

DISTANCE EDUCATION IN THE AGE OF GLOBALIZATION: An Overwhelming Desire towards Blended Learning

Satya Sundar SETHY
Staff Training and Research Institute of Distance Education
Indira Gandhi National Open University
Maidangarhi, New Delhi, INDIA

ABSTRACT

The aim of this paper is to discuss the nature and status of distance education in the age of globalization, i.e. how best it fits for the present educational scenario. In this connection, we will discuss how Blended Learning (hence after, BL) is one among the other learning strategies mostly helpful for the learners. Keeping this view in mind, this paper is divided into three sections. The first section aims to discuss the nature of distance education in the age of globalization. The second section devotes a discussion on why we need blended learning in ODL system and in which way it plays a vital role for maximizing the benefit of the learners, tutors, and the institutions. The third section explains the pros and cons of blended learning to evaluate how successfully it can be implemented in the ODL system. The paper concludes with an established view that blended learning is a globalized approach to the distance education.

Keywords: Content high, blended learning, blended collaborative learning, lifelong education

INTRODUCTION

If we closely observe the world's progression for a few decades, we find everything is quite changed, if not drastically. Since changes are found in all domains, it affects the educational domain also. In the present age, education is not bounded in a particular locus as it was seen in earlier. Now higher education is available on the doorsteps, rigidity in earlier education became flexibility; the educational degree can be achieved while at work. All these happen due to the globalization effects. It is the globalization which empowers people to think in a rational and wider way, to see for a larger benefits, to use technology to do their task more efficiently, effectively, comfortable, and quickly.

We are living in an ever-changing world. New findings are generated and become established at breathtaking speed. To move hand in hand with this technology oriented globalized world we have to search for an atmosphere where most of the outcomes are caused by technology. Education is one of the prominent domains where advanced technologies are used. The term 'education' here should not be confused as discipline rather it should be understood as a whole which provides space to incorporate all the possible ways of learning. What education means and what it should comprise in a globalized world? A simple answer may be, a good education system should set out to achieve the highest goal and will be defined as the process of acquiring and developing knowledge.

DISTANCE EDUCATION IN THE GLOBALIZED WORLD

Globalization creates new ideas, values, identities, practices, and movements. In the globalization era, the world is becoming a more independent place in which people have a better chance of discovering their common humanity. Hence, it is viewed that globalization is a progressive transformation of social structures.

The principal objective of DE has been the development of the individual as a whole. It includes learners' cultural, behavioral, responsibility capacity, understanding capability, and rational attitude. Seeing through globalized telescope, it is viewed that in the present borderless information society, education needs to respond to the additional demands by raising awareness of environment, peace, cultural and social diversity. Education trains the individual to connect and live in harmony with the environment around him or her. But it is a fact that nothing is permanent in the phenomenal world. Everything is in a state of constant flux. In this flow, educational system has changed its size, nature and its corpus. In this regard, the challenge for ODL system is to bring reforms, create and develop the systems that trained the individual to work in a borderless economy and live in a global society. The traditional university admits students are in an 'enclosure' atmosphere due to certain admission criterion to till providing certification. With ICT and the Internet, the 'enclosure' came under attack. Globalization questions the 'fixity and stability of the world'. It moderates the view that ICT and the Internet with hypertexts and superabundance of information weaken the authority of the linear text and the teacher, and opens up for more diversity and self-monitoring.

The Open and Distance Learning (ODL) universities/institutions have given access to higher education to those persons who are lacking the formal qualifications to access the traditional universities. Globalisation demands flexibility, with flexible people in continuous, lifelong learning. The ability to produce outputs, i.e. collaboratively in global networks is more appreciated by the market than an academic degree fixed in space and time.

ODL universities give access to large number of learners who would otherwise have been unable to access education because of geographical distance or the inability to combine traditional studies with work. Those who disappear from work over longer periods of time tend to become peripheral in the workplace community and their discourse. The peripheral employees tend to get routine jobs; fewer opportunities for advancement; and are the first to go in times of rationalization. Most employees therefore are reluctant to engage in full time studies. Flexible learning that can be combined with a job, where the studies can be done at the workplace or at home, is ideal for learners who would otherwise have been excluded.

Open and Distance Education (hence after, ODE) typically involves flexible learning. This results according to Edwards, Nicoll & Lee (2002:198) increased access to post-school education, opening of boundaries between education and work, removal of barriers to accessing higher education, the use of ICT for the delivery of curriculum and the practice of learning. Geographical barriers are obvious issues in remote areas. To many, social barriers may be just as formidable.

"Minorities, women, and the poor have all had to struggle across this distance for access...to higher education" (Brown & Duguid, 2000, p.7).

The Open University opens the door at least partly to those lacking formal qualifications. Maybe more important is that online, asynchronous interaction between learner-learner is perceived as less threatening to learners who are reluctant to speak in face-to-face classes. Men are notorious for dominating classroom discussions. (Brown & Duguid, 2000:8). With asynchronous online discussions, gender, race and social background tend to fade. Besides, the timid have more time to reflect and formulate compared to the physical classroom.

Kellner thinks that ICT opens up "opportunities for research and communication not previously open to students who did not have the privilege of access to major research libraries or institutions.

The Internet opens more information and knowledge to more people than any previous institution in history, although it has its problems and limitations.

Moreover, the Internet enables individuals to participate in discussions, to circulate their ideas and work, which were previously closed off to many excluded groups and individuals” (Kellner, D.1999:19).

Education would soon be wearing a new face modernized for a 'knowledge economy' based on information technologies; its values, preferences and tastes would certainly be different. The needed preparation can be achieved by enabling learners to acquire appropriate knowledge, skills and the intellectual capacity to meet the challenges of accelerated change and uncertainty.

Now it is the age of techno-scientific revolution. The pace of change taking place in the work place requires people to re-equip themselves as new knowledge and new skills are needed to compete, survive and prosper. People will require new knowledge and skills to control and manage their own working lives.

In a globalized world, we need to have a learner friendly education. To meet this challenge institution must provide four skills that are required by the learners. DE does the task by alerting the learners about their required skills. Those skills are scientific, technological, application, and personal skills abbreviated as STAP (Mutthirulandi, R., 2003). The analyses of these skills are as follows.

-
- **Scientific skill:** This skill fosters learner to acquire an understanding of scientific methods that are used either for analyzing or describing a fact in the course. This skill helps to develop the analytical aptitude of the learner.
 - **Technological skill:** This is more concerned with giving a broad overview of the various technologies implemented in the course. This skill helps the learner to become more efficient to collect their required materials for their course. In addition to it, learner also develops some insights within himself/herself about the update technology, i.e. how it helps them in future to perform better.
 - **Application skill:** A command of the basics is not in itself sufficient for assuring the professional competence in an institution. In order to meet the demands of the job, graduates also need an in-depth fundamental knowledge of their specialized fields, general knowledge of problem solving methods, and finally particular application knowledge in accordance with workplace demands for the particular job profile. To do all these we need the application skill.
 - **Personal skill:** This skill is to be developed through team projects, group discussions, negotiation, presentations etc. throughout the course. It helps the learner to develop their thought on a certain fact or an issue.
-

One of the most visible manifestations of globalisation is the emerging 'borderless' distance education market. The huge increase in the worldwide demand in distance education is one of the reasons to trend the learners to get their opportunity in the globalized world, and this is possible due to the ICTs facilitation. This creates an environment where most of the learners access their materials in their leisure time and hence gets the degree while at work.

In a globalized society education plays a vital role for brining any changes or modifications. The new changes or modifications are mostly caused by ICTs. ICTs welcome majority of the learner across the border irrespective of caste, creed, race, sex, and age. It provides information with a lesser time, help learners to complete their course successfully and effectively.

Nevertheless, it is observed that in addition to providing information to the learners, we need to help them how successfully they can complete their course, how best they can learn their subject, and at the same time their quality of education should not be compromised.

In this regard, ODL institutions are giving justice to their learners for bringing them up in per with their excellence by providing them their preferred learning strategies.

There are different learning strategies implemented in ODL institutions to help the learners. Mostly, it is noticed that all these strategies are either through correspondence material despatch procedure or through ICTs. It is in either of these cases reaches the extreme polls. So there is a disruption seen for implementing these strategies in the ODL institutions.

This suggests why ODL institutions are highly concerned with their objectives and goals. To achieve the institutional goals and objectives, we find another alternative learning strategy named as 'Blended Learning'. It helps the learners to do a course successfully, to search and get a job in the techno-driven world. It aims at to provide education to the majority of the population in the world including the minor category who never ever thinks for their higher education. It facilitates the learner by providing materials through ICTs.

Not only that but also it trends the learner to become more efficient, rational, and skill full. All these characteristics help to satisfy one among the other features of globalization in the present age.

Now we will discuss what is BL and its defining features before proceeding towards the role of blended learning in distance education.

WHAT IS BLENDED LEARNING?

Blended learning integrates seemingly opposite approaches, such as formal and informal learning, face-to-face and online experiences, directed paths and reliance on self-direction, and digital references and group connections, in order to achieve individual and organizational goals.

Singh & Reed (2001) has defined blended learning as: "optimizing achievement of learning objectives by applying the 'right' learning technologies to match the 'right' personal learning style to transfer the 'right' skills to the 'right' individuals at the 'right' time."

Features of Blended Learning

BL is devoted to learning and performance. It has some identified features. These are;

- It promotes connections and conversations
- It guides, directs and tracks
- It nurtures a world-class and worldwide workforce.
- It provides consistent and updated messages.
- It tries to utilize the technologies in a better and fruitful way.
- It fosters independent habits for learning and reference.
- It encourages learning and work.
- It improves performance and control costs.

Most blends today are collections of separate, stand alone face-to-face and/or online components from which learners pick and choose. In a blended learning system, we find direction is minimal; freedom is maximized. The scenario could be instructor-led workshops and web-based sales module training. For example, after the basic training class, sales/marketing people may or may not elect to complete the modules. Likewise, some who completed the modules may not have attended the face-to-face workshop.

Michael Brennan (2003) points out some of the factors that have to be considered in designing a blended program: conditions (e.g., urgency), resources available (time,

money, and expertise), target audience, characteristics of the learner, characteristics of the content (type of learning objectives, shelf life, etc.).

To these we could add a few others, such as availability of other resources, for example, infrastructure, and characteristics of the learners' work and learning environments.

Hocutt's (2001) argues for a strategic blend that ensures; a) components of a blend are appropriately interrelated; b) the transitions among the components are smooth; (c) there will be consistency among the components in terms of message, language, and style (d) there will be sufficient and appropriate redundancy among the components.

Reasons for Implementing Blended Learning

There are some reasons for implementing the BL in ODL system. These are; (Igeneri & American Management Association, 2005)

- It reduces the costs (reduce time spent off the job, in the classroom; reduce training overheads and direct costs; re-use or leverage existing materials and programs, rather than develop or re-develop programs completely online)
- It delivers training in a shorter period (in contrast with a 100% classroom-based strategy) by introducing self-paced, independent study components (reduce time to completion, and time to market, for associated products and services)
- It provides more flexible learning models for learners to increase rate of learning, increase satisfaction with learning, and improve motivation and increase uptake of training
- It aligns training with business objectives and increase transfer to the workplace.
- It manages change (for example, migrate people gradually to online learning solutions)
- It increases collaboration among employees beyond the lifespan of the course or program (team building, facilitation of ongoing communities of practice, etc.)
- It accommodates different learning styles.

CAN BLENDED LEARNING TRULY IMPROVE LEARNING?

It is worth asking a question: Can blended learning really improve learning? In other words, is it really an effective learning? From a theoretical perspective, there are several reasons to think it should be, if designed appropriately. To start with, one would expect more robust learning, given the redundancy that is typically built into blended approaches. According to cognitive theories, articulating the same ideas in different ways, across different contexts and from different perspectives, should lead to the creation of mental models or schemata that are more flexible and that facilitate retrieval from memory (Procter, C., 2003). Blended learning also often incorporates strategies that can be expected to promote transfer to the workplace - strategies such as on-the-job learning, coaching, and performance support. And given the blend of strategies employed, one could also assume that a broad range of learners will be satisfied by the match between their preferred modalities for learning, and what a training program offers them. This should improve buy-in for training programs and lead to higher motivation.

Blended learning, with some level of redundancy built in, will typically lead to more time on-task. This aspect alone should lead to more effective learning and better retention, to some degree. At the same time, an increase in time on task does not necessarily mean that blended learning is less efficient, or carries a greater opportunity cost.

For example, in a blended strategy more learning may be taking place directly in the workplace, as opposed to entirely in classrooms. And a blended strategy may introduce a higher percentage of self-paced rather than instructor-paced learning, leading to quicker completion times. (Igneri & American Management Association; 2005)

Blended Collaborative Learning (hence after, BCL) actively encourages the modern form of communities of practice and permits dispersed individuals to contribute and gain from this kind of group involvement. Pedagogy and facilitation is the core of BCL. By embedding human interaction in learning programme, the online educator exploits the human need for socialization to aid learning. It also helps the marginalized by encouraging them to do their selected course.

Blended Collaborative Learning delivers outstanding results predominantly through tutor facilitated asynchronous computer conferencing. Grundry (1992) defined collaborative learning as individual learning as a result of group process. At its heart it is the process by which people learn as a result of interactions with their peers. It is important to recognize the contrast between the collaborative learning model and the transmissive model of traditional formal education, in which interactions occur principally between the teacher and students. Lasonen and Stenstrom (1995) believe the whole concept of teaching is undergoing change due to the changes in society. They maintain that this is not because of the new educational technologies but because society is changing.

In a globalized world it is a challenge for ODL institutions to provide education worldwide. To provide education in worldwide we need to use the technology. It is the advanced technology which helps to spread and distribute messages worldwide with a pulse of second. Thus, globalization is nothing but the technoloization of the world force.

We find in the present trend education that learners' inquisitiveness to learn through ICTs in wide range. The reasons are; it supports for the effective learning, completion of short period courses, bridging the gap of distance etc. All these will be possible when we go for the advanced strategies of learning system. This is nothing but the BL approach to the DE.

THE ROLE OF BLENDED LEARNING IN DE

The virtual classroom education which is considered as residential education is based on synchronic and verbal interaction, while distance education is mainly realized in asynchronous and material based interaction. BL blurs these sorts of education 'residential education' and 'distance education' by the use of ICTs for giving an opportunity to learn from each other. In the past, distance education was based on the production and the asynchronous exchange of materials. The learner was sent written learning materials plus written instructions, and returned his homework in a written form. Today, the use of synchronous forms of communication, like chat, voice-over-IP or the life-broadcasting of lectures and presentations, increasingly gain importance in distance education, which can lead to a transfer of new didactical arrangements (e.g. student-student interaction, group work, etc.).

In contrast to that, residential education can adapt to new forms of material based communication. In the past, most communication was verbal and the reading list often was the only learning material produced by the teacher himself. However, the educational use of ICTs requires an increased production of electronic materials and of written instructions. Asynchronous forms of communication is, e.g. email or discussion forums, gain importance.

As a whole, much communication that has been volatile and verbal before, becomes increasingly "materialized", fixed in digital form. Examples for that are new forms of written communication (email, chat, forum), the use of PowerPoint instead of blackboard and chalk, the recording of presentations, and the production of more written materials (syllabus, calendar, reading list, lecture notes, etc.)

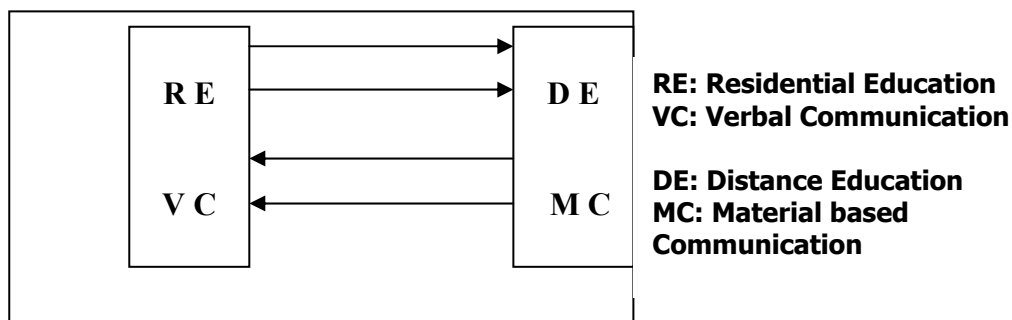


Figure: 1
Blended learning blurs two traditional concepts

The use of ICTs in residential education makes it more obvious that education does not only rely on interaction of the involved participants.

There exists a material component as well. It is possible to roughly distinguish between two types of materials. One type is the meta-information on an educational arrangement, e.g. (commented) course lists, descriptions of courses, syllabi, calendars and announcements. The other type is learning material in a more narrow sense, e.g. lectures notes, literature, assignments, tutorials, self-tests, etc. ICTs in education make it necessary to distinguish different forms of personalized communication more explicitly and to use them more specifically. Different form can, for example, be the presentation of content, discussion with and between students, feedback about how imparted information was understood, consultancy to support individual work of students, and, finally, examination to decide about success or failure.

On the one hand, this distinction between material and interaction as complementary elements of formal learning arrangements makes it obvious that both residential as well as distance education require personal communication. Even if this communication is based on the exchange of materials or if it takes a written form, it still refers to the individual student. His or her personal development is the goal of education and has to be assessed individually. Qualified and qualifying personal communication is a core requirement for formal education.

For electronic learning materials, the situation is very much different. In the past, learning materials have been bound to a physical form of representation. Texts were fixed in paper, or in audiovisual recordings. This made their reproduction and their dissemination logistically and economically expensive.

The shift from analog to digital forms of representation and the evolution of the Internet changed this situation radically. The presentation of digital materials in online archives allows to boundlessly increase the number of potential users for neglectable costs per additional user. In contrast to that, analog materials (e.g. lecture notes, books, films) have to be reproduced and each copy only can be used by one person at a moment.

Except of problems of bandwidth (which loose importance continually), in principle it is technically possible to make electronic materials available to an unlimited number of people, without significant additional costs for the producer and without users competing for access.

It is obvious that learning materials and personalized interaction are complementary elements of educational arrangements. Learning materials will never substitute interaction in formal education.

However, the use of ICTs is changing the shape of learning arrangements and increases the need to produce learning materials. If the production and publication of learning materials is addressed by academic mechanisms of acknowledgement and promotion, the provision and distribution of electronic learning materials can be sustained.

Progressive convergence of traditional face-to-face and distributed environments allowing development of blended learning systems.

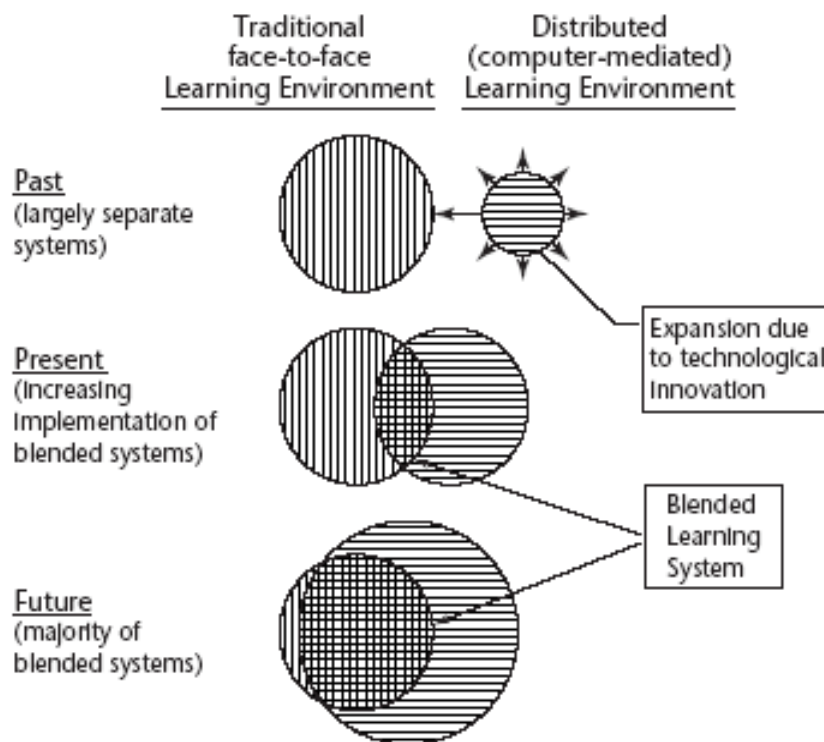


Figure: 2
 (A description of past, present and future trend of ICT)
 Picture source: Accessed on (27/09/07) from
www.publicationshare.com/graham_inte.pdf

The widespread adoption and availability of digital learning technologies has led to increased levels of integration of computer-mediated instructional elements into the traditional face-to-face learning experience.

The intersection of the two archetypes depicts where blended learning systems are emerging. Although it is impossible to see entirely what the future holds, we can be pretty certain that the trend toward blended learning systems will increase. But regardless of what we decide to call blended learning in the future, it is clear that it is here to stay. Therefore, it is imperative that we understand how to create effective blended learning experiences that incorporate both face-to-face and computer-mediated (CM) elements.

THE ON-GOING TRENDS AND ISSUES

There are quite a few reasons which enforce instructor, trainer, and learner to pick blended learning over other learning options. Osguthorpe and Graham (2003) identified six reasons that one might choose to design or use a blended learning system:

- pedagogical richness,
- access to knowledge,
- social interaction,(4) personal agency,
- cost-effectiveness, and
- ease of revision.

Compressing these six reasons Graham, Allen, and Ure (2005) further found that people chose BL for three reasons:

- improved pedagogy,
- increased access and flexibility, and
- increased cost-effectiveness.

Improved Pedagogy

Pedagogy is one of the other important factors for implementing BL in a programme. It is found that most of the higher educational institutions and corporate training institutions focused their pedagogy on transmissive strategies rather than interactive strategies. In higher education, 83 percent of instructors use the lecture as the predominant teaching strategy (U.S. Department of Education; 2001). Similarly, distance education often suffers from making large amounts of information available for students to absorb independently (Waddoups & Howell; 2002). Some have seen blended learning approaches increase the level of active learning strategies, peer-to-peer learning strategies, and learner-centered strategies used (Collis, Bruijstens, & Van der Veen, 2003).

Increased Access and Flexibility

Access to learning is one of the key factors influencing the growth of distributed learning environments. Learner flexibility and convenience are also of growing importance as more mature learners with outside commitments such as work and family seek additional education. Many learners want the convenience offered by a distributed environment yet do not want to sacrifice the social interaction and human touch they are used to in a face-to-face classroom. There are numerous examples how blending is used to provide a balance between flexible learning options and the high-touch human interactive experience.

Increased Cost-Effectiveness

Cost-effectiveness is a third major goal for BL systems in both higher education and corporate institutions. Blended learning systems provide an opportunity for reaching a large, globally dispersed audience in a short period of time with consistent, semipersonal content delivery. Bersin and Associates (2003) have done an exemplary job of documenting corporate cases that have effectively used blended learning to provide a large return on investment. By implementing BL we can have also quality enhancements and cost savings simultaneously.

The above issues encourage us to implement blended learning in ODL system. To do so, it is necessary to know at what level we can do blend.

BLENDING AT MANY DIFFERENT LEVELS

All of the BL occur at four levels in ODL system. These are;

- activity level,
- course level,
- program level, and
- institutional level (Graham, C.R., 2005).

Across all four levels, the nature of the blends is determined by the learner or the designer or the instructor. Blending at the institutional and program levels is often left to the discretion of the learner, while designers and instructors are more likely to take a role in prescribing the blend at the course and activity levels.

Activity-Level Blending

Blending at the activity level occurs when a learning activity contains both face-to-face and CM elements. For example, Wisner outlines large-scale military training events that incorporate both face-to-face and virtual elements. Jung and Suzuki share how technology is used to bring experts at a distance into the classroom, creating a simultaneous face-to-face and CM experience.

Course-Level Blending

Course-level blending is one of the most common ways to blend. It entails a combination of distinct face-to-face and CM activities used as part of a course. Some blended approaches engage learners in different but supportive face-to-face and CM activities that overlap in time, while other approaches separate the time blocks so that they are sequenced chronologically but not overlapping.

Program-Level Blending

Graham (2005) observes that blends in higher education are often occurring at the degree program level. Blending at a program level often entails one of two models: a model in which the participants choose a mix between face-to-face courses and online courses or one in which the combination between the two is prescribed by the program.

Institutional-Level Blending

Some institutions have made an organizational commitment to blending face-to-face and CM instruction. Many corporations as well as institutions of higher education are creating models for blending at an institutional level.

The University of Phoenix (Graham; 2005) also has an institutional model for blending, where students have face-to-face classes at the beginning and end of the course, with online activities in between. Similarly, at the University of Illinois, traditional on-campus economics students have been allowed to take a required course online while they were off-campus for the summer (Wang, Kanfer, Hinn, & Arvan, 2001).

For the institution to be engaged in blended learning, there must be a concerted effort to enable the learner to take advantage of both ends of the spectrum. It is not sufficient for the institution to have a distance learning division that is largely separate from the on-campus operations.

According to Graham (2005) there are three categories of blend found in ODL system. These are, enabling blends, enhancing blends, and transforming blends. Each model provides ideas about how to blend with examples implemented in specific contexts and with real constraints. Here, it is important to note that none of these blends is necessarily bad but they are just different patterns. Out of these three blends, learners pick the option that best meets their cost and time constraints. A good example is the University of Phoenix which attempts to provide an "equivalent" learning experience through its face-to-face residential programs, entirely online programs, and blended learning programs. An analysis of the above mentioned blends are as follows. Table 1.1 Categories of Blended Learning Systems (Graham; 2005)

Enabling blends	Primarily focus on addressing issues of access and convenience—for example, blends that are intended to provide additional flexibility to the learners or blends that attempt to provide the same opportunities or learning experience but through a different modality
Enhancing blends	Allow incremental changes to the pedagogy but do not radically change the way teaching and learning occurs. This can occur at both ends of the spectrum. For example, in a traditional face-to-face learning environment,

additional resources and perhaps some supplementary materials may be included online.

Transforming blends

Blends that allow a radical transformation of the pedagogy—for example, a change from a model where learners are just receivers of information to a model where learners actively construct knowledge through dynamic interactions. These types of blends enable intellectual activity that was not practically possible without the technology.

On the view of Graham (2005), there are six major issues relevant for designing a blend and these are to be focused when we attempt to design a blended learning system. The issues are;

- the role of live interaction,
- the role of learner choice and self-regulation,
- models for support and training,
- finding balance between innovation and production,
- cultural adaptation, and
- dealing with the digital divide.

The Role of Live Interaction: The role of live interaction helps the learner to feel a kind of close environment. It gives the thrilling of nearness, so that they can ask frequent questions and can clarify their doubts without any hesitation.

The issue on live interaction asks a vital question that is, under what conditions human interactions are important for the learning processes and how it satisfies the learners. In this regard, Graham (2005) finds when CM and face-to-face elements were combined, learners often placed a greater value or emphasis on the face-to-face aspects of the experience.

Role of Learner Choice and Self-Regulation: This is a crucial factor for any ODL institutions to see what kinds of learning preferences learner expect from their respective institutions. How are learners making choices about the kinds of blends that they participate in? It seems that learners are primarily selecting blended learning based on convenience and access. But this begs questions about the type and amount of guidance that should be provided to learners in making their choices about how different blends might affect their learning experience. Online learning components often require a large amount of self-discipline on the part of the learners (Collis, Bruijstens, & Van der veen, 2003).

Models for Support and Training

There are many issues related to support and training in blended environments, including:

- increased demand on instructor time (Hartman et al., 1999),
- providing learners with technological skills to succeed in both face-to-face and CM environments (Levine & Wake, 2000), and
- changing organizational culture to accept blended approaches (Hartman et al., 1999).

There is also a need to provide professional development for instructors who will be teaching online and face-to-face (Graham; 2005). It is important to see more successful models of how to support a blended approach to learning from the technological infrastructure perspective as well as from the organizational perspective.

Digital Divide

The divide between the information and communication technologies available to individuals and societies at different ends of the socioeconomic spectrum can be great. Massy raises the issue that e-learning is often perceived as being an approach that favors the advantaged.

Yet e-learning is a strategy that might be considered for educating the masses because of its low cost and ability to be distributed widely. But the jury is still out on whether blended learning models can be developed that is affordable and still address the needs of different populations with different socioeconomic conditions around the world.

Cultural Adaptation

What role can and should blended approaches play in adapting materials to local audiences? One of strength of e-learning is the ability to distribute uniform learning materials rapidly. Yet there is often a need for customizing the materials to the local audience to make them culturally relevant. Jagannathan and Selinger (2001) both address the need to find balance between global and local interests. Selinger suggests that a face-to-face instructor plays an important role in helping to make globally distributed materials culturally relevant and meaningful.

ISSUES AND CHALLENGES FOUND IN BL

Educators think in non-linear way whereas technicians think in a linear way. This is the mismatch where blended learning fails. In regard to this, many technologists consider learning is to be a matter of information transference, rather than a process for gaining deep understanding. Many people expect that such a radical change can happen very quickly. One of the major disadvantages is that effective online learning will take time to implement properly. Staff needs to be trained and to develop online facilitative skills and policies need to be written and implemented. Thus it is assumed that implementation of BL requires quite a few times, a considerable effort, and a serious thought. Good online educator training is required to make educators feel confident to deliver effective online training, and at the same time they should know that when online education is appropriate, and equally important, when it is not likely to be effective.

While designing blended learning we find that there is a constant tension between innovation and production. On the one hand, there is a need to look to the possibilities that new technological innovations provide, and, on the other hand, there is a need to be able to produce cost-effective solutions. However, due to the constantly changing nature of technology, finding an appropriate balance between innovation and production will be a constant challenge for those who designing blended learning. From a pedagogical standpoint, the designers of blending learning systems should be seeking best practices for how to combine instructional strategies in face-to-face and CM environments that take advantages of the strengths of each environment and avoid their weaknesses (Martyn, 2003). (Table 1.2 is retrieved on 27/11/07, from www.publicationshare.com/graham_intro.pdf)

Computer-Mediated Environment (Asynchronous Text-Based Discussion)

Strengths :Flexibility: Students can contribute to the discussion at any time and at any place that is most convenient to them.

Participation: All students can participate because time and place constraints are removed.

Depth of reflection: Learners have time to more carefully consider and provide evidence for their claims and provide deeper, more thoughtful reflections

Face-to-Face Environment (In-Class Discussion)

Human connection: It is easier to bond and develop a social presence in a face-to-face environment. This makes it easier to develop trust.

Spontaneity: Allows the generation of rapid chains of associated ideas and serendipitous discoveries (Mikulecky, 1998).

(Mikulecky, 1998; Benbunan-Fich & Hiltz, 1999).

Weakness: Spontaneity: Does not encourage the generation of rapid chains of associated ideas and serendipitous discoveries (Mikulecky, 1998).

Procrastination: There may be a tendency toward procrastination (Benbunan-Fich & Hiltz, 1999).

Human connection: The medium is considered to be impersonal by many (Benbunan-Fich & Hiltz, 1999), which may cause a lower satisfaction level with the process (Haytko, 2001).

Participation: Cannot always have everyone participate, especially if there are dominating personalities.

Flexibility: Limited time, which means that you may not be able to reach the discussion depth that you would like.

To illustrate the importance of understanding the strengths and weaknesses afforded by a face-to-face and CM learning environment, consider the following example of an activity-level blend. Class discussions are one of the most common instructional methods used in education. Unlike the lecture, the instructional method of class discussion focuses on learner interaction rather than knowledge transmission. Typically, the goal of class discussion is to have the learners negotiate and co-construct an understanding of the discussion topic. The face-to-face and CM environments have many complementary strengths and weaknesses that impact class discussion. Table 1.2 lists some of the strengths and weaknesses of conducting discussions in each of these environments (Graham; 2005). Strengths and weaknesses of conducting discussions are in face-to-face and computer-mediated learning environments.

Although Table: 1.2 certainly does not contain all of the possible strengths and weaknesses of conducting discussions in the face-to-face and CM environments, instructors might use this understanding to make decisions about whether to use one or the other or both learning environments to meet instructional goals. For example, by understanding the affordances of face-to-face and CM environments, an instructor of a large-enrollment class might choose to use the CM environment so that everyone in the class can contribute to the discussion. Another instructor concerned about unmotivated students and procrastination might choose to use a face-to-face discussion where social presence and excitement for the topic can be communicated through voice as well as gesture. A third instructor might choose to blend the two learning environments, starting with a brief exploratory face-to-face discussion to generate excitement for the topic and set the stage for a more in-depth follow-up discussion online in a CM environment.

CONCLUSION

Distance education in the age of globalization is found a remarkable change both in learner satisfaction and in achieving institutional objectives in comparison to the last few decades. This is possible due to the interest on learners' side towards DE. As we move into the future it is important that we continue to identify successful models of blended learning at the institutional, program, course, and activity levels that can be adapted to work in contexts. Blending would be considered on learners' preferences and the perceived benefits of learning and training keeping in minds the results and reality.

It seems that globalization raises a global competition among the learners and their application towards the global market principle, where large segment of population are involved for acquiring the knowledge and keep themselves update with the time and space. It also encourages the minority to come out from the bondage and enjoy their rights/liberty. Now it is important for the ODL institutions to establish

structures and systems that offer higher education not only to small elite but also to the majority of the world's population regardless of geography, social class, gender, and race.

The technological world where we are living in, the new innovations are occurring at breakneck speed and digital technologies are increasingly becoming an integral part of our lives. Technological innovation is also expanding the range of possible solutions that can be brought to bear on teaching and learning. Hence, teaching and learning can be possible in more effectively, flexibly, and at the same time it would be worth paying.

All these features are possible when we think of a blend where both face-to-face and CM experiences are found together. Nevertheless, it is important to note that like any other design problem, the issues and challenges faced by BL is highly context dependent, with a practically infinite number of possible solutions.

BIODATA and CONTACT ADDRESSES of AUTHOR

I am a lecturer in Distance Education at Indira Gandhi National Open University, New Delhi, India. I have published *three* papers in philosophical journals and presented more than 26 papers in national seminars and conferences, and two papers in International Conferences.

Satya Sundar SETHY
Staff Training and Research Institute of Distance Education
Indira Gandhi National Open University
Maidangarhi
New Delhi-110 068
Fax: 011- 29533073
Emails: sssethy@ignou.ac.in or satyasundar20012001@yahoo.co.in

REFERENCES

- Benbunan-Fich, R. & Hiltz, S.R. (1999). 'Educational Applications of CMCS: Solving Case Studies Through Asynchronous Learning Networks'. *Journal of Computer-Mediated Communication*, vol.4, no.3
- Bersin and Associates. (2003). *Blended Learning: What Works? An Industry Study of the Strategy, Implementation and Impact of Blended Learning*. Bersin and Associates Publication: Oakland
- Brennan, M. (2003). Effectively Implementing a Blended Learning Approach. http://adlcommunity.net/file.php/11/Documents/Edo_Knowledgeware_whitepaper_Blended_Learning_AMA.pdf Accessed 21st September 2007
- Brown, J.S. and Duguid, P. (2000). 'Re-education', in J.S Brown and P. Duguid (eds.), *The Social Life of Information*. Harvard Business School Press: Boston
- Collis, B., Bruijstens, H. & Van der Veen, J.K. (2003). 'Course Redesign for Blended Learning: Modern Optics for Technical Professionals'. *International Journal of Continuing Engineering Education and Lifelong Learning*, vol.13, no.1/2: pp.22-38
- Edwards, R., Nicoll, K. and Lee, A. (2002). 'Distributed Learning and Changing Educational Spaces', in R. Edwards, K. Nicoll, and A. Lee (eds.), *Distributed Learning: Social and Cultural Approaches to Practice*. Routledge Falmer Publication: London
- Graham, C. R. (2005). *Introduction to Blended Learning*. www.publicationshare.com/graham_into.pdf Accessed 27th September 2007

- Graham, C.R., Allen, S. & Ure, D. (2005). 'Benefits and Challenges of Blended Learning Environments', in Encyclopedia of Information Science and Technology. Idea Group Publication: Hershey, pp.253-259
- Grundry, J. 1992. 'Understanding Collaborative Learning in Networked Organizations', in A.R. Kaye (ed.), Collaborative Learning through Computer Conferencing. Springer-Verlag Publication: Berlin
- Hartman, J. L. et al. (1999). August 16-18. 'Faculty Satisfaction in ALNs: A dependent or Independent Variable', Paper Presented at the Sloan Summer ALN Workshops, Learning Effectiveness and Faculty Satisfaction .IL Publication: Urbana.
- Haytko, D. L. (2001). 'Traditional Versus Hybrid Course Delivery Systems: A Case Study of Undergraduate Marketing Planning Courses'. *Marketing Education Review*, vol.11, no.3: pp.27-39
- Hocutt, R. (2001). Strategies for Building Blended Learning. http://adlcommunity.net/file.php/11/Documents/Eedo_Knowledgeware_whitepaper_Blended_Learning_AMA.pdf Accessed 21st September 2007
- Igneri, N. & American Management Association. (2005). Effectively Implementing A Blended Learning Approach: Maximizing Advantages and Eliminating Disadvantages. http://adlcommunity.net/file.php/11/Documents/Eedo_Knowledgeware_whitepaper_Blended_Learning_AMA.pdf Accessed 29th September 2007, p.3
- Jagannathan, S. & Selinger, M. (2001). Handbook of Blended Learning: Global Perspectives, Local Design. Pfeiffer Publishing: Francisco, Forthcoming
- Kellner, D. (1999). Theorizing Globalization Critically. <http://www6.open.ac.uk/h805/resources/KellnerTheorizingGlobalisation.doc> Accessed 24th September 2007.
- Lasonen, J. & Stenstrom, M. (1995). 'Blended Collective Learning: Online Teaching of Online Educators', in G. Prendergast (ed.), Blended Collaborative Learning www.whirligig.com.au/globaleducator/articles/GerardPrendergast2004.pdf p.3, Accessed 27th September 2007
- Levine, S.L. & Wake, W.K. (2000). October 20. 'Hybrid Teaching: Design Studios in Virtual Space'. Paper presented at the National Conference on Liberal Arts and the Education of Artists. School of Visual Arts: New York
- Martyn, M. (2003). 'The Hybrid Online Model: Good Practice'. *Educause Quarterly*, vol.26, no.1: pp.18-23
- Mikulecky, L. (1998). 'Diversity, Discussion and Participation: Comparing Web-based and Campus-based Adolescent Literature Classes'. *Journal of Adolescent and Adult Literacy*, vol. 42, no.2: pp.84-97
- Mutthirulandi, R. 2003. Globalization and Education: Need for Curriculum for Lifelong Learning Programs. <http://www.boloji.com/analysis/068.htm> Accessed 25th September, 2007
- Osgthorpe, R. T. & Graham, C. R. (2003). 'Blended Learning Systems: Definitions and Directions'. *Quarterly Review of Distance Education*, vol. 4, no.3: pp.227-234
- Procter, C. (2003). Blended Learning in Practice. Accessed 27th September 2007 http://www.ece.salford.ac.uk/proceedings/papers/cp_03.rtf

Singh, H. & Reed, C. (2001). A White Paper: Archiving Success with Blended learning.
www.centra.com/download/whitepapers/blendedlearning.pdf

**U.S. Department of Education (2001). The Condition of Education 2001. National
Centre for Educational Statistics Print: Washington**

**Waddoups,G. & Howell,S. (2002). 'Bringing Online Learning to Campus: The
Hybridization of Teaching and Learning at Brigham Young University'. *International
Review of Research in Open and Distance Learning*, vol.2, no.2**

**Wang, X.C., Kanfer,A., Hinn,D.M. & Arvan,L. (2001). 'Stretching the Boundaries: Using
ALN to Reach On-campus Students During an Off-campus Summer Session'. *Journal of
Asynchronous Learning Network*, vol.5, no.1: pp.1-20.**