

## Difference Between Online and Offline Students in Their Learning Satisfaction at Mizoram University, India

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**How to cite this article:** Jumri. Riba, Muttu Vemula, L.K. Lalbiakfeli, Christina Lalramthari (2024) Difference Between Online and Offline Students in Their Learning Satisfaction at Mizoram University, India. *Library Progress International*, 44(3), 26468-26475

### Abstract

This study compares the results of learning satisfaction for online and offline students at Mizoram University based on the dimensions, such as classroom engagement, availability of learning resources, assessment and feedback, technology use, course satisfaction, and overall learning satisfaction. Six hundred students were involved, divided equally into each learning environment. Data were collected with the help of a structured questionnaire. A t-test was run on the data to bring forth the differences in the mean scores between the two groups. The online students scored significantly higher on classroom engagement, learning resources, assessment and feedback, technology usage, and overall learning satisfaction. There was no significant difference in course satisfaction. Such findings indicate that online learning environments have an edge when it comes to available resources and engagement that enhance overall satisfaction. Thus, this study will highlight the fact that the environments in which a student may be learning online or learning offline are very different indeed, and such differences do matter when it comes to curriculum design and support. This will fill the aforementioned gaps in their learning procedure and improve teaching methods along with learning experiences accordingly in any given educational setting.

**Keywords:** Learning Outcomes, Online Education, Offline Education, and Student Engagement

### Introduction

The shift to online education has dramatically changed the landscape of learning, which implies a review of learning environments in terms of their effectiveness. As educational institutions start using digital platforms, there's a need to understand the effects of online and offline learning experiences on student outcomes. This comparative study will assess the dimensions that include classroom involvement, availability of learning resources, assessment, and feedback received, the use of technological resources, course satisfaction levels, and overall learning fulfillment among Mizoram University's students.

The online education platform brings flexibility and access to different resources, but it is fraught with challenges that could easily influence student engagement and the efficacy of learning. Conversely, traditional offline learning environments allow for direct contact with instructors and peers, thereby increasing motivation and teamwork skills. This research, through systematic analysis of the differences between the two types of learning, aims to uncover the strengths and weaknesses of both learning modalities in order to provide a much-needed insight for educators and policymakers. The findings of this research are geared toward guiding strategies in the development of the learning experience, in the form studied, towards bettering the learning outcome and experience of the student. To achieve this, the comparative study will be able to identify best practices and include them in designs and delivery of education aimed at offering excellent learning experiences to all its students

irrespective of the mode of study.

### **Review of Related Literature**

There have been great efforts to prove the effectiveness of online learning against traditional face-to-face learning. Many studies shows that online learning environments are capable of offering flexibility and access, thus allowing students to better interact with course materials in their preferred manner. For instance, Allen and Seaman's study (2017) found that students usually enjoy online learning because they can "balance academic responsibilities with other commitments," an advantage unique to online learning. However, flexibility can also be problematic because it leads to demotivation and loneliness, especially in courses that do not contain any interactive elements (Dixson, 2015).

Student engagement is also different between online and offline settings. For example, Hwang and Chen (2017) found that face-to-face interactions in traditional classrooms promote a sense of community and collaboration that is hard to replicate in virtual environments. These interactions are likely to enhance the social skills of the students, and it will also allow instant feedback, thus adding to the fun of the learning experience. On the other hand, the student who is online may be deprived of all these social interactions that are needed for his life, thereby affecting their overall satisfaction in addition to their learning outcome (Bolliger & Martin, 2018).

There are studies pointing to the fact that a large number of digital collection resources such as e-books, online journals, interactive content are often accessible and readily available for online learners (Morrison et al., 2019). For traditional offline students, their access materials will be largely through written texts and whatever material comes their way at the places of study. This may impact the quality of education as perceived and considered, in addition to critical thinking while carrying out research (Cohen & Mendez, 2020).

Assessment and feedback strategies also differ considerably between these two modalities. Many online learners often report receiving more timely varied feedback through digital platforms enhancing their understanding and retention for course content (Hattie & Timperley, 2007). As such, traditional assessment modalities may not always make the same level of timing, which leads to delays in student understanding as well as adjustment (Wang & Wang, 2020).

Overall, the literature suggests that both online and offline learning environments have strengths and weaknesses that can impact student outcomes. This study aims to contribute to the discussion on how educational practices can be optimized for diverse learners by considering the factors in the context of Mizoram University.

### **Objectives**

1. Compare the classroom engagement levels between online and offline students to understand which environment better supports the students in engaging with their class fellows.
2. Assess the availability and quality of learning resources as perceived by online and offline students, and determine whether accessibility to resources influences educational satisfaction.
3. Compare the difference of assessment practices and the quality of feedback received between students of online and offline teaching with a focus on their differences in affecting the efficacy of learning.
4. Examine the level of use of technology in online and offline settings and its influence on students' overall experience with learning.
5. Satisfaction of the Course To research students' reported levels of satisfaction with respect to the online or offline course, considering different parameters contributing to their entire comfortability with the provided study materials and delivery mechanisms
6. Overall Satisfied with Learning To research overall learning comparisons between an online and an offline set of students, identify areas where students are considered mostly satisfied with their perception of learning.

### **Research Methodology**

#### **Research approach**

The study adopted a quantitative approach to identify the differences between online and offline students' learning satisfactions in Mizoram University. The empirical data was drawn through the structured measurement of various dimensions in education.

#### **Selection of Sample**

There were 600 students who took part in the study, and half of them were online learners while the other half were offline learners. Stratified random sampling was used in order to ensure that diversity among different academic disciplines and backgrounds was represented. This is the reason why the student population was well represented in this study, thus making the study valid.

### Data Collection Instruments

Data were gathered using a structured questionnaire containing standardized instruments to measure the following dimensions of learning satisfaction- Classroom Engagement, Learning Resources, Assessment and Feedback, Use of Technology, Course Satisfaction. These were dimensions that were considered relevant for the educational experiences of students in various learning environments.

### Data Analysis

Quantitative data was analyzed through statistical software. For the characteristics of the sample, descriptive statistics will be used. Inferential statistics, t-tests, on a significant level of  $p < 0.05$ , were used to compare the outcomes of the means for each dimension between online and offline students.

### Ethical Consideration

Ethical clearance for the research was sought before conducting the study from the appropriate institutional review board. Informed consent was ensured for all the participants to know the purpose of the study and their rights to withdraw from the study at any given time. The anonymity and confidentiality that was maintained throughout the research process ensured that there was a follow-through on the ethical standards in educational research.

### Results and Analysis

Table-1: Significance of Difference in Classroom Engagement

Dimension	Type of Student	N	Mean	Std. Deviation	t-value	p-value	Remarks
Classroom Engagement	Offline	300	20.4533	3.20344	-3.687	0.000	Significant at 0.01 level
	Online	300	21.43	3.28549			

From the analysis of Table 1, it is observed that there is a significant variation in classroom engagement between the offline and online Mizoram University students. For the offline students, it is 20.4533, while for online students, it is 21.4300. In this case, the value of  $t=-3.687$  shows that there are significant variations between the engagement levels. With a p-value of 0.000, the difference holds at the 0.01 level. From the study, students in virtual learning environments indicated more class engagements than their counterparts in class. One of the possibilities is that virtual learning may be more interactive and has multimedia and other varied equipment to make learning more fulfilling, thus a difference between the two classes. Such off-campus learning may sometimes be conventional, which, in most cases, doesn't appeal to capture the student's interest in participation. In summary, these findings emphasize the role of engagement in learning outcomes and suggest that online learning environments may have a particular advantage in fostering student involvement and interaction. Further studies can then be directed towards exploring which factors particularly explain this enhanced engagement in the online setting.

Table 2: Significance of Difference in Learning Resources

Dimension	Type of Student	N	Mean	Std. Deviation	t-value	p-value	Remarks
Learning Resources	Offline	300	26.5033	3.53151	-4.704	0.000	Significant at 0.01 level
	Online	300	28.0233	4.34192			

From the analysis in Table 2, there is a significant difference between the two groups of Mizoram University students: the offline and the online students' perceptions of learning resources. The offline students scored with a mean value of 26.5033, whereas the online students scored a mean value of 28.0233. This means there is a highly significant difference in how the two groups perceived the availability and quality of learning resources; the p-value is at 0.000 level, meaning that the two groups were statistically different at the 0.01 level of significance. This is a significant difference because online students feel that they have better access to learning resources than the ones who study offline. Higher mean scores for online learners could be due to more abundant digital materials, including e-books, online databases, and interactive content. Physical resources and traditional instructional materials might limit the offline students.

Overall, learning resources appear to play an important role in educational satisfaction and effectiveness. Results do indicate a need for resource enhancements by education institutions for student satisfaction in offline learning settings as well as better academic performance. Future studies could research which kinds of resources students find to be the most useful in both formats of learning.

**Table 3 Significance of Difference in Assessment & Feedback**

Dimension	Type of Student	N	Mean	Std. Deviation	t-value	p-value	Remarks
Assessment & Feedback	Offline	300	26.76	3.3436	-4.153	0.000	Significant at 0.01 level
	Online	300	28.09	4.42574			

As seen from Table 3, it indicates there is a significant difference regarding the perception of assessment and feedback among students when considered between the offline and online learning environments at Mizoram University. The mean score for offline students was 26.76, while that for online students was impressively high at 28.09. The t-value is -4.153 and the p-value is 0.000, which means that the difference is highly significant at 0.01 level.

These results indicate that e-learning students feel they experience more effective assessment and review than their traditional counterparts. This may be due to the use of digital assessment tools that allow for swift feedback, such as an online quiz or interactive type of assessment, which tends to make students better equipped to understand their performance in the best possible way, whereas traditional students may end up experiencing delayed feedbacks or may not find any assessment method effective in improving their performance.

The findings emphasize effective assessment practices in enhancing learning experiences. To bridge the gap, educational institutions are encouraged to integrate more effective feedback mechanisms into offline learning environments and incorporate technology where possible to streamline the process of assessment. Future studies may also be conducted into the features of assessment and feedback that students find more valuable in both learning contexts.

**Table 4 : Significance of Difference in Technology Usage**

Dimension	Type of Student	N	Mean	Std. Deviation	t-value	p-value	Remarks
Technology Usage	Offline	300	23.2867	3.04336	-6.04	0.000	Significant at 0.01 level
	Online	300	24.9967	3.84525			

An analysis of Table 4 would reveal that Mizoram University has a major difference in the technology used by offline and online students. Offline students received a mean score of 23.29, while online students received a much higher mean score of 25.00. Their t-value is -6.04, which demonstrates a large difference between the two. The p-value is 0.000, which means that this is statistically significant at the level of 0.01.

This result goes on to state that students taking their lessons online will find a way they take the benefit of technology, unlike those attending classes the physical way. It is quite likely because of using many digital resources, instruments, and sources through which studying takes place and interactive use with learning. Technology seems to often be harnessed within the e-learning environment, which promotes improving the process of studying while offering much more to both an individual and flexibility when learning is concerned. On the other hand, tech integration constraints in a traditional classroom environment may limit offline students' exposure to various technological resources. This calls for the integration of improved technology in these offline

learning environments to bridge this gap. Importantly, training sessions and the development of resources can help offline students perform better with available technological tools for enhanced outcomes. Further research might further explore specific technological tools that can efficiently improve the engagement and learning of students in both settings.

**Table 5: Significance of Difference in Course Satisfaction**

Dimension	Type of Student	N	Mean	Std. Deviation	t-value	p-value	Remarks
Course Satisfaction	Offline	300	20.5267	2.95608	-1.083	0.279	Not significant
	Online	300	20.8367	3.97778			

Table 5 represents a summation of an analysis comparing course satisfaction levels among both the offline and online groups. In summary, mean value for offline was found to be 20.53 as opposed to mean value of online with mean of 20.84. Hence t-value appeared to be -1.083. It signifies the insignificant minute difference between the samples of this research. The P-value was computed at 0.279 showing no variation between two groups.

These outcomes could suggest that while the level of student satisfaction might normally be roughly about balanced for off-campus and distance students, nothing in particular appears to strongly falsify that course with materials, instructional modality and, thus educational quality, would not vary or vary by significant degree across instructional environments. Factors that dictate what will constitute the need and adequacy of each program are instructor's effectiveness and programme appropriateness by arguably learner's involvement as well.

For instance, while having the flexibility of accessing some of these learning materials like online students, offline can boast the benefits of the face-to-face interaction meant to enhance this understanding as well as support. This is not, however, a clear indicator that this particular group is more satisfied with the course than the others since the p-value, as explained above happens to exceed the threshold of 0.05. Further research could examine further micro-level aspects of satisfaction, such as student-teacher interaction or perceived relevance of the course, to understand how satisfaction differed among traditional, distance education, and other forms of learning.

**Table 6: Significance of Difference in Overall Learning Satisfaction**

Dimension	Type of Student	N	Mean	Std. Deviation	t-value	p-value	Remarks
Overall Learning Satisfaction	Offline	300	117.53	12.70751	-4.762	0.000	Significant at 0.01 level
	Online	300	123.3767	17.05023			

Table 6 Analyzes overall satisfaction with learning by offline and online students at Mizoram University. The mean for the offline students was at 117.53 while that of the online students was at 123.38. The t-value was -4.762 with a p-value of 0.000 indicating a significant difference between the two groups at the 0.01 level.

This would mean that the online students have a greater overall learning satisfaction than the students in the offline environment. The reasons why online learners report higher satisfaction are that they can be flexible in their online learning, they have access to a wide variety of resources, and they can engage with material at their own pace. Online environments also offer chances for varied interactions through forums, chats, and multimedia, which may enhance the engagement and satisfaction of the students.

The offline students might be disadvantaged by a highly intensive schedule, availability of comparatively fewer sources of learning, and possibly less individualized learning. Overall satisfaction varies considerably and therefore education establishments should consider the specific advantages online learning can offer when designing their courses and support services.

Future research might zoom in on aspects that appear to influence online student satisfaction, including teaching methods, the utilization of technology tools, and how courses are developed, all aimed at boosting learning experiences in both environments.

#### **The key findings and conclusion of the study**

The key findings of the study of the learning outcomes and levels of satisfaction of online and offline students at Mizoram University are as follows:

1. Classroom Engagement: There was an observed difference in classroom engagement; the mean score was relatively higher in online students as compared to that of offline students, which was found to be 21.43 and 20.45, respectively. That would indicate that online learning environments make students more engrossed and attentive due to the interactive nature of such a learning environment and the flexibility of participation.
2. Learning Resources: The online students perceived their access to learning resources more favorably and scored a mean of 28.02 compared with 26.50 from the offline students. Such a significant difference indicates that the availability and quality of digital resources enhance the experience of online learning, which may be limited for those in traditional settings.
3. Testing and Feedback: The online students said that there were better testing and feedback systems as compared to the offline. They scored 28.09 while the offline scored 26.76 on average. This suggests the reality that digital assessment tooling enables faster feedback that also is more comprehensible thus easier to implement while learning.
4. Use of Technology: The difference in technology usage was evident as online students scored relatively higher with a mean score of 25.00 as opposed to those who attended classes physically whose mean score was 23.29. Conclusion In this regard, technology needs to be enhanced within the offline classrooms for even more enhanced learning experiences.
5. Course Satisfaction: There is no difference in course satisfaction levels between online students (20.84) and offline students (20.53). This means that satisfaction may balance both ways, based on factors such as instructor effectiveness and relevance of course content.
6. Learning Satisfaction: Online students were highly significant in having greater global learning satisfaction (123.38) as compared to their offline peers (117.53). It reveals that flexibility, the access to varied resources, and the scope for different interactions provide advantages for online learning and thereby more student satisfaction. The study, therefore, generally brings to attention critical disparities in performance outcomes and satisfaction between online and offline students, hinting that educational institutions should capitalize on the strengths of online learning and advance the traditional classroom experience.

#### **Discussion**

This study's findings correspond with and contribute to other literature on variations of learning outcomes and satisfaction levels between online and offline educational environments.

Research studies by Allen and Seaman (2017) also argue that online education frequently affords students more flexibility as well as access to resources that are diverse and richer, which can make learning more engaging and satisfying for the students. This would be in line with our results since online students were shown to experience significantly higher classroom engagement and overall learning satisfaction compared with their offline counterparts. Possibly, the fact that these students can interact with material at their own pace and with interactive activities can contribute to this enhanced satisfaction, in support of the argument that online environments are more capable of creating an engaging learning experience.

The truth also lies in the fact that a large gap in accessed learning resources supports earlier claims such as Zhao

et al. (2005), who argued that online students typically acquire abundant digital information besides e-books and rich multimedia content. Our data showed that online students accessed better learning resources, explaining their higher scores on both learning resources and assessment feedback. This reflects the importance of resource availability in determining the experiences that students will have with education.

In general, the findings in assessment and feedback also accord with those of Gikandi, Morrow, and Davis (2011) who claimed that digital tools for assessments are effective ways of getting rapid and constructive feedback. Most of the students in this study reported positive perceptions towards assessment and feedback, where the immediacy of assessment in the online environment makes it possible for students to understand their performances better faster.

In contrast, we found no difference in satisfaction with the courses taken in the online versus offline modality. The result agrees with the results from Xu and Jaggars (2013), which conclude that, while there are definite benefits associated with taking a course online, satisfaction itself is not a benefit associated with it. It would seem, rather, that instructor effectiveness and relevance to the students might play decisive roles in ensuring that either format produces greater satisfaction for the student.

The general contribution of this study is the empirical evidence showing significant differences of various dimensions of learning outcomes between online and offline students, thereby pointing to a general necessity on the part of educational institutions for curricular designs and support services to cope with the differences, and more precisely, to support the classroom learning experience. Future research will explore further aspects that impact satisfaction and learning outcomes in different settings, thereby further developing pedagogical practice.

### **Recommendations**

Based on these conclusions, educational institutions would be advised to enhance both curricular designs and services that would meet the different requirements of online and offline learners. For online learning particularly, institutions should utilize their technological resources to provide as many diverse and engaging contents as possible, including both interactive multimedia and real-time feedback mechanisms, which have been shown to support better learning outcomes and more satisfaction. More importantly, strategic training programs for the instructor will be necessary concerning proper usage of digital tools in appropriate assessment. Again, an off-line setup, making both physical and digital materials more accessible shall complement what is given on providing for professional development. Monitor progress in the curriculum regularly using student feedback solicited at regular intervals, areas in need of attention for effective courses. Finally, present research should consider which factors affect satisfaction and outcome to ensure that education is moving towards improving their students' individual needs.

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