

Effectiveness of Training and Development to the Teacher through E-Learning at Whitehat Education Technology Llc

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ABSTRACT:

Human Resources are a crucial asset for every firm. People's abilities and knowledge are the driving forces behind progress and societal development. Employees can build competencies and maximize their potential with the help of training and development. Time and money are the two most significant barriers to staff training. To face the rising problems, developing technological trends necessitate the development of new skills and knowledge. As a result, companies are now concentrating on innovative and effective training methods to teach and develop their employees. E-learning is quickly becoming a dominating tool for employee training in enterprises all around the world. This study mainly examines the effectiveness and usage of E-learning in training and development activities within the organizations under consideration. E-learning assists in meeting the goal of adaptable training and provides a less expensive alternative to classroom-based training. It significantly reduces boarding and lodging expenses, and man-hours, and does not disrupt business processes because learning is feasible even after working hours. The massive goal of this study is to scrutinize how e-learning practices in firms in the field of education might improve employee development possibilities as well as overall company success. While growth is geared toward a continuous, pro-active process for managers, training is for short-term acceptance of the procedure, people, and processes. Training is about acquiring new abilities and shaping one's personality. Equally important is making the best use of human resources to establish a highly competent, motivated, and passionate staff, enhance productivity, improve work quality, shorten learning times, foster a sense of teamwork, and cut costs. The research begins with a

conceptual framework relating to the essential criteria required to construct effective and efficient teacher development course material. A review of the literature was also worked out to develop an understanding of the work undertaken so far on the theme of this research. This enabled the researcher to identify the unexplored areas. The final stage was to evaluate the findings. This was done so that an appropriate conclusion could be reached and recommendations could be made. These research findings have consequences for human resource management and other related decisions in employee(teacher) training. The study found that E-learning may give teachers with flexible learning alternatives and allow them to quickly upskill.

Keywords: E-learning; Components, Strategy; Training and Development; Human Resource

I. INTRODUCTION:

The education industry is a collection of organizations and enterprises that produce products and services targeted at improving educational quality in society. The education business is becoming increasingly essential in supporting public education by satisfying the need for products and services that both complement and augment basic education offerings. Schools/Service Providers, Supplemental Education Service Providers, Products, and Education Service Businesses are the four major categories in the business. Each category has various market segments, which are all explained in the following articles. India is one example of a country that has used globalization and higher education to better its people's standard of living. The economy is booming in locations where the software engineering business has grown, and globalization provides several chances for those who are trained.

Online education is a versatile instructional delivery strategy that includes any type of learning that occurs through the Internet. Online learning allows educators to reach students who would not be able to enroll in a regular classroom course, as well as students who want to work on their own time and at their own speed.

In most fields, the number of distance learning and online degrees is substantial and growing quickly. The number of schools and institutions that provide online learning is likewise growing. Students pursuing degrees online must be cautious to verify that their curriculum is completed via a reputable and authorized institution.

Since it gives students with significant flexibility, online education has become a feasible and exciting way of instructional delivery in the global corporate sector that operates on a 24/7 schedule (24 hours a day/7 days a week). With the expanded availability of the Internet and computer technology, students may now access material that was previously only available in a traditional classroom at any time and from any location. According to studies, pupils learn equally as well in an online classroom as they do in a regular classroom.

The e-learning sector may be divided into four parts: content, management system, delivery/distribution system, and consumers/customers. A satisfactory and effective e-learning experience for a customer is the result of an efficient collaboration of all three content, management system, and delivery/distribution system. For companies in the e-learning, area to thrive, for e-learning to be adopted in schools and by a large customer base, for money to pore into this field, and for the entire industry to evolve, one must first grasp the industry's pains and challenges. Understanding the difficulties and collaborating across verticals are essential in this deeply intertwined e-learning sector.

An Indian virtual learning technology firm called Whitehat Junior relies mostly on teaching children how to code. In 2018, Karan Bajaj established it. BYJU'S acquired the company in the FY2020 for \$300 million. Ever since, the firm has released curriculums in the US, Brazil, and Mexico in English, Spanish, and Portuguese. Furthermore, courses in music, math, English, Science and fine arts have commenced. Trupti Mukker has become the company's CEO after Bajaj abdicated during FY2021, August. In the year 2021, Whitehat Junior and Microsoft India

collaborated together across Minecraft game-based learning. The firm employs 9500 teachers and therefore has 11,000 subscribers.

Whitehat Junior is indeed a live, virtual, one-on-one platform that pairs kids ages 5 to 12 with elite child development coding instructors from the convenience of their own homes. Whitehat Junior intends to encourage students to envision themselves as creators. They embrace children's computer programming education and stimulate them to build games, design animations, and do other things. This start-up uses an in-depth pedagogy and virtual live one-on-one classes. Data Structures, Gaming and App Development, Machine Learning, and Space Technologies are just a few of the topics included in their curriculum design structure so far and yet to add more in future days.

For students from grades 1 to 12, they provide different levels of courses: Beginner, Intermediate, Advanced and Professional. More than 9,000 instructors worldwide actively leveraging platforms devised by firms based in Mumbai.

Whitehat Jr sets no limit on how many classes a teacher can take. However, they assign a level to the teacher i.e Beginner, Intermediate, Advanced, Professional or APT level depending on interview performance, student availability, etc. So that teachers can build expertise on one level.

Objective of the study:

- To analyze whether employees are satisfied with various training programs implemented by the organization.
- To evaluate the effectiveness of the process and techniques carried out for training at development at the organization.

Scope of the study:

This study is limited to the educational sector with an eye on the possibilities of E-learning for training and development. All the teachers from WHITEHAT EDUCATION TECHNOLOGY PRIVATE LIMITED from Beginner, Intermediate, Advanced and Professional curricula were polled. The study's goal is to determine the efficacy of E-learning in terms of learning, capacity building, and keeping people informed. This also intends to discover how firms in the education industry utilize E-learning to create a competitive advantage for teacher retention and increased performance. The primary goal of this study was to examine the effectiveness of an E-learning program covered in improving teachers' core skills so that they could train their students well. Another significant goal of

this study was to gain a better knowledge of the usefulness of E-learning in increasing teacher productivity and overall performance in order to promote organizational growth. It discovered many aspects that contribute to the effectiveness of online training. E-learning has the advantage of flexibility. Trainees (TEACHERS) can learn whenever and wherever they like. It eliminates the requirement for a training location, a trainer, and a certain time window.

II. REVIEW OF LITERATURE:

- **R. Suhasini, Dr. T. Suganthalakshmi(2015):** The Author has done her research on a paper titled “Emerging Trends in Training and Development”. The article emphasizes the evolution of education and its relevance in the current. It also discusses the most recent developments in training technology. According to AMA Enterprise, a few current trends will affect the Training and Development(T&D) industry in the coming year. To increase worker productivity, there is a rising need for training courses that promote communication, critical thinking, and creativity.
- **Arun Gaikwad, Vrishali SurendraRandhir(2015):** In order to comprehend the idea of e-learning and investigate the many types, the author undertook research for the essay “E-Learning in India: Wheel of Change”. The comparison of old and contemporary learning methods also exposes the viewpoints of many people. According to study findings, India’s rapid expansion of internet access is a key factor in the expansion of e-learning there. Online learning will be more extensively used if there is a robust internet network with many local, national, and international actions. E-learning has helped to improve educational standards, literacy rates, and economic growth in developing and poor nations.
- **Priyanka Chauhan Indora(2014):** The necessity of training programs and technology innovation to remain competitive in the corporate sector has been studied by the author in the article titled “Training, E-Learning, and Technological Advancements in the Cement Industry”. Organizations need to become more adaptive, flexible, responsive, and customer-focused if they want to prosper in the face of rising competition at every level. Managers now face an entirely new set of technological advances. This study focuses on technology innovation and how training programs may help to manage these changes. E-learning is really beneficial, yet it has limitations. According to the study, technical issues should be addressed through training and E-training as needed.
- **Renju Mathai(2014):** The author did a study on a paper titled “Influence of Robust Technology Training through E-learning in Corporate Hotels in India”, which highlights the impact of E-learning in the corporate training process in the hospitality industry. Quality qualities are commonly used to characterize an e-learning system. It is being investigated if system quality may be characterized by properties such as adaptability, usability, dependability, and system reaction time. Most employees do not like to recognize any flaws in themselves, thus an E-learning system may help them overcome such psychological issues. The rapid expansion of companies necessitates the use of such technologies to handle any scenario in the firm. Such software aid in increasing employee performance and allowing staff to adapt to changes in the sector.
- **Eugen Rotarescu (2010):** The author has reviewed the topic “An Alternative Selection Under Risk Conditions in Human Resources Training and Development Through the Application of the Estimated Monetary Value and Decision Tree Analysis”.The focus of this essay is the concise and practical explanation of various decision-making processes and the approaches used for human resource development and training in risky contexts.The decision-makers have two readily available methods of analysis: (1) The decision matrix and (2) Methods compute the alternatives based on the estimated monetary value (EMV) of action regarding the training and development of human resources. Calculated using the (EMV) approach for each possible course of action. The choice technique chosen from these two options relies on the facts, how complicated the issue is, and the preferences of the decision-makers.
- **Franco Gandolfi (2009):** The Author has conducted a study on the subject of “Training and Development in an Era of Downsizing” and has examined how downsizing, which has been actively used as a restructuring approach over the past three decades, works. Prior to the mid-1980s, downsizing was mostly used to address crises; however, by the mid-1980s and into the late 1980s, downsizing has become a fully-fledged managerial strategy for tens of

thousands of businesses. Since then, downsizing has changed the global business landscape and had an impact on the lives of hundreds of millions of people. The importance of training and development (T&D) during the downsizing process is the main topic of this conceptual study. The research highlights the existing body of knowledge concerning the role of HR and the strategies, programs, and policies that organizations that downsize must offer to their remaining workforces. This study concludes with some thoughts on successful downsizing strategies that have been discussed in the literature.

III. METHODOLOGY:

Type of research:

The research design used for this study is Descriptive. The conceptual framework of this study is to significantly raise validity and dependability while offering a known empirical means of reaching the study objectives. The proposed study is descriptive research to learn more about a subject that is poorly understood. In addition to gathering information that is used to respond to a wide range of what, when, and how questionnaires pertaining to a particular population or group, the study aims to explore and overcome the current work environment and challenges associated with the implementation of e-learning in the educational sector.

Sources of data collection:

To identify solutions to the research problem, test the hypothesis, and assess results, data collection is a systematic method of gathering observations, measurements, or information from all pertinent sources.

- **Primary Data:** This is first-hand information that is been gathered by the researcher. Prior to

conducting anymore or related research, this procedure serves as the first stage in acquiring information. This type of data has been collected through a design of a properly structured questionnaire format using virtual forms from the respondents.

- **Secondary Data:** This is a second-hand data collected by other parties and already having undergone statistical analysis. The data is either information that the researcher has tasked other people to collect or information the researcher has looked up. Such types of data are typically collected from various websites and articles over the internet.

Sampling Method:

The survey's respondents are teachers from the various curriculum of Whitehat Junior. Because, it was simple for the researcher to conduct and connect with the specific subject matter in this study, convenience sampling was adopted. Convenience sampling is therefore employed in circumstances when there are resource constraints, such as the early phases of research.

Sampling Unit:

In this study, the respondents are the "Teachers" of Whitehat Education Technology LLC.

Sampling Size:

The total sample size is taken as 100 for the entire survey due to high number of total population of teachers at Whitehat.

Statistical tools and Techniques:

For testing the hypothesis SPSS (Statistical Package for the Social Science) software will be used in the Anova analysis, Chi-square test, and Distributive analysis. The tools used for analyzing the data collected are ratings and percentages, pie charts, and bar diagrams.

Analysis and Interpretation:

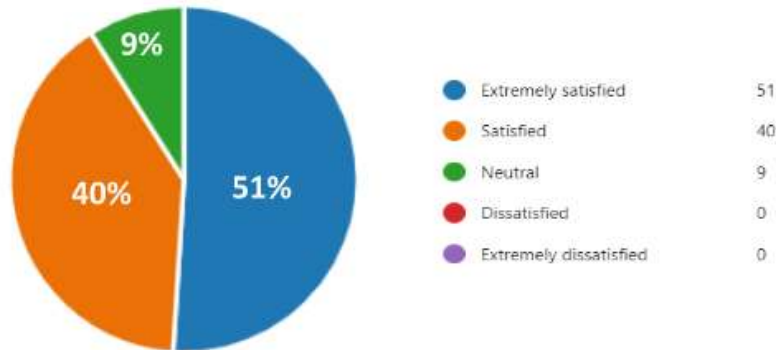
1) Respondents' satisfaction with the program's quality and content:

SL.NO	SATISFACTION WITH THE CONTENT AND QUALITY OF THE TRAINING PROGRAM
01	Extremely satisfied
02	Satisfied
03	Neutral
04	Dissatisfied

05	Extremely dissatisfied
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Analysis: The aforementioned table shows that nearly 51% of respondents are extremely satisfied with the course content and quality, while another 40% of respondents are only satisfied with the

course content and quality, and only a small number of respondents were found to be neutrally satisfied with the course content and quality offered at their company, respectively.



Interpretation: The distribution of respondents according to their satisfaction with the training program's quality and substance is shown in the graph up top. The aforementioned graph makes

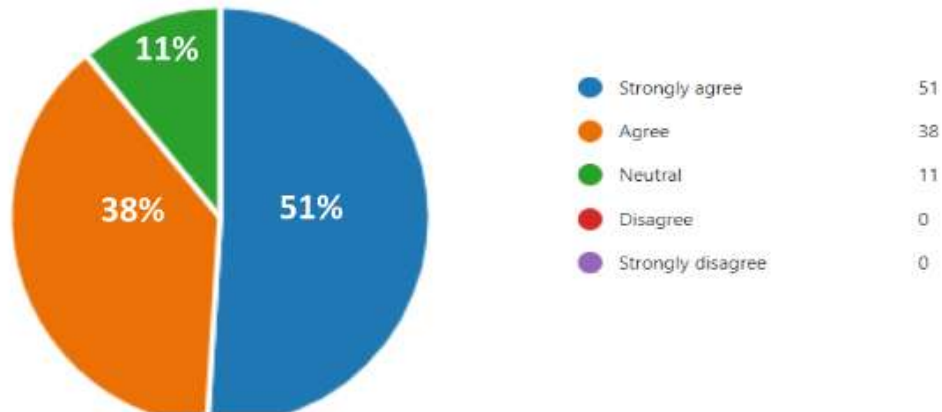
obvious that the vast majority of respondents are, respectively, highly happy with the content and quality of the training programme offered by their organization respectively.

2) **Training enhances the productivity and performance:**

SL.NO	TRAINING ENHANCES THE PRODUCTIVITY AND PERFORMANCE
01	Strongly agree
02	Agree
03	Neutral
04	Disagree
05	Strongly Disagree

Analysis: According to the aforementioned table, about 15% of respondents strongly agree that training is essential for boosting performance and productivity, while another 38% only agree and

only a few respondents strongly disagree with the aforementioned statement in their place of employment.



Interpretation: The distribution of responses according to whether they believe that the training improves performance and productivity is depicted in the graph up top. The graph above shows that the majority of respondents firmly believe that training improves productivity and performance at their

particular companies. Since there would be a great likelihood of eliminating the wastage of their time, money, and resources, it forces the well-trained instructors to demonstrate both quantity and quality performance.

3) Is a training programme enough to satisfy an organization's needs:

SL.NO	TRAINING PROGRAM MEETS THE NEEDS OF AN ORGANIZATION
01	Yes
02	No
03	May be

Analysis: According to the aforementioned table, nearly 93% of respondents concur that the training programme meets the needs of an organization,

while 5% of respondents say that the training programme does not.



Interpretation: The above graph shows the distribution of respondents on the basis of whether the training program meets the needs of an organization and almost the majority of the

respondent agrees that the training program meets the needs of an organization respectively. Thus, it shows that majority of the respondents agree with the same.

4) Feedback collected by the respondent post-training is really implemented or not:

SL.NO	FEEDBACK COLLECTED POST-TRAINING IS REALLY IMPLEMENTED OR NOT
01	Yes
02	No
03	May be

Analysis: The above table depicts that almost 89% of respondents agree that the feedback collected post-training is really implemented, another 8% of respondents say that the feedback collected post-

training may or may not be implemented but hardly 3% of respondents say that the feedback collected post-training is not implemented at their company respectively.



Interpretation: The above graph shows the distribution of respondents on the basis of feedback collected post training is really implemented or not. As per the above graph shown, it clearly depicts

that almost majority of respondents agree that the feedback collected post training is really implemented at their company respectively.

5) Whether the trainer is knowledgeable and motivating to the respondents(teachers) during training program:

SL.NO	IS THE TRAINER KNOWLEDGEABLE AND MOTIVATING DURING THE TEACHER DURING TRAINING PROGRAM
01	Yes
02	No
03	Maybe

Analysis: The above table depicts that almost 94% of respondents felt that the trainer is knowledgeable and motivating during training program, another few respondents felt that the trainer may be knowledgeable and motivating but not sure, and

hardly very less percentage of respondents felt that the trainer during the training period is not knowledgeable and motivating due to various reasons in their company respectively.



Interpretation: The above graph shows the distribution of respondents on the basis of satisfaction towards effectiveness towards teacher training program. As per the above graph shown, it

clearly depicts that almost the majority of respondents felt that the trainer is knowledgeable and motivating during training program in their company respectively.

6) The respondent rating towards the improvement of knowledge after training program:

SL.NO	RATE THE IMPROVEMENT OF KNOWLEDGE AFTER THE TRAINING PROGRAM
01	Excellent
02	Very good
03	Good
04	Average
05	Poor

Analysis: The above table depicts that almost 52% of respondents gave a rating as “Very Good”, another 35% of respondents gave a rating as “Excellent”, the remaining 12% of respondents

gave a rating as “Good” and nearly 1% of respondents gave a rating as “Average” but none of them gave a rating as “Poor” for training conducted by their company respectively.



Interpretation: The above graph shows the distribution of respondents on the basis of rating the improvement of knowledge after the training program. As per the above graph shown, almost the majority of respondents gave a rating as “Very Good which was conducted by their company respectively.

One-way analysis of variance is performed in this study to see if there are any statistically significant differences between the means of three or more independent (unrelated) groups. Analysis of variance (ANOVA) is a set of statistical models.

Using one-way analysis of variance, the table below displays how happy the respondents are with the effectiveness of the teacher training program.

ANALYSIS OF VARIANCE (ANNOVA)

ONE-WAY ANALYSIS OF VARIANCE

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.038	2	2.019	5.219	.007
Within Groups	37.522	97	.387		
Total	41.560	99			

Interference:

Based on the above ANOVA analysis there is a relationship based on respondents’ satisfaction with the effectiveness of the teacher training program. All the significant value is < .05, therefore the respondent’s satisfaction completely depends upon the effectiveness of the teacher training program. Thus, there is a significant relationship based on respondents’ satisfaction with the effectiveness of the teacher training program.

CHI - SQUARE ANALYSIS

Chi-Square Test analysis refers to a statistical test for goodness of fit that assesses the discrepancy between a result that is predicted and one that is actually seen. The analysis table shown below determines the most effective training method by comparing how competent and inspiring the trainer is to the teachers during the training program.

CHI – SQUARE ANALYSIS

	Value	df	Asymp. Sig. (2 -sided)
Pearson Chi-Square	.3771.242	2	.538
Likelihood Ratio	1.179	2	.555

Linear – by – Linear Association	.781	1	.377
N of Valid Cases	100		

Interference:

Chi-square has a value of .3771 (Df = 2) and a significant value of .538 (which is greater than 0.5). In light of the respondents’ varying levels of satisfaction with the training, it is inferred that there are differences between whether the trainer is educated and inspiring to the respondents during the training session and whether the style of instruction is superior.

Note: 4 cells (66.7 %) have an expected count of less than 5. The minimum expected count is 20.

DESCRIPTIVE ANALYSIS

Descriptive analysis is the process of using statistical techniques to describe or summarize a set of data.

DESCRIPTIVE ANALYSIS

	N	Minimum	Maximum	Mean	Std. Deviation
Enhancing productivity and performance required training. Do you concur?	100	1.0	3.00	1.5400	.68785
According to you which mode of training is better?	100	1.00	2.00	1.1000	.30151
How satisfied are you with the effectiveness of teacher training program?	100	1.00	3.00	1.6200	.64792

Rate the improvement of knowledge after training program	100	1.00	4.00	1.7900	.68601
Valid N (listwise)	100				

Interference:

The standard deviation in the descriptive analysis findings table above is .68785. The majority of the observations with normal data are distributed within 3 standard deviations on either side of the mean. Therefore, the higher in the above table denoted a wider range of data.

found that E-learning may give teachers with flexible learning alternatives and allow them to quickly upskill.

IV. FINDINGS:

From the analysis of the data, it is found that all the respondents are satisfied with the online training provided to them with the right quality, content, feedback implementation, flexible hours, free training, and many more. Thus, the study

V. SUGGESTION:

The suggestions made as potential areas of additional study are mentioned below:

It is advised to investigate a larger sample size and different organizations’ subsidiaries that the study covered. Researchers should also include demographic aspects that affect employee productivity and job satisfaction and learning style who have received training through both traditional

classroom instruction and electronic learning tools. A thorough analysis of mobile learning technologies is advised by the researcher. With devices like smartphones and tablet PCs that could stream content and allow chat and instant messaging, mobile technology. To further understand the differences between these training practices and to further investigate the potential outcomes of implementing a learning management system, it is advised to compare the skills of employees.

VI. CONCLUSION:

Whitehat Education Technology LLC adopted e-learning with a focus on quality issues, job-oriented refresher training, technical skills, and knowledge, which is a significant step toward the company's goal of more efficient, adaptable, and successful staff training. The majority of respondents expressed satisfaction with the current training techniques as well as with the development programs' overall quality and efficacy. However, some of the respondents believe that social components like interactions between coworkers, departmental communication, subject-focused conversations, etc. are provided in traditional classes. The company's E-learning programs have a favorable impact on employees' work, resulting in efficiency, few mistakes, and high levels of job participation. It produces a fruitful outcome and helps to improve working circumstances inside the company. To increase their level of expertise and knowledge, almost all of the respondents have participated in online programs.

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