A CONCEPTUAL ANALYSIS IN ENHANCING STUDENT'S LEARNING SKILLS VIA BLENDED LEARNING

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ABSTRACT

This paper presents a conceptual analysis on enhancing students learning skills in blended learning. Basically, learning skills are habits that are used throughout life to complete tasks and communicate effectively. In learning context, it is the learners' cognitive style in processing and learning new information either visual, auditory or kinaesthetic whereas blended learning combines self-study with valuable face-to-face interaction with a teacher. The method adopted in extracting the related concepts is done via conceptual analysis. A conceptual analysis is a technique that treats concepts classes of objects, events, properties, or relationships. The technique involves precisely defining the meaning of a given concept by identifying and specifying within the scope of study. The findings from this conceptual analysis show that the right pedagogical adopted by the teacher is directly beneficial to enhance learning skills as well as autonomous learning and learner motivation.

Key words: *Conceptual Analysis, Learning Skills, Blended Learning, Classroom Practices*

1.0 Introduction

Blended learning has already become a vital part of education practice in many disciplines and different fields of study. Although the term is not a new concept, the exploration of the changing in education systems and paradigms may contribute to the many aspects involved in the real definition of Blended Learning.

This article provides a conceptual analysis on two terminologies which are "Blended Learning" (BL) and "Learning Skills" (LS). It then looks into the pedagogical aspect that binds these terms in enhancing students' learning skills. It concludes by making associations of the two terminologies in regard to pedagogical considerations. This research is motivated by the fact that "…blended learning requires educators to completely re-think the classroom planning, implementation and management (Sahare & Thampi, 2010).

Theoretical Framework

A combination of team teaching and blended learning brings the past and present together in innovative and flexible ways, challenging pedagogical approaches and thinking. The background and context for both team teaching and blended learning will be provided to inform the understanding of the educational framework and constructivist paradigm in which this sits (Crawford, R., & Jenkins, L. E., 2018).

This more complex perspective of blended learning suggests that the role of the teacher and the student should be reconsidered (Garrison & Kanuka, 2004). This could include moving the emphasis from the teacher to the student and focusing on the experience rather than the content. Further, despite the inclusion of the technological component, the focus should be on pedagogy not technology (Oliver & Trigwell, 2005). Deghaidy, E. H., & Nouby, A. (2008) emphasise that to implement blended learning well, teachers need appropriate pedagogic skills. Therefore, time, effort and appropriate preparation are required to ensure that the pedagogical imperative is being achieved as this underpins the process and the assessment of outcomes and success.

The re-shaping of the curriculum that blended learning encompasses should support students' capacity for independent learning and the students should be at the centre of the curriculum planning (Chigeza & Halbert, 2014). Educators should aim to develop higher order skills such as critical and creative thinking, organisation and motivation to enhance thinking processes, learning opportunities and knowledge application. Educators need to be willing to experiment and change their pedagogy accordingly to ensure a successful and positive implementation of blended learning which is driven by pedagogy rather than technology (Crawford, 2016).

Constructivist theory is based on the idea that people construct their own knowledge through their personal experience (Duffy & Cunningham, 1996). It is about knowledge and learning; it describes both what knowing is and how one constructs knowledge (Fosnot, 1996). The effectiveness of constructivism is that it prepares students for problem solving in a complex environment and caters for the contemporary competency skills and knowledge that graduating teachers require. Constructivism provides opportunities for learners to be active in building and creating knowledge, individually and socially, based on their experiences and interpretations (Anderson, J. R., Greeno, J. G., Reder, L. M., & Simon, H. A., 2000). As a result, the possibility of different interpretation of each student will exist. There will be differences between the taught knowledge and the learned knowledge because each student may interpret the taught knowledge based on his or her own individual socially mediated constructs.

This constructivist teaching and learning relies upon the lecturers explicating their pedagogy, curriculum design and assessment development in tangible and visible ways. The role of the teacher in this context is to develop an understanding of how lecturers interpret the knowledge and skills being taught. The lecturers need to guide and facilitate in the refinement of students' understanding and interpretation through careful scaffolding and sequencing. The team teaching, and blended learning approach provides a platform for reflective practice that connecting the pre-service teachers' prior knowledge and practical experience to construct new knowledge and contemporary competency skills. In doing so, we enable a balance between the responsibilities for educators to encourage students to construct their own knowledge while also ensuring that disciplinary knowledge and course content is addressed (Stemhagen, Reich, & Muth, 2013)

Blended Learning

Blended learning is problematic to define as documented understandings and descriptions differ greatly (Mirriahi & Alonzo, 2015). For some it is identified as a mix of traditional on-site instruction with innovative learning technologies (Thorne, 2003) or a course with online and on-campus components (Linder, 2015).

Blended learning represents an educational environment for much of the world where computers and the Internet are readily available. It combines self-study with valuable face-to-face interaction with a teacher. Graham (2006) defined "blended learning systems' as learning systems that "combine face-to-face instruction with computer mediated instruction." Currently, the use of the term blended learning involves combining Internet and digital media with established classroom forms that require the physical co-presence of teacher and students. (Friesen, 2012).

There are some challengers faced by BL. Poon(2013) pointed out that the aim of the two delivery methods is to complement each other and how much is the blend between the two delivery methods. Boelens, Van Laer, De Wever, and Elen (2015) define blended learning as "learning that happens in an instructional context which is characterized by a deliberate combination of online and classroom-based interventions to instigate and support learning". The online element should not solely be an addition to classroom-based teaching; rather, blended learning requires the effective integration of both virtual and face-to-face methods (Garrison & Kanuka, 2004). For example, a university lecturer placing some selected course materials, such as a course handbook, on a virtual learning environment (VLE) would not constitute a sufficient 'blend'.

Impact of Blended Learning on Students Learning

Studies by López-pérez, pérez-López, and Rodríguez-Ariza (2011 cited in Bowyer and Chambers, 2017) and Boyle, Bradley, Chalk, Jones, and Pickard (2003 cited in Bowyer and Chambers, 2017) found that the introduction of blended learning in higher education courses improved retention and correlated with improvements in students' achievement. Garrison and Kanuka (2004) argue that blended learning is effective because it questions the traditional lecture-based teaching model, allowing classroom time to focus on more active and meaningful activities. Thus, this has opened to many researches on blended learning impact on learners. This has been supported by Delialioğlu (2012 cited in Bowyer and Chambers, 2017), who found that problem-based, rather than lecture-based, blended learning had higher levels of student engagement.

Aspden and Helm (2004) found that blended learning has a positive impact, especially it helped students who lived far away from campus and able to use their time at university more effectively as they were able to engage with materials at home prior to attending class. Additionally, they found that students who were struggling with particular topics in class were able to participate and engage with online materials and thus grow in confidence

Learning Skills

Learning skills (LS) are study skills and thinking skills that are integral part of student's learning. Learning Skills is term that describes the task involved in learning, including time management, note taking, problem solving, decision making , organising, reading effectively, study skills and writing.

Learning Skills is a set of skills used in the process of acquiring new knowledge, typically in a classroom setting N, Pam MS (2017). The skills and habits are; responsibility, organization, independent work, collaboration, initiative and self-regulation

Jagranjosh 2020) enlisted six strategies to enhance students learning. It includes (a) underline key points (b) prepare own study notes (c) make a Study plan and stay organised (d) collaborate with study partners (e) take regular study Breaks (f) recall learning (g) give a try to new technologies. The aim of developing learning skills or capabilities is therefore to improve subsequent learning, either by developing more effective study skills and habits, or by improving specific skills such as aspects of literacy, for example, comprehension or inference which will be the basis or the prerequisite for further learning.

2.0 Methodology

This paper adopts a conceptual analysis (CA) method. CA is a research tool used to determine the presence of certain words, themes, or concepts within some given qualitative data. CA is a technique for making inferences by systematically and objectively identifying special characteristics of messages." (Holsti, 1968). Conceptual analysis is analysis of concepts, terms, variables, constructs, definitions, assertions, hypotheses, and theories. It involves examining these for clarity and coherence, critically scrutinising their logical relations, and identifying assumptions and implications. Content analysis can be used to make qualitative inferences by analyzing the meaning and semantic relationship of words and concepts.

Sometimes called theoretical research, and closely related to critical thinking, conceptual analysis is not merely a matter of language or language use (Bennett & Hacker, 2003). A summative content analysis involves counting and comparisons, usually of keywords or content, followed by the interpretation of the underlying context. In this research two concepts : "Blended Learning" and "Learning Skills" are the two units of analysis.

The data in this review is obtained from secondary data. Secondary data is the **data** that has already been collected through **primary sources** and made readily available for researchers to use for their own research. Hakim (1982) stated that secondary data begins with an investigation to learn what is already known and what remains to be learned about a topic through reviewing secondary sources and investigations others have previously conducted in the specified area of interest. The aim is to find associations and patterns in how concepts are communicated.

The justification for adopting CA as the present research methodology is due to the advantages it offers. The primary reason for using **CA** is to understand the meaning of an idea or concept. Besides that, other advantages include (a) Directly examines communication using text (b) Allows for both qualitative and quantitative analysis (c) Allows a closeness to data (d) Content analysis is a readily-understood and an inexpensive research method

A total of twenty five published journal were selected to review the concepts of BL whilst six article journals were selected to review the concept of LS.

3.0 Findings and Discussion

The aim of this research is to conduct a conceptual analysis of two concepts which are "Blended Learning" and "Learning Skills". Below are the findings that had been gathered from published journal articles. Table 1 depicts the definition of the concept on "Blended Learning" and Table 2 shows the definition of the concept on "Learning Skills".

Table 1: Concepts of Blended Learning

Year	Author	Definition
2000	Nunan, T., George, R., & McCausland, H.	BL contained within the mix is a paradigm change in which the emphasis shifts from teaching to learning
2001	Smith	According to Smith (2001), blended learning is "A method of educating at a distance that uses technology (high-tech, such as television and the Internet or low-tech, such as voice mail or conference calls) combined with traditional (or, stand-up) education or training.
2002	Driscoll, M.	argued that blended learning has taken on several means, such as combining modes of web-based technology, pedagogical approaches, instructional technologies and actual job tasks. However, she argued that the point of blended learning is that it means different things to different people which illustrate the untapped potential of blended learning.
2003	Bhonk & Graham	define blended learning as "the combination of instruction from two historically separated models of teaching and learning traditional learning systems and distributed learning systems which emphasizes the central role of computer-based technologies
2005	Khan	A blended learning program is considered effective if it has a mix of traditional instructor-led learning, synchronous collaborative learning, asynchronous self- paced study, and practical, experiential learning. A blended learning program is considered effective if it has a mix of traditional instructor-led learning, synchronous collaborative learning, asynchronous self- paced study, and practical, experiential learning
2006	Bonk & Graham	states "Blended learning systems combine face-to-face instruction with computer-mediated instruction.
2006	Horton	e- learning is "the use of information and computer technologies to create learning experiences"

2006	Welker & Berardino	defined blended learning as a course that comprises any combined use of electronic learning tools that supplement, but do not replace face to face learning
2006	Graham	BL as learning systems that "combine face-to-face instruction with computer mediated instruction. BL as the convergence of face-to-face settings, which are characterized by synchronous and human interaction, with Information and Communication Technology (ICT) based settings, which are asynchronous, text based, and involve humans operating independently.
2006	Horton	e- learning is "the use of information and computer technologies to create learning experiences"
2006	Welker & Berardino	defined blended learning as a course that comprises any combined use of electronic learning tools that supplement, but do not replace face to face learning
2006	Graham	as learning systems that "combine face-to-face instruction with computer mediated instruction. as the convergence of face-to-face settings, which are characterized by synchronous and human interaction, with Information and Communication Technology (ICT) based settings, which are asynchronous, text based, and involve humans operating independently.
2006	Dziuban, Hartman, Juge, Moskal, & Sorg,	blended learning is itself a blend. It is a mix of pedagogical approaches that combines the effectiveness and the socialization opportunities of the classroom with the technological enhancements of online learning
2006	Goodyear et.al	Blending the face-to-face learning with active learning assignments and online learning activities facilitates interactions between (a) learner to learner, (b) learner to instructor, and (c) learner to community-based partners. It also promotes lifelong learning through the developed skill of "discovering" information utilizing online activities, while also increasing interactive skills with a variety of others and enhancing engagement.
2007	Wright	Combination and integration of Information Communica Technology in learning activity
2007	Sloman Garrison & Vaughan	If the term blended learning is to have longevity ... we must extend its use beyond technology. It must be as

		much about varying learning methodology as it is about training delivery. We must understand more about what motivates learners, what support they need and how these supportive interventions can take place in practice. Only with this understanding we can get the "blend" right. They emphasize "The basic principle of blended learning is that face-to-face oral communication and online written communication are optimally integrated such that the strengths of each are blended into a unique learning experience congruent with the context and intended educational purpose."
2008	Watson	Blended learning is defined in this thesis as instruction that delivers between 30 percent and 79 percent of its content online. The remaining content is provided through face-to-face instruction or other non-web-based methods, such as paper textbooks
2008	Garrison and Vaughan	define blended learning as "the thoughtful fusion of face-to-face and online learning experiences" and emphasize the need for reflection on traditional approaches and for redesigning learning and teaching in this new terrain.
2009	Ellis, Ginns, & Piggott	define it as "information and communication technologies used to support students to improve their learning"
2010	Bath & Bourke	emphasized that blended learning "is not just about using technology because it is available; blended learning is about finding better ways of supporting students in achieving the learning objectives and providing them with the best possible learning and teaching experiences, as well as supporting teachers in their role (including the management and administration of courses)."
2011	Yen & Lee	In order to enhance this shift, a blended learning course should also increase the interaction between the instructor and students, and also among students. It should furthermore enhance the mechanism for integrating formative and summative feedback in order to boost students' learning experiences.
2012	Friesien	learning involves combining Internet and digital media

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		with established classroom forms that require the physical co-presence of teacher and students
2012	Pankin et. al	Structured opportunities to learn, which use more than one learning or training method, inside or outside the classroom. This definition includes different learning or instructional methods (lecture, discussion, guided practice, reading, games, case study, simulation), different delivery methods (live classroom or computer mediated) and different scheduling (synchronous or asynchronous)
2015	Boelens, R., Van Laer, S., De Wever, B., & Elen, J.	define blended learning as "learning that happens in an instructional context which is characterized by a deliberate combination of online and classroom-based interventions to instigate and support learning"

Table 2: Concepts of Learning Skills

Concepts of Learning Skills		
Year	**Author**	**Definition**
2009	The Scottish Government, Edinburgh	identifies the skills for learning, life and work for Curriculum for Excellence and shows how they are embedded in the Experiences and Outcomes. The skills include literacy, numeracy and associated thinking skills; skills for health and wellbeing, including personal learning planning, career management skills, working with others, leadership and physical co-ordination and movement skills; and skills for enterprise and employability.
No year Indicated	https://www.indeed.com/career-advice/finding-a-job/learning-skills	Learning skills are habits that can be used throughout your life to complete projects and communicate effectively. They can continuously be developed and improved to help you accomplish daily tasks or achieve your career milestones. Examples of Learning Skills includes Organizational skills,

|		communication skills, critical thinking skills and creative skills
2007	Steve Higgins, Dr Viv Baumfield, Elaine Hall	The concept is therefore closely associated with learning to learn and the development of independent learning skills as well as the concept of transfer of learning across or between contexts. In terms of current policy initiatives, it has clear links with personalised learning and assessment for learning in the way that it focuses on the role of individual learners in improving their own performance. Learning skills is a very broad term used to describe the various skills needed to acquire new skills and knowledge, particularly in a formal learning setting, such as school or university. • Information and communication skills: often including aspects of literacy or literacies • Thinking and problem-solving skills: particular the development of critical thinking • Interpersonal and self-management skills
2007	Steve Higgins, Dr Viv Baumfield, Elaine Hall	The key thinking and learning skills are identified in the as follows: • Enquiry includes asking relevant questions, planning and testing conclusions. • Creative thinking includes suggesting hypotheses and imaginatively challenging ideas. • Information processing includes locating and classifying information. • Reasoning includes explaining opinions, actions and decisions, and using deduction. • Evaluation includes assessing evidence, judging against criteria and values.
2014	Boratzis & Kolb	Generic heuristics that enables mastery of specific domain. It has two components: a domain of application and a knowledge of transformation process.

By synthesising the findings on the "Blended Learning" concept enlisted in Table 1, it is found that the common composition that contained in Blended Learning is shown in Figure 1

Figure 1: Composition of Blended Learning
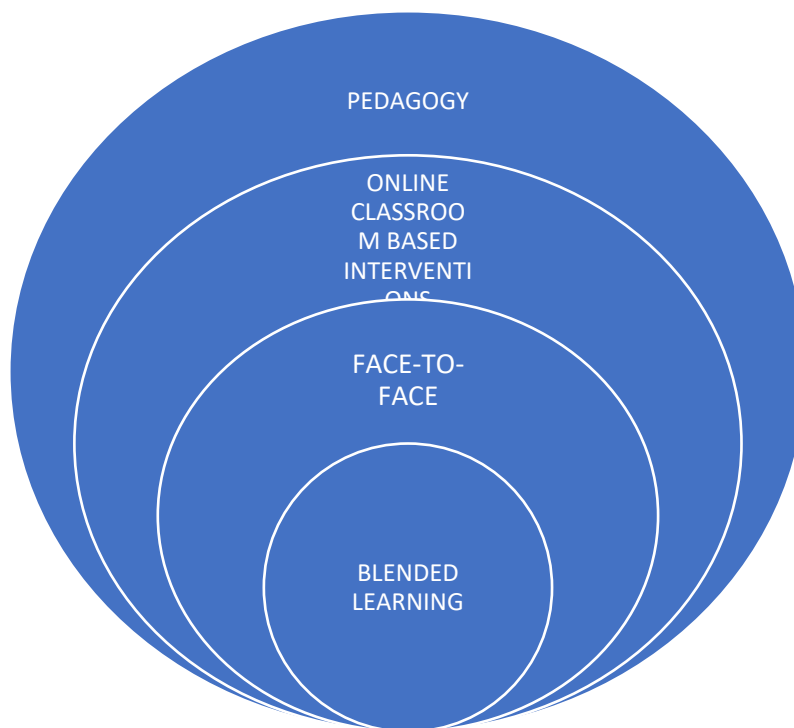
An element that binds the composition of the blended learning is the pedagogy that is the strategies of instructions. Figure 2 shows the strategies of instruction which encompass in brick and mortar /Classroom and Online/ Virtual Classroom.

Figure 2: Strategies of instruction which encompass in brick and mortar /Classroom and Online/ Virtual Classroom
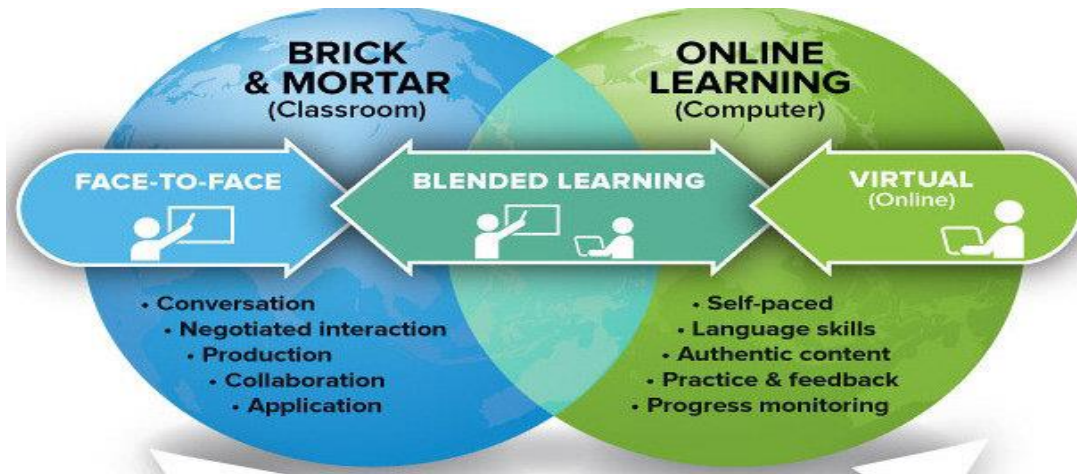
Students Reflections on Impact of Blended Learning on Learning Skills.

The excerpts from students' reflections on the impact of blended learning on learning skills are listed. These excerpts are secondary data retrieved from Pizzi (2014) which give 5 categories of BL impact on learning skills.

1. *Learning Skills: Organising, Gathering Information*

"I became more organized. I also learned how to gather information better in order to improve my reading and comprehension skills."

2. *Learning Skill : Self-Management Skills*

"Blended learning for me was a big struggle. I am not a fan of online learning, and never was. I learn best in face-to-face interaction and need to have a real classroom with a teacher and classmates around. As such, I struggled to succeed in this course, more than others."

3. *Learning Skill: Interpersonal skills*

"While I was sceptical about this experience in the beginning, after learning, and doing all of the assignments I found it to be very interesting and dynamic way of learning."

4. *Learning Skills: Information Literacy*

"My experience with blended learning has been a new way of receiving the information through more than one outlet. Blended learning for me is still a learning process and has taking [sic] up a lot of my time but I am beginning to enjoy having the class partially online

and in person."

5. *Learning Skill: Personalise learning Management*

"I find myself remembering the factual and discussion-based material much better and quicker."

It is believed BL plays a significant role to assist and optimize face-to-face teaching and learning process (Wang, et. al, 2019) by providing additional platforms for learning outside the classrooms where students can self-directedly access learning materials they need. More specific skills in practice, blended learning combines the benefits of collaborative, independent, and problem-based learning to reach the broadest range of learning types by involving providing physical and virtual environments and a wide variety of media (Lothridge, 2013).

Suana et.al (2017) confirmed that schoology-based blended learning media is able to improve students' conceptual understanding and problem-solving ability. They argued that the effectiveness of this approach is contributed by its ability to promote students' autonomy to access learning material. Added to this, Isti'anah (2017) reported that not only does blended learning promote students' conceptual understanding but also their interest and motivation to learn. In her study using Moodle, a kind of online learning management system (LMS), she found that students' interest and motivation in blended learning instruction leads positively to the development of students' cognitive behaviour. Meanwhile, Ekayati (2018), in her qualitative study of applying Edmodo for blended learning instruction, proposed that blended learning is widely making possible to escalate learning quality and intensity that may result positively to students' conceptual understanding.

Blended learning requires the effective integration of both virtual and face-to-face methods (Garrison & Kanuka, 2004). For example, a university lecturer placing some selected course materials, such as a course handbook, on a virtual learning environment (VLE) would not constitute a sufficient 'blend'. (Bowyer, J. & Chambers, L., 2017)

The students were given an online survey prior to the course, at midterm and after the course. Since the students had never taken a blended course, this survey was designed to determine student perceptions of both content and delivery method (blended learning). It was found the information to be very helpful for future course development as described in the student reflections.

Conclusion

Blended learning is increasingly being offered in higher education to enhance the accessibility and flexibility of education. The conceptual analysis (Ca= of the terms "Blended Learning" enlisted

the composition that binds elements in building up pedagogy in teaching and learning. Meanwhile the impact of learning skills has been identified and categorized.

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