



The Debate over Distance Learning in Educational Psychology and Computer-Based Training

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Abstract

According to this article distance learning is an educational field which makes use of educational techniques and technology to deliver teaching to students who are physically absent within a traditional-educational setting like a classroom. On the other hand, computer based training is termed as a self paced learning activity that is accessible through a computer. According to this article, distance learning and precisely computer based training has been the subject of debate among many researchers with two schools of thought existing regarding the debate. One side is strongly supporting the system and the other side also strongly criticizing the system. According to this article it was imperative that the analysis of the strengths and weaknesses of the two sides be analyzed in trying to come up with the side with the stronger argument. Since various ethical issues are also viewed in the research it was important that they be described.

Keywords: Distance Learning, Instructors, Computer Based Training, System

Introduction

Two schools of thought do exist regarding the debate on the efficacy of distance learning and precisely computer based training. As one regards distance learning particularly, computer based training can be lonely and an unfavourable system, unable to provide the correct learning experience to the trainee and the instructor. But, there exists another voice that supports the whole idea of distance learning. In their research papers the scholars in support of the system have illustrated the capability of the system when the technology (computer based training) is made use of to its maximum. They also view distance learning as a force which can unite individuals from different walks of life. According to Florida University's Dan Melzer, computer based training courses can be invigorating just like a normal course, if only the instructors and the trainees can competently make use of the technology available. The intent of this research is to look at the ongoing debate over distance learning and in particular computer based training, both its strengths and weaknesses and its effects on the future of learning.

Distance learning

This is an educational field which centers on education techniques and technology with an objective of delivering teaching, frequently on the basis of an individual to students or learners who are physically absent within a traditional-educational setting like a classroom (Fenton, 2010). It is described as a process that creates and provides education when both the learners and the information source are separated by time or distance or both (Berg, 2002).

Computer based training

Computer based training sometimes known as computer assisted instruction is a self-paced learning activity that is accessible through a computer, training and instruction is delivered through a computer rather than via a human instructor. Computer based training typically provide content in a linear-fashion, more similar to reading an online manual or book (Navabi, 2002). This makes the system applicable in teaching static processes like completing mathematical equations or using software. Computer based trainings are typically delivered through CD-ROM. However, particular computer based training are also delivered through the internet to ensure that both the text and multimedia materials are accessed from all the locations at any time or day (Lee, 2004).

Supporters

Computer based training is a flexible and comfortable system. According to Edmonds (1994), the system permits trainees to work and learn at their own style and pace, both of which may be adjusted to conform to the individual requirements of every learner. Trainees do not require arranging and coordinating their workloads and schedules to accommodate schedules of training. In an instructional program that is self-paced, an employee can review particular topics on which clarification is needed. In case a topic is familiar, an employee can speedily complete the course. This is contrary to classroom instruction where a set of workers is trained on the basis of a programmed duration and are independently supposed to master the subject matter during that time. It grants the trainees the freedom and capability to be able to train when they wish or when it is convenient for them. Trainees can stay at work or at home and participate in training (Nedeva & Dimova 2010).

Computer based training can be said to be non-judgmental and non-threatening while presenting instantaneous feedback when the training is in progress. The instantaneous interactivity of the system makes it possible for the trainees to review parts of the material, privately, and as regularly as required without the mistakes creating a feeling of embarrassment (Navabi, 2002).

As regards to Mantyla (1997) the probability of inconsistencies and errors occurring in the provided training materials are largely reduced with this kind of system. This is because computers just deliver the training which they are programmed with, this happens in the manner in which they are designed to deliver the training. When managers improve or change the materials of learning, they can at once update the system of training and the updates get automatically spread to every existing trainee at once (Berg, 2002).

Convenience is another beneficial feature associated with computer based training to a trainee. Apart from an individual being able to train whenever they wish, they can do so from wherever they wish provided they can access a computer and therefore minimizes the travel time. Employees don't need to wait. During training the employee has the freedom to pause and carry on at a later date or time ((Fenton, 2011).

According to Nedeva & Dimova (2010) trainees have an advantage with this system since they do have superior control over their training experience, this is also known as learner control. It is the control of trainees over the sequence, pace and content of training. Trainees may enter or leave the classroom whenever they feel like, and may also progress at the pace which they wish having the freedom to schedule time for their training. This permits the trainees to perform tasks quickly or slowly depending on how they wish (Vetter, 2009).

The system saves time for an organization since it can train a huge number of employees in a short span of time. The training of fresh employees is minimized from a week or month long process that involves instructors as well as hours or days of hard work to an effortless CD-ROM. This is facilitated by the fact that the number of workers to be trained is not limited because of the absence of constrictions on particular things like classroom space or instructors (Navabi, 2002).

Companies are also able to train employees in the same kind of training regardless of their location. This enables a company to deliver consistent and standardized training to a huge number of workers across the company and even worldwide (Ramos et al 2011).

According to Vetter (2009) cost effect is the greatest benefit of the computer based training system to both an organization and the trainee. Although the initial setting up of the system can be expensive, but once that is completed, the cost of training to an organization is normally reduced with the effective application of this system. This is achieved through exclusion of variable costs like training facilities, cost of travel, meals, hotel rooms, trainer's expenses as well as the time spent by workers during travelling and attendance of training (Edmonds, 1994). The same expenses are also laid off on the side of trainee. Moreover, the traditional training's high overhead costs make computer based training applicable particularly to companies which have both national and international employees (Lau, 2000).

Research confirms that the use of computer based training normally minimizes the time for learning by one third (Nedeva & Dimova 2010). This is certainly beneficial to both the trainer and the trainee since time is regarded as money. The cost effect is strongly demonstrated incase there are a huge number of employees geographically dispersed to be trained. The system may be customized to center on individual parts of the material required by each individual who is being trained. All combined the overall costs of training and time of training required per employee may be considerably minimized (Graham & Jones, 2011).

Computer based training systems are tireless. They don't require breaks and are always present. School is always in session when you are ready, any time day or night. A computer based system can train lots of students within a specific time frame compared to various other systems even if those students are separated by time and distance. It also frees up the managers and human trainers to review and develop the training curriculum that best suits their employees (Malik & Rahman, 2010).

As regards to Lau (2000) computer based training has the potential to track the performance of an employee on learning tests and exercises. This is vital during the conducting of training programs which are compulsory and are to be completed, or during achieving a performance level which is legally mandated. This permits an employer the capability of providing training proof incase it is required in future (Kearns, 2011).

Computer based training presents learning stimulus beyond the methodology of traditional learning from manual, textbook, or instructions that are classroom based. For instance, Computer based training offers solutions which are user friendly in order to satisfy continuing education requirements (Fenton, 2010). Rather than limiting students to reading printed manuals or attending courses, students are capable of acquiring knowledge and skills via methods which are greatly favorable towards individual learning preferences. For instance, Computer based training provide benefits of visual leaning via video or animation not typically presented by other means (Kasatkina, 2010).

Another reason which makes various individuals prefer computer based training is that it offers accessibility to people with busy and demanding work schedule but wish to upgrade their knowledge and skills (Overman, 2012). This system is administered either at classrooms through computers or as a distance learning at home or any location through the internet. Therefore, students are capable of attending to their full time work throughout the day and also complete their online courses after work. This certainly makes it an attractive alternative for individuals with no time during the day to attend to their classes. People are also capable of accessing the programs of computer based training situated within their city or offered from other countries (Berg, 2002).

According to Lee (2004) computer based training is individually adaptive in that sophisticated algorithms can create sessions of learning, taking into account the progress of learning one's personal strong and weak points. This is important in the training of x-ray image recognition where screeners of x-rays must be trained on how to recognize numerous prohibited items within different rotations (Horn-Ritzinger et al, 2011).

Computer based training is a good option for printed leaning materials because rich media, including animation or videos may simply be embedded to improve the learning experience (Lee, 1995).

Critics

Thousands of corporations employ this system in the training of new employees. Accredited learning institutions such as community colleges and universities are also making use of distance learning as a mode through which students earn class credits. However there are various reasons associated with distance learning, specifically computer based training that makes this mode of training an ineffective one.

According to Fenton (2010), lack of integrity is one reason associated with this mode of training. For instance, with the introduction of distance learning, there exist challenges in proving whether the user really took the course. Unscrupulous students can have a colleague or friend do computer examinations in their favor since an instructor who would prevent cheating is never present (Iqbal et al, 2011).

As regards to Kasatkina (2010) low interactivity is a reason that also hinders the efficiency of the system. Interactive learning is a kind of teaching which requires learners to actively respond to the material of study. For instance, computer programs which teach language both local and foreign require learners to speak when responding to images and phrases. Users who interact as they learn have a high likelihood of retaining information, and the majority of distance learning courses require extremely little interaction. For instance, most assessments just require an individual to respond by checking a multiple choice box (Iqbal et al, 2011).

The system is also associated with unique experience loss. Computer based training normally relies on educating lots of individuals in the exact similar item or concept in the same manner (Vetter, 2009). Although this method may prove to be cost effective, it normally lacks versatility. Certain individuals may be better trained by visuals, others by speech. Since majority of systems of distance learning are purely based on text, a huge section of the populace is said to lose out (Greene et al, 2011).

Interaction and interpersonal contact between a student and other trainees or students is greatly minimized. People have learning preferences and methods; therefore, if a trainee would prefer obtaining training inside a classroom that has a trainer and other trainees, then the system of computer based training will be a disadvantage. The feeling of isolation by some trainees from the classmates and the instructor may also be a challenge (Evia, 2011). In addition, in case a student faces difficulties and requires the help of the instructor he or she may not get the help due to the instructor's absence. Various safety professionals like OSHA (Occupational Safety and Health Administration) think that a worker ought to be given the chance to ask questions that necessitates access to a trainer who is qualified. According to OSHA, relying on computer based training may not attain this goal (Curtin et al, 2011).

The technology introduction might also face resistance from computer illiterate workers who might feel uncomfortable with computers. This may mainly be experienced from older workers with less experience in making use of computers. Moreover, engaging in this system of computer based training may prove difficult in case the worker has no accessibility to a computer (Graham & ones, 2011).

As regards to Navabi (2002) the software which develops computer based training is normally more complex compared to a teacher or subject matter expert. Moreover, the absence of human interaction may limit the kind of content which may be presented and the kind of assessment which may be performed (Malik & Rahman, 2010).

High development cost is another limitation associated with the system, particularly for complicated multimedia materials. Although the systems of computer based training are extremely cost effective, the

development process may be incredibly high (Vetter, 2009). Producing a system which teaches better with the elements of multimedia and interactivity is certainly not an easy process. Extensive program of e-training could cost hefty amounts of dollars to build. In addition the program must be updated and maintained at extremely high recurring fee. There is always the need to employ or hire content creators and programmers. Therefore, the cost of designing and developing computer based training may be significantly higher compared to traditional classroom training (Williams, 1999).

According to Edmonds (1994) the quality of computer based training and programs are sometimes wanting. The feedbacks provided by the computer based training system for students training are less compared to those provided by a teacher in classroom. As a result, trainees are regularly compelled to gauge their progress and come up with judgments by themselves (Kearns, 2011). Due to this reason, there exists the possibility that mistakes that occur are inadequately corrected before the completion of the course. The efficiency of the computer based training also chiefly depends on the computer program's quality that is being used in teaching (Sitdhisanguan et al 2012). No doubt there exists various quality products, but the market saturation with the computer based training also signifies that poor options exist as well. It is certain that low quality computer based programs cannot offer a trainee the quality of education he or she requires and that would be waste of both time and money (Mantyla, 1997).

As regards to Lee (2004) there is a weakness associated with the perceived learner control advantage in Computer based training. Learner control may be viewed to be an advantage to the trainee since the trainee has the total control of how he or she conducts his or her training. However, research shows that trainees working on their own with no instructor around can choose not to complete computer based training. The research also illustrates that sufficient quantity of time is not spent on it by the trainee (Navabi, 2002).

Computer based training also has the probability of students getting confused or lost concerning deadlines and course activities since the system lacks routine traditional class structure (Williams, 1999).

Older computers which are slow in processing information as well as net work congestion or slow internet connections normally cause frustrations in accessing course materials (Kearns, 2011).

Students having beginner level skills in computers sometimes do face challenges in managing computer based training software and computer files (Kasatkina, 2010).

They are electrical equipment that can sometimes be harmful just like any other machines or equipment. For instance they can cause electrocution and fires (Vetter, 2009).

Rationale Regarding the Side with the Stronger Argument

Having conducted a competent comprehensive research literature concerning the above debate, there is no doubt that the side having a stronger argument is the supporting side. The decision can be justified with the numerous numbers of both the supporters and supporting arguments compared to the criticizing side. Such arguments as slow computers can be upgraded, or even available at work to use. There are also many free courses in computer instruction to help you to use your device. Electrocution is remote; this is like an argument out of the industrial revolution. The only real piece of strong debate is interactivity with instructor and classmates. This may be true to some extent; most have the ability to set up instant messaging or emails that are answered in an efficient time frame. Discussion boards also help facilitate interactivity with fellow learners and instructor, so being in a vacuum is remote. The supporting side also seems to have stronger and weightier arguments compared to the criticizing side in learning accessibility, convenience and monetary savings.

The Key Ethical Issues Associated with the Research

Discrimination is certainly encountered in this particular research (Demiray et al, 2008). For instance, those who have no knowledge of computers are definitely locked out of the system. The courses in this particular system are also intended to meet the requirements of a generic base of students. On the contrary, critics argue that the requirements of the minorities as a result get neglected with this course material which is designed towards meeting requirements of a generic-audience. In addition, resourceful trainees can afford to purchase the best type of computers and programs. The system can therefore be said to lock out the lesser privileged trainees. This contradicts the rule of ethics that states that not any form of discrimination shall be allowed in the professional services delivery or scholarly activities due to ethnicity, race, age, disability, religion background or national origin (Demiray et al, 2008).

The Imbalance of responsibility and authority is another ethical issue viewed in the research. This is arrived at since trainees bear the most responsibility; they obtain independence that ought to be the instructors concern in authority, according to the principle of ethics which states that individuals ought to honor their responsibility of achieving, and maintaining the utmost professional competency and performance level. This principle of ethics seems to contradict the ethical issue described (Turkish Online Journal of Distance Education, 2008).

The ethical issue of integrity comes about when a trainee wrongfully gets someone to do an exam on his or her behalf because of the absence of the instructor. This ethical issue certainly goes against the rule of ethics that

states that individuals shall not involve themselves in deceit, fraud, dishonesty or misrepresentation (Demiray et al, 2008).

The time consumed in learning is minimized, this means that the content learned is also minimal. This ethical issue is somehow not in conformity with the rule of ethics which states that individuals ought to engage in learning in order to maintain and improve professional competency and performance (Turkish Online Journal of Distance Education, 2008).

The life of the instructor having actually been made simpler can be seen as an ethical issue since they are seen working less than they ought to and to earn the same as classroom instructors. For instance, compared to classroom teaching little effort is needed to download assignments and upload grades. Therefore, according to the rules of ethics which states that one ought to be compensated according to both the quality and quantity of the labor done, the ethical issue seems to contradict the rule of ethics described ((Demiray et al, 2008).

Learner control can also be viewed as an ethical issue since it is absurd that the trainee controls the learning programs instead of being controlled by the instructor. Though the trainee has the freedom to work at his or her pace it is unfortunate that some end up not completing the course. The privacy associated with the system also comes out as ethical issue since it is viewed as an isolation of the trainee with the rest of the trainees and the instructor ((Demiray et al, 2008).

Negligence towards the real training facility where the population of the trainees surpasses an actual campus can also be viewed as an ethical issue (Turkish Online Journal of Distance Education, 2008).

Conclusion

There is no research paper which has come up with a conclusive debate regarding Distance learning and in particular computer based training. Although various people do concur that Distance learning has opened up new vistas within the educational field, some researchers are relentlessly questioning the significance of learning via non-traditional means like distance learning through computer based training. Some seem undecided, they argue that distance learning can be collaborative learning; however, the challenge is the understanding of the technology to apply it in order to come up with new and more efficient learning situations. Certainly, there are numerous opinions to be considered and all are important within their own regard. Like any new endeavor that starts to really blossom and become more accepted in society, there will be growing pains, and educational psychologists will hopefully over time be the catalyst to bring computer based training to maturity.

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