



A Study of Effectiveness of Blended Learning Mode in Teaching of Educational Methodologies in College of Education

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Abstract:

Today in this fast pacing world blended learning is popular subjects of research and practice in educational institutions. As a sensible combination of online and face-to-face learning, blended learning provides a better opportunity to design learning as per the needs of the learners in B. Ed collages. Present study was expanding over two years and conducted at the Department of Education, R. C. Patel collage of Education, Shirpur, Dhule (MH), India, to study the effectiveness of blended learning mode. Educational years are an apex time when students learn to behave as responsible citizens and preparing themselves as professionals and rarely have issues with their institutions. The purpose of the study was to explore the various problems of B.Ed class students of R. C. Patel collage of Education while learning content of methodologies. The study was designed to identify the problems faced by B.Ed students during blended learning.

The research was carried out in positivistic paradigm and descriptive in nature. By using the quantitative research design, survey was conducted. Every student of R. C. Patel collage of Education was the population of the study. The study population was comprised of 200 students which was chosen by using a census sampling method. By using self-developed questionnaire, researcher found that the majority of B. Ed students like to learn with blended learning. The study also identified use of an effective digital technologies for blended learning in the given learning conditions and identified the challenges of designing and executing them.

Key words: *blended learning, digital technology,*

1. Introduction:

In the decade of the 21st century, the use of Information and Communication Technology (ICT) for all sector of education is very important and the use of AI and digital technologies were become part and parcel of it. Introduction of new technologies for supporting education consequently influences the technology of education. In other words, the technology that helps to convey education, influence how it should be convey. They raise new



questions and create new problems about use of technology, but it is also important to see how are they addressing the long-standing questions and challenges of education to reach at the doorstep of students.

One of the problem of student is low attainment in classroom in formal education is one such big problem of our education system. Especially in an overcrowded country like India, formal education is highly challenged due to lack of qualified teachers, facilities and quality education. Even in the best environment formal education convey in the well planned traditional way is not fruitful to fulfil the needs of diverse learners. This problem identified before many days, though it is yet elusive towards a solution of problem direction. We always expect to add new technologies to solve these problems and intricate on their potentials. The new medium of the Internet is one such technology we can use for proper education. We need to explore its potentials regarding solving our long-standing problem about education.

2. Expanding modes of education:

Whole education system was using first the face-to-face or regular mode of education followed by second distance mode of education, the world of education was used these two modes of education for delivery of information before the information age. They were the two opposite ends of a progression of modes of education. These two modes differ in features like the resource, learners group size and commitment of the learners in the relation of time and place. The face-to-face mode demands from the students a commitment to the institutional time table and attendance at a place. On the other side, the distance mode demands no commitment to institutional time table and place. The students are widely distributed over a large geographical area. These two modes are sharply divided. This split of modes gets changed with the fusion of online and face-to-face learning called as blended learning.

In recent decapod, blended learning is arousing as an alternative mode that shares characteristics of both of the previous modes. It sits on the middle ground of the continuum that starts with the face-to-face mode or regular mode and ends at distance mode. The online learning is mostly conducted as asynchronous learning, where the teachers and students need not be together at a given point of time. They may be scattered over a wide geographical area, as in the distance learning but there is a possibility of monitoring the activity of each of the students in real-time. The study materials also can be fitted according to the needs of the learner.

In many of the institutions, the continuum is populated by different modes of learning, such as some institutions use computer labs or laptop instruction, classroom aids, web-enhanced learning, blended learning, and fully online instruction as option to face-to-face

learning. A number of experiments are being done in this field and many fanciful terms like Hybrid Learning Emerging trends of e-learning and blended learning. This is a very broad definition which includes all types of digital learning in its fold (for example, CAI, Videos, PPT Presentations, etc.) besides the online learning. Often, the terms of digital learning and online learning are used for specifying them separately.

3. What is blended learning?



Fig. 3.1 Blended learning

The term blended or blending was in use in educational contexts from a long time. In recent decades, the term 'blend' is being specifically used to mention to the blending of e-learning with the traditional face-to-face mode of teaching. It was used for using different learning environments to attract the learners' erection of their own idea by mingling with different types of resources and activities. It is an art that has been practiced by inspirational teachers for centuries in all of the world. Blended learning, also known as hybrid or mixed-mode learning, a part of the traditional face-to-face instruction is restoring by web-based online learning.

4. Review of literature:

As per the view of McGee and Reis (2012, p.18) said that there is consensus about a number of aspects of blended learning, but he does not show any consensus about the exact structure of a blended course. He told that "a snapshot system that personifies those unique elements of a blended course can inform, model, and clarify how blended course differs from other delivery designs." Educational organization generally used 'blended' to refer to a combination of face-to-face teaching and online teaching. Graham et al. (2014) also assert that in the research on blended e-learning, most of the blended models adopted the combining of online and face-to-face instruction. Blended learning is a widely researched phenomenon. Drysdale et al. (2013, p. 98) reviewed over 200 masters' theses and doctoral dissertations related to blended learning and have found that the graduate research on blended learning was increasing. He also identified a growing perception among researchers that blended learning



was superior to predominantly or exclusively e-learning methods and traditional method and all.

Blended learning is defined as a mixed-mode of learning in which both face-to-face and online learning are used. Spiliotopoulos (2011) in Towards a Technology Enhanced University Education defines the above term as “blended learning is a learning model or approach that mixes both web-based, mobile technologies, and classroom technologies for on-campus courses or programs (with or without a reduction in ‘seat time’)”. According to the Sloan Consortium (Sloan-C), a leading professional organization dedicated to promoting and supporting online education, “a blended course is one in which 30 per cent to 70 per cent of the instruction is delivered via technology. Sloan-C further defines this type of course as one “that blends online and face-to-face delivery. A substantial proportion of the content is delivered online, typically uses online discussions, and typically has some face-to-face meetings” (Sloan Consortium’s Definition), (Dziuban et al., 2011).

5. Objectives:

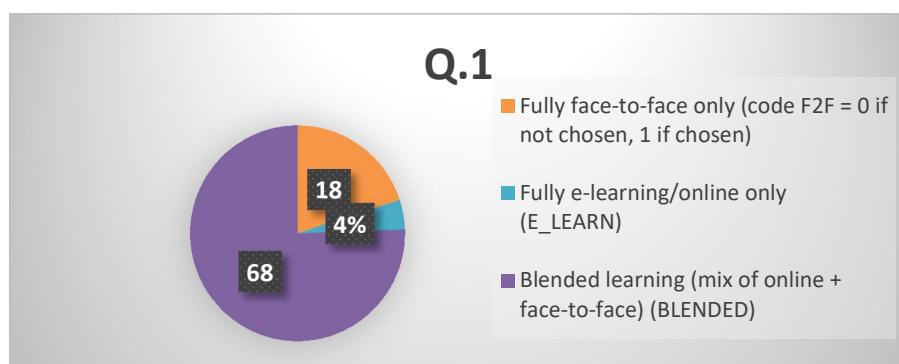
- To study effectiveness of blended learning mode in teaching of educational methodologies in collage of education.

6. Methodology:

In present research questionnaire was made for data collection from the 100 II nd year students with the help of google forms, sending messages and email to students. Purposive sampling survey was done and data was collected. Teacher education institutions was based on a schematic structure imposed by the NCTE. This curriculum had a number of new contents in comparison to the old one-year curriculum. The main papers PE1, PE2, Pe3, PE4, PE5 and PE6 are the main paper. Pedagogy of a School Subject is divided over two years. Practice-in-school teaching as internship of 3 months. Another set of papers named as Enhancing Professional Capability (EPC) is introduced which has the papers Reading and Reflecting On Texts, Drama and Art in Education, Critical Understanding of ICT, and Understanding the Self. The 2-year course has a total of 1300 marks divided equally over two annual examinations. The ratio of external and internal examination is 930:370. The four papers of EPCs are for internal evaluation. Besides these, the department has included research at the graduate level in its curriculum. The department also had ten add-on courses. The new curriculum was an apt opportunity for learners.

7. Data analysis and interpretation:**1. Which mode(s) of instruction have you experienced this academic year?**

| Mode of Instruction | Response | Percentage (%) |
|--|----------|----------------|
| Fully face-to-face | 18 | 18% |
| Fully e-learning / online | 4 | 4% |
| Blended learning (mix of online + offline) | 68 | 68% |
| Total | 100 | 100% |

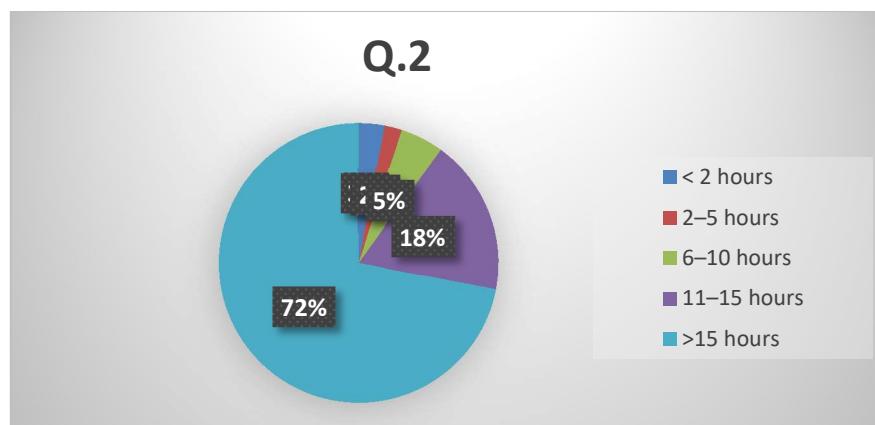
**Interpretation:**

A majority (68%) of students experienced blended learning and 18% who experienced face-to-face followed by only 4% fully online mode of instruction were using. This demonstrates that blended learning is the dominant instructional mode used at the B.Ed. College, Shirpur.

2. Average hours per week spent on blended learning activities (synchronous + asynchronous)**Interpretation:**

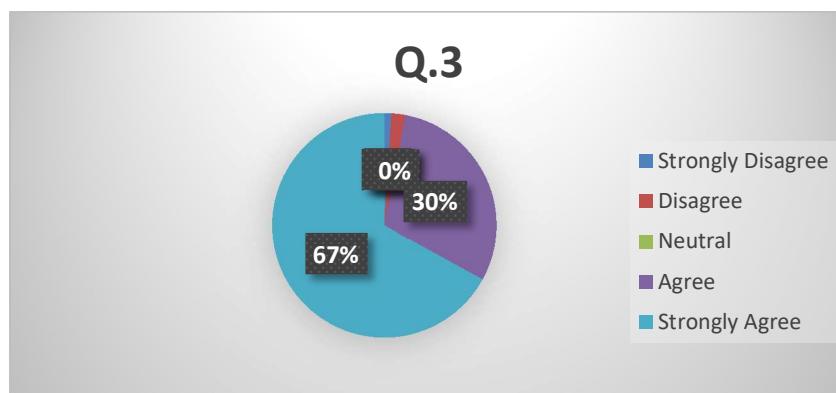
About 72% of students spend more than 15 hours per week on blended learning. This shows that most students are engaging in blended learning, supplementary online sessions, while very few (3%) engage for less than 2 hours weekly.

| Hours per Week | Response | Percentage (%) |
|--------------------|----------|----------------|
| Less than 2 hours | 3 | 3% |
| 2–5 hours | 2 | 2 % |
| 6–10 hours | 5 | 5% |
| 11–15 hours | 18 | 18% |
| More than 15 hours | 72 | 72% |
| Total | 100 | 100% |



3. Blended learning (mix of online + face-to-face) helped me learn course content effectively.”

| Course content learn effectively | Response | Percentage (%) |
|----------------------------------|----------|----------------|
| Strongly Disagree | 1 | 1% |
| Disagree | 2 | 2% |
| Neutral | 0 | 0% |
| Agree | 30 | 30% |
| Strongly Agree | 67 | 67% |
| Total Agree (Positive) | 100 | 100% |



Interpretation:

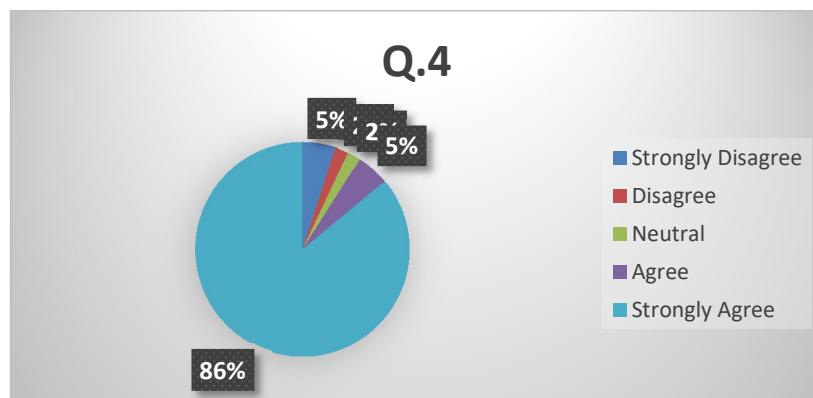
An enormous 67% of students agree or strongly agree that blended learning helps them learn course content effectively. Only 3% expressed disagreement. Blended learning significantly improves learning effectiveness. With 67% positive responses.

- 4. "I am satisfied with the quality of blended learning sessions."

| Quality of blended learning satisfaction | Response | Percentage (%) |
|--|----------|----------------|
| Strongly Disagree | 5 | 5% |
| Disagree | 2 | 2% |
| Neutral | 2 | 2% |
| Agree | 5 | 5% |
| Strongly Agree | 86 | 86% |

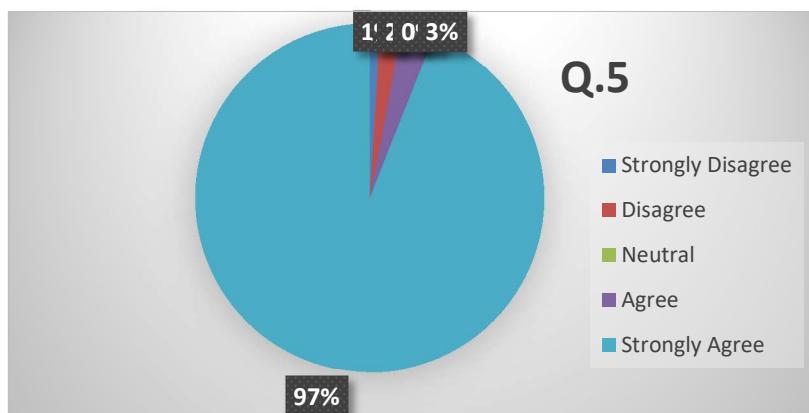
Interpretation:

A total of 91% (Agree + Strongly Agree) mentioned satisfaction with the blended learning sessions. Only a small portion (9%) are dissatisfied or neutral. Very high satisfaction aligns with effective learning.



- 5. During blended classes, I interact more with peers than in fully online classes.

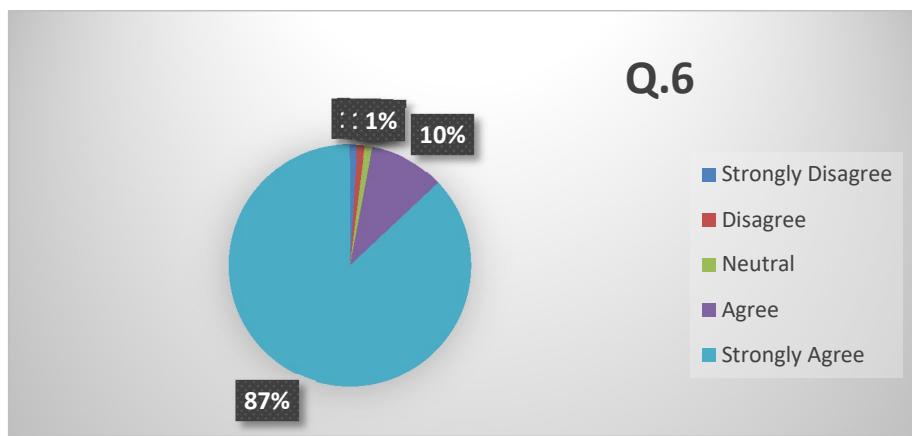
| More interaction with peers | Response | Percentage (%) |
|-----------------------------|----------|----------------|
| Strongly Disagree | 1 | 1% |
| Disagree | 2 | 2% |
| Neutral | 0 | 0% |
| Agree | 3 | 3% |
| Strongly Agree | 94 | 94% |

**Interpretation:**

97% students agree that peer interaction is higher in blended learning compared to fully online learning. Significant difference - interaction higher in blended mode with 97% positive response.

6. Complete assigned online tasks/activities on time.”

| Complete online task on time | Response | Percentage (%) |
|------------------------------|----------|----------------|
| Strongly Disagree | 1 | 1% |
| Disagree | 1 | 1% |
| Neutral | 1 | 1% |
| Agree | 10 | 10% |
| Strongly Agree | 87 | 87% |

**Interpretation:**

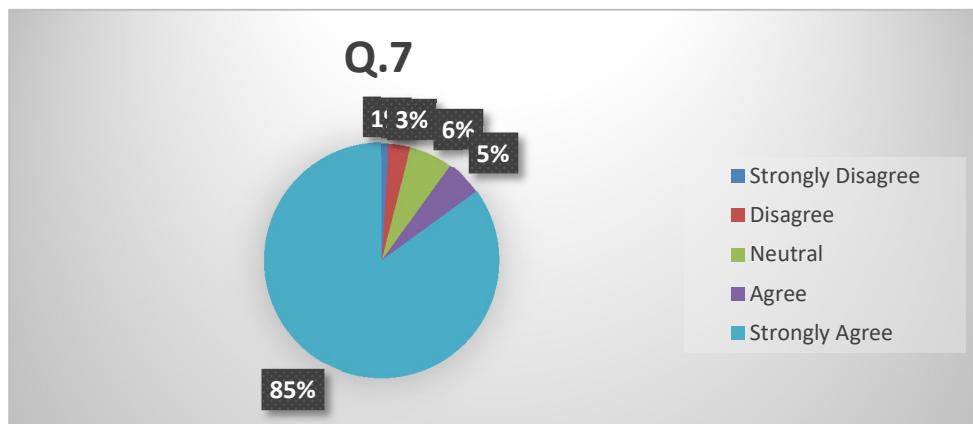
Near about all students (97%) report completing online activities on time. This indicates strong learner discipline and engagement in blended learning. Significant relationship - blended learning improves timely task completion

7. The college provides sufficient for e-learning/blended learning.

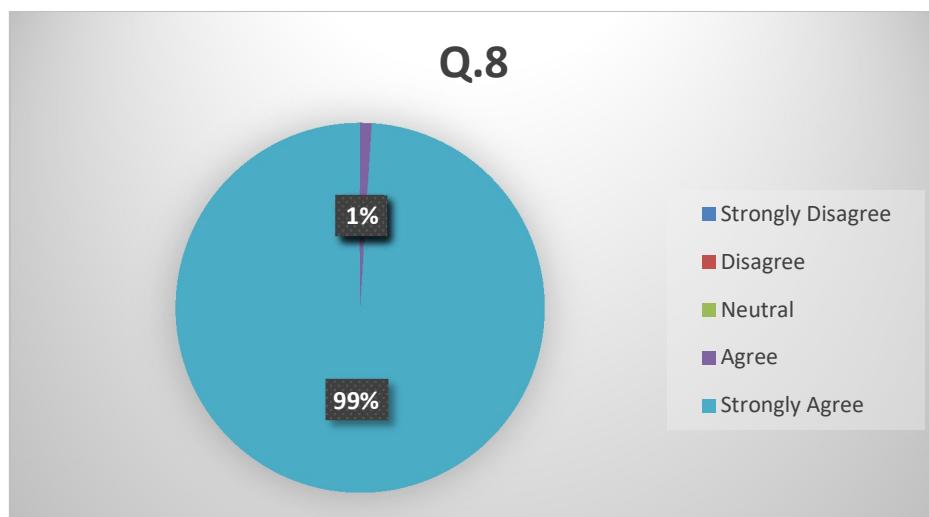
| technical support of collages | Response | Percentage (%) |
|-------------------------------|----------|----------------|
| Strongly Disagree | 1 | 1% |
| Disagree | 3 | 3% |
| Neutral | 6 | 6% |
| Agree | 5 | 5% |
| Strongly Agree | 85 | 85% |

Interpretation:

Total 100% (Agree + Strongly Agree) of students believe the college provides adequate technical support for blended learning. Strong support and satisfaction

**8. I am motivated to learn when classes are done with modes of blended learning.**

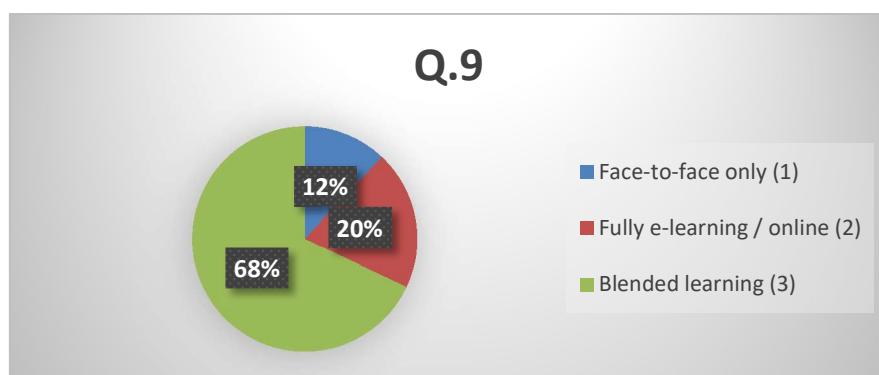
| Motivated to learn in blended learning | Response | Percentage (%) |
|--|----------|----------------|
| Strongly Disagree | 0 | 0% |
| Disagree | 0 | 0% |
| Neutral | 0 | 0% |
| Agree | 1 | 1% |
| Strongly Agree | 99 | 99% |

**Interpretation:**

All students (100%) report being highly motivated in blended learning. This is an extremely positive indicator of the model's success. Since 99% are motivated.

9.Overall, which mode do you feel led to the best academic performance for you personally?

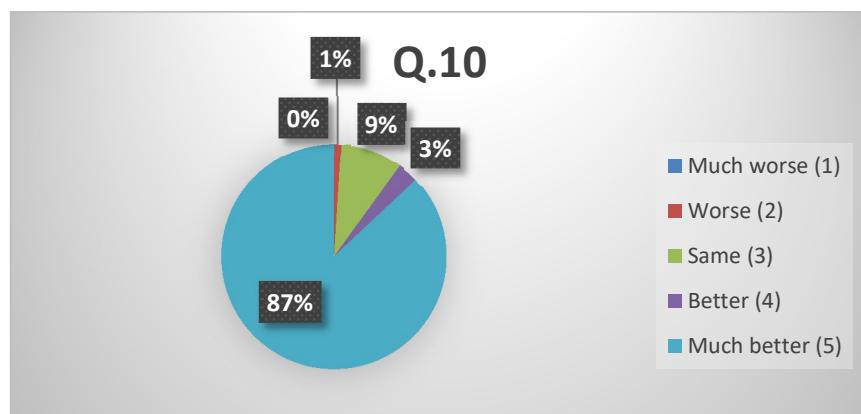
| Mode | Response | Percentage (%) |
|------------------|----------|----------------|
| Face-to-face | 12 | 12% |
| Fully e-learning | 20 | 20% |
| Blended learning | 68 | 68% |

**Interpretation:**

68% of students understood that blended learning led to the best academic performance. Only 12% preferred face-to-face and 20% online. The majority selected blended mode.

10.Compared to previous semesters, my academic performance this semester is:

| academic performance | Response | Percentage (%) |
|----------------------|----------|----------------|
| Much worse | 0 | 0% |
| Worse | 1 | 1% |
| Same | 9 | 9% |
| Better | 3 | 3% |
| Much better | 87 | 87% |

**Interpretation:**

A remarkable 87% of students report their academic performance this year as better or much better than previous year, indicating a strong positive impact of blended learning. Strongly improved performance.

8. Conclusion:

From the collected data of 100 B.Ed. 2nd year students clearly show that:

- Blended learning is the dominant instructional mode (68%).
- 97–100% of students found it effective, motivating, and performance-enhancing.
- Peer interaction, technical support, and punctuality were rated extremely high.
- Overall academic performance improved significantly in the blended environment.

Thus, all alternative hypotheses (H_1) are supported, confirming that blended learning positively impacts the teaching of methodologies at the B.Ed. College, Shirpur.

8.1 Suggestions for teachers

Teachers interested in running a blended course should consider the following suggestions:



- Learning through a blended mode of learning will be more effective only when there is a correct combination of the online and face-to-face mode of learning.
- Teachers should learn to use different teaching modes to make teaching learning more effective. They should select and preferred the strategies that give students control over time, path, place and pace.
- It is also important to understand that simply playing the slides, video etc. online would not allow you the monitoring, which is important.
- The teacher should acquire the technical knowledge of running technology.

8.2. Suggestions for students

- The students should also be proactive and try to follow instructions for the success of the system.
- They should not be shy and participate in discussion under the platform of blended learning whole heartily.
- Provide frequent feedback regarding whatever good experience they have and also about the problems. They should take the initiative if the feedback is not solicited.
- Students try to do activities and readings suggested in the content honestly.
- Provide technical or otherwise support to their peers when needed.
- Challenges relating the B.Ed. curriculum Right at the beginning of the research, one of the biggest changes in the teaching of education as a subject took place. The curriculum of education was converted from one year B.Ed to a two year B. Ed course. The new 2-year curriculum adopted.

References:

- Akyuz, H.I., & Samsa, S. (2009). The effects of blended learning environment on the critical thinking skills of students. *Procedia-Social and Behavioral Sciences*, 1(1), 1744-1748. doi: 10.1016/j.sbspro.2009.01.308
- Battye, G., & Carter, H. (2009). Report on the review of online and blended learning. Retrieved from University of Canberra website: <http://www.canberra.edu.au/tlc/asd/attachments/pdf3/Online-and-Blended- Learning-Review-Final-Report-June-2009.pdf>
- Best, W.J., & Kahn, V.J. (2006). *Research in Education*. New Jersey: PearsonEducation, Inc
- Bhatt, P.C. (1983). *Science process skills in teaching and learning*. New Delhi: Commonwealth Publishers.



- Clark, I., & Patrick, J. (2005). Blended learning: An approach to delivering science courses online.
- learningsymposium, Paper presented at Uniserve science blended University of Sydney. Retrieved from http://sydney.edu.au/science/uniserve_science/pubs/procs/wshop10/2005Clark.I.pdf
- Drysdale, J., Graham, C., Spring, K., and Halverson, L. (2013). An analysis of research trends in dissertations and theses studying blended learning. *The Internet and Higher Education*, 17:90–100.
- Garrison, D., & Vaughan, N. (2008). Blended learning in higher education: Framework, principles and guidelines. San Francisco, CA: John Wiley & Sons.
- Graham, C., Henrie, C., and Gibbons, A. (2014). Developing models and theories for blended learning research. In Picciano, A., Dziuban, C., and Graham, C., editors, *Blended learning: Research perspectives*. Routledge, NY.
- Lee, K. (2004). Effects of individual versus online collaborative case study learning strategies on critical thinking of undergraduate students (Doctoral Dissertation). The university of Texas, *Dissertation Abstracts International*, 65(4), p. 134.
- McGee, P. and Reis, A. (2012). Blended course design: A synthesis of best practices. *Journal of Asynchronous Learning Networks*, 16(4):7–22
- O'Toole, J. M., & Absalom, D.J. (2003). The impact of blended learning on student outcomes: Is there room on the horse for two? *Journal of Educational Media*, 28(2-3), 179-190.
- Phala chandra, B. (2011). Effect of blended learning strategy on higher order thinking and science among <http://hdl.handle.net/10603/73173>