

A study on the effective learning outcomes in Virtual Learning Environment: Andragogical
Perspective

Background of the study

Learning and development programs are often perceived as a way of encouraging business growth (Srivastava, 2020). At present, the learning & development industry has been impacted greatly due to COVID-19, all traditional classroom training has been halted or cancelled, due to the need to maintain social / safe distancing. The environment of a global health pandemic COVID-19 has disrupted global economy and the businesses are acting consistently to reduce the effect on business continuity by working remotely. Also, For K-12 schools, they have also been impacted as governments have forced the closure of schools globally. Thus, to mitigate the current educational challenge, some countries have adopted home-based learning approaches instead of halting the process of education. At this situation, virtual learning can be considered as the best choice. However, the online platform is not as convenient as classroom teaching, but it can be used very effective in educating students during these difficult times. Besides, it is more innovative and makes learning interesting and creative for students. Therefore, it is important that we support teachers and educators in their endeavours to educate students from home.

New technologies and systems can support in inspiring and providing ‘greater interactivity within the virtual learning environment’. It also offers many innovative and exciting potentials for educators and learners (Katie O’Connor, 2019). Technologies are largely deemed as tools which are cognitive and facilitates learners to elaborate on what is being thought and to participate in learning that is meaningful (Alves, Miranda, & Morais, 2017). While it is a well-known fact that the use of technology has extended support for effective instructional tool in conventional environments, it has also extended opportunities to provide education within virtual setting. As an outcome, over the period of the past twenty years, there has been an extensive

development in Information Communication Technology (ICT) and an increment in the use of internet the world over, which has augmented the demand for online education.

Theoretical background

The principles of andragogy, as the method and practice of teaching adult learners were used for this study as a theoretical basis. An important element of online learning is andragogy. Andragogy is termed as an adult learning theory (Bakar, 2013; Henschke, 2010)—Knowles (1980) referred to it as a “model of assumptions. There are five standard principals of andragogy present despite of how educational theorists describe andragogy. First is the self-management of learning, second is the learners empowerment which leads to the increase level of motivation, third is the learners life experiences in order to support their learning’s, fourth is the learners intention to take up the course and fifth is the realistic solutions for the problems occurred in the course Knowles (1980). In various instructional models, the strategies of Practice and feedback are widely used. Dick, Carey, and Carey, (2015) stated that feedback is frequently provided in the form of support following learner practice when it is built into instructional design strategies and it can also be noted as the knowledge of results once it follows the practice.

A study done by Rigden, (2017) aimed to examine how teachers employ cultural andragogy in the virtual classroom. This study results provided online instructors a clear understanding about culturally responsive andragogical strategies applied in a synchronous webcam enabled virtual learning environment. Further, McGrath (2009) reviewed the model of andragogy and the experience as the adult educator. This study particularly examined adult’s learners learning with one particular theory of adult learning. This study denoted that the students are often motivated in their education and they tend to take part in other courses due to the variation and innovation in the teaching style. Also, Ozuah (2016) in his study denoted the

adult educator must employ pedagogy first when the learner has no field knowledge and then the educator should change to andragogy when the learner attains knowledge in the specific field and turn into a sovereign learner. Clayton et al.,(2010) conducted a study to facilitate learning leaders and teachers for outlining approaches for motivation and also motivational designs for motivating the learners. Chan (2010) studied the application of andragogy in teaching and learning in different contexts using previously published studies. The study showed that an instructor can use andragogical principles to tailor the instruction to adult learners that leads to improved communication, trust between the student and instructor, and enhanced self-awareness in the students. Andragogy contributes to how adult students learn and helps educators engage the learners in the learning process and their environment.

A gap presented in the research is that there are several studies which focus on adapting to a virtual learning environment (Winston H. Maddox, 2015), Virtual, Interactive, Real-Time, Instructor-Led Classroom (Francescucci & Foster, 2013), Virtual Classroom as an Added Learning Platform in higher Learning Institutions (Ruhinda, 2013), Application of andragogy in teaching and learning andragogy (Chan, 2010) culturally responsive andragogical strategies (Rigden, 2017) etc, However, the use of technologies and andragogies for effective virtual instructor-led training (VILT) settings in adult learning, learning satisfaction and effective learning outcomes has not received much attention The purpose of the study is to address gaps that exist within current research on learning satisfaction within virtual environment. Specifically, this qualitative study explores learners' and trainers' perceptions and attitude towards virtual instructor-led training (VILT), to explore the advantages and challenges they face while coaching soft skills.

Statement of the Problem

In recent times, virtual learning environments have turned out to be rather ubiquitous in the workspace (Oproiu & Teodora, 2012). A learning environment which is virtual is a space of design information that is not limited to distance education and it facilitates several technologies to be leveraged and incorporated within a single system. It also offers social spaces that enable learners to acquire learning and cooperate with one another without any worry of the geographic location, It has been reported that VLEs have helped organizations to save several millions in expenses that are usually generated through travel expenses as in a VLE, the adult learner does not have to travel to take part in a training session to some far off location (Mueller & Strohmeier, 2010). VLEs also facilitate adult learners to participate in training without worrying unnecessarily about any physical boundaries (Hampel, 2014). (Saleeb & Georgios, 2010). Several leaders of learning have staked claims that virtual learning environments (VLEs) prove to be particularly beneficial to aid the adult learner to enhance their knowledge, performance as well as skills (Hampel, 2014). Though VLEs are frequently utilized in the work environment, there is still need for additional research (Saleeb & Georgios, 2010). This can be attributed to the fact that VLEs can be varied in their functionalities and capabilities. In addition, though much has been said about VLEs and how it is being increasingly adopted across the world for furthering adult learning. Though there are several advantages that can be derived from virtual learning environments but research in terms of effective learning outcomes and learning satisfaction from VLEs is scant or non-existent. The problem explored by this research focuses on how do learners and trainers perceive towards VILT sessions in improving soft skills learning experience.

Purpose of the study

The purpose of the study is to address several gaps that exist within current research on learning satisfaction within virtual environment. Specifically, this qualitative study explores learners' and trainers' perceptions and attitude towards virtual instructor-led training (VILT), to explore the advantages and challenges they face while coaching soft skills on a one-on-one basis. Besides, the study will also specifically explore the trainer's perceptions of the impact of new technologies and practices on the field. Using a qualitative design-based research, this study utilized interview data to understand their perceptions towards VILT. Besides, the study also explored the current adult learning theories and motivational strategies in designing soft skill programs while deploying in virtual environment. This will shed a light on a deeper view of the instructor's experiences and concerns in coaching online utilizing VILT. The study findings would lead to the development of strategies to create effective online courses thereby facilitate in knowledge and skill building of the adult learners.

Research Question

The study focused on two central research question and four sub questions.

Central Research Questions

How do learners and trainers perceive towards VILT sessions in improving soft skills learning experience; and to identify what are the technologies and andragogies that are most cost-effective and judged as most satisfactory by trainers.

Sub Questions

1. What technologies and andragogies are effective for virtual instructor-led training (VILT) settings in adult learning and coaching soft skills on a one-on-one basis?

2. What are the learning activities and characteristics that benefited learner in attaining soft skills while using VILT?
3. (or) How do learners perceive and describe their learning experiences with regards to the use of such tools for their learning & development of soft skills?
4. What are the most effective ways for a trainer to design soft skills program and deploy these virtual platforms for the purpose of training adults from an andragogical viewpoint?
5. How do trainers think emerging technologies might change current practice in the near future, specifically with reference to soft skills development?

Rationale, Relevance, and Significance

Learning techniques, the modalities pertaining to delivery of educational materials and the modalities of how teaching is delivered have been exposed to changes over the period. The facilitator for experimentation of non-conventional methods and mediums of teaching such as VLE might be based from the perspective of andragogy. This could comprise of an environment of learning which is amply challenging enough to further develop reflective learning and critical learning of the learner, the capability of the learner to integrate work and life and experiences at work within the course with the use of technology which is pertinent and timely to the objectives of the course and assignments. While VLE environment does provide ample scope and is much sought after today, the learning outcomes need to be effective in order to make an impact on the adult learners or the work that they are engaged in. Also, technologies and andragogies are effective for virtual instructor-led training (VILT) settings in adult learning. Therefore, keeping these factors in mind, the purpose of this study is to explore how do learners and trainers perceive towards VILT sessions in improving soft skills learning experience

Methodology

A Design-Based Research (DBR) is defined as a “efficient and flexible methodology which advances the educational practices by means of iterative analysis, design, development, and execution, collaborating among researchers and practitioners in real-world settings and leading to contextually-sensitive design principles and theories” Wang and Hannafin (2005). It is also defined as design research (Collins, Joseph, & Bielaczyc, 2004), design experiments (Brown, 1992), and educational design research (McKenney & Reeves, 2019). This type of research has generated growing interest among educational researchers in the past decade (Shattuck & Anderson, 2013). This study aims to explore the how do learners and trainers perceive towards VILT sessions in improving soft skills learning experience; and to identify what are the technologies and andragogies that are most cost-effective and judged as most satisfactory by trainers and thus this study will seek to adopt a Design-Based Research (DBR).

This study will be framed within a social constructionist epistemology. Epistemology indicates a way to understand and explain the process of how things are known to the individual. Epistemology is concerned with providing the philosophical grounding in case of making decisions based on the types of knowledge which can be possible and when it would be ensured by the individual that this process can be utilized under adequate and legitimate processes (Willig, 2019). The epistemological stances can be utilized under constructivism. It refers to the theory in education system and it helps to recognize knowledge and understanding of the learners depending on the experiences. Crotty, (Crotty, 1998) denotes that constructionist epistemology considers that people construct meaning together in relation to their engagement with their human world. This design based research focuses on exploring the adult learner’s motivations, beliefs and perceptions of learning in a Virtual Learning Environment for the

effective learning outcomes and also to explore the trainers perception towards VILT sessions in improving soft skills learning experience which is operated within a social constructionist epistemology. The researcher explored a problem and sought to understand the context and setting of the participants. The problem will be viewed through the worldview lens of social constructivism

Grounded theory design refers to the systematic and qualitative process utilised for generating the theory that explains the topic related to process, action or any interaction based on the substantive topic. Grounded theory is mostly applicable in an educational process depended event where action and interaction of data time is happened (Birks & Mills, 2015). This grounded theory can be mentioned as the general research approach which can guide individual for collecting data and restrict the process for data analysis. In grounded theory, the theoretical saturation can be obtained at the time of simultaneous collection and the analysis of various data sets. According to this theory, the data is collected by utilizing various sources, such as the interviews, records and the official documents. The grounded theory method refers to the inductive process within which they would process to build up the theory as it can be found from this data itself(Khan, 2014). Thus, grounded theory is widely used to support in building theories from the qualitative data analysis, and hence will be adopted in this study.

In this study, interviews will be conducted among the adult learners who attend Soft Skills / Leadership training class and Coaching conducted in the virtual learning environment by the study researcher. The sample size will be around 10 to 15 adult learners. The participants of the study will be selected using Purposeful sampling technique. Once the data is collected from the participants, the data will be analysed thematically by identifying patterns and themes. Furthermore, interview transcripts are analysed systematically to code words, concepts,

sentences and phrases and finally characterized into codes. In the present study, thematic analysis will be performed based on the following steps: first, a code will be introduced in either a short sentence or a word describing it in the form of a concept or a phrase, and it would be given descriptive titles to encode the elements. Following this, a textual data will be formed based on the similar patterns of responses identified from the sub themes and the themes of the study.

According to Brewis (2014) the researchers need to follow the ethical requirements in order to have equal participation of the respondents and also to protect the privacy and confidentiality of the respondents. The respondents in the research will be advised for voluntary participation without the need for any monetary compensation. The voluntary participation is significant for a research as it enhances the accuracy of the data collected. Further, prior consent form will be provided to the participants which confirms the respondents' willingness to participate in the research study voluntarily. In the present research, the professionalism will be maintained throughout and there will be no conflict of interest which will affect the data interpretation and the findings of the study. As per the ethical requirement, the study researcher will be unbiased during the interpretation of the facts in the present study.

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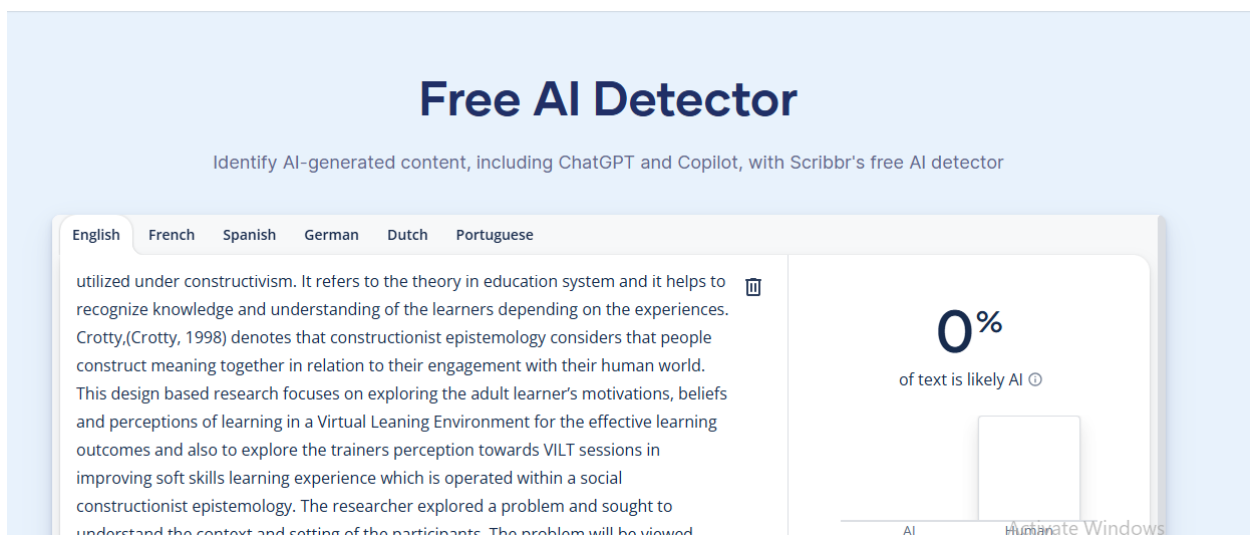
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Statement of the Problem
In recent times, virtual learning environments have turned out to be rather ubiquitous in the workspace (Oproiu & Teodora, 2012). A learning environment which is virtual is a space of design information that is not limited to distance education and it facilitates several technologies to be

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