

# Impact of Training Mode on The Performance of The Employee

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**Abstract:-** This study compares ACE Designer employee's performance in traditional learning to that of virtual learning during the pandemic, and analyses the implications of the shift to online learning from employee's perspective. The Quick-Response Research method using Google Documents was used with 100 employees chosen on convenience sampling in ACE designers that shifted to virtual learning during the COVID-19 outbreak. Results showed that the performance of employees has been better via this method than traditional learning. Classroom activity was shown to positively affect overall employee performance. Moreover, the adaptation of technology positively affected the validity of using virtual learning and employee performance. We also found that time management and technology self-efficacy are mandatory to improve remote learning.

**Key words:** *Virtual Learning, Traditional Learning, employees' performance, covid-19, time management*

## I. INTRODUCTION:

Training is no longer a one-horse race. Learning and Development professionals had limited options before the introduction of automation, digital workplaces, and mobile technologies, with practically all of them falling into the in-person camp. Online learning has become increasingly popular in recent years, with technological advancements and improved quality of life making it nearly impossible not to include it in your training delivery strategy. However, even if it improves retention and engagement, eLearning isn't always the best option especially for certain skills that can only be taught through hands-on demonstrations and examinations. Online training can never entirely replace in-person training in cases like this, such as paramedic practical training. From classrooms to computers, learning platforms have evolved dramatically.

From classrooms to desktops to mobile phones, learning platforms have evolved dramatically. However, some firms are still undecided about whether or not to transition entirely to online training. Some may argue that, because millennials make up such a large portion of the workforce, it is sensible to use an online training platform. However, even among millennials, some people favour the conventional manner. Because businesses cannot make decisions based on individual employee preferences, they must make a decision that is both advantageous to their firm and ensures employee satisfaction. Training and development are required for any business. However, most L&D teams wonder how to offer it so that employees can get the most out of it. Should they stick to the traditional classroom method? Should they use an online learning platform, because staff are already familiar with them?. Therefore, the decision now lies in the hands of individual companies whether to adapt online training or to continue with their same method of Traditional training for their employees since both of these training methods have their own pros and cons.

## II. LITERATURE REVIEW

Andrea Beinicke et al., (2018) opinion that e-learning is as effective as traditional training for learning procedural and declarative knowledge, and research also identified that it is not the training environment or delivery media per se that leads to better levels of training success, but rather the type of training content. Eva Kyndt and Andrea Beinicke (2019) explored that training and development experts from a variety of industries who work for some of Germany's greatest employers were evaluated cross-sectionally on actions that promote transfer for e-learning and Traditional training. Activities to improve training efficacy were virtually always taken in both training environments, particularly before and during training.

Artino (2008) research show that task value, self-efficacy, and instructional quality were significant positive predictors of students' satisfaction with online course content. Findings support and expand on previous research in traditional classrooms and online education in university settings. Military students' motivational beliefs about a learning task and their perceptions of instructional quality are related to their satisfaction with courses. Kathrin Krammer, et.al (2006) research explored that purpose of the evaluation was to learn more about the training processes, instructors' acceptance of the training, and teachers' perception patterns of teaching processes. The training programme was assessed scientifically using a variety of devices. Karen Jeannette, et.al., (2002) explored that in the Master Gardener Core Course/Horticulture 1003 at the University of Minnesota, St. Paul, the effectiveness of Internet or online training was compared to traditional training. In this study, online training was found to be ineffective for teaching Master Gardeners. The loss of instructor face-to-face interaction was not as critical to online learners as it was to classroom participants. Online students also valued class schedule flexibility and absence of commuting. Karl Smart and James Cappel (2006) research explored that student in an elective course rated online modules significantly higher than those in a required course. The outcomes suggest that instructors should be selective in the way they integrate online units into classroom-delivered courses, say researchers from Cardiff University and Cardiff University Graduate School of Business. Linda Weiser Friedman, Hershey Friedman (2013) the number of students taking online classes at colleges continues to rise. Blogs, wikis, online social networking, and virtual worlds are among Web-based technologies that fall under the category of social media technologies. This research examines online learning activities through the lens of today's new communication

technologies. Kenneth Brown (2006) Computer-delivered training typically offers learners more control over their instruction. Learner choices regarding practice level, time on task, and attention are expected to be critical determinants of training effectiveness. Results indicate considerable variability among trainees in practice level and time on tasks predicted knowledge gain.

Judith Strother (2002) traditional classroom instruction is more expensive than e-learning. Costs for training facilities, travel fees for employees or trainers, and employee time away from the job are significantly decreased. However, some businesses who have invested a significant amount of money in new e-training initiatives have not seen the expected financial benefits. Allison Hodges (2009) case study looked at how three healthcare firms designed, implemented, and assessed e-learning. According to the findings, evaluation and measurement must be integral parts of training process. The creation of consistent measurements to track the links between learning, employee performance, and profitability is required. Hyochang Lim, et. al (2007) study has shown that individual, organisational, and online training design variables have a positive association with training effectiveness constructs (learning and transfer performance) in the workplace. The study's aim was to identify the factors that influence effective online training and determine how those factors affect learning and performance.

Hande Kimiloglu, et. al (2017) study looks at the attitudes of 106 of Turkey's top 500 companies when it comes to using e-learning for corporate training. Employee commitment and motivation, ease and accessibility, customisation and outsourcing are primary advantages of incorporating e-training in a company's training. Čonková Monika (2013) goal of the study was to figure out which learning style is preferred, subjectively more beneficial, and higher rated by corporate personnel in order to aid decision-making in the development of the company's business education plan. The findings revealed that two types of business training in the organisation had equivalent perceived quality, efficacy, efficiency, and knowledge applicability. This led to balanced preferences and hence validation of both styles of training in business education programmes. Brenda Cecilia Padilla Rodriguez (2013) research was carried out in a large Mexican corporation that runs a virtual corporate university. Most people believe that online learning is a good way to deliver corporate training. However, there is no link between online interactions and training effectiveness, according to participants. The conclusions are only applicable to the setting of the participating organisation.

Edward Chen (2008) the advantages and benefits of e-learning for organisations will be discussed. Travel cost savings, globalisation, increased value-chain activities, and return on investment are just a few of them. The paper will provide some success examples and provide an overview of the subject area. Rakesh Sharma, et. al (2021) during the COVID-19 pandemic, video-assisted teaching-learning using virtual platforms efficiently trained health staff on infection prevention and control procedures. This methodology may be implemented in the future for a variety of additional training in manpower-constrained scenarios, like this one. Newton Robert, Doonga Nitin (2007) the market for e-training services is quickly expanding, but the business case for their deployment is frequently lacking. The results of a questionnaire survey and interviews show a considerable variation in the relative relevance of prospective e- training benefits between training managers and training providers. Renée Derouin, et. al (2005) E-learning is here to stay as an instructional technique for imparting necessary knowledge, skills, and attitudes in enterprises. How it is created, delivered, and assessed has a big impact on its feasibility, efficacy, and capacity to yield concrete advantages. This article examines the current state of e-learning approaches in businesses.

Irina Makarova, et. al (2018) system of engineering education in 21st century should embrace the innovative principles, methods and teaching technologies. Analysis of applied forms of education shows that Blended Learning has advantages over traditional learning and E-Learning. For its successful implementation an intelligent learning environment, including such technologies, as gamification, virtual and augmented reality has to be created. Shafqat Hameed, et. al (2008) the purpose of this research is to see how effective and efficient e-learning can be when combined with traditional learning in a mixed learning environment. The report indicates that blended learning approaches to E-Learning provide the best flexibility and scalability for students, tutors, and institutions.

### III. STATEMENT OF THE PROBLEM:

During the global COVID-19 pandemic, virtual training and learning became necessity. More than ever, organizations are looking for a flexible substitute to traditional classroom training. But, can virtual training deliver the same results as Traditional training? Organizations now want to know which mode of training their employees think has more effect in the learning process.

### IV. NEED FOR THE STUDY:

Virtual training and learning became essential during the global COVID-19 outbreak. In order to meet the demands of changing work environments, most organizations rely on both traditional and e-learning for their staff. In-person training is a typical experience in an actual classroom setting, whereas online learning mostly involves learning through the internet. Businesses, educational institutions, and manufacturing industries have all used virtual communication platforms to continue daily classes, meetings, and health appointments. Community-based in-person training has also been pushed to transition to a web-based delivery.

Organizations are looking for a flexible alternative to traditional training more than ever before in order to cut expenses, avoid unnecessary travel, and relieve the stress of tight work schedules. We already know that virtual training works in fields where knowledge is being taught rather than performance. Through live video and social sharing, COVID-19 has

expedited the adoption of fully digitised ways to re-create the best of in-person learning. This change allows for more cost-effective scaling of learning activities as well as better personalisation for learners, resulting in increased efficacy. But there is necessity to find answer to the question as to virtual training can produce the same outcomes as traditional classroom training. There is a need for the organizations to know which type of training employees believe has the most impact on their learning that is being implemented by them.

V. RESEARCH METHODOLOGY:

1. **Source of data collection:** Questionnaire using Google form, Face to face survey
2. **Sample design:** Convenience Sampling
3. **Statistical Tools:** Anova, Chi square
4. **Sample:** 100 Employees

VI. ANALYSIS

**Distribution of respondents**

Table -1 Distribution of respondents

Demographics	Particulars	Number of respondents
Gender	Male	80
	Female	20

From the above table it was found that 80% of the respondents participated are male and the rest 20% are female.

Table-2: The mode of training received by the respondents

Parameter	Particulars	Number of respondents
Mode of Training	Blended training	35
	Traditional training	34
	Virtual training	31

During the Covid-19 pandemic, Ace designers limited has lately implemented the virtual training method. Employees are now receiving both types of training during their learning process. This type of training is referred to as blended training by the organisation. 35% of respondents received blended training, 31% received virtual training, indicating that they received training during the pandemic, and the remaining 34% received traditional training, indicating that they received instruction prior to the pandemic.

**Impact of Virtual training**

Null Hypothesis: Ho: Virtual training positively impacts on the performance

Alternate Training: H1: Virtual training will not impact on the performance

Table-3 Virtual training providing positive results in reality

Parameter	Particulars	Observed Respondents	Expected Respondents	Chi square Value	Significance
Impact of Virtual Training	Strongly agree	8	20	Calculated value = 52.7 Table Value= 9.49	5%
	Agree	34	20		
	Neutral	40	20		
	Disagree	15	20		
	Strongly disagree	3	20		

From the Chi square analysis, it shows calculated value (52.7) is more than the table value (9.49), Hence we accept the H<sub>0</sub> and reject H<sub>1</sub>, that is virtual training positively impacts on the performance.

**Impact of Virtual training platform**

Null Hypothesis: Ho: Virtual training platform positively impacts on the results

Alternate Training: H1: Virtual training platform will not impact on the results

Parameter	Particulars	Observed Respondents	Expected Respondents	Chi square Value	Significance
Impact of Virtual Training	Strongly agree	9	20	Calculated value = 51.2 Table Value= 9.49	5%
	Agree	43	20		
	Neutral	27	20		
	Disagree	19	20		
	Strongly disagree	2	20		

From the Chi square analysis, it shows calculated value is (51.2) is more than the table value (9.49), Hence we Accept the Ho and reject H1, that is Virtual training platform positively impacts on the results

**Impact of Virtual training interaction**

Null Hypothesis: Ho: Virtual training positively impacts on the interaction  
 Alternate Training: H1: Virtual training will not impact on the interaction

Parameter	Particulars	Observed Respondents	Expected Respondents	Chi square Value	Significance
Impact of Virtual Training	Strongly agree	8	20	Calculated value = 51.3 Table Value= 9.49	5%
	Agree	42	20		
	Neutral	30	20		
	Disagree	17	20		
	Strongly disagree	3	20		

From the Chi square analysis, it shows calculated value is (51.3) is more than the table value (9.49), Hence we Accept the Ho and reject H1, that is Virtual training positively impacts on the interaction

**Employees comfort in virtual training**

Ho: Employees are comfortable to receive virtual training  
 H1: Employees are not comfortable in receiving virtual training

Parameter	Particulars	Observed Respondents	Expected Respondents	Chi square Value	Significance
Impact of Virtual Training	Strongly agree	9	20	Calculated value = 53.7 Table Value= 9.49	5%
	Agree	44	20		
	Neutral	27	20		
	Disagree	18	20		
	Strongly disagree	2	20		

From the Chi square analysis, it shows calculated value is (53.7) is more than the table value (9.49), Hence we Accept the Ho and reject H1, that is Employees are comfortable to receive virtual training

**Virtual training effectiveness**

H0: Training content provided through virtual mode of training is effective  
 H1: Training content provided through virtual mode of training is not effective

Parameter	Particulars	Observed Respondents	Expected Respondents	Chi square Value	Significance
Impact of Virtual Training	Strongly agree	14	20	Calculated value = 51.8 Table Value= 9.49	5%
	Agree	46	20		
	Neutral	32	20		
	Disagree	8	20		
	Strongly disagree	14	20		

From the Chi square analysis, it shows calculated value is (51.8) is more than the table value (9.49), Hence we Accept the Ho and reject H1, that is training content provided through virtual mode of training is effective

**Flexibility of virtual mode**

H0: Virtual mode of training is flexible  
 H1: Virtual mode of training is not flexible

Parameter	Particulars	Observed Respondents	Expected Respondents	Chi square Value	Significance
Impact of Virtual Training	Strongly agree	7	20	Calculated value = 92.2 Table Value= 9.49	5%
	Agree	55	20		
	Neutral	25	20		
	Disagree	12	20		
	Strongly disagree	1	20		

From the Chi square analysis, it shows calculated value is (92.2) is more than the table value (9.49), Hence we Accept the Ho and reject H1, that is Virtual mode of training is flexible

**The platform of traditional training easy to clear doubts and clarifications**

Parameter	Particulars	Number of respondents
Traditional training is easy to clear doubts and clarifications	Strongly agree	33
	Agree	52
	Neutral	11
	Disagree	1
	Strongly disagree	3

From the above table it can be interpreted that 52% of the total respondents feel that traditional method of training is more convenient to clear doubts and clarifications.

**Interaction in traditional training learning process**

Parameter	Particulars	Number of respondents
Interaction in traditional training learning process	Strongly agree	38
	Agree	45
	Neutral	12
	Disagree	4
	Strongly disagree	1

From the above table it can be interpreted that a majority of 45% of the total respondents think that the traditional method of learning is more interactive enough.

**Blended Training V/S Traditional Training**

Parameter	Particulars	Number of respondents
Mode of Training	Blended training	15
	Traditional training	63
	Virtual training	22

Ho: Traditional training has more impact on learning compared to Virtual training  
 H1: Virtual training has more impact on learning compared to traditional training

Analysis using ANNOVA

Anova: Single Factor

**SUMMARY**

Groups	Count	Sum	Average	Variance
Blended training	100	15	0.15	0.128788
Traditional training	100	63	0.63	0.235455
Virtual training	100	22	0.22	0.173333

**ANOVA**

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	13.44667	2	6.723333	37.52029	2.96E-15	3.026153
Within Groups	53.22	297	0.179192			
Total	66.66667	299				

### **Interpretation:**

From the above analysis, since F value (37.52029) is more than F Critical value we accept H<sub>0</sub> and we reject H<sub>1</sub>, that is traditional method of training has more impact on the learning process.

### VII. FINDINGS:

- As the organization belongs to manufacturing industry, the number of male employees working there is more compared to female employees.
- Majority of respondents received blended training.
- Majority of the employees agree that virtual training provides positive in learning process for the employees in reality.
- Majority of the employees felt that the platform of virtual training was easy to clear doubts and clarifications.
- Majority of the employees think that virtual method of training can be more interactive and agree that they were comfortable to receive virtual mode of training.
- Majority of respondents agree that the training content provided through the virtual method of training is effective in their learning process.
- Majority of the respondents agree that the time allotted to cover all the training topics is sufficient enough for them.
- Majority of the employees have faced issues regarding language and technical issues during the virtual training process.
- Majority of the respondents agree that the mode of virtual training provided was flexible with time for the employees in their learning process.
- Majority of the respondents agree that the facilities provided during the virtual training process were up to their expectations.
- A majority of the total respondents think that the traditional method of learning is more interactive enough.

### VIII. SUGGESTIONS

Since the respondents of the company prefers classroom training than virtual training. To meet the demands of changing work environments, Ace designers opted virtual training but it is better to continue class room training to their staff as it is a manufacturing company the staff needs more practical knowledge.

### IX. CONCLUSION

Virtual training and learning became essential during the global COVID-19 outbreak. Organizations are looking for a flexible alternative to classroom training more than ever before to cut expenses, avoid unnecessary travel, and relieve the stress of tight work schedules during COVID-19. As per the study we came to know that classroom training has more effective than virtual training. Where most of the staff should have practical knowledge in Ace designers because it is a machine manufacturing company. It is found that respondents of the company preferred classroom training so the company can continue with classroom training.

### X. REFERENCES

- [1] Beinicke, Andrea, and Tanja Bipp. "Evaluating Training Outcomes in Corporate E-Learning and Traditional training - Vocations and Learning." SpringerLink, link.springer.com, 16 Feb. 2018, <https://link.springer.com/article/10.1007/s12186-018-9201-7>.
- [2] "Evidence-Based Actions for Maximising Training Effectiveness in Corporate E-Learning and Traditional training." Taylor & Francis, www.tandfonline.com, <https://www.tandfonline.com/doi/abs/10.1080/0158037X.2019.1608940>. Accessed 18 May 2022.
- [3] Krammer, K., Ratzka, N., Klieme, E. *et al.* Learning with classroom videos: conception and first results of an online teacher-training program. *Zentralblatt für Didaktik der Mathematik* **38**, 422–432 October (2006). <https://doi.org/10.1007/BF02652803> <https://link.springer.com/article/10.1007/BF02652803>.
- [4] Jeannette, Karen J., and Mary Hockenberry Meyer. "Online Learning Equals Traditional Traditional training for Master Gardeners in: HortTechnology Volume 12 Issue 1 (2002)." *Horttech*, journals.ashs.org, 1 Jan. 2002, <https://journals.ashs.org/horttech/view/journals/horttech/12/1/article-p148.xml>.
- [5] Smart, K.L. & Cappel, J.J. (2006). Students' Perceptions of Online Learning: A Comparative Study. *Journal of Information Technology Education: Research*, 5(1), 201-219. Informing Science Institute. Retrieved May 17, 2022 from <https://www.learnlib.org/p/111541/>.
- [6] Weiser Friedman, L. & Friedman, H. Using social media Technologies to Enhance Online Learning. *Journal of Educators Online*, 10(1), 1-22. Retrieved May 18, 2022 from <https://www.learnlib.org/p/114389/>.
- [7] Using computers to deliver training: which employees learn and why? Kenneth G. Brown, First published: 07 December 2006 <https://doi.org/10.1111/j.1744-6570.2001.tb00093.x> <https://onlinelibrary.wiley.com/doi/10.1111/j.1744-6570.2001.tb00093.x>
- [8] Strother, J. B. (2002). An Assessment of the Effectiveness of e-learning in Corporate Training Programs. *The International Review of Research in Open and Distributed Learning*, 3(1). <https://doi.org/10.19173/irrodl.v3i1.83>
- [9] Validating E-learning factors affecting training effectiveness. Hyochang Lim, Sang-Gun Lee, Kichan Nam Redirecting, doi.org, <https://doi.org/10.1016/j.ijinfomgt.2006.08.002>. Accessed 18 May 2022.
- [10] "Perceptions about and Attitude toward the Usage of E-Learning in Corporate Training." Perceptions about and Attitude toward the Usage of E-Learning in Corporate Training - ScienceDirect, www.sciencedirect.com, 28 Feb. 2017, [https://www.sciencedirect.com/science/article/pii/S0747563217301437?casa\\_token=9t29MF6B7j8AAAAA:15yVzCpJL9WQGjmaSahKBya5CbRYvd\\_KVJw6laGLNVHmsskXy4PEv9mMtnfnzq8cTHXvgIJ\\_v-gmzg](https://www.sciencedirect.com/science/article/pii/S0747563217301437?casa_token=9t29MF6B7j8AAAAA:15yVzCpJL9WQGjmaSahKBya5CbRYvd_KVJw6laGLNVHmsskXy4PEv9mMtnfnzq8cTHXvgIJ_v-gmzg).
- [11] Conková, Monika. "Analysis of perceptions of conventional and e-learning education in corporate training." *Journal of Competitiveness* 5.4 (2013) <https://pdfs.semanticscholar.org/dcae/7f0837df06daddef34458e5b4a468da9d58e.pdf>

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- [12] "Interaction and Effectiveness of Corporate E-Learning Programmes." Taylor & Francis, [www.tandfonline.com](http://www.tandfonline.com), <https://www.tandfonline.com/doi/abs/10.1080/13678868.2013.803753>. Accessed 18 May 2022.
- [13] Chen, Edward T. "Successful E-Learning in Corporations." CSUSB ScholarWorks, [scholarworks.lib.csusb.edu](http://scholarworks.lib.csusb.edu), 2 June 2014, <https://scholarworks.lib.csusb.edu/ciima/vol8/iss2/5/>.
- [14] Sharma, Rakesh, et al. "Cureus | Effectiveness of Video-Based Online Training for Health Care Workers to Prevent COVID-19 Infection: An Experience at a Tertiary Care Level Institute, Uttarakhand, India." Effectiveness of Video-Based Online Training for Health Care Workers to Prevent COVID-19 Infection: An Experience at a Tertiary Care Level Institute, Uttarakhand, India, [www.cureus.com](http://www.cureus.com), 1 May 2021, <https://www.cureus.com/articles/58066-effectiveness-of-video-based-online-training-for-health-care-workers-to-prevent-covid-19-infection-an-experience-at-a-tertiary-care-level-institute-uttarakhand-india>.
- [15] Newton, Robert, and Nitin Doonga. "Corporate E-Learning: Justification for Implementation and Evaluation of Benefits. A Study Examining the Views of Training Managers and Training Providers - IOS Press." Corporate E-Learning: Justification for Implementation and Evaluation of Benefits. A Study Examining the Views of Training Managers and Training Providers - IOS Press, [content.iospress.com](http://content.iospress.com), 1 Jan. 2007, <https://content.iospress.com/articles/education-for-information/efi00825>.
- [16] Derouin, Renée E., Barbara A. Fritzsche, and Eduardo Salas. "E-learning in organizations." *Journal of management* 31.6 (2005): 920-940. <https://doi.org/10.1177/0149206305279815>
- [17] "Blended Learning Technologies in the Automotive Industry Specialists' Training." Blended Learning Technologies in the Automotive Industry Specialists' Training, [ieeexplore.ieee.org](http://ieeexplore.ieee.org), <https://ieeexplore.ieee.org/abstract/document/8418090>. Accessed 18 May 2022.
- [18] Hameed, Shafqat, Atta Badii, and Andrea J. Cullen. "Effective e-learning integration with traditional learning in a blended learning environment." *European and Mediterranean conference on information systems*. Vol. 60. 2008. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.490.4515&rep=rep1&type=pdf>