



Technology as the substructure of all blended learning environments

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"If we teach today as we taught yesterday, we rob our children of tomorrow." John Dewey

ABSTRACT:

Blended learning is a formal education program in which the student learns in part through online learning, and partly in a supervised brick-and-mortar location away from home. The strengths of e-learning include flexibility, personalization, interactivity and adaptability as the ability of the educational process for students with different abilities and demands. This collaborative setting has more enriched learning experience and collaboration among students can be improved upon if group activities rely on information gathered from online resources or lessons. The key to the transformation of teaching and learning that we have explored in this paper will depend largely on a commitment to collaborative leadership and governance structure.

Keywords: e-learning, self-education, knowledge, competence

INTRODUCTION:

The Covid-19 pandemic situation has changed the world upside down economically, socially, educationally and more so on health. The premier industry which suffered a lot is education but at the same it has thrown many challenges to the teaching fraternity in communicating their subject to the students who are at home using technology. Many schools where teachers are well experienced with face-to-face emphasis of education have been forced to learn technology; how to use technology for the benefit of new generation kids. To the best of our knowledge they were of the opinion that technology can only be a supplement but it cannot replace the real time teaching. The combination of traditional face to face learning and

technology may result in the formation of blended learning where the students are given the liberty to learn by themselves using technology – either off-line or online and come for clarification to the teachers in their subject. In this paper, we would like to discuss about the blended learning as substructure for new kind learning environment.

Emotion and love of teacher with the students is the net result of traditional full-time education with personal communication coupled with spontaneous outbreak of ideas and discoveries. The strengths of e-learning include flexibility, personalization, interactivity and adaptability as the ability of the educational process for students with different abilities and demands, etc. In the present day world every person's activity has high rate of changes in many fields that includes technology and education, truly effective to their individual development. Knowledge and development competencies of the critically conceiving, socially active, ready to work in fast-changing vital conditions for the school leaver with different outlook may be possible with blending learning. Gradually school changes principles of organization of educational process, creating conditions for realization of dynamic flexible personalized training.

The strengths of electronic training refer flexibility, individualization, interactivity, adaptability as possibility of organization of educational process for trainees with different possibilities and inquiries, etc. In western countries combination of traditional and technological education laid the foundation for blended learning for the past 10 to 15 years.

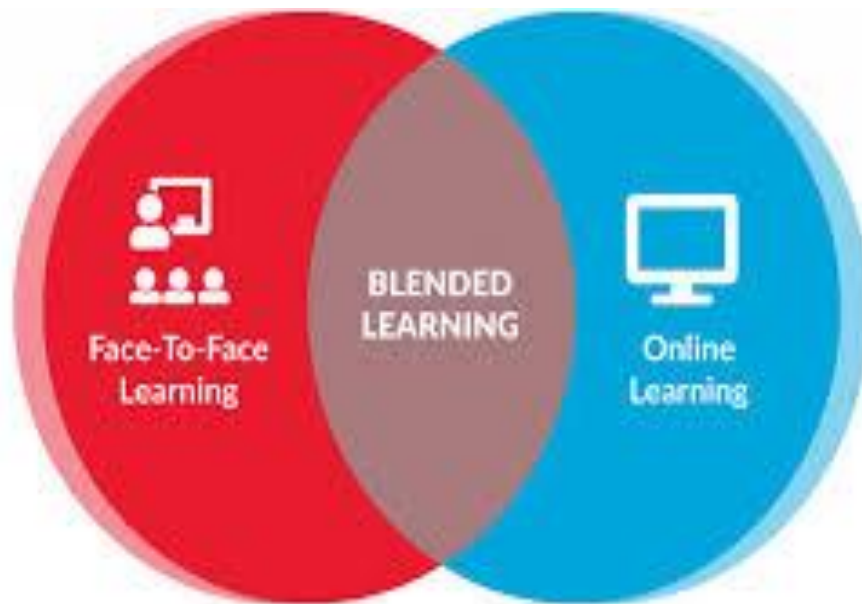
BLENDED LEARNING BASICS:

Blended learning is an instructional methodology that leverages technology to provide a more personalized approach to learning, giving students control over the time, place, path and pace of their learning. It is a formal education program in which the student learns in part through online learning, and partly in a supervised brick-and-mortar location away from home. The modalities along each student's learning path within a course or subject are connected in order to provide an integrated learning experience. The role of the teachers' has become facilitator.

Blended learning is often referred to as “hybrid” learning, and can take on a variety of forms in online education environments. While some organizations may only use blended learning techniques on rare occasions, others might utilize it as a primary teaching method within their curriculum. Rich media formats such as video/audio files, Augmented Reality and Virtual Reality are now being used to hold the learner's attention span and make learning more engaging and effective.

There are two key principles commonly associated with blended learning (which are the “secrets” to its success): students who can share information and work with other students directly in a collaborative setting have a more enriched learning experience, and collaboration between students can be improved upon if group activities rely on information gathered from online resources or lessons. It's also been suggested that students who complete online coursework followed by interactive, face-to-face class activities have richer educational experiences. Figure 1 depicts the blending of traditional and online learning.

Figure 1. Blended learning



COMPONENTS OF BLENDED LEARNING:

There were three different blended learning models are prevalent.

1. Component of traditional direct personal interaction of educational process participants.
2. Component of interactive interaction mediated by computer telecommunication technologies and electronic information and educational online resources and
3. Self-education component may result in giving solution to a number of tasks such as
 - ❖ to expand educational opportunities of students at the expense of increase of availability and flexibility of education, accounting of their individual educational requirements, and also speed and a rhythm of development of a training material;
 - ❖ to stimulate formation of subject position of a student: increase of his motivation, independence, social activity, including in development of training material, reflection and introspection and, as a result, increase of educational process efficiency as a whole;
 - ❖ to transform style of a teacher: passing from translation of knowledge to interactive interaction with student, promoting a student to design his own knowledge;
 - ❖ to personalize educational process: student independently defines his educational purposes, ways of their achievement, considering his educational requirements, interests and abilities, teacher is an assistant of student.

MONITORING AND ANALYSIS OF ACTIVITY:

Nothing can be realized unless there is real participants of students and teachers together involved in the education process. Teacher together with student builds their individual educational trajectories both within lesson, and out of it; organizes different types of activity with the use of information and educational resources, including the Internet; coordinates activity of students both internally, and remotely in conditions of hi-tech education-information environment of school.

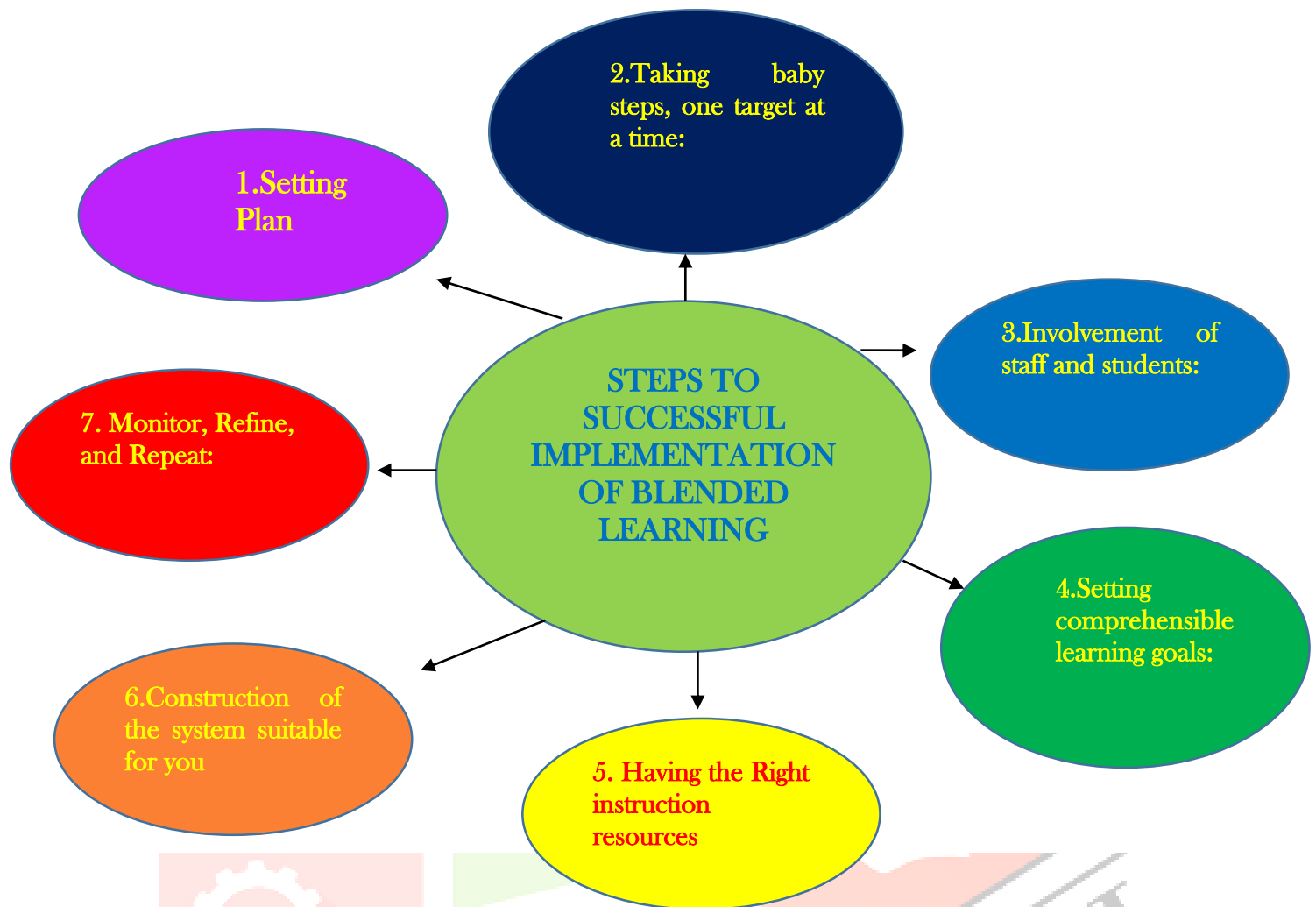
Teacher continuously carries out monitoring of educational process and complex analysis of intermediate results of activity of each pupil. The teacher is able to select electronic educational content corresponding to the purposes of a lesson, or creates his own multimedia products, including audio recordings, video lectures. It is necessary not because the sphere of information technologies can become an additional element of teacher and pupil bringing together that is important but also because information technologies simplify and intensify educational activity at the same time: schoolboy can have online electronic educational resources on mobile device, they can be sent to the schoolmate, to discuss the contents at a thematic forum and so forth (1)

MODELS OF BLENDED LEARNING:

Traditionally in foreign practice they allocate five models of blended learning which are given in Table 1.

Face to Face Driver Model	Rotation Model	Flexible Model	«Online Lab». model	«Self-blend». model
An Extra level of individualization in teaching and learning Technology acts as a supplement learning.	The school hours are distributed between individual electronic training and training in class together with the teacher. The teacher working on-site in class also carries out remote support at electronic training	Method for non-traditional learners. Students learn to develop and create new concept independently in digital environment.	Training program accustoms to conditions of electronic training which is organized in schools, as a rule, in classrooms equipped with computer equipment. Online training is attended by teachers. Pupils, in spite of online courses, can be trained and in a traditional form in class fixed system.	The model is traditional for higher educational institutions of America. Students independently choose additional to the main education courses. Different schools and educational institutions can act as suppliers of an educational content.

Figure 2 displays Steps involved in successful implementation of Blended Learning



STEPS TO SUCCESSFUL IMPLEMENTATION OF BLENDED LEARNING

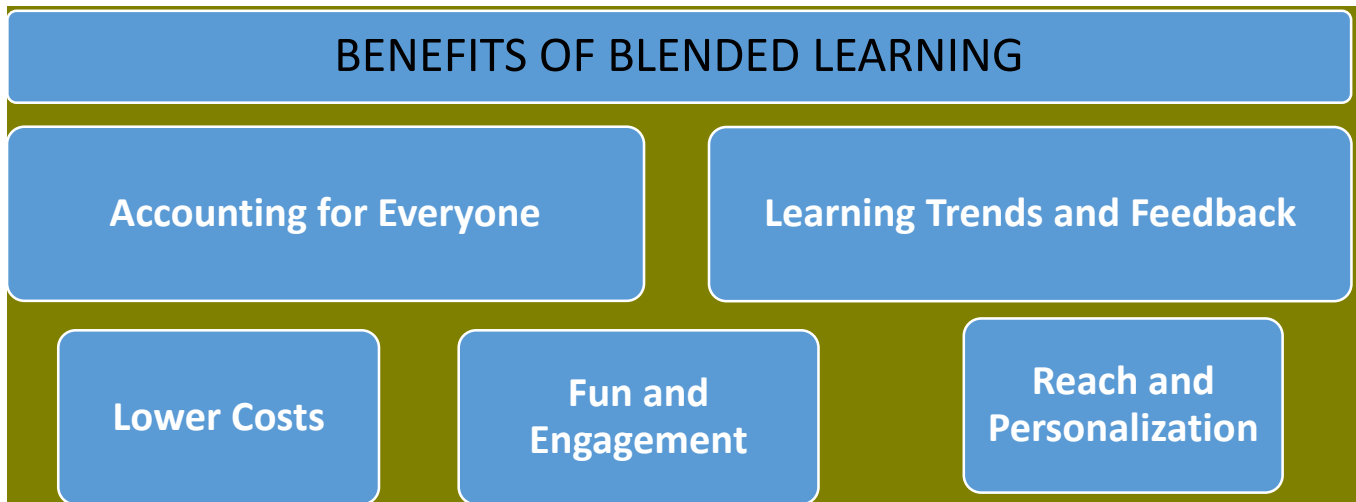
1. **Setting plan:** Blending the delivery mode of your training courses is a strategic change that requires careful mapping and a clear "big picture" plan by senior management. Get experts involved early if required, don't go in blindly.
2. **Taking baby steps, one target at a time:** Systematically approach the execution process and learn quickly from your mistakes. Small successes will give you the know-how and motivation to do more and more.
3. **Involvement of staff and students:** Don't assume you know what your students and staff need or want. Ask them, and have feedback loops that allow them to provide feedback and comments.
4. **Setting comprehensible learning goals:** All activities - online or offline - should contribute towards the right learning goals. You should also set clear expectations for students from the start.
5. **Having the right instruction resources:** Material & resources for teaching online are very different from traditional ones. Interactive, engaging, bite-sized content can enhance the learning experience.
6. **Construction of the system suitable for you:** The right processes and workflows put in place will ensure that your courses are compliant. Consider your current systems and capabilities: in what way can you use technology to eliminate non value adding tasks?

7. **Monitor, refine, and repeat:** So you go live, and then...? Don't forget to keep a close eye on the data collected: numbers and feedback can tell you whether the learning goals are fulfilled or not.

BENEFITS OF BLENDED LEARNING:

There are many relevant reasons for educational institutions consider integrate blended learning as deliverance in making education conveniently accessible are:-

Figure 3 illustrates the Benefits of Blended Learning (BBL)



1. Accounting for Everyone: Blended learning takes every type of learner into account, whether they prefer the familiar traditional classroom, would rather learn online, or try a mixture of both. Without the limitations of a classroom or all-online course, blended learning utilizes a variety of methodologies so the content can be customized to the learner and optimized for the subject matter. While not all face-to-face training is easily translated to digital content, it's possible to re-engineer existing content for online delivery in a way that complements the existing training.

2. Learning Trends and Feedback: Blended learning uses both online and offline in teaching learning allowing instructors to quickly adopt the latest learning trends and modalities into the curriculum. Instructors can also use built-in reporting features in most Learning Management Systems (LMS) software programs for deeper, data driven insights into student progress and success. Blended learning also offers the unique opportunity to discuss, model, and practice their new skills in a safe space for learners so they're not just watching or hearing but actually they're doing. By applying the new knowledge shortly after they've left the physical or virtual classroom, learners retain what they've learned.

3. Lower Costs: In-class training may seem like a cheaper option when compared to eLearning development, but consider the true cost of face-to-face sessions: Time away from work, paying instructors, and flying in remote employees can eat up a significant amount of the Learning and Development budget. A blended eLearning approach cuts down on travel costs and can be used again and again, which reduces instructor's time as well.

4. Fun and Engagement: Blended learning is an interactive experience in every sense of the word. Learners reinforce the offline lessons by practicing online through a variety of different content media, each geared to suit a certain learning style. Learners can choose which type of content they want to interact with, practice what they learn, and communicate with instructors and other learners any time and on any device. The community experience keeps learners engaged and informs teachers about their progress and areas requiring extra attention.

5. Reach and Personalization: Global organizations face the challenges of making learning universal, no matter the branch location. Language interpretation and travel can also be concerns, both of which are easily addressed by blended eLearning that brings training to all employees, whether they work in another country or from home. Blended Learning creates a buffet-style approach to training, allowing learners to lead and choose how and when they interact with the material. Being able to test out of a familiar topic or listening to the same podcast a few times means each learner gets the training they need (and want).

CONCLUSION:

When blended learning incorporates adaptive technology, real-time progress monitoring, and provides the recommended next steps to customize instruction for each student, teachers become more targeted, time-efficient and effective in improving students' overall reading abilities. Educators will embrace blended learning when they are included in the decision-making process, understand the benefits of new initiatives, and have the skills—or the support to develop the skills—to accomplish what is being asked of them. That's why it is essential to have strong leadership to achieve consensus, build infrastructure and then implement your model. Following these guidelines is the best way to personalize instruction and use mastery-based learning to improve overall student outcomes through a blended approach of face-to-face and online learning.

REFERENCES:

1. R.N. Shaidullin et al. / Procedia - Social and Behavioural Sciences