

Technology-Based Training: Empowering Workplace Ownership and Accountability

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Abstract: As technology advances, training and development are undergoing a transformation as a result. At every stage of their educational careers, students learn how, when, and where to learn, with an emphasis on being empowered at every stage of their educational journey. Through the use of technology in training and development, students are able to take ownership of how they learn. This makes training and development relevant to their digital lives, and prepares them for the future. Technology and the availability of resources beyond the classroom walls encourage students to become problem solvers, critical thinkers, collaborators, and creators through the use of technology. By successfully integrating technology into classrooms, students develop a lifelong love of training and development that lasts for the rest of their lives. It has been observed that technology has played and will continue to play a critical role in delivering education to students outside of the classroom. Despite the difficulty in deploying remote learning technologies, it is commendable that all countries were able to make use of TV, Radio, Online and Mobile Platforms to do so.

Keywords: Technology, Transformation, Training and Development, Technology driven Learning Space.

1. Introduction

An educator is always striving to ensure that he or she is capable of personalizing the training and development that he or she provides to their students, which is a major goal of theirs, and a significant challenge. This is done in order to be able to meet the individual needs of each individual. Technology can assist teachers in a variety of ways during this time of post-covid recovery, and there are many ways in which it can do so. Knowledge enhancement and mobile technology significantly improve effectiveness and efficiency (Tiwari 2022). The introduction of computers and the Internet into education systems for the first time almost always meets with significant resistance from certain sections of the teacher population (and often from the teacher's unions as well) when introducing them for the first time. There is no doubt that such resistance is understandable, and perhaps to some extent it is even inevitable. It is understandable that change can be frightening or at the very least very inconvenient.

There is a possibility to use technology to help them achieve higher levels as teachers when given access to real-time evaluations, longitudinal data, content, mobile apps, and many other things that will assist them in achieving higher levels in training and development in the long run as they continue to grow as teachers. As educators, we can use technology to create blended learning environments and to utilize digital tools for formative and summative assessments in order to



provide students with a better learning experience in order to provide them with a more effective learning environment. This will in turn allow them to develop new teaching and learning models, as well as create new ways of learning as a result.

There is no doubt that education is at its core a study of human relationships and connections. Despite the fact that we will never be able to replace the magic that happens between great teachers and students in an in-person environment, in order to enhance connections from a distance, we should focus on the social aspects of technology. It is imperative that more attention is paid to how technology can be used in a blended learning environment to enhance teaching and learning for students, both at school and at home, in order to reach more students.

2. Current Technology Driven Learning Space

Whether it is using technology in the training and development field or putting the right devices in the hands of students, there is no doubt that technology assists them in acquiring the career and technical skills they will need to be successful now and in the future. The use of relevant learning experiences in training and development can inspire creativity, help students apply meaning to their learning, and prepare them for future career opportunities and jobs that have yet to be created. The need for different types of skills is becoming more and more common in the workplace, such as coding, programming, data computing, and computational analytics skills. As a result of making, students will be able to gain these skills and will also be able to improve their problem-solving and critical thinking skills for today's society. If the right technology and framework is integrated into a maker mindset and environment, learning by doing can be a very engaging and engaging experience when designed and implemented. Covid-19 knowledge development and its flow and impact on training and development has been significantly impacted (Tiwari 2022).

There are a number of benefits that can be derived from the use of technology in training and development, some of which are mentioned below.

- It is possible for educators to personalize learning for every student in an efficient, effective, and efficient manner, by combining data, content, and the cloud.
- ➤ In order to equip students with the technological skills and competencies that will help them to succeed in the modern economy post-cold recession, classrooms should be equipped with technology skills and competencies that will help them to excel in their careers after graduation.
- Develops a blend of learning environments where students can be able to learn in an environment that is relevant to their daily lives, and provides them with the opportunity to learn effectively.
- ➤ In order to improve the learning process, educators can receive real-time feedback via digital formative and summative assessments, which can be used as formative as well as summative assessments.

3. Methodology

To conduct this study, 253 individuals from a cross-section of the education and technology sectors were surveyed, and a wide range of questions were asked to them as part of the survey. Over the course of this project, the author conducted a series of surveys in order to be able to examine how academics make sense of their own explanations and motivations for changing their practices in relation to those changes. An effort was made by the author to determine how people interpret the changes to their practices that result from our findings, so a series of surveys was conducted in order to achieve this goal. Participants were asked to participate in a survey to assess their attitudes towards technology based training which begets empowerment of ownership and accountability at the workplace their perceived utility for themselves as well as their expectation of how technology will affect them before implementation and their understanding of its impact. Following the implementation process, a survey was conducted to determine whether previous expectations had been met. Upon the formation of these opinions, a comparison was made between them and those that had developed after the implementation began.



Technology has had a significant impact on training, and it has played an important role in many different areas. Respondents were asked to rate the questionnaire on a five-point Likert scale, ranging from 5 points (strongly agree) to 1 point (strongly disagree), using a five-point Likert scale. According to the scale above, respondents were asked to indicate their level of agreement with the statement. The validity of the measuring questions was determined by using Cronbach's Alpha as a tool to calculate the validity of the measuring questions. In accordance with the calculation performed by SPSS for the 'Reliability Statistics', the Cronbach's Alpha value of the 20 items in the 'Technology-Based Training: Empowering Workplace Ownership and Accountability' questionnaire is .784. Based on this result, it can be concluded that the data is reliable and suitable for further analysis. In this case, the value is significantly higher than a value of '.6', which is well above the minimum value.

Reliability Test:

RELIABILTY TEST: Cronbach's Alpha

Measure of Internal Consistency

Cronbach's alpha tests to see if **multiple-question Likert scale** surveys are reliable. It will tell you if the test you have designed is accurately measuring the variable of interest.

Cronbach's Alpha		INTERPRETATION	
	$K \left[\sum c^2 \right]$	Interpreting ALPHA for	dichotomous or Likert scale question.
$\alpha = \frac{\pi}{1 - \frac{2^3 y}{2}}$		CRONBACH'S a	INTERNAL CONSISTENCY
	$K - 1 \begin{bmatrix} s_x^2 \end{bmatrix}$	0.90 and above	Excellent
Where		0.80 - 0.89	Good
K	is the number of test item	0.70 - 0.79	Acceptable
$\sum s_y^2$	is sum of the item variance	0.60 - 0.69	Questionable
s ² _x	is the variance of total score	0.50 - 0.59	Poor
		below 0.50	Unacceptable
		https://www.statisticshowto.com/cronbachs-alpha-spss/	

Table 1. Reliability Statistics

Cronbach's Alpha	N of Items
.784	20

4. Data Collection

- 1. Primary data: The following primary data was collected from the samples selected through the use of a questionnaire consisting of 20 questions which was asked from the participants closely associated to technology based training where it lead to the relation which helped empowering workplace ownership and accountability.
- 2. Linear Regression: To further prove or disprove the relationship between technology based training and its empowerment at the workplace with reference to ownership and accountability the former was considered an Independent Variable and the latter as a Dependent Variable, a simple linear method, a statistical method, was implemented to establish[the relationship between the two variables. The data received from the questionnaire designed as well as the analysis on Excel has helped in showing a general flow of the points based on the X axis and the Y axis, where (y = mx+c) indicates a positive trend, and the points are close together, which is indicative of a strong and positive correlation between technology based training and its empowerment at the workplace with reference to ownership and accountability, as demonstrated by the regression line where the y intercept is 0.017 and the m intercept is 0.392. The Slope, where a slope is the measure of the steepness of a straight line (Change in y / change in x, for any two points on the line) & Regression Square is .415.





Figure 1. Linear Regression

5. Results and Discussions

- 1. In fact, there is more than a thrice greater chance that companies with training and development teams that experiment and innovate with new learning technologies and approaches will be more likely to be more innovative as a business as compared to those who do not engage in such initiatives.
- 2. It has also been discovered that this research indicates that there is a need for experimentation and a need to take advantage of a new range of tools and technologies that can be used to create short videos and tips that can be integrated into the flow of the work and accessed anywhere in real time and at any time. According to the authors of the research, the on-demand virtual learning market is growing at a rapid rate and is booming.
- **3.** There is a lot of innovation and creativity going on in the training and development technology market right now, and the companies that are making a big impact are trying a lot of new things in order to achieve their goals in order to remain competitive. The advancement of technology in training and development tools will continue to impact the training and development tools as technology advances. It is imperative that companies experiment with new technologies and continuously update their training and development infrastructure in order to keep up with these advances by using tools that will increase employee productivity and improve the employee experience.
- **4.** As a result of the research, it has been found that training and development is an incredible retention tool, since one of the reasons people leave their jobs is that they believe that they won't get anywhere, or that they feel bored, or that they feel that they are overworked, or that they feel that they are stultified. There is no question that learning is one of the most beneficial tools available in the context of this particular post-covid economic cycle.
- 5. It has been found that training and development tools, along with the support of training and development tools, have proven very effective in engaging employees in their work, giving them a sense of growth and progress, and making them feel more positive about their companies and their jobs, as well as engaging them in their work.



6. Conclusion

It has become commonplace for learning corporations to incorporate some of the most current technologies into the classroom, including Artificial Intelligence, Virtual Reality, and Augmented Reality. By facilitating more innovative and engaging teaching methods and learning experiences, the aim is to achieve more effective results. If technology is used well in training and development for teachers as well as students, then educators will be able to provide their students with the opportunity to experience things that have never been possible before, if technology is used well in training and development for teachers and students alike. Consider a scenario in which you could study science on the International Space Station with students from around the world from all over the world and learn from each other. In addition to shrinking down to the size of an education strand so that you can interact with molecules with your hands, you can also shrink down to the size of a nanoparticle. This research suggests that teachers are responsible for making sure that the VR experiences themselves are engaging to their students during the time that they are experiencing them. When students are enjoying their virtual reality experience, it can be difficult for them to pay attention to the lesson during that time. Our goal, therefore, is to encourage students to explore their VR environment in an in/out cadence whenever they are exploring it. After the students have explored for a few minutes, the teachers allow them to take off their headsets in order to ask questions and talk with each other during this time. By maintaining their concentration throughout the entire process, students will be able to consolidate the learnings they have gained from the experience and solidify the knowledge they have acquired.

As the corporate training and development technology landscape evolves and becomes more complex, there are a number of new corporate training and development technology solutions being introduced almost every day to the market as a result. Platforms within the Human Resources department are simultaneously undergoing a change in how they are utilized internally. How can your organization's learning team build a system that integrates technology and methodology in a compelling and productive way. This system brings technology and methodology together in a way that engages employees and is interesting to them. There are dozens of different ways to train employees and the desire to create engaging digital experiences.

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