RECOGNIZING POSSIBLE LIMITATIONS OF E-LEARNING THROUGH EDMODO

Farha Alia Mokhtar
farhaalia1990@gmail.com
School of Education and Modern Languages,Universiti Utara Malaysia

ABSTRACT: When addressing the topic of e-learning integration via Edmodo, two concerns arise. First, isEdmodo vulnerable to internal or external factors which may become barriers to its effective implementation? Second, if Edmodo has limitations to its use, how can it be diminished to ensure optimum teaching learning experiences? This paper investigates contributing factors that limit Edmodo's application as a learning management system (LMS) for educational purposes. The results suggest possible limitations of Edmodo; lack of face-to-face interaction, facilities that might not be available to all students and distractions that may pose a threat in online learning environments. Propositions to overcome those limitations suggested in this paper are; face to face interaction to be maintained while supplemented with assignments through Edmodo, ensuring facilities are provided or available prior to execution and inculcate intrinsic motivation for students to stay focus when completing tasks online.

KEYWORDS: Edmodo, E-learning, Perceptions and Virtual limitations.

INTRODUCTION

E-learning and its web

Educational reforms due to technological advances are regarded as important requirement in preparing 21st century world citizens. The urgency emerges due to the rising expectations that students are required to do more than just remembering and absorbing fact as they need to be educated on how to apply and create knowledge with existing information (McClain & Brown, 2013). Many claim that this aspiration can be assisted by combining face-to-face instruction with web-based activities (e-learning) because it increases students' interest and self-learning (Amrein-Beardsley, Foulger&Toth, 2007; Vernadakis, 2012).

Prior to e-learning implementation, we must first and foremost examine its definition and functionality. According to the European Union, e-learning is defined as *'the use of new multimedia technologies and the internet to improve the quality of learning by facilitating access to resources and services as well as remote exchanges and collaboration'* (European Commission, 2001). Various researchers claim that e-learning is a vast and detached area of inquiry which draws attention from diverse disciplines, such as education, computer science, psychology, management, communications and others (Bell &Federman, 2013). Due to its flexibility in catering to many fields, e-learning has been gaining popularity. Belonging under its paradigm, e-learning tools come in many platforms, shapes and types. These tools can be concluded as instruction and learning experience delivered through electronic devices and technologies such as the internet, audio and videotape, interactive television, virtual classrooms, web-based learning and satellite broadcast (Imel, 2002).

Why Edmodo warrants an inspection?

Edmodo is an online social learning platform hosted as a web service at www.edmodo.com. It is normally thought of as Facebook for educational purposes as it has an interface, layout and design akin to that of

Facebook (Maguth&Harshman, 2013). This is due to an attempt in making students feel familiar and comfortable to communicate and learn via Edmodo. In terms of usage, the United States ranks in 1st place with the highest number of users (Alexa Internet, 2015). As of mid 2016; Edmodo has over 66 million users worldwide.

This platform is a tool under the paradigm of e-learning. Below is the establishment of interconnectedness between e-learning and Edmodo;
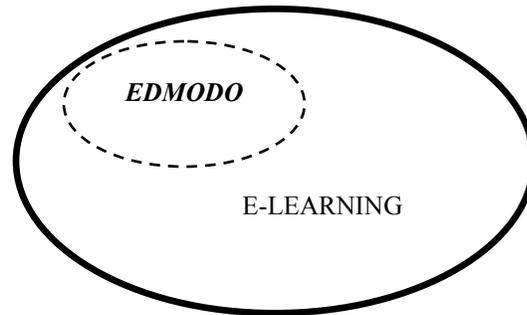

*Figure 1.*The Interrelation between E-learning and Edmodo

What are the claimed advantages of Edmodo as an e-learning tool? In conventional classroom settings, a teacher is often the center of activities. On Edmodo, the attention is shifted to students as teachers take the role of a facilitator (Schiller, 2011). Additionally, teaching tends to be more interactive, immediate and relevant to today's learners as they are more adept with technology (Redman & Trapani, 2012). Edmodo, like many other solutions competing in market share in the LMS space, also gives educators an online room to interact with students in a typical social learning fashion (Schiller, 2011). Besides shifting the method of teaching in classrooms, Edmodo inverts passive learning into allowing students to undertake discovery learning independently (Wallace, 2013). The tool is perceived as a formal learning platform offering interactivity, interaction with peers, sharing of information and collaboration on group projects (Lu & Churchill, 2013).

Lu and Churchill (2013) further comment that Edmodo can be used by non-technology savvy teachers because it is easy to post links and files into a library for sharing, track learning progress, create subgroups for different classes, set deadlines for assignments, create quizzes and others. In addition, Google Documents can also be integrated into Edmodo conveniently. In terms of connectivity, Kavcic, Pesek, Bohak and Marolt (2013) and Dobler (2012) postulate that Edmodo assists in connecting educators to learning materials in an immediate, comprehensive and collaborative manner. Edmodo offers the wider teachers community interconnectedness and involvement with creating authentic projects for students (Redman & Trapani, 2012). Exchanging lessons can be done effortlessly while retaining a private and safe environment, while at the same time additional tools can also be discovered easily on Edmodo's new application store (Tomassini, 2013).

By and large, stakeholders in education are searching for the best platform which is compatible with today's learners. Rightly so, in this globalized era, educators are counseled to work with emerging technologies because students' *"..engagement with learning is likely to mean engagement with technology"* (Hung &Khine, 2006). This notion seems to be relevant for the masses especially in any developing countries that hope to move forward into becoming a modern nation. As illuminated earlier, Edmodo has been examined by researchers on its advantages and positive impacts on teaching and learning outcomes. Nevertheless, in my knowledge, studies thus far have neither scrutinized Edmodo nor give any voice to future teachers on the practicality of implementing the tool at school. Every instrument designed for the use of educational purposes is worthy to be examined and analyzed so that we may learn from its weaknesses and strengths.

RESEARCH OBJECTIVES

Prospects regarding e-learning through Edmodo remain a debatable question. I would like to quote Ravenscroft (2001) who aptly asserts that *"we cannot truly transform educational practice for the better through implementation of new technologies unless we examine the roles that computers can play in stimulating, supporting, favouring innovative learning interactions that are linked to conceptual development and improvements in understanding"*. The idea connotes technology ought to be adapted and adopted with critical cautions and preparations, despite its positive claims and enthusiasm (Mokhtar, 2016). Due to the paucity of studies pertaining to the drawbacks of Edmodo which may be directly or indirectly caused by it or else other factors, this paper aims to present its limitations and possible ways of overcoming those limitations.

Objectives of the study as follows:

1. To recognize the possible limitations of Edmodo as an e-learning tool in education
2. To propose feasible solutions in overcoming the said limitations.

METHOD

The research emerges from the need of exploring views and concerns regarding conventional teaching which consequently triggered an interest in exploring an intervention scheme for teaching and learning. The article focuses on perceptions of future teachers pertaining to conventional teaching and potentials ofimplementing Edmodo in a classroom. The study adopts a constructivist theoretical framework as Crotty (1998) states, meaning is not discovered but constructed; people derive meanings differently despite being exposed to the same phenomenon. This affords participants an opportunity to construct meaning from their own experiences while engaged with learning content on Edmodo. In this sense, they are encouraged to freely express perceptions without any prior expectations orpredetermined views. Meanwhile, hermeneutics (Crotty, 1998) is participative and cannot be produced bythe researcher. Hermeneutics as one of the theoretical frameworks permits participants to project their ownthoughts on Edmodo through their work, comments and encounters on the platform which later aregathered for analysis. Symbolic interactionism on the other hand focuses on interpretations of environmentsthrough actions (Crotty, 1998); which allows me to record the interpretations on the subject matterthrough which the participants construct their actions (i.e., body language, facial expressions and gestures).All of these theoretical frameworks are suitable for the purpose of this study in disclosing meanings andperceptions of participants via interviews, projection of thoughts on Edmodo and interpretations by meansof actions.

Participants and Instrument

Purposive sampling is employed in order to yield the best understanding of this study (Fraenkel&Wallen, 2003). Therefore, four 3rd Year TESL students namely; Rose, Fatin, Farah and Emme from the Facultyof Education, University of Malaya are selected as participants. The participants are chosen due to their position of being students and pre-service teachers who are equipped with teaching methodologies. Therefore, they are able to opine and relate while having an advantage of seeing the tool's use from two different perspectives. The research draws heavily on qualitativestudy that focuses on examining perceptions of participants. Researchers are advised to conduct interviews to gather qualitative data because perceptionscollected in quantitative representations do not clearly ascertain students' reasons for their beliefs (Gamble, Aliponga, Koshiyama, Wilkins, Yoshida and Ando, 2013). Meanwhile, the instruments are: researcher (Yin, 2011), interview protocols (Jacob & Ferguson, 2012) which serve as a mental framework and consist of open questions, a concept map that helps to reduce cognitive load when participants reinstate their opinion on the subject matter (Plotnick, 1997) and photographs (Dzakiria, 2008) which are meant to illustrate participants' experiences on the website.

Data analysis

This study looks into the subject matter from an interpretive and naturalistic approach in order to explorethe participants' views. I employ the use of inductive logic that will allow issues,categories and themes to emerge from the experiences of participants in this study (Dzakiria, 2004). It iscrucial to approach the phenomenon

in a natural setting, without any presumptions to ensure neutrality inreporting the data. In order to comprehend participants' views better, qualitative research provides theappropriate approach to tap into the subject matter. Further, Creswell (1998) comments on qualitative studyas an inquiry process of understanding that explores an area of study.The study executed open coding to identify the emerging themes, axial coding which focused onfinding the themes' consistency and selective coding whereby core categories are selected in order to explainthe Edmodo phenomenon (Strauss & Corbin, 1990). Open coding is a process involving naming andcategorizing a phenomenon via intense examination of the data (Strauss & Corbin, 1990, p. 62). As this studyincludes photographs, I skimmed through the data and roughly categorized it into possible main points thatwould connect it to the interviews' central ideas. The next advancement in data classification is known asaxial coding, where I attempted to make all the categories fit together nicely. According to the highlightedmain concepts found during open coding, I triangulated the data to confirm the interrelationships andconsistency. This process is similar to open coding but with more details and attempts to narrow down thecategories, sub-categories and their properties (Strauss & Corbin, 1990, p. 97). Selective coding is an actionof choosing core categories that would represent the related smaller categories and sub-categories. Thesecore categories in which each has its own smaller elements and central ideas have the ability to answer allthe research questions and accomplish the objectives of this study (Strauss & Corbin, 1990).Throughout the process of perusing the data and findings, I adopted interpretive method (Walsham,1993) that allows me to explore possible hidden meanings while revealing multiple realities of the participants involved.Interpretive perspective relies on the notion that qualitative research should reveal multiple realities of thepeople involved, as opposed to capturing the objective reality. This is because objective reality can never becaptured (Denzin, 2010). In order to establish stronger validity and reliability of the study, I cross checked and received confirmation on theemergent themes with the participants by inquiring if my analyses and interpretations aptly reflect their perceivedviews on the subject matter.

RESULTS

One size does not fit all!

Albeit the encouraging claims found in previous studies pertaining to the implementation of Edmodo for educational purposes, there is a pressing need to study Edmodo's potential drawbacks in order to obtain a balanced view. Although the platform offers various advantages that can be most beneficial to education, one application cannot necessarily fulfill the requirements of all possible educational providers. Consequently, I implored views on the practicality of its implementation and limitations of the tool which can be produced either directly or indirectly by Edmodo. I believe in the importance of providing equal insights on the limitations of using Edmodo for teaching and learning

As posited by scholars, different people have diverse preferences towards their learning style (Rodriguez, Ooms& Yan, 2005; Syed Mohamad, 2004). For example, a number of students are audio-visual learners who learn best when presented with visual or audio materials. On the contrary, some students learn via writing and reading, meanwhile some others learn best using technological tools alone or merely audio files. I inquired the participants on their personal learning strategy and general opinions on how Edmodo affects students with various interests and preferences.

> *"A visual learner would appreciate Edmodo because of the interaction but auditory learners prefer to learn by listening, so face-to-face interaction would be better for them. Personally, I prefer face to face interaction with extended discussions online."*

> *Emme/EDMODO 1/Interview*

> *"The only limitation is less or no face-to-face interaction"*

> *Emme/EDMODO 2/Interview*

The first theme emerged regarding Edmodo's limitations is on the subject of learning preferences of students. As suggested by Emme, visual learners may benefit the most from the use of Edmodo while students with

other learning style preferences might prefer conventional settings in classrooms where they can maintain face-to-face contact and do hands-on activities. Even though e-learning can be hands-on too as students explore learning materials independently, however it is a type of virtual hands-on experience. Besides that, on personal level, Emme confessed she prefers face-to-face interaction in classroom, but favors getting supplementary assessments online. Rose, another participant comments on the similar subject matter;

> *"...discussions whether online or face to face are always beneficial, but having discussions face to face is more advantageous than online especially when you can see their facial expressions and get quick responses"*

> *Rose/EDMODO 1/Interview*

Both Emme and Rose have shed light on the concerns of catering for students' individual needs. I would be of the same opinion that learners do acquire knowledge at different pace and with diverse learning styles; therefore it is a matter of judgment and personal perspectives on which forms of teaching approach will work best for them. Farah too shares the same view with Emme as she is slanted towards the need to have face-to-face interaction during learning in classroom.

> *"I prefer to see the person who is talking to me and also look at the person whom I'm talking to. I need to see my teacher's face when she/he is conducting lessons, but if some people are fine with no face-to-face interaction in their learning experiences, I think they will not have a problem with this tool at all as it depends on the person's learning preference."*

> *Farah/EDMODO 1/Interview*

Besides an external factor involving learners' preference which affects the implementation of Edmodo, the second indirect factor affecting Edmodo is on the availability of facilities when using the tool for teaching and learning. In a case where accessibility to hardware and bandwidth are not readily available, students will experience difficulties in accessing e-activities (Ramayah, Ahmad & Lo, 2010). The common misconception about Generation Y and Z is that they are well-equipped with at least a smart phone, a computer at home or a personal laptop (Manohan, 2014). However, that might be the case for students living in the urban areas with families coming from high income or middle higher income. The opposite scenario for students from rural areas is that they might not be privileged enough to own such devices (Soltan, 2016). Meanwhile, in the image seen below, Emme summarizes some of the limitations that may emerge when Edmodo is introduced in teaching and learning.

> *"The only thing I don't like is the inconvenience some students may have; lack of facilities and internet connection."*

> *Emme/EDMODO 2/Interview*

Disadvantages/EMME/Concept Map

Rose commented on the theme stating she does not wish to burden the students with online resources because she wants Edmodo to make access easier and not more difficult. Meanwhile, Fatin remarked if she gets to teach in a rural area, she will diagnose the situations prior to implementing Edmodo. Further, Farah pointed out that proper facilities would be the foremost concern, because she is convinced that students are very proficient in terms of capability in handling a technological device and navigating a website.

> *"....what if the students do not have internet access at home? I do know that internet is a common privilege, but there are students who don't get the opportunity to have the access at home. I'm afraid that I might burden them as they'll have to go to a friend's house or cyber café just to get internet connection. I want this portal to be helpful and assisting, instead of burdening."*

> *Rose/EDMODO 2/Interview*

> *"I'm afraid that not all students can afford to do the assignments online, some maybe don't have internet connection at home, come from poor family so they don't have the facilities (laptops and internet) and some maybe live in the rural area. If I'm a teacher at a school in urban area, that might not be the major problem, but if I were to be teaching in a rural area, it will be a problem for me."*

> *Fatin/EDMODO 2/Interview*

> *"I'll be concerned about the access; they might not have internet or laptop. Besides that, I don't think there are any other problems because students these days cannot be incapable of handling a technology device or computer."*

> *Farah/EDMODO 2/Interview*

On this particular matter, all of the participants reached consensus that the most noteworthy limitation of executing Edmodo is the need to acquire a technological device while simultaneously be connected to the internet in order to allow teaching and learning come to pass. This form of limitation is contributed by a learning environment as this condition will not pose a threat if only access to hardware and bandwidth are provided at school and home. This leading concern of theirs is not new as previous studies too pointed out similar anxieties whenever learning using an e-learning tool is concerned (Ramayah et. al., 2010; Rahamat, Shah, Din &Abd. Aziz, 2011).

The next limitation of using Edmodo is the possibility of being distracted. As Edmodo is a website that requires students to conduct their learning online, some of the participants share their worries that students might get diverted from the real focus.

> *"Edmodo is similar to a social site so there's a chance that students might misuse it for other purposes which are non-educational, and in the end they might be diverted from the main goal; which is learning."*

> *Fatin/EDMODO 2/Interview*

> *"Students might get distracted while doing work on Edmodo, they might simultaneously browse for videos and do other unnecessary things on social media."*

> *Emme/EDMODO 2/Interview*

Indeed distraction may pose a threat to the teaching and learning process, however distraction is an apprehensive issue that persists in almost all tools and methods pertaining to e-learning and traditional classroom situations as well. Briefly, there is no perfect tool or method for educational purposes as

everything has its own flaws and challenges to overcome. The plethora of tools that are available to the educational sector all have different features – some more than others. Not all cater equally well for the educational institutions' requirements. Like other LMS, Edmodo also has its limitations, mainly with reference to the lack of face-to-face interaction, the accessibility to hardware and bandwidth and the possibility of distractions that might disrupt learners' online learning experience. These forms of limitations which beget from environment and external factors as noted by the participants undoubtedly do present drawbacks toward the implementation of Edmodo even though these limitations in its essence are not the shortcomings of Edmodo itself.

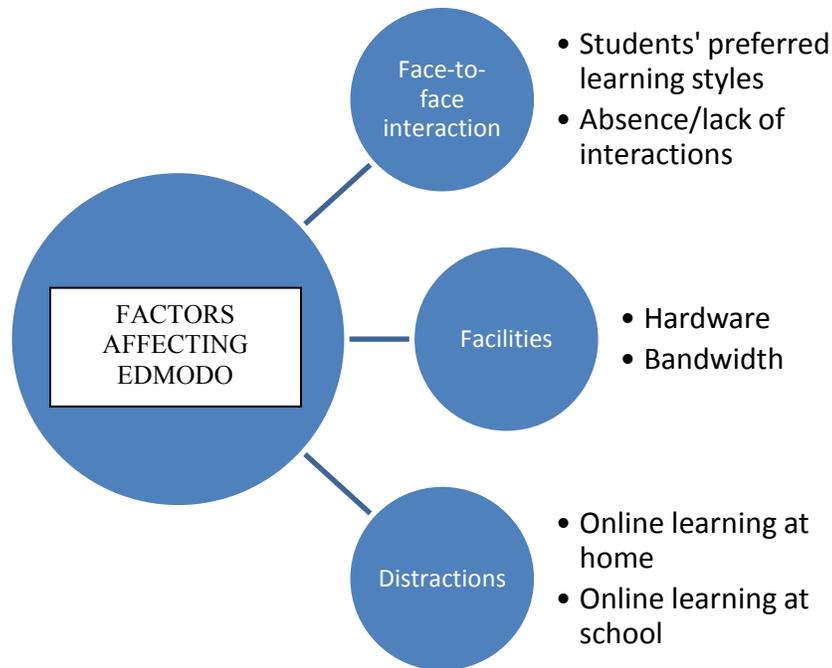**Overcoming its possible limitations**

*Figure 2.*Concerns for Limitations

The above figure summarizes Edmodo's restrictions set forth by the participants in this study. Besides examining the drawbacks of this e-learning tool, another prominent motive is to propose possible methods in overcoming the limitations it presents to warrant optimum teaching learning experience. As elucidated in this paper, the possible limitations of Edmodo are lack of face to face interaction, availability of facilities and distraction. Educators face said issues regardless of which tool they choose to implement in teaching methodology, therefore even though these limitations are not directly the shortcomings of Edmodo, it is wise to make adjustments and suggest solutions to diminish concerns regarding the limitations.

Future teachers in this study proposed lack of face-to-face contact may be one of the main limitations of Edmodo. I acceded on the importance of direct conversations that ultimately produces rich interactions with proper social skills. This point of view resonates with the findings by Rodriguez et. al. (2005) who postulated face-to-face interaction does play a significant role in learning. The participants in this study, like educators and students are concerned about physical interaction. This is particularly true for instructors and students who are not proficient in managing or participating in online environments (Syed Mohamad, Talib&Faridah, 2007) because incompetent users of technology may place e-learning intended aims in jeopardy. In retrospect of these circumstances, Edmodo may continue to fit into the picture when face-to-face interaction does not become obsolete, by means of blended learning. Conventional approach where physical meetings become a main part of an instruction maintains to be equally essential but some of the methods in its

approach convert to be more technology friendly, for example assessments and tasks can be assigned on Edmodo instead of giving home-written assignments to students. Besides that, video calls can be implemented as an alternative to compensate for the physical absence in a virtual classroom.

Additionally, students are encouraged to know and explore more about their ideal learning approach to stand a higher chance at succeeding in academics (Syed Mohamad, 2004). Largely, learners have diverse approaches to study that lead to different approaches and adoptions to learning (Ahmad, Mohamad&Saat, 2004); hence it resulted in the booming industry of e-learning and its tools because it is deemed to be an excellent route to cater for students' perusal. Nevertheless, favored learning style is merely a matter of judgments and a preference of one's approach to education. One of the participants; Fatin maintained her stance in supporting education through Edmodo because it is compatible with her learning style, *"I think Edmodo is an alternative platform for students to discuss about their group's task or anything at all, wherever they are."* and *"Edmodo enhances learning and takes education to a whole new level. I find it flexible because you can do it anytime and anywhere. This site encourages me to do assessments and tasks according to my time."* For that reason, in the case of students' preferred learning styles, the decision to choose whether they will be able to adapt well to digital designs learning approach rests entirely at the hands of students. Accordingly, it will be a motivational factor for teachers to implement Edmodo if students find the tool compatible and beneficial.

The theme on facilities (hardware and bandwidth) is posited to be an indirect limitation of implementing Edmodo. Whenever facilities are not properly available, it presents a threat as students will feel discouraged to use e-activities (Ramayah et. al., 2010). Instead of growing into an assisting tool, the lack of crucially needed facilities will only cause hindrances in teaching-learning process. In order for Edmodo to be executed smoothly, students need to be or provided to be technologically, economically and competently ready (Rahamat et. al., 2011). However, most university students should be able to overcome this barrier as universities' libraries are well-equipped with computers and internet. Not only a public university has one main and numerous mini libraries on campus, there are cyber cafes in and outside premise providing services at students' disposal. Additionally, university students are normally equipped with personal computers and Wifi is also provided anywhere within the university's compound. On the other hand, school students may not have personal laptop or a computer at home, but even then, they or at least a family member might own a smartphone which can be used to access Edmodo. Even though after all things considered, if restrictions mentioned still persist, Edmodo will be difficult to be implemented for school students.

As illuminated earlier, the possibility for distraction can occur if learning takes place online which consequently may turn into a limitation of executing Edmodo for educational purposes. Some of the participants commented; as Edmodo is a website that requires students to conduct their learning online, students might get diverted from the real focus. This concern can only be overcome by students' sheer will and interest to learn as well as their devotion to paying attention in his/her learning. Above and beyond distraction online, we must embrace the fact that distractions are inevitable in daily routines of students; for example if school students are assigned with hand-written homework at home, they might be distracted to watch television or play video games instead. In this regard, parents can play a vital role by restricting websites they do not wish their children to browse; this approach has been used by public universities and educational institutions for many years now. Furthermore, students need to be taught on how to stay focus when they are learning and shift their focus to entertainment and leisure time online only after they are done with tasks assigned on Edmodo. Via these ways, distractions when learning online can be minimized.

CONCLUSION

Clearly, digital designs and its approaches have its restrictions despite the enthusiasm revolving around new inventions and innovations. E-learning via Edmodo is proven as above to have its limitations as well whereby if those limitations persist, it is difficult for Edmodo to be implemented in educational institutions. Therefore, educators who wish to apply Edmodo in his/her teaching strategy are advised to conduct a quick survey on students' technological competency, availability of facilities and learners' preferred learning style. I adamantly believe if limitations discussed above continue to be major issues in schools or universities; the

implementation of Edmodo cannot be done efficiently. Until these limitations are overcome, only then Edmodo can be executed effortlessly and effectively by educators.

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