

## THE EFFICACY OF BLENDED LEARNING APPROACH FOR STUDENTS WITH SPECIAL EDUCATIONAL NEEDS IN INCLUSIVE CLASSROOM SETTINGS: A STUDY

---

Fr. Baiju Thomas\*

### ABSTRACT

*The current study determines the Efficacy of the blended learning approaches (BLA) for students with special educational needs (SwSEN) in inclusive classroom settings. This study would aim to see how effective a BLA is for SwSEN in inclusive classroom settings. The BLA is a natural step from better access to e-learning and online materials, as well as the continuing requirement for a human element in the learning process. The BLA will not deliver on its hope of getting learning until educators are motivated to explore and build programs that provide learners with more varied learning opportunities than any of those provided either by the online or traditional classrooms. A BLA ensured that the student is actively involved and in control of his or her education. The appeal of a BLA rests in the integration of technology-assisted teaching strategies together with the learning procedure. Even though it is extensively agreed that media education provides unique prospects for inclusive classrooms, the majority of BLA now available are inaccessible to and consequently unusable by SwSEN. The widespread use of educational technologies, always like technology and communications, has provided educators with such a wealth of new chances to research better teaching settings for their students' learning strategies. The BLA was also well recognized by the SwSEN. The BLA is a possible result of a learning program based on innovative technologies. The outcomes display that BLA is beneficial than traditional approaches for SwSEN. At this point, the author provides some techniques in the hopes that BLA will be sustained since it can boost learners' motivation, and it allows SwSEN in inclusive classroom settings to educate in a far more modern, adaptable, and independent way for SwSEN in inclusive classroom settings.*

**Keywords:** *Blended Learning, Efficacy, Inclusive Education, Online Learning, and SwSEN.*

---

### Introduction

Technology has progressive in the last few periods (El-Ghalayini & El-Khalili, 2012). Almost every element of everyday life has indeed been influenced by this technological explosion. Yet, the effects of technological development on education appear to become more recent. As a response, inclusion is understood as a system of recognizing and reacting to the diverse needs of children, youth, and persons through enhancing classroom engagement, culture, and social, as well as decreasing and eradicating segregation from learning. It entails improvements and revisions in information, techniques, procedures, and tactics, with a common goal that encompasses all students of the proper age group and the concept that this is the normal system's obligation to teach all students (UNESCO, 2009). Learning occurs in a variety of contexts, but academic institutes promote both range and deep knowledge. Various kinds of instruction have quite diverse estimates as to what constitutes learning. The current study looks at how student qualities, BLA components, and teaching strategies affect BLA success, but how the latter are highly predictive of BLA efficacy. Determining integrated case of BLA objectives would assist designers of such learning styles in making the essential foundational arrangements for building as a BLA effective education strategy. BLA offers a wide range of options, using a variety of processes and technology. BLA blends the benefits of both online and offline education. The usage of technology attracts pupils and boosts their process of learning without causing them any pressure. Even though this approach is best understood and established throughout the globe, it remains theoretical in India. The BLA is a learning model that encompasses e-learning and traditional methods to destination, rewards, and is extremely beneficial both in classrooms and administrative settings (D. Wilson and E. M.

Smilanich, 2005). The usage of BLA is designed to teaching and learning procedure among learners and educators more relaxed, autonomous, and not constrained by space and time (C. Ford, D. McNally, and K. Ford, 2017). In summary, the BLA can be considered a new learning option that has integrated and leveraged technological and communications advancements. BLA has changed the face of education in modern years as technology became more widely available. This study intends to explore this move by studying the past closely former to the extensive use of technology in classrooms, as well as the conceptual framework that reinforces the notion of BLA for SwSEN in inclusive classroom settings.

### **The Concept of Blended Learning Approach**

Present studies have mostly fixated on the usage of BLA by teachers and learners to enhance teaching-learning. Previous studies motivated the usage of BLA to enhance the value of education and professors' instruction. The BLA's deep viability for learners is, obviously, critical since it has benefited learners. The advantages of improving facilities and enabling BLA are projected to reduce the limitations experienced by teachers and learners for the sake of collective advancement. However, fewer studies have looked into the procedures of BLA execution as well as administration that start regulations related to BLA adaptation in education. For educational institutes, BLA atmospheres that comprise bodily and digital elements are seen as key techniques (Cobcroft, Towers, Smith, & Bruns, 2006). The prior BLA model, in which offline and online learning are integrated all through, the period, is the emphasis of this work. Because the latter approach is a hybrid, its development procedure is more strongly connected with totally online classes (Vai & Sosulski 2011). BLA combines both formal and online learning methods. It displays the finest of both universes. BLA is becoming more popular in educational institutions since it combines the benefits of both offline and digital teaching practices (Poon 2014). As an outcome, face-to-face teachers are no longer needed for education. One of the most significant progress in academic institutions has been the usage of BLA for students, which has resulted in a more dynamic learning strategy (R. Dwaik, A. Jweiless, and S. Shrouf, 2016). BLA shifts the focus from instruction to studying, permitting learners to be more engaged and enthusiastic in the learning procedure, which enhances their tenacity and dedication (Ismail et al. 2018). BLA helps children with digital support and materials that are appropriate for their depth of understanding and enthusiasm. It improves teachers' time effectively and promotes classroom and provides chances for professional collaboration (Guillén-Gámez et al. 2020; Owston et al. 2019). Learners' motivation in their very own classroom activities grows as a result of BLA (Chang-Tik 2018). Although the surplus of studies on digital and online technologies, there are few studies exploring learning using a BLA among SwSEN, rendering to numerous academics (Gerich and Fellingner 2012, Cuculick 2014, Gregor 2014, Hill 2015, Oyewumi et al. 2015, Kozuh et al. 2015, Saunders 2016, Toofaninejad et al. 2017). As a result, the goal of this comprehensive study is to find out the usage of BLA among SwSEN in inclusive classroom settings.

### **The Different Learning Modalities Involved in Blended Learning Approach**

BLA offers a wide range of real-world competencies, which stress distribution into life competencies, including Study competencies, Personality competencies, Self-engagement competencies. It supports the "self-driving power" by enhancing effective decision-making and also provides a strong sense of control. The BLA consists of different learning modalities, which includes, distance education, e-learning, online learning, and virtual learning classroom combines a face to face learning for SwSEN in inclusive classroom settings.

#### **Distance Education: Modes and Models**

Distance education (DE) turns out to be more and more predominant in modern society. It is an essential part of education irrespective of its procedure and skills used. The focus of the goal of the educators is the requirements of the students and their particular features. The function of distance learning is becoming increasingly important. DE, unlike many other methods of education, teaching, and career development, is inextricably related to its delivery method (Commonwealth of Learning, 2008). DE professionals are concerned about the explosive development of delivery methods (Commonwealth of Learning, 2008; Taylor, 1995). However, there is no academically challenging study on distance learning techniques, and a deficit of substantial study in remote learning leadership, distribution, and organization has destabilized the area. DE is also a comprehensive term that encompasses a wide range of approaches. The kind of medium or material resources (print, radio, laptop); the structure of the learning (conference, symposium, graduate program, addition to classroom environment, grades of assistance); educational systems; themes covered; and degrees of interaction assistance are all examples of certain variance (Fillip, 2001). Distance education (Keegan, 2002) is an educational process in which students and teachers are distanced in time or space, meaning it can take place outside of an education program

and result in a degree or certification (Gunawardena, Mclsaac, & Jonassen, 2008). DE, as a form of formal education, is the main feature in many classroom settings, thanks to its use of numerous technological devices that link learners with their educators (Moore et al. 2011; Simonson et al. 2011). Although DE portals and web meetings come to mind when thinking of remote education, this has a deeper tradition that precedes the internet. DE is a process of imparting information to the learners who are distanced from the educator by distance and time.

### **E-Learning- Teaching Design in Education**

Based on the fact that E-learning plays a prominent impact on the educational atmosphere today, E-learning is crucial. Due to this, it has become one of the investigators' favorite subjects. E-learning and forehead class participation use specific equipment of e-learning to make learning more efficient. Moreover, e-learning technologies can help learners with different limitations feel more included (Fichten et al., 2009). E-learning's features are a helpful method to teach and learn for both learners and educators (Kruse, 2002). Educators might be the creators of e-teaching processes or the users of e-teaching and e-learning output. In e-teaching settings, educators have two main responsibilities: delivering material for learners and facilitating contact among students and instructors (Schertler & Bodendorf, 2003). The combination of technology and specially prepared materials is referred to as e-learning. In addition to that, the design of learning material is especially important in the digital world because it can be presented in various formats. On top of using e-learning to help in the face-to-face methods, they also use it to make those methods more beneficial. In other instances, they may be used to decrease face-to-face interactions. All learning process is completed via a combination of classroom activities and e-learning platforms. There are opportunities to utilize E-learning in great ways, but it is not very well understood by many professionals. Even though there are various technical guidelines and specific details for making e-learning technologies accessible, the educational and prescriptive aspects of accessibility have received little attention; SwSENs can take the e-learning framework but just not the parts, facilities, tasks, cooperation, or solutions to many problems. This study examines techniques, equipment, and practices to suggest a common framework for developing accessible e-learning course work in the learning environment, having started with the working principle that an e-learning session is truly inclusive while accessibility is acknowledged both functionally and academically. E-learning and e-teaching are important elements in teaching methods that are used in a diversity of frameworks. E-learning technologies can support children with a diversity of problems flourish in school. We considered locations that are beneficial in e-education for SwSENs in inclusive classroom settings.

### **Online Learning for SwSEN**

Educators are frequently the sole source of guidelines in online learning (Tucker, 2010). Alternatively, educators work collaboratively with the family to support students to meet their educational goals (Frey, 2005). Online learning is used by diverse types of learners, and those SwSEN (Archambault et al., 2010). However, for inclusive educational needs, depending on practices and guidelines from developed online learning provided both through standard public and state schools was not viable. First, online classroom educators are incomplete both in teaching and preparation for instructing SwSEN and online teaching potentials (Kennedy & Archambault, 2012; Rice, 2017; Smith, et al., 2016). Proceeding to the innovation of online classrooms, learners were assigned to a school system based on location. Families now have a broad diversity of options for their children's education at all academic subjects via online schooling, while many classroom educators only accept children within their region (Cavanaugh, 2009). Adapted technology has been applied for SwSEN as needed, in addition to the types of online teaching benefits defined earlier (Repetto et al., 2010). Instruction offered on a technological device that is designed to improve education is referred to as online learning (Clark, R.C.; Mayer, R.E, 2016). As learners are properly evaluated on academic skills rather than the team instructional strategies of an entire school (DiPietro et al., 2010), online learning also may correspond with the particular teaching approach of a SwSEN, enabling individuals to integrate with their academic process and promote a better potential for learning success.

### **Virtual Learning Classroom**

The effect of web-based technologies on teaching and learning is significant. No framework describes the links between adaptive learning and developed a system. This study aimed to bridge the gap. The efficiency of an innovative Virtual Learning Classroom (VLC) in the setting of basic information technology skills development is the subject of our study. VLC facilitated by technologies is described as "computer-based settings that are generally open systems, enabling connections and information exchange with several other users and educators" and enabling access to a variety of materials (Wilson

1996). A VLC like a physical classroom allows for quick responses, supports common understanding and decision-making in social activities with "merely clarity and knowledge," provides directed tempo and self-control in learning, and development of teamwork and a sense of togetherness (Schullo et al, 2007). VLC are online platforms that allow students and teachers to connect simultaneously, as if they're in a classroom, using sound, videos, textual chatting, smart boards, collaboration software, quick polls, and other capabilities (Parker & Martin, 2010). Students can chat see each other via a web camera, use gestures, and collaborate in break-out rooms in VLC, which have become incredibly common (Parker & Martin, 2010). In online education, a VLC is a web-based platform for online components of areas of study, typically throughout academic institutions. They demonstrate how to use materials, exercises, and relationships within such courses offered, as well as how to students learning at various stages. VLCs typically have had some sense of interaction with the other institutions and reflect on involvement (Britain, Sandy; Liber, Oleg, 1999; Weller, Martin 2007). The VLC enables students and instructors to communicate synchronously using audio, video, interactive whiteboard, application sharing, instant polling, text chat, and other features as though they were standing face to face for SwSEN in an inclusive classroom.

### The Benefits of Blended Learning Approach for SwSENs

BLA is beneficial because it offers the opportunity to include additional interesting, proactive learning processes during school time, which ultimately improves learning effectiveness. BLA classes have seen a meteoric rise in popularity over the past few years in all academic disciplines.

- **Flexibility:** BLA classes provide educators with flexibility in terms of delivering information, as well as flexibility for learners to the pace and scope of their increased risk.
- **Effectiveness:** Several studies have found that BLA integrates a variety of instructional techniques from various viewpoints, and thus it is efficient for the learners engaged.
- **Efficiency:** Adaptable and rapid improvement the provision is feasible using a BLA. There is an enormous potential for re-use with digital content like video content, audiotapes, and e-books. After the initial learning rounds have managed to pass, you will be able to help further human beings up to pace.
- **Engagement:** Often these students today are exposed to BLA, which makes it easier for them to participate with instructional content. Educators can also enable students they grow their technical skills and knowledge.
- **Educator Empowerment:** Educators are liberated up and reach more learners through the use of BLA in classrooms. To verify on individual and small populations of learners, educators can start moving inside the channels or actions.
- **Differentiation:** Teaching methods can be customized to meet a wide range of classroom management when BLA integrates a variety of teaching methods. An added benefit of top-notch digital learning resources is that they enable teachers to determine each learner's knowledge level and present targeted lessons that satisfy the child where they will be.
- **Cost-Effectiveness:** For the most part, we prefer techniques that will save our company money. As well as BLA, learning online cuts down on journeys and missing school. You no longer have to pay for travel expenses because once you attend online events. Once you have one's possess workspace, you're saving the money compared to using rooms.
- **Extended Reach:** When BLA are utilized, they also often decrease learning classroom time. The reason how you can attain the most person with greater material for a fraction of the price is that you can digitize the expert knowledge of skilled teachers or subject-matter experts.

### Conclusion

The investigators found that better involvement tends to as a result of the increased communication skills, as demonstrated in email and online communication. The BLA enables educators to build their abilities and esteem by encouraging them to express their understanding and knowledge of ideas. Effective communication was found to have improved as a result of BLA. This study provided insight into how BLA is being used to support SwSEN, identifying the primary building blocks of BLA, and describing how to integrate BLA for SwSEN. This study discovered that the essential elements of BLA for SwSEN are a method, atmosphere, student, techniques, reinforcement, assessment, and examination. The outcomes also bring benefits to the claim that BLA holds much promise for those SwSEN in inclusive classroom settings.

### References

1. Ambrose, S. A., Bridges, M. W., DiPietro, M., Lovett, M. C., & Norman, M. K. (2010). *How learning works: Seven research-based principles for smart teaching*. John Wiley & Sons.
2. Ali-Masri, H., Hassan, S., Fosse, E., Zimmo, K. M., Zimmo, M., Ismail, K. M., ...&Laine, K. (2018). Impact of electronic and blended learning programs for manual perineal support on incidence of obstetric anal sphincter injuries: a prospective interventional study. *BMC medical education*, 18(1), 1-10.
3. Borgelt, C., & Kruse, R. (2002). Induction of association rules: Apriori implementation. In *Compstat* (pp. 395-400). Physica, Heidelberg.
4. Cavanaugh, C. S., Barbour, M. K., & Clark, T. (2009). Research and practice in K-12 online learning: A review of open access literature. *The International Review of Research in Open and Distributed Learning*, 10(1).
5. Cavanaugh, C., Repetto, J., Wayer, N., & Spitler, C. (2013). Online learning for students with disabilities: A framework for success. *Journal of Special Education Technology*, 28(1), 1-8.
6. Chang-Tik, C. (2018). Impact of learning styles on the community of inquiry presences in multi-disciplinary blended learning environments. *Interactive Learning Environments*, 26(6), 827-838.
7. Clark, R. C., & Mayer, R. E. (2016). *E-learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning*. John Wiley & Sons.
8. Cobcroft, R., Towers, S., Smith, J., & Bruns, A. (2006). Mobile learning in review: Opportunities and challenges for learners, teachers and institutions. In *Learning on the Move: Proceedings of the Online Learning and Teaching Conference 2006*: (pp. 21-30). Queensland University of Technology.
9. Dwaik, R., Jweilless, A., & Shrouf, S. (2016). Using Blended Learning to Enhance Student Learning in American Literature Courses. *Turkish Online Journal of Educational Technology-TOJET*, 15(2), 126-137.
10. Dym, C. L., Agogino, A. M., Eris, O., Frey, D. D., & Leifer, L. J. (2005). Engineering design thinking, teaching, and learning. *Journal of engineering education*, 94(1), 103-120.
11. El-Ghalayini, H., & El-Khalili, N. (2012). An approach to designing and evaluating blended courses. *Education and Information Technologies*, 17(4), 417-430.
12. Fichten, C. S., Asuncion, J. V., Barile, M., Ferraro, V., & Wolforth, J. (2009). Accessibility of e-learning and computer and information technologies for students with visual impairments in postsecondary education. *Journal of Visual Impairment & Blindness*, 103(9), 543-557.
13. Phillip, B. (2001). *Distance Education in Africa: New Technologies and New Opportunities* A Report prepared for JICA-USA Washington DC.
14. Ford, C., McNally, D., & Ford, K. (2017). Using Design-Based Research in Higher Education Innovation. *Online Learning*, 21(3), 50-67.
15. Gerich, J., & Fellingner, J. (2012). Effects of social networks on the quality of life in an elder and middle-aged deaf community sample. *Journal of deaf studies and deaf education*, 17(1), 102-115.
16. Jonassen, D. H. (1994). Thinking technology: Toward a constructivist design model. *Educational technology*, 34(4), 34-37.
17. Kennedy, K., & Archambault, L. (2012). Offering preservice teachers field experiences in K-12 online learning: A national survey of teacher education programs. *Journal of Teacher Education*, 63(3), 185-200.
18. Keegan, D. (2002). *The Future of Learning: From eLearning to m Learning*.
19. Moore, M. G., & Kearsley, G. (2011). *Distance education: A systems view of online learning*. Cengage Learning.
20. Moorosi, P., & Bush, T. (2011). School leadership development in Commonwealth countries: Learning across boundaries. *International studies in educational administration*, 39(3), 59-75.
21. Owston, R., York, D. N., & Malhotra, T. (2019). Blended learning in large enrolment courses: Student perceptions across four different instructional models. *Australasian Journal of Educational Technology*, 35(5), 29-45.

22. Poon, J. (2014). A cross-country comparison on the use of blended learning in property education. *Property management*.
23. Schullo, S., Hilbelink, A., Venable, M., & Barron, A. E. (2007). Selecting a virtual classroom system: Elluminate live vs. Macromedia breeze (adobe acrobat connect professional). *MERLOT Journal of Online Learning and Teaching*, 3(4), 331-345.
24. Schertler, M., & Bodendorf, F. (2003). Production environment for Web-based video lectures. In *E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education* (pp. 2401-2408). Association for the Advancement of Computing in Education (AACE).
25. Simmie, J., & Martin, R. (2010). The economic resilience of regions: towards an evolutionary approach. *Cambridge journal of regions, economy and society*, 3(1), 27-43.
26. Taylor, J. A., & Newton, D. (2013). Beyond blended learning: A case study of institutional change at an Australian regional university. *The Internet and Higher Education*, 18, 54-60.
27. Tucker, J. P., & Neely, P. W. (2010). Unbundling faculty roles in online distance education programs. *International Review of Research in Open and Distributed Learning*, 11(2), 20-32.
28. Vai, M., & Sosulski, K. (2011). *Essentials of online course design: A standards-based guide*. Routledge.
29. Weller, M. (2007). *Virtual learning environments: Using, choosing and developing your VLE*. Routledge.
30. Wilson, B. G. (1996). *Constructivist learning environments: Case studies in instructional design*. Educational Technology.
31. Wilson, D., & Smilanich, E. M. (2005). *The other blended learning: a classroom-centered approach*. John Wiley & Sons.
32. Yeboah, A. K., & Smith, P. (2016). Relationships between Minority Students Online Learning Experiences and Academic Performance. *Online Learning*, 20(4), n4.

