



UPHOLDING INTEGRITY IN THE MANAGEMENT OF E-LEARNING IN INSTITUTIONS OF HIGHER LEARNING

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ABSTRACT

Integrity in e-learning environments is a major concern to institutions as it is an important value that must be upheld. The principle of integrity is the foundation for the achievement and progress of students. Integrity being upheld results in good citizenship and a better society. The flexibility of e-learning which enable students to learn anywhere at their convenient and preference also result in an increase opportunity of breaching academic integrity. It is therefore imperative to examine the issue of academic integrity in e-learning management. This paper is aimed at identifying integrity issues in e-learning and proposing effective methods of maintaining integrity in the management of e-learning without underestimating its benefits to learning institutions. Relevant research articles relating to integrity in the management of e-learning were searched from the internet using different search keywords such as “integrity in e-learning”, “maintaining integrity in online learning”, “types of e-learning”. Articles that are not from peer-reviewed journals were not included. Some integrity issues in e-learning such as academic misconduct and fraudulent activities in e-learning were highlighted. Two methods of maintaining academic integrity in e-learning proposed in the study are avoidance and implementation. Avoidance is a pre-emptive tactics of making sure that misconduct such as plagiarism, fabrication and cheating are not exhibited at all in e-learning. Implementation method on the other hand entails using software to detect academic misconduct and fraudulent activities. It is recommended that e-learning activities should be properly monitored and controlled.

KEY WORDS: Academic integrity; e-learning; fraudulent activities.

INTRODUCTION

In the educational system, integrity is fundamental in pursuing academic excellence. In recent times, the system has had abounding cases of academic integrity breaches, both reported and unreported; thus making the aim of attaining integrity a key challenge. This paper is aimed at identifying integrity issues in e-learning and proposing effective methods of maintaining integrity in the management of e-learning without underestimating its benefits to learning institutions. Despite the flexibility of e-learning that students can learn at their own convenience and preference anywhere and anytime, its rigor and quality should not be undermined. Online degree is not perceived by some employers positively as a traditional classroom-based one. They believed that online educational system cannot be fully trusted as the testing method adopted is not as difficult as that used in classroom-based educational system (Saad, Busteed & Ogisi, 2013). It is therefore imperative to examine the issue of academic integrity in e-learning management.

E-Learning can be described as education acquired via any electronic device connected to the internet. Here the ‘e’ refers to ‘electronic’; hence, the full form of e-learning is electronic learning. Other terms used to describe e-learning are online learning or online training, where the term ‘online’ refers

to an internet connection or through the use of the Internet. E-Learning make learning easier, more accessible and with minimal restriction. In e-learning, the course materials are shared in various forms such as videos, presentations, word documents, or PDFs. E-learning also uses several tools such as e-learning systems or Learning Management Systems (LMS) for applying different methodologies. E-learning has the prospective of revolutionizing the teaching and learning process (Department for Education and Skills, 2003).

The arrival of internet initiated the development of e-learning which marked a new era in education. The very first virtual classroom was invented in the year 1960 by Donald Bitzer; this he did by interlinking multiple computer terminals. The computer-based training program (CBT program) was called Programmed Logic for Automated Teaching Operations (PLATO). The device originally designed strictly for computer-based education, quickly became the groundwork for online learning and online communities due to its innovative networking proficiencies. With the emergence of the internet and associated technologies, e-learning took on a more structured form. Online-only courses began only after the 1980s and in the 1990s it was possible to earn a degree without the presence of physical professors (Troutner, J. 1991). In 1999, Elliott Masie that first used the term, “e-learning”, in a



professional context during the TechLearn Conference at Disneyworld (Dunn, Meine & McCarley, 2010).

Today, schools, colleges, and other educational institutions have started including the scope of e-learning in their agendas so as to meet up with global trend. E-learning has also become an effective medium of disseminating higher education. Despite the recognition of the benefits of e-learning by higher educational institutes, the ethical and moral challenges with regard to the academic integrity in e-Learning cannot be ignored (Muhammad, Shaikh, Naveed & Qureshi, 2020; Cox, 2013).

TYPES OF E-LEARNING

There are two types of e-learning, namely:

- Synchronous E-learning and
- Asynchronous E-Learning

Synchronous E-learning

This involves students and tutors in different geographical locations interacting in real-time. The resources used for learning are circulated via mobile, video conference and/or online chatting. This type of e-learning includes: Virtual classroom, Internet chat, Webinars, Audio/Video conferencing, and instant messaging (Hrastinski, S. 2008).

Asynchronous E-Learning

In this type of e-learning students and tutors do not interact in real-time. Students can complete the courses at their own convenience because they are self-paced. Various learners can benefit through this type of learning since there is an option to finish the courses in their preferred time. The resources used for learning are in the form of blogs, CDs, DVDs, forums and eBooks. This type of e-learning includes: Self-paced online courses, online forums, Blogs and message boards (Hrastinski, S. 2008).

Benefits of E-Learning

The fact that one can have access to courses anywhere and anytime is one of the biggest advantages of e-learning. The advantages of e-learning according to (Gautam & Tiwari, 2016) are discussed as follow:

1. Cost-effective: Since learning can be acquired anywhere via the internet, one is saved from travel expenses. Also, courses can be explored more than once when bought which saves the cost of having to pay for a refresher course again. By being online, huge amount of printing costs of courses can be saved.
2. Self-paced: Some people are comfortable learning through notes while some others are comfortable through videos. Since e-learning courses are created using various content forms and have resources in various formats, it fits everyone's individual learning curve and helps them learn in their own way. The self-paced characteristic of e-learning courses means that it can match the learning style of every individual.

3. Feedback: Learners get immediate feedback on their work, while the instructors can ascertain the individual progress of the students in each of the courses. Feeding the correct answers in the system will automatically lead to the grading and evaluation of students.

4. Speed: The quick delivery of information is one of the foremost advantages of e-learning. E-learning has faster delivery cycles since they are easy to develop.

5. Consistency: E-learning courses are available at all time and can reach a wider audience, unlike traditional learning where classroom training can be unpredictable and inconsistent as physical attendance is not required.

CONSEQUENCES OF BREACHING INTEGRITY IN E-LEARNING MANAGEMENT

Some of the consequences of breaching integrity in e-learning management are discussed next:

1. Indiscipline: E-learning is a self-paced form of learning where one can start, pause, and stop courses at any time. It also hampers the self-discipline of learning. This can diminish the priority to learn and one can keep on avoiding it for a long time. So, the impersonal and passive feature of e-learning courses can be a deterrent for some (Muhammad et'al 2020)
2. Ineffective use of Learning Management System: Training providers must use the Learning Management System to track the activity and progress of students and collection of data for integrity. This is done through the e-learning materials and assessment. The time spent on learning content by students and the number of attempts made for every assessment and the result for each can also be tracked by some other LMS. While other LMS take record of accessed and not accessed course sections or those not completely successfully. These differences must be understood by regulators in order to improve integrity by ensuring high granularity tracking of interactions and assessment of students. It will therefore be difficult to establish that integrity is upheld in absence of high granularity of data (Oliveira, Cunha & Nakayama, 2016)

MANAGEMENT OF E-LEARNING

Bof (2005) postulated that effective management is needed if the educational benefits of e-learning are to be achieved. To ensure that the system works very well, it is essential to map out plans by defining the different components of e-learning that will operate in a unified way. The management of e-learning implies the ability of manager to plan, organize, coordinate and control the space, money, time, facilities, information and the people, while still concentrating on pedagogical ethics which also applies to educational management. However, the precise nature of e-learning must be carefully examined by managers (Mill & Brito, 2009).

Even in educational institution, the pattern of management differs considerably with the type of institution; for instance, the management of tertiary institution is different from



that of basic education. So also, e-learning management should be handled distinctly.

The combination of Learning Management System (LMS) and e-learning management will likely enhance e-learning processes. Supporting this, Belloni (2001) highlights a significant drift in investing more on information technology (IT) and researches on appropriate methodologies and their application and not only on equipment. Based on this, there is need for studies on either improving the efficiency of the present management methods or creating new mechanisms for improving e-learning processes.

ACADEMIC INTEGRITY IN E-LEARNING

In defining academic integrity, there are six values which are committed to it in every aspect of academic practices even in the face of difficulty (Fishman, 2014). These values which are guide to behavior similar to academic integrity includes: Honesty, trust, fairness, respect, responsibility, and courage. Conversely, the involvement in any act to gain or an effort to gain unjust academic benefit constitutes breach of academic integrity or misconduct. Therefore this misconduct includes instances of cheating, fabricating, forgery, incorrect alliance, several submissions, plagiarising, and helping others to acquire an unjust academic benefit (Benson, Rodier, Enström & Bocatto, 2019).

Institutions having e-learning platforms must have ways of establishing that students who registers for the program are same who partake and completes the program and also gets the academic credit (Rodchua, 2017). This means that virtual learning environment must be created and maintained by the institutions which are only accessible to registered students. Activities of registered students can be monitored and tracked. General misconduct in academic integrity could be detected and deterred particularly impersonation. Summarily, student identity and honest should be ensured while preventing cheating and fraud authentication solutions of students.

When it comes to the issue of academic integrity, most institutions in Nigeria focuses more on students rather and or rarely on the lecturers. Harassing of students sexually, demanding and accepting of bribery, malpractice in regard to continuous assessment, and corruption are some dishonest practices of lecturers in most learning institutions in Nigeria (Animasahun, 2014). Though there are some exceptional lecturers which are known for their honesty, truthfulness, fairness and high level of integrity both in their academic work and relationship with students.

METHODS OF MAINTAINING INTEGRITY IN E-LEARNING

There are two broad methods namely:

1. Avoidance method.
2. Implementation methods:

Avoidance method

This is a pre-emptive tactics of making sure that misconduct is not exhibited at all. Honor code and declaration of genuineness should be used so that students will have a better understanding of the values, character and integrity of the institutions and then agrees to it (Jones, 2009). Occasionally, students are reminded of this code and the declaration statements are required when the coursework is been submitted.

There are seven methods proposed by Mcallister and Watkins (2012) for redesigning courses online so as to help students develop the self-regulatory skills of refraining from involving in academic fraud. These include: (1) Using all-embracing calendaring for planning of task and management of time as well; (2) Monitoring all work and not only exams; (3) Individualizing examination by randomizing of the questions; (4) Creating awareness by discussing academic integrity; (5) Slowing down the progress of students by permitting asynchronous learning; (6) Tracking students activities to detect possible irregularities; (7) Providing quick response to enable the valuation of student progress.

To achieve aforementioned methods, the institution needs to: (1) Clearly states what integrity entails; (2) Win the commitment of faculty to respect and put into effect the practices of integrity; (3) Developing integrity of students and self-regulation skills; (4) Developing a system of integrity for measuring, monitoring and tracking the development of academic integrity.

Implementation methods

These are protective tactics which detects misconduct and fraud. Some of the software used for this methods are, TurnItIn (which is used for detecting plagiarism) and Browser lock-down such as Respondus (used for controlling the test environment so as to prevent student from accessing answers from other sources or means) (Heckler, 2013; Moten et al., 2013; Sewell et al., 2010)

VERIFICATION SOLUTIONS IN THE MAINTENANCE OF INTEGRITY IN E-LEARNING

Knowledge-based verification

This is when only user who registers is allowed to gain access to the platform. The use of user ID, password and security questions is some examples of this verification method (Ullah et al., 2012; McNabb, 2010).

Biometric-based verification

The identity of the user is confirmed by taking the user's biometrics like thumbprint, appearance, voice and signature (Rabuzin et al., 2006).

Continuous or presence verification

This is important in authenticating users taking online examinations. Examples are bimodal scheme like video monitoring and/or recording via webcam (Apampa et al., 2010).



INTEGRITY ISSUES IN E-LEARNING

Academic Misconduct

The involvement in an act to gain or making an effort to gain unjust academic benefit constitutes academic misconduct. This misconduct consists of instances of plagiarism, fabrication, cheating, forgery and helping others to acquire an unjust academic benefit (Benson et al, 2019). Access to information had increased through the internet making it easy to disseminate information students who could use various tools to edit and share it (Nilsson 2016). Also, students can successfully complete their studies easily by copying from the internet (Sutherland-Smith 2016). Moreso, the preparation of assignments, contract cheating and getting academic materials through the support of some website has contributed to plagiarism (Newton and Lang 2016). This has also increase violation of academic integrity (Etgar et al. 2019). Most students indulge in academic misconduct as a result of lack of awareness, the pressure to achieve high grade, time constraint and laziness on the part of student (Newton and Lang 2016; Ellery 2008; Stephens and Nicholson 2008), and competitiveness of the educational system (Doolan and Barker, 2001)

E-LEARNING PROVIDER BREACHING

E-LEARNING INTEGRITY BREACHES

The provider of e-learning may want to breach the e-learning integrity by using unqualified administrative personnel to help with the training. Also, they may limit the access to qualified training personnel in order to reduce cost.

To uphold integrity in e-learning management, the following procedures must be adhered to:

1. Employment of qualified training personnel. It is very important that qualified administrators and trainers are present in online learning environment. These training personnel may connect with students through e-mail, telephone calls, chat, Web conferencing, Skype and videoconferencing. The training personnel must be on a training register.
2. The required time for a trainer should reveal that he is available during working hours.
3. They must respond to learners who need assistance within a specified time limit. A qualified personnel or trainer must assess and confirm all the information pertaining to the student's enrolment and activities before issuing statement of completion.

FRAUDULENT ACTIVITY IN E-LEARNING

There are four types of fraudulent activities according to Pavela (1997) as cited in Blau, I., Goldberg, Friedman & Eshet-Alkalai, (2020) discussed as follow;

Cheating which implies using of materials, information or receiving of any kind of assistant from others; Plagiarism: The use of other peoples' work such as words, ideas, tables, figures as one's ideas without acknowledging the source; Fabrication: The process of creating data and information not in existence; and Facilitation which is getting assistance from others to intentionally violate academic integrity.

To minimize fraudulent activity in e-learning the following procedure should be observed:

1. Internet Protocol (IP) address of students should be captured to monitor if more than one user is using it.
2. Cheating during assessment text should be monitored by a system that flags whenever students gives exact answer to same questions.
3. The details field of students should be locked and information on it can only be changed by administrative personnel upon student's request. There should be subsequent verification of student's identification. Students should be notified that if any fraud is detected as to the information they provide or their activities during periods of learning, then there will be cancellation of certification.
4. Immediately report students taking the courses for any suspected fraudulent act to the suitable authority. Have the ability to report immediately any suspicious activity by students undertaking the course to the appropriate authority.
5. Training should be delivered via Secure Sockets Layer (SSL) to decrease fraudulent activities of third parties.

CONCLUSION

Integrity is essential in the pursuit of academic excellence in the educational system. The attainment of integrity has become a challenge as there are abounding cases of its breaches in the system. In e-learning, it is believed by some that the acquired training cannot be fully trusted as there can be loopholes in its management. This article has been able to identify some procedures through which integrity can be upheld and managed in an e-learning environment and how fraudulent activity could be curbed.

RECOMMENDATION

It is recommended that e-learning activities should be properly monitored and controlled by the training provider. There should be clear distinction between acceptable and unacceptable e-learning practices so that student can have a clear perception of an acceptable behaviour.

CONFLICT OF INTEREST

The author has not declared any conflict of interest.

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