

An Observational Approaches, Such as Attending Demonstration Sessions and Listening in Lectures, Provide Student Teachers with Constructive Criticism About Their Teaching Abilities

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During the last several years, there has been a rising amount of interest in the topic of how to guarantee the quality of online learning at universities. Students' perceptions of online education quality have been the subject of fewer research than those of instructors' and administrators. Two universities and one community college's worth of students were polled using a quantitative methodology to glean insights on the quality of their individual online learning experiences. The participants of this research were three high school students who were interviewed and observed for the duration of the experiment. Statistics were collected from both digital and paper sources. Researcher looked at the highs and lows of the students' experiences. The reasons why these things happen have also been discovered. This research revealed that students viewed online learning favorably due to its capacity to meet their individual needs, its cheap cost, the availability of electronic materials, the ease of connecting to the Internet, and the well-designed classroom interface. Several factors were identified as causes of students' poor impressions of their courses, including teachers' delays in providing feedback, teachers' incapacity to assist with technical issues, students' lack of ability to self-regulate and motivate themselves, students' feelings of isolation, teachers' use of monotonous teaching methods, and poorly designed course materials. The findings might be used by educators to gain insight into their students' experiences with online learning and adjust their practices appropriately.

Keywords: Teaching abilities, lectures, criticism, demonstration session.

1. Introduction

Because of the vast growth of the Internet, many schools now provide online learning opportunities alongside traditional classroom instruction. Yet, a number of concerns have surfaced, with the quality of online education for students being a primary focus. Online education is a new area of research that combines conventional distance learning with the provision of in-person instruction via the use of CMC. Sulaiman, F. identifies the following features as typical of virtual classrooms:

- (a) It accommodates a more diverse range of pupils than can be served in a traditional classroom setting,

- (b) All communication is conducted electronically.
- (c) there is a wide range of participation from students,
- (d) the social dynamic in the classroom is changed, and

Those students who couldn't previously attend college due to financial reasons or a lack of access to modern communication tools like the Internet, streaming video, net-meeting, etc., may now be able to do. As a result, many schools now provide access to their curriculum via a virtual learning environment. Cyber-learning, asynchronous learning, and remote education are only few of the many subsets that make up the larger umbrella term of "online learning" (Eldy, E. F., 2013). Another researchers lists a number of factors that have an impact on online education, such as collaboration, connection, student-centeredness, unboundedness, community, discovery, shared knowledge, multimodal experience, and authenticity.

According to Harrington, the Internet enables a new kind of distributed learning via online distribution. The following characteristics distinguish an online classroom:

- separation between teachers and students (which distinguishes it from face-to-face education), school administration's direction (as opposed to individual study or private coaching),
- Using technology to disseminate educational resources
- facilitating the mutual benefit of students, faculty, and staff via two-way communication over a computer network.

Online education is becoming more important to universities, both as a way of educating individual students and as a means of conferring degrees. According to recent studies, online delivery accounts for at least 80% of all course content at U.S. universities. As early evidence of the broad popularity of online education courses regardless of definition, a assessment by the United States Department of Education indicated that more than 54,000 online education courses were being offered with more than 1.6 million students enrolled (Harrington, S. J., 2012). Results from a more recent study, conducted by Ismail N. A., were released, and they revealed:

- A) More than 1.6 million students signed up for at least one online course in the fall of 2002,
- B) 578,00 of them, or more than a third, did all of their schoolwork in an online setting.
- C) Eleven percent of first-year students in the United States took at least one online course in the 2002-2003 academic year, and
- D) Thirteen percent of students at schools with online programmes enrolled in at least one online course (Ismail N. A., 2011).

2. BACKGROUND OF THE STUDY:

As the number of online courses provided in higher education has increased, concerns have been expressed about the quality of these offerings. There are three basic causes for the

problems with the quality of online education: (a) the requirement for independent quality assurance standards; (b) programmes with weak or nonexistent quality standards; and (c) a lack of consensus on what really constitutes high-quality education (Business Wire, 2014).

The value of online learning, saying, "... students who take classes online don't engage as much as their colleagues in conventional courses, and that they may walk away with information but not with an understanding of how to think independently." Concerns have been raised that institutions are turning to technology more as a means to an end (solving their financial issues) than as a means to further education. Lam et al, argue that online course delivery is often perceived by administrators as a cash cow venue - a way of delivering training to a large number of paying customers without the expense of building such like as temperature-controlled classroom and parking spots (Lam et al, 2012).

Some critics of online education question whether or not it is feasible to simulate the interactions between teachers and students. Although it is currently difficult to confirm the credentials of instructors teaching online courses, many sceptics of this kind of education raise serious concerns about the quality of what they provide. Others have suggested that as end-users of online courses, students have little to no opportunity to assess the quality of such courses. As most online schools and universities do not provide comparative information, it may be difficult for students to choose which online course is ideal for them. Moreover, student websites often fail to adequately state prerequisites that are needed to complete a certain online course, and when students are encountering technical challenges, they have nowhere to turn for assistance. So, further research is needed to determine whether or not distant education is effective (Malaysia Education Blueprint, 2012).

Those who support online education are convinced of its merits. It has been argued that teleconferences and online mailing lists may effectively replace face-to-face meetings. An online education has the potential to improve students' skills in many areas, including critical thinking, deep learning, collaborative working, and problem solving. Online learning, as suggested by previous researchers, might help schools save money while adding additional classes to the curriculum. In addition, students may have the opportunity to gain marketable technology skills that enhance their employment after graduation. Proponents of online education also argue that it may promote nondiscriminatory pedagogical and scholastic practices due to the absence of face-to-face interaction between professors and students and between students and their peers. Teachers and students may work together online without worrying about bias related to race, gender, or sexual orientation (Sull, E. C., 2012).

For online degree programs, "quality" is defined here as how closely they adhere to the guidelines established by the Institute for Higher Education Policy. Every online education programme that wants to be taken seriously must adhere to these standards. There are ten crucial features that should be included in any high-quality online course. The success of a course depends on several factors, including its content, pedagogy, motivation, feedback, coordination/organization, usability, support, workload, and flexibility. Many studies from the viewpoints of both instructors and administrators have examined the quality of remote education using the Internet as the principal delivery mechanism (Taylor, 2011).

3. LITERATURE REVIEW:

- Quality control standards

University accreditation bodies are evaluating online courses. Various organisations have produced online learning quality standards. WECT created the "Principles of Good Practice for Electronically Delivered Academic Degree and Certificate Programs". Some organisations have adopted these values. Consider the American Distance Education Consortium's "ADEC Guiding Principles for Virtual Learning" (ADEC). "Guiding Principles for Remote Learning in a Learning Society" by the American Council on Education and the Alliance: An Organization for Alternative Programs for Adults outlines online education best practises. Instructional Telecommunications Council presented "Quality Improving Strategies in Remote Education". Distance learning ideas were developed by the AFT. With WECT's declaration, the Council of Regional Accrediting Commissions amended and simplified "Guidelines for the Assessment of Electronically Delivered Degree and Certificate Programs" (Vural, 2013).

The Institute for Higher Education Policy (IHEP) developed 24 online education quality requirements. IHEP reviewed all current principles and standards, categorising them into seven categories: Institutional support; course creation; teaching/learning; course structure; student assistance; faculty support; evaluation and assessment. Teaching/learning, course structure, and student assistance affect students most. This research uses the IHEP student Benchmark measures to determine if student views of online education quality match the Benchmarks.

- Online education benefits pupils

The forum postings' internet availability enabled them to continue discussing one other's ideas. One responder stated: "There is something that encourages them to consider more fully when they have to reply in paper". Another student agreed, saying that online interaction allowed for greater contemplation than in a classroom (Vural, 2010).

- Personal factors that affected each student's schooling

Students' characteristics affect their online learning and interactions. Another research of online distance learners found that constructivist learners were most pleased about online education. Independent, proactive, and self-directed pupils were the most hopeful. Online education was believed to be as organised and thorough as classroom training by those who had a poor experience. Instructors were asked to help dissatisfied students. Students felt abandoned by the teacher's silence.

Warren et al, found that online students' role changes make this method of instruction more cognitive or internally oriented. Another researcher also noted that online students must be able to take on greater responsibility, adapt to a new environment, learn how to engage in class, synthesise ideas, apply what they've learned, and fire their own curiosity to succeed (Warren et al, 2014).

4. RESEARCH METHODOLOGY:

From January to December 2022, researchers performed a rigorous cross-sectional investigation. The cross-sectional design necessitated a single point in time data collection, which was quick and low-cost. Rao-soft software was used to estimate the sample size of 1800; 2000 questionnaires were distributed; 1930 were returned; and lastly, 130 questionnaires were rejected owing to incompleteness of the questionnaire. One thousand five hundred people from China were contacted and interviewed for the study. Using convenience sampling, all respondents were approached at the places listed above. Respondents were asked to engage in a monitoring programme at the factories. Participants who decided to participate in the study were given information about it by the researcher, who was also on hand to answer any questions they had while they were waiting to finish their monitoring programme. When a respondent was unable to read or write, the researcher read the survey questions and response categories to them, and then recorded their responses in the survey form as they were told. In some places, people were given questionnaires to complete and return all at once.

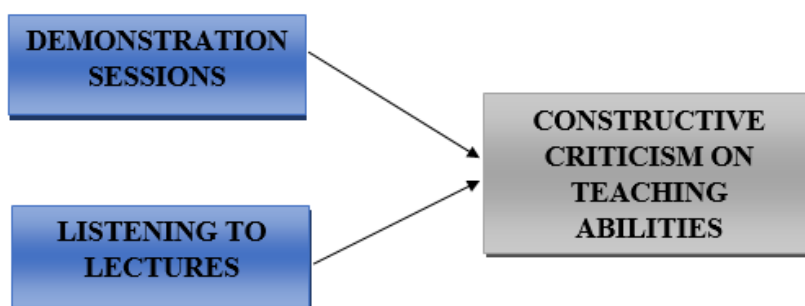
Sampling: Data for the study was collected through a questionnaire. Sample Size calculated through Rao-soft software was total 1800.

Data and Measurement: The researcher also conducted qualitative research in the form of survey collection. Respondents first answered control questions regarding their teaching ability analysis of the teacher. This left a sample size calculated from Rao Soft and the sample size was 1800. Likert scale, rating system, used in questionnaires, that is designed to measure people's attitudes, opinions, or perceptions. Subjects choose from a range of possible responses to a specific question or statement; responses typically include "strongly agree," "agree," "did not answer," "disagree," and "strongly disagree." Often, the categories of response are coded numerically, in which case the numerical values must be defined for that specific study, such as 5 = strongly agree, 4 = agree, and so on.

Statistical Software: MS-Excel and SPSS 25 was used for Statistical analysis.

Statistical tools: Descriptive analysis was applied to understand the basic nature of the data. Validity was tested through factor analysis.

5. CONCEPTUAL FRAMEWORK:



6. RESULTS:

6.1 Factor Analysis:

Confirming the latent component structure of a collection of measurement items is a common utilisation Factor Analysis (FA). The scores on the observable (or measured) variables are thought to be caused by latent (or unobserved) factors. Accuracy analysis (FA) is a model-based method. Its focus is on the modelling of causal pathways between observed phenomena, unobserved causes, and measurement error.

The data's suitability for factor analysis may be tested using the Kaiser-Meyer-Olkin (KMO) Method. Each model variable and the whole model are evaluated to see whether they were adequately sampled. The statistics measure the potential shared variation among many variables. In general, the smaller the percentage, the better the data will be suitable for factor analysis.

KMO gives back numbers between 0 & 1. If the KMO value is between 0.8 and 1, then the sampling is considered to be sufficient.

If the KMO is less than 0.6, then the sampling is insufficient and corrective action is required. Some writers use a number of 0.5 for this, thus between 0.5 and 0.6, you'll have to apply your best judgement.

- KMO Near 0 indicates that the total of correlations is small relative to the size of the partial correlations. To rephrase, extensive correlations pose a serious challenge to component analysis.

Kaiser's cutoffs for acceptability are as follows:

Kaiser's cutoffs for acceptability are as follows:

A dismal 0.050 to 0.059.

- 0.60 - 0.69 below-average

Typical range for a middle grade: 0.70–0.79.

Having a quality point value between 0.80 and 0.89.

The range from 0.90 to 1.00 is really stunning.

Table 1: KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.919
Bartlett's Test of Sphericity	Approx. Chi-Square	7316.121
	df	180
	Sig.	.000

This demonstrates the validity of assertions for sampling purposes. To further verify the relevance of a correlation matrices as a whole, Bartlett's Test of Sphericity was performed.

Kaiser-Meyer-Olkin Sampling Adequacy Value is 0.919. The p-value for Bartlett's sphericity test was determined to be 0.00. Bartlett's test of sphericity showed that the correlation matrix isn't an identity matrix, with a significant test result.

6.2 Test for hypothesis:

A demo is a public demonstration in which people show their support or opposition for a particular subject or cause. Demonstrations may take several forms.

Instead of the "time for telling" that is typical of a lecture, a Lecture Demonstration adds a well organised activity that engages the audience and helps them understand the topic at hand. By confronting their prior understanding of a vital topic, students are better prepared to learn in the succeeding lesson. An interactive lecture presentation may be broken down into three distinct phases for the benefit of the students.

- Do the best to predict what the demonstration was show. Prior to deciding together which of many possible outcomes is most probable, students deliberate individually and then in small groups.
- Just take a look at the proof for yourself. Students test the veracity of their hypothesis via a collaborative inquiry, survey, or data analysis.
- Consider the outcomes. Students will be prompted to consider how the presentation either strengthened or undermined their preexisting worldview. After generating new ideas in conversation with their classmates, students then synthesise those concepts into original written products.

The following hypothesis was developed by the researcher in light of the preceding discussion: which was analyse the relationship between demonstration session and constructive criticism on teaching abilities.

H_{01} : There is no significant relationship between demonstration session and constructive criticism on teaching abilities.

H_1 : There is a significant relationship between demonstration session and constructive criticism on teaching abilities.

Table 1: ANOVA

ANOVA					
Sum					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	66702.504	547	5575.291	2959.922	.000
Within groups	168.392	1252	1.983		
Total	66859.896	1799			

In this study, the result is significant. The value of F is 2959.922, which reaches significance

with a p-value of .000 (which is less than the .05 alpha level). This means “There is a significant relationship between conventional marketing and socio-demographic details” is accepted and the null hypothesis is rejected.

7. CONCLUSION:

There are benefits and drawbacks to earning a degree online. Participants' positive experiences were attributed to a number of factors, including the low cost of the online format, the ease of electronic research, the well-organized course structure, participants' prior knowledge of the instructor, familiarity with the online class interface, and familiarity with the online class interface. Kids have a bad time in school because of a number of factors, including teachers who don't provide enough feedback or technical aid, students who can't control their emotions and motivation, students who feel alienated while studying, and boring, repetitive lectures. The comfort level of the instructor had an impact on the classroom dynamics. Online learners may feel more at ease if they have a good rapport with their instructor. A first-year professor might teach an online course in this scenario. Research may be done on both brand-new and seasoned online educators.

8. LIMITATION:

There are a few problems with the study that need to be ironed out before it can be trusted completely. To begin, just three institutions were considered for this study; two universities and one community college. Each of the teachers in the study uses a method of instructing and communicating with their students that is distinct from the others. It follows that the teacher's personality may have influenced the pupils' attitudes of their virtual classroom.

In addition, there was great variation in the formats used for the online courses. Two of the courses utilised WebCT, while the third used Blackboard. As similar as the two courseware systems are, they couldn't be more different when it comes to presentation, class structure, and user interface.

Lastly, there was a large selection of content available at different degrees of difficulty. The graduate level was represented by Educational Psychology courses. Whereas the first course was an introduction to music appreciation for freshmen, the third was a course on social development.

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