.49	Agreed
4.	Moodle can help lecturers create learning spaces called Courses	3.31	0.46	Agreed
5.	Moodle helps lecturers set up a list of things for students to do before coming to a lesson	3.43	0.49	Agreed
6.	Moodle can help lecturers collaborate with students effectively	3.38	0.48	Agreed
7.	Moodle provides a place where you can easily create web pages with information about your course and provide links to word documents, slides, and other resources that your students will want to access	3.45	0.50	Agreed
8.	It helps students and lecturers to know each other at the start of the course, also hold information about course team and students in one place.	3.38	0.48	Agreed
9.	Moodle can help lecturers post up slides	3.37	0.48	Agreed
10.	Moodle can help lecturers record lectures as podcasts or even arrange for videos of lectures or special events- posting them online and making it available to students	3.42	0.49	Agreed
	Overall Mean	3.43	0.48	Agreed

Midpoint = 2.50; any mean score < 2.50 suggest disagreement; any mean score > 2.50 suggest agreement.

Entries in table 1.1 shows that respondents agreed that Moodle can help lecturers enhance their teaching with online supplementary activities, both remedial and extension (Mean= 3.40; SD= 0.49), they agreed that Moodle can be used to provide lecturers with links to websites relevant to a course (Mean= 3.33; SD= 0.47), they agreed that Moodle can help lecturers upload series of learning activities created in some authoring software (Mean= 3.43; SD= 0.49), they also agreed that Moodle can help lecturers create learning spaces called Courses (Mean= 3.31; SD= 0.46), they agreed that Moodle help lecturers to set up a list of things for students to do before coming to a lesson (Mean= 3.43; 0.49), they agreed that Moodle can help lecturers collaborate with students effectively (Mean= 3.38; SD= 0.48), they agreed that Moodle provides a place where you can easily create web pages with information

about your course and provide links to word documents, slides, and other resources that your students will want to access (Mean= 3.45; SD= 0.50), they agreed that It helps students and lecturers to know each other at the start of the course, also hold information about course team and students in one place (Mean= 3.38; SD= 0.48), they also agreed that Moodle can help lecturers post up slides (Mean= 3.37; SD= 0.48), they agreed that Moodle can help lecturers record lectures as podcasts or even arrange for videos of lectures or special events-posting them online and making it available to students (Mean= 3.42; SD= 0.49). An overall mean of 3.43 and standard deviation of 0.48 suggests that using Moodle to teach benefits lecturers and help them collaborate with students effectively.

2. What are lecturer's usage of Moodle for Teaching?

Table 1.2 Lecturer's usage of Moodle for teaching

S/N	ITEM	Mean	Standard Deviation	Remark
1.	Lecturers use Moodle to upload video, audio and link to a lesson	3.43	0.49	Agreed
2.	Engage lecturers in a discussion forum	3.36	0.48	Agreed
3.	Guide a real-time discussion or chat	3.28	0.45	Agreed
4.	Create, conduct and guide quizzes	3.34	0.47	Agreed
5.	Prompt students with survey questions	3.24	0.42	Agreed
6.	Post classroom blogs	3.38	0.48	Agreed
7.	Create and maintain a classroom glossary related to a lesson	3.28	0.45	Agreed
8.	Assign, collect, review and upgrade assignment	3.30	0.46	Agreed
9.	Work collaboratively on a classroom wiki or group-edited document and much more	3.22	0.41	Agreed
10	Work in teams to co-author a document using a wiki	3.37	0.48	Agreed
	Overall Mean	3.32	0.45	Agreed

Midpoint = 2.50; any mean score < 2.50 suggest disagreement; any mean score > 2.50 suggest agreement.

Entries in table 1.2 revealed that lecturers agreed that Moodle can be used to upload video, audio and link to a lesson (Mean= 3.43; SD= 0.49), they agreed that Moodle engage lecturers in a discussion forum (Mean= 3.36; SD= 0.48), they agreed that Moodle helps guide a real-time discussion or chat (Mean= 3.28; SD= 0.45), they also agreed that Create, conduct and guide quizzes (Mean= 3.34; SD= 0.47), respondents agreed that Prompt students with survey questions (Mean= 3.24; SD= 0.42), they agreed that lecturers post classroom blogs using Moodle (Mean= 3.38; SD= 0.48), respondents also agreed that lecturers use Moodle to create and maintain a classroom glossary related to a lesson (Mean =3.28; SD= 0.45), respondents also agreed that lecturers use Moodle to assign, collect, review and upgrade assignment (Mean= 3.30; SD= 0.46), they agreed that with Moodle lecturers work collaboratively on a classroom wiki or group-edited document and much more (Mean=3.22; SD= 0.41), they agreed that with Moodle lecturers work in teams to co-author a document using wiki (Mean= 3.37; SD= 0.48). An overall 3.32 and standard deviation of 0.45 suggests positive usage of Moodle by lecturers for teaching.

Research Question 3: What are the attitudes of lecturer's towards using Moodle for teaching?**Table 1.3: Attitude of lecturer's using Moodle for teaching**

S/N	Attitude of Lecturers	Mean	Standard Deviation	Remark
1	Information communication technology has steadily increased and in turn influenced the change in attitude towards ICTs	3.28	0.45	Agreed
2	There is rapid development in science and technology through ICT and has influenced educational system and other fields	3.37	0.48	Agreed
3	ICT has necessitated the implementation of new technologies into educational system to improve the quality of education	3.36	0.48	Agreed
4	I can use Moodle for teaching	3.37	0.48	Agreed
5	Moodle is interesting	3.43	0.49	Agreed
6	Computer skills is beneficial in using Moodle	3.33	0.47	Agreed
7	Moodle technology has helped drive change	3.40	0.49	Agreed
8	Lecturers are highly motivated by the use of Moodle to design courses online	3.34	0.47	Agreed
9	Communication is made easy with Moodle	3.39	0.49	Agreed
10	Moodle offers new educational experience for both lecturers and students	3.39	0.49	Agreed
11	Orientation on the use of Moodle in classroom is required	3.39	0.49	Agreed
	Overall Mean	3.70	0.52	Agreed

Midpoint = 2.50; any mean score < 2.50 suggest disagreement; any mean score > 2.50 suggest agreement.

Entries in table 1.3 shows that lecturers agreed that Information communication technology has steadily increased and in turn influenced the change in attitude towards ICTs (Mean=3.28; SD= 0.45), they agreed that there is rapid development in science and technology through ICT and has influenced educational system and other fields (Mean=3.37; SD= 0.48), they also agreed that ICT has necessitated the implementation of new technologies into educational system to improve the quality of education (Mean= 3.36; SD= 0.48), respondents also agreed that they can use Moodle for teaching (Mean= 3.37; SD= 0.48), they also agreed that Moodle is interesting (Mean=3.43; SD= 0.49), respondents agreed that computer skills in beneficial in using Moodle (Mean=3.33; SD=0.47), they agreed that Moodle technology has helped drive change (Mean= 3.40; SD= 0.49), they agreed that lecturers are highly motivated by the use of Moodle to design courses online (Mean= 3.34; SD=0.47), they agreed that communication is made easy with Moodle (Mean= 3.39; SD= 0.49), they agreed that Moodle offers new educational experience for both lecturers and students (Mean= 3.39; SD=0.49), they also agreed that Orientation on the use of Moodle in classroom is required (Mean=3.39; SD= 0.49). An overall mean of 3.70 and standard deviation of 0.52 suggests positive attitude of lecturers towards using Moodle for teaching.

CONCLUSIONS

The following conclusions were made by the researcher:

- It was found that using Moodle to teach benefits lecturers and help them collaborate with students effectively.
- Lecturers show positive usage of Moodle for teaching
- It was also found that lecturers show positive attitude towards using Moodle for teaching.

RECOMMENDATIONS

Based on the findings, the following recommendations are made:

- Schools should consider course maintenance as a priority while using Moodle
- Internet connectivity should also be made available
- Workshop should be organized to train more lecturers on the use of Moodle to enhance teaching

REFERENCES

- GSS, (2015). Benefits of Moodle for Teachers and Learners. Retrieved on 20-01-2016 from <http://www.gsslimited.co.uk/what-is-moodle/>
- Lee, (1970). Socializing the human-computer environment. Retrieved on 3-01-2016 from <http://www.books.google.nl/books?isbn=0893914711>.
- Li, N, and Kirkup, G. (2007). Gender and cultural differences in Internet use. A study of China and the UK. *Computers and Education*, 48, 301-317.
- Lim, C.P & Khine, M.S (2006). Information communication technology use. Retrieved on 3-01-2016 from <http://www.ala.org/.../SLMR-...>
- Selwyn, N. (1999). Students' attitudes towards computers in sixteen to nineteen Educations. *Education and Information Technologies*, 4(2), 129-141.
- Smith, B., Caputi, P., and Rawstorne, P. (2000). Differentiating computer experience and attitudes towards computers. An empirical investigation. *Computer in Human Behaviour*, 16(1), 59-81.
- Varol, A. (1999). Educating the educator in the information field. *Linking Research and Practice to Improve Learning*. Vol. 52.2, aect 2012. USA.
- Wheeler, B. (2010). Open source 2010: "Reflections on 2007". *EDUCASE. Review*, vol 42, No.1 www.docs.moodle.org/22/en/About_Moodle-Options