BSSS Journal of Education:ISSN(Print)-2320-1258,E-ISSN-2582-4872,Vol.X,Issue-I(2021),pp103-113
Dr. Ankita Rajdev and Ms. Sunita Ramchandani : Traditional Learning to Blended Learning: Trends and Issues
https://doi.org/10.51767/je1011

TRADITIONAL LEARNING TO BLENDED LEARNING: TRENDS AND ISSUES

Dr.Ankita Rajdev
Ms. Sunita Ramchandani

A B S T R A C T

As Benjamin Franklin quoted, "Tell me and I forget, Show me and I remember, Involve me and I learn." This statement is true as it forms the essence of Blended Learning. Blended learning methods leads to continuous understanding and learning. It provides methods of teaching which leads to sharpen the skills and attitude furtherto seek resolutions to problems and to create new knowledge and awareness.

This research intends to introduce blended learning to its readers and to analyze the trends and issues specially related to mathematics and nursing field.The research focuses on different components of blended learning with emphasis on flexibility as the core component. This is a secondary research analyzing different journals, research articles, thesis, books etc. Lastly, it will highlight the comparison of blended learning with traditional methods.

The results of the analysis were interpreted using descriptive analysis, percentages, and frequencies. This analysis found that various fields were practiced in the flipped classroom approach, and some technology tools were used as the online platform for its practice.

Keywords: Blended learning, Trends and Issues, Traditional learning methods and flexibility

CONCEPTUAL OVERVIEW

In the fast changing world. Leveraging the technology with the classroom teaching is the only key to engage and enable learning in students. Pre-recorded lecture, skype lessons, podcast etc. are the demand of the hour. For any lesson to be outstanding, their needs to be a perfect blend in teacher talk and students understanding. Moreover, in higher education there is a need to focus on collaborative learning, critical thinking, reflection and higher ability exercise etc.

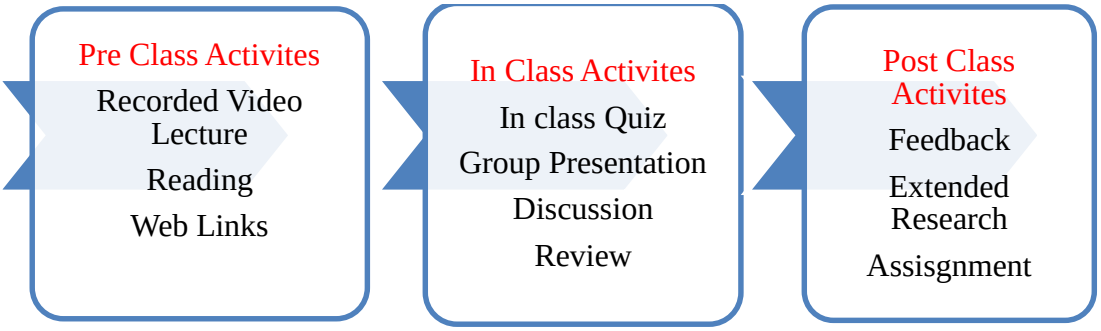
Blended learning (BL) is combining face-to-face and online teaching methods (Sharma, 2010;Kintu, M. J., Zhu, C., &Kagambe, E. (2017), described blended learning as a feature of learner interaction. As per the Asif, I. K., Noor-ul-Qayyum, Mahaboob, Abdullah, &Ch, V.

Traditional Learning to Blended Learning: Trends and Issues by Dr.AnkitaRajdev&Ms.SunitaRamchandani is licensed under CC BY-NC 4.0

B. (2012). State that BL comprises combination of online and face to face learning model. "Flipped Classroom is an issue that gains increased attention in Blended Learning models". (Andrade&Coutinho, 2017).

Flipped classroom or "inverted classrooms" (Mason, Shuman & Cook, 2013; and Strayer, 2012) is a pedagogy, which combines the online teaching tools with traditional classroom methods. It's also known as hybrid or integrated teaching methodology same as BL. 21st century Technology has put access to large pool of information and instant access to the database. Availability of various computer-based interactive tools and technology tools as laptop, phones, IPad, etc. have tremendously supported the new teaching methodology. (Fu, 2013).The need for change in the teaching pattern is due to change in the role of a teacher, evolving more as a facilitator. This change reflects the mindset shift from ideologist to a pragmatic pattern of teaching. Students appreciate the flexibility of course access at any time and in the comfort of their homes or at the office. Kim, H., & Jang, Y. (2017) highlighted that flippedlearning comprises three stages. The first stage is the pre-class stage, the second stage is the in-class stage and the last stage is post class stage.

Figure 1: Flipped learning activities



Blended lessons focus on student-directed learning. It is an instructional and interactive approach of teaching. It enables teacher to be strategic and focused. One way to measure these lessons' efficiency is by the perceived utility (Ozkan&Koseler, 2009).

RESEARCH METHODOLOGY

Need of the Research

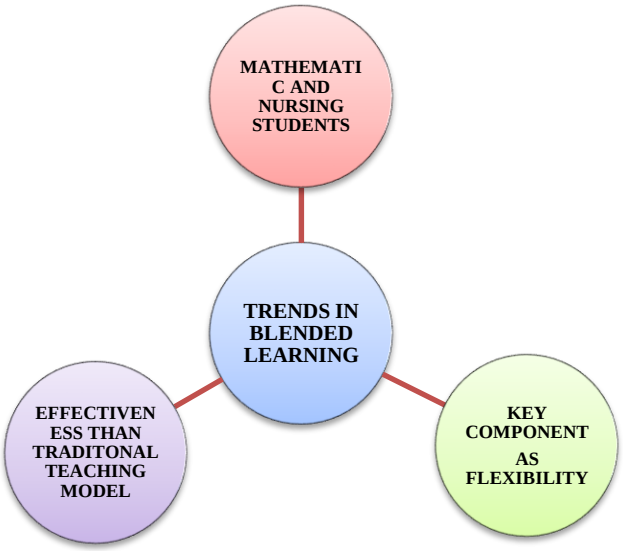
In order to explore the trends and issues of blended learning authors have focused on various articles, journals, research thesis etc. To analyses the concept deeper, this study will focus on the trends of blended learning on mathematics and blended learning for nursing students

Traditional Learning to Blended Learning: Trends and Issues by Dr.AnkitaRajdev&Ms.SunitaRamchandani is licensed under CC BY-NC 4.0

https://doi.org/10.51767/je1011

&instructors, and in the second part, it will focus on key component as flexibility of blended learningand thirdly, the comparison of blended learning with traditional methods.

Figure 2: Trends in blended learning



Scope of the Study

The scope of the study was limited to see the issue and trends of blended learning. To study the innovative methodologies and challenges in implanting flipped classroom- To study the common factors in research paper, journals, and other publication

Significance of the Study

The study has a contribution to the existing knowledge in the area of blended learning and innovative trends of blended learning. This is a secondary study through analyzing the content of 20-research paper and identifying the key common factor for rising trend in blendedlearning. Therefore, the major benefit from this study is to higher education bodies and the academic staff.

Objective of the study

1. To study the trends of blended learning
2. To analyze the challenges in implementing blended learning

Methodology of the Study

Traditional Learning to Blended Learning: Trends and Issues by Dr.AnkitaRajdev&Ms.SunitaRamchandani is licensed under CC BY-NC 4.0

For analyzing the trend, different article and cited references were studied. Essential data is depicted through graphs, percentages and frequencies.Investigation of publication in EdITLib database is conducted to find the trends and issues.

Limitations of the Study

The study suffers from certain limitations which are listed as follows:

i. The study has been performed over two branches as mathematic and nursing. It can be extended to many other fields.
ii. The study is limited to secondary information. Hence, it reflects only a reflective view of the overall blended learning approach to education.

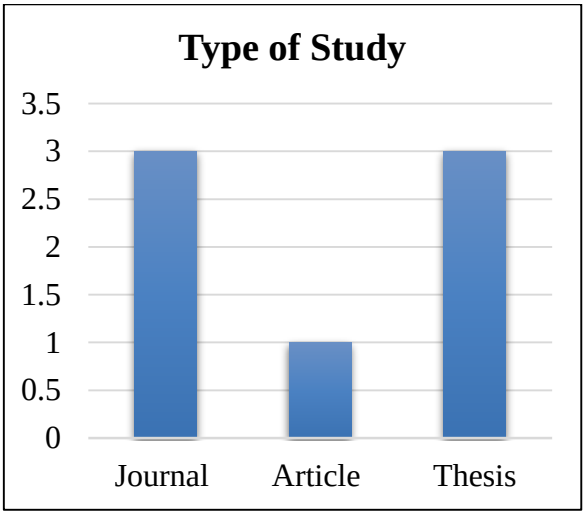
RESULT ANALYSIS

TRENDS IN BLENDED LEARNING: Mathematics and Nursing Education.

Blended Learning (Flipped Classroom): Mathematic

The study was conducted on seven sets of publications out of which four fully agree that blended learning has a positive impact on mathematic students, where one is neutral and two shows a negative relation between blended learning and assessment score.

Figure 3: Trends in blended learning: Mathematics Education



Today's is the world of technology. Student have higher ability, skill and affection towards technology. Video learning, playing online quizzes etc. is attracting the student's interest. However, in practical subject like mathematic, -it is seen student require a lot of support from

Traditional Learning to Blended Learning: Trends and Issues by Dr.AnkitaRajdev&Ms.SunitaRamchandani is licensed under CC BY-NC 4.0

teacher. Technology sometimes burden student with a lot of information and content. Every teacher has his own method to teach a topic and that creates confusion in students mind.

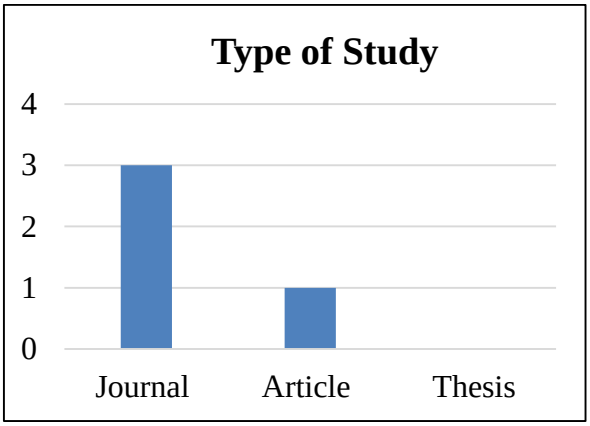
According to Kösea (2010), students through blended learning model can learn Mathematics better. He found that the academic result can also improve by this method. He suggested teachers to prepare online quizzes and other interactive exercises for students. This notion was supported by Wan Ahmad.W,&Shafie. A, Janier.J (2014) in his study which proved that there is a positive perception in studying mathematics through blended learning. Yushau(2006) collected university student data to prove this hypothesis and resulted that student attitude toward mathematic does get effected by introducing blended e-learning. Many studies show that blended learning improves the perception and attitude toward mathematic. However, some studies were neutral andhighlighted that both (Online and Traditional) teaching method had their own positive and negative points (Edwards, C. M., Rule, A. C., &Boody).

On the other hand, some were fully negative stating that students have a difficult time navigating the online environment, then their academic performance may suffer as well (Muilenburg& Berge, 2005). “There was a difference found in the grade point in student achievement as determined by course grade point average, with students in the traditional course scoring higher in average course grade point average. Students in the traditional courses also had a significantly higher number of A’s and a significantly lower number of F’s in the grade distribution” (Vilardi& Rice, 2013)

Blended Learning (Flipped Classroom): Nursing Education

The study was conducted on three sets of journal and one article, all showed positive impact of blended learning in teaching nursing education.

Figure 4: Trends in blended learning: Mathematics Education

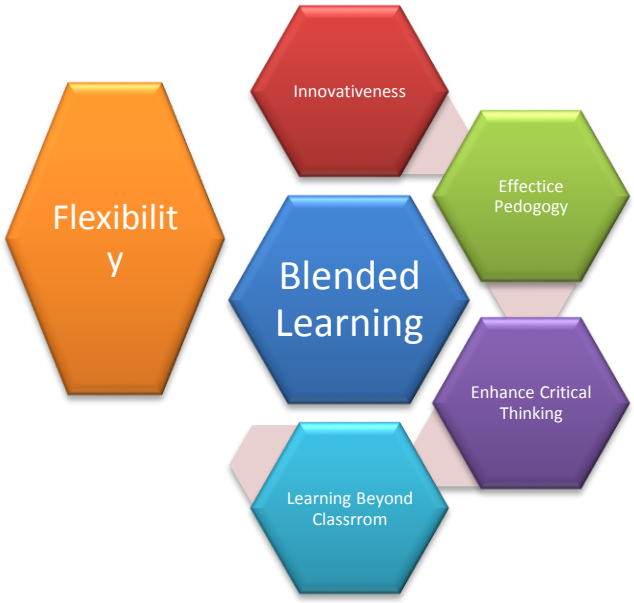


Traditional Learning to Blended Learning: Trends and Issues by Dr.AnkitaRajdev&Ms.SunitaRamchandani is licensed under CC BY-NC 4.0

Blended learning when delivered as flipped classroom, flipping the classroom can be implemented by video presentation, improving the flexibility of classroom, Power point presentation etc. It can be done in the classroom or outside by homework. Deeper thinking and critical evaluation is the main component of dynamically changing health care sector. Several studies has shown that flipped classroom is a successful tool for nursing student. Like Kim, H., & Jang, Y. (2017) proved that the knowledge score of control group of nursing student was higher as well as their motivation was also high. Doctors and nurses are lifelong students. "Heutagogical approaches to teaching and learning may support faculty who seek to trial new models and methods that may, at first, be uncomfortable and challenging to students, faculty, and administrators." (SchlairetM.C,Green.R,Benton.M.J, 2014).It seen that flipped classroom is effective pedagogy for nursing students. Schwartz T.A (2014) proves that flipped classroom format was highly effective for nursing students. His methodology involves that students should understand each component of the course before proceeding for next unit and he found that flipping the classroom involves greater responsibility on the part of students. In addition, it was proven that blended learning environment can build the gap between student, peer and teacher. Nursing student are prepared for global skills and analytical thinking through active learning. Hsu, L. (2011) studied the"Likert-scale questionnaire surveys: CAAS (Case Analysis Attitude Scale), and BLSS (Blended Learning Satisfaction Scale)" and found that BLSS has high score in satisfaction scale.

TRENDS OF COMPONENT OF BLENDED LEARNING: Key component as flexibility

Figure 5: Components of blended learning



Traditional Learning to Blended Learning: Trends and Issues by Dr.AnkitaRajdev&Ms.SunitaRamchandani is licensed under CC BY-NC 4.0

Blended Learning gives flexibility

Flexibility is defined as giving students more choice. Flexibility improves productivity. It offers the participant freedom to decide on the best time and location. Giving them freedom to choice what, when, and where to learn (Collis, Vingerhoets, &Moonen, 1997). Several studies have shown that flexibility is a key coupon of blended learning. According to Garrison &Kanuka(2004)blended learning require the scheduling of the course in an appropriate manner. Giving student time and place flexibility facilitates successful implementation of blended learning environment. Poon,J (2011) studies shows that blended learning includes online component, which makes it more flexible for students and instructors. Student can complete the assignment at any place and at any time. It encourages student for deeper learning and more engagement in the subject. The same concept was studied by Panagos.J(2014)who found that Blended learning gives schedule, course content and resource flexibility. Thai NTT, De Wever B, Valcke M.(2017) studied and found that the perceived flexibility in these hybrid learning model is more, which make it suitable for the student and the academicians.

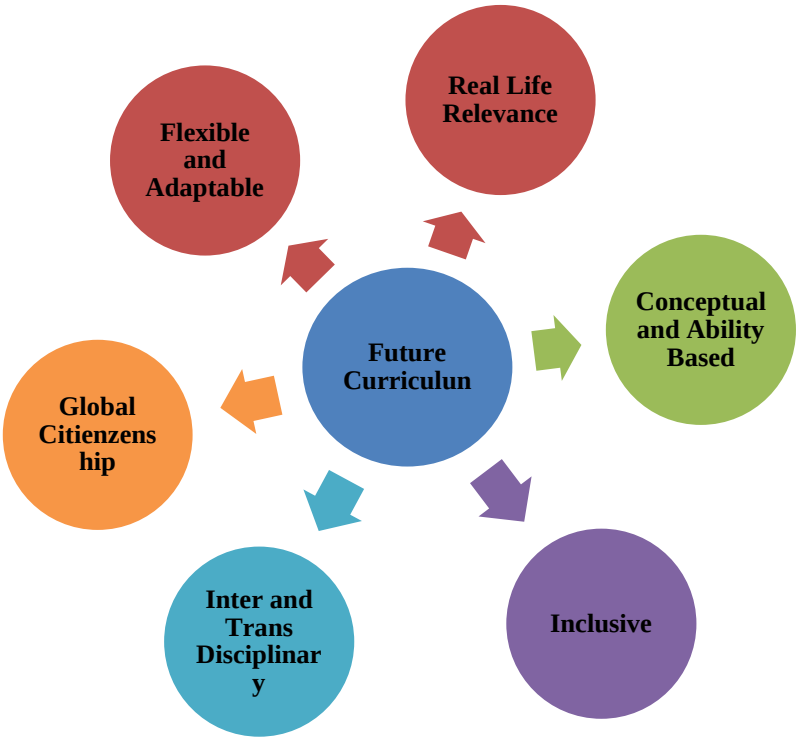
IMPACT OF BLENDED LEARNING ON FUTURE CURRICULUMS

Online learning has many positive aspects that make this form of instruction effective. Computer technology facilitates each student to working at his/her own pace and moving ahead as able and desired. When material is put online and students are allowed to work at the speeds at which they operate best, students who often feel rushed or left behind in a traditional classroom setting can take their time to figure out concepts rather than resorting to memorization of a procedure without understanding. Students who excel at mathematics can finish one topic and move on to the next without having to wait for slower classmates, thereby combating boredom and frustration. Another positive trait of online learning is the sheer number of materials that can be infused into instruction. Face-to-face situations are generally more limited in learning choices to materials provided by programs the school has endorsed or games and activities purchased by the teacher. Within an online learning community, students could potentially choose from a video, website, podcast, and a game to understand the concept. This idea of choice allows students to pick what helps them learn best. Blended learning impacts the delivery of future curriculum in below ways.

Figure 6: Future curriculum of blended learning

Traditional Learning to Blended Learning: Trends and Issues by Dr.AnkitaRajdev&Ms.SunitaRamchandani is licensed under CC BY-NC 4.0

https://doi.org/10.51767/je1011



CONCLUSION

Blended learning has various issue or challenges related to technology, usage and effective implementation. Asif, I. K., Noor-ul-Qayyum, Mahaboob, S. S., Abdullah, M. A., &Ch, V. B. (2012)studied the challenges faced by learning profession on cultural, technology etc. Implementation of blended learning requires lot of resources and capital. He has identified six major challenges related to BL.

1. Creation of BL environment.
2. Choices of Learner option.
3. Implementation of a hybrid model for all students.
4. Changes in technology
5. Adapting different culture in BL, and
6. Handling the technology tools and devices.

Gedik, N., Kiraz, E., &Özden, M. Y. (2012) studied the barriers of implementing the traditional and blended learning environment and found that it included increased workload, cultural and technical barriers, and the inter-dependence of the two environments. Implications and suggestions are offered for instructors in higher education settings. Dau, S., &Ryberg, T. (2014) had suggested blended learning environment bring not only technical and pedagogical challenge, but equally a disruption of students habit. Schwartz, T. A. (2014)

Traditional Learning to Blended Learning: Trends and Issues by Dr.AnkitaRajdev&Ms.SunitaRamchandani is licensed under CC BY-NC 4.0

discuss the challenges with implementation of flipped classroom broadly to entire subject is not possible.

The future of blended classroom seems to be depending upon many variable such as time, money, technology etc. Blended learning may change the teaching pedagogy completely.However, blended learning is totally subject depended and its success responsibility is on the students. For academicians, using blended learning seems time-consuming and challenging pathway. Although if they learn the use of technology they can change the entire face of teaching.

REFERENCES

Althaus, S. L. (1997). Computer-mediated communication in the university classroom: An experiment with on-line discussions. *Communication Education*, 46(3), 158-174.

Anastasiades, P. S. (2012). Blended learning environments for adults: Evaluations and frameworks. Hershey, *PA: Information Science Reference.*

Andrade, M., &Coutinho, C. (2017). Implementing flipped classroom in blended learning environments: A proposal based on the cognitive flexibility theory. *Journal of Interactive Learning Research*, 28(2), 109.

Chao, F. & Davis, J. (2001). Student Satisfaction with Online Math Courses and Its Impact on Enrollments. *Society for Information Technology & Teacher Education International Conference*, 1348-1349

Collis, B., Moonen, J., &Vingerhoets, J. (1997). Flexibility as a key construct in european training: Experiences from the TeleScopia project. *British Journal of Educational Technology*, 28(3), 199-217.

Dau, S., &Ryberg, T. (2014). Disruptions and disturbance as challenges in a blended learning (BL) environment and the role of embodied habit orientation. *European Conference on e-Learning*, 156.

Edwards, C. M., Rule, A. C., &Boody, R. M. (2013). Comparison of face-to-face and online mathematics learning of sixth graders. *The Journal of Computers in Mathematics and Science Teaching*, 32(1), 25.

Fu, J. S. (2013). ICT in education: A critical literature review and its implications. *International Journal of Education and Development using Information and Communication Technology*, 9(1), 112.

Traditional Learning to Blended Learning: Trends and Issues by Dr.AnkitaRajdev&Ms.SunitaRamchandani is licensed under CC BY-NC 4.0

Garrison, D. R., &Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The Internet and Higher Education*, 7(2), 95-105.

Gilboy, M. B., Heinerichs, S., &Pazzaglia, G. (2015). Enhancing student engagement using the flipped classroom. *Journal of Nutrition Education and Behavior*, 47(1), 109-114.

Hsu, L. (2011). Blended learning in ethics education: A survey of nursing students. *Nursing Ethics*, 18(3), 418-430.

Khan, A. I., Noor-ul-Qayyum, Shaik, M. S., Ali, A. M., &Bebi, C. V. (2012). Study of blended learning process in education context. *International Journal of Modern Education and Computer Science*, 4(9), 23-29.

Kim, H., & Jang, Y. (2017). Flipped learning with simulation in undergraduate nursing education. *Journal of Nursing Education*, 56(6), 329-336.

Kintu, M. J., Zhu, C., &Kagambe, E. (2017). Blended learning effectiveness: The relationship between student characteristics, design features and outcomes. *International Journal of Educational Technology in Higher Education*, 14(1), 1-20.

Köse, U. (2010). A blended learning model supported with web 2.0 technologies. *Procedia - Social and Behavioral Sciences*, 2(2), 2794-2802.

Krathwohl, D. R. (2002). A revision of bloom'staxonomy: An overview. *Theory into Practice*, 41(4), 212-218.

Muilenburg, L. Y., & Berge, Z. L. (2005). Student barriers to online learning: A factor analytic study. *Distance Education*, 26(1), 29-48.

Newlin, M. H., & Wang, A. Y. (2002). Integrating technology and pedagogy: Web instruction and seven principles of undergraduate education. *Teaching of Psychology*, 29(4), 325-330.

Olsen, F. (2000). California State U. learns to rely on online remedial-math courses. *The Chronicle of Higher Education*, 46(24), A57

Panagos, J. (2014). Blended learning: Developing flexibility in education through internal innovation.

Poon, J. (2012). Use of blended learning to enhance the student learning experience and engagement in property education. *Property Management*, 30(2), 129-156.

Puccetti, G. P. (2017). Blended technology rich instruction verses blended computer managed instruction in 8th grade digital literacy instruction.

Schlairet, M. C., Green, R., & Benton, M. J. (2014). The flipped classroom: Strategies for an undergraduate nursing course. *Nurse Educator*, 39(6), 321-325.

Schwartz, T. A. (2014). Flipping the statistics classroom in nursing education. *Journal of Nursing Education*, 53(4), 199-206.

Traditional Learning to Blended Learning: Trends and Issues by Dr.AnkitaRajdev&Ms.SunitaRamchandani is licensed under CC BY-NC 4.0

Sharma, P. (2010). Blended learning. *ELT Journal*, 64(4), 456-458.

Thai NTT, De Wever B, Valcke M. (2017).The impact of a flipped classroom design on learning performance in higher education: Looking for the best "blend" of lectures and guiding questions with feedback. *Computers & Education*; 107,113-126.

Vilardi, R. (2013). Mathematics achievement: Traditional instruction and technology-assisted course delivery methods Retrieved from http://libproxy.murdoch.edu.au/login url=https://searchproquestcom.libproxy.murdoch.edu.au/docview/1505373341?accountid=12629

Wan Fatimah Bt Wan Ahmad, AfzaBtShafie, Josefina BarnacheaJanier.(no date). Students'Perceptionstowards Blended Learning in Teaching and Learning Mathematics, Application of Integration. *Petronas University of Technology, Malaysia.*

Yushau, Balarabe (2006) The Effects of Blended E-Learning on Mathematics and Computer Attitudes in Pre-Calculus Algebra.*The Mathematics Enthusiast*, 3(2) 5.

Traditional Learning to Blended Learning: Trends and Issues by Dr.AnkitaRajdev&Ms.SunitaRamchandani is licensed under CC BY-NC 4.0