Arguing for blended teaching and learning
- A reflective essay

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Learning is described as an active process of group collaboration. The focus of learning has shifted from the product to the process, that is, from goal achievement to how the learning goal is achieved. The emphasis now centers on instruction format and design. This reflective essay attempts to clarify and discuss contemporary controversial issues of discourse, dialogue, and resultant blended teaching and learning methods within the COI (Conflict of Interest) framework.

Key words: Blended teaching and learning, education, environment.

INTRODUCTION

Contemporary education scene is characterized by two principal features of learner diversity, and participatory, collaborative learning. Bransford states that the nature of learning has changed (Bransford et al., 1999). It is no longer an individual process, but an open, group collaborative effort (Sfaard 1998).

Learning is now conceived as a process of becoming a member of a certain community. This entails, above all, the ability to communicate in the language of this community and act according to its norms. The norms themselves are to be negotiated in the process of consolidating the community. While the newcomers are learners, the potential performers of practice, the teachers are the preservers of its continuity... this new view of learning can be called participation...” (Sfaard 1998).

This viewpoint focuses the attention from a teacher-centered passive learning environment to that of a student-oriented active learning environment. Chickering and colleagues state that learners benefit most in an environment of prompt feedback, active learner participation, high levels of interaction between learner and instructor, cooperation over competition among learners, and a sense of community fostering mutual respect and tolerance among all learners (Chickering and Gamson, 1987). Constructivist learning environments have similar structure calling for mutual goal achievement, learner participation, and individual knowledge construction dependent on group social collaboration (Honbein, 1996; Driscoll, 1994). They state that such participatory learning environments are built on principles of social and active learning. Perkins elaborates that learners are not passive organisms or vessels waiting to be filled with knowledge, rather learners comprehend knowledge or information to construct individual knowledge constructs or schemas (Perkins, 1991). This contends that though the process of learning is individualized in the end where the learner alone has to construct or modify previous schema, the process of codifying the entire information into a relevant chunk of knowledge is interactive, special, and collaborative (Perkins, 1991; Driscoll, 2000).

They describe learning as a permanent change in behavior in an environment, “where learners work together and support each other as they use a variety of tools and information resources in their guided pursuit of learning goals and problem-solving activities (Wilson, 1996). Hence, a learning environment can be deemed participatory if it uses multiple modes of representation, encourages learning to be meaningful, realistic, and relevant, is social in nature, and promotes metacognition (Honebein, 1996; Driscoll, 1994). Learning ought to propel a learner to evaluate and assess presented knowledge engaging in processes of assimilation, or accommodation, and construct individual schema. Constructivist learning environments argue for authentic learning tasks where learners work together, share opinions, perceptions to reach a feasible conclusion (Eggen and Kauchak, 2007). The researchers also contend that authentic learning tasks instruct learners to
interact with diverse people to solve problems. They also increase learner motivation thereby increasing the ability to learn.

This paper, written as a reflective essay, attempts to discuss the contemporary teaching and learning method of blended learning and teaching against the theoretical framework of the community of inquiry. The essay begins with a brief background of the theory moving to the ongoing debate of discourse and dialogue. The third section scrutinizes the aspect of blended learning and teaching. The concluding sections focus on the contemporary state of blended teaching and learning method, recommendations, and future directions for research.

Community of inquiry framework
The COI framework finds its roots in the philosophy of Dewey. Based on three main elements of cognitive, social, and teaching presence, the COI framework is deemed as a feasible and comprehensible theoretical structure for all synchronous classroom-oriented, and asynchronous online learning environments (Garrison, Anderson and Archer, 2000). The framework bears a close resemblance to the constructivism theory in higher education with regards to features of active learning, collaboration, metacognition, and social learning (Shea, Li, Pickett, 2003; Garrison and Arbaugh, 2007). COI is built on the primary principle that the learning process requires a community structure and sense to provide learners scaffolding, zone of proximal development, and propel development of feelings of belongingness. Learners within COI feel the need to cooperate to achieve mutual goals, and solve problems. They view each other as agents of support, and with them, and not as competitors, against them.

The first element of social presence indicates the role of social networking and interaction (Garrison et al., 2001). It revolves around the notion that learning is a group social process. The element itself embodies critical aspects of effective and open communication, and group cohesion. According to Swan and Shih social presence means open and purposeful communication to meet the goal of group cohesion (Swan and Shih, 2005). It is the ability of learners to project themselves socially and emotionally (Gunawardena and Zittle, 1997). Swan points out that social presence in a COI framework does not mean socialization.

The second element of cognitive presence is defined as the exploration, construction, resolution, and confirmation of inquiry through a process of collaboration reflection (Garrison et al., 2001). As such cognitive presence seems to be heavily reliant on components of social and teaching presence. It is dependent on learner participation and mutual effective communication to develop scaffolds and reach feasible solutions (Pawan et al., 2003). The researchers also state that cognitive presence means that learners need to become highly aware of self-learning activities, indicating the role of metacognition in inquiry formation process. The role of the learner, instructor, instruction design and format, and level of interaction between learner and instructor, and among learner themselves, also play key factors in the development, resolution, comprehension, and reflection of inquiry.

The third element of COI called the element of teaching process is a validation component (Garrison et al., 2001). Teaching presence determines the level and success of social and cognitive activities within COI. Research proves that there is a significant relationship between student satisfaction, metacognition, communication, group cohesion, knowledge construction, learning, and community development, and teaching presence (Swan and Shih, 2005; Swan, 2003; Arbaugh, 2005; Vaughan, 2004; Meyer, 2003; Murphy, 2004; Pawan et al., 2003; Garrison and Cleveland-Innes, 2010). This element is marked by three factors of instructional design, instructional facilitation, and direct instruction (Garrison et al., 2001; Shea et al., 2006). Hence, teaching presence is concerned with learner, instructor role, and instructional design and format.

The next section focuses on the emerging debate between dialogue vs. discourse within the third component of COI. This issue has far reaching implications regarding the effectiveness of COI in the contemporary classroom.

Face-to-Face vs Online - An ongoing debate
Research has shown that the bedrock of the COI model is the third element of teaching presence (Stodel, Thompson and MacDonald, 2006). Garrison and colleagues contend that the social and cognitive components of COI are dependent on the third component of teaching presence (Garrison et al., 2001). They further explain that social and content-related interactions resulting in critical reflections and exploratory and cognitive activities are important for learning. But, these factors are by-products of a healthy teaching presence that is, instructional format, delivery, instructor and learner role (Garrison et al., 2001). The level and quality of networking and cohesion resulting in development of an academic community and learning environment is a function of the role instructors play in delivering and presenting content, and role learners play in understanding the content and working towards mutual academic goals.

Discourse is defined as productive inquiry. It is disciplined interaction between learners, learner and instructor. It requires possession of previous knowledge so that new knowledge constructs can be developed within a time frame and structure (Garrison et al., 2001, Pawan et al, 2003). Hence, existence of discourse hinges of proper and efficient instructional design. Discourse is not relegated to classroom teaching, but can be successfully implemented in online learning environments.
including virtual classrooms. This kind of interaction has a focus and direction, and does not allow academic discussions, interactions and investigations to meander. Meaningful discourse is a valuable teaching tool, which allows opportunities for collaborative constructive group activities (Meyer, 2004). It is the responsibility of the instructor to maintain decorum, set rules for a meaningful and productive discourse. According to Tiene, discourse encourages learners to build knowledge constructs with meaningful, appropriate information discarding irrelevant information at once. This helps learners in modifying and expanding knowledge bases in the “correct” direction (Tiene, 2000). Anderson and colleagues state that discourse is a weapon- a weapon of intellectual and scholarly information used by instructors to mold, train, share, and help learners to develop knowledge, attitudes, and behavior in an appropriate manner (Anderson et al., 2001).

An instructor has to ensure that productive discourse includes prompt and explanatory feedback which is deemed crucial for developing sound knowledge constructs. At the same time, the instructor has to make sure that the discourse does not take the form of a monologue, but extends to learner interactions and queries. This leads to support-building, constant exchange of ideas between learners and instructor, and group closeness. The classroom becomes an academic community where ideas and thoughts are exchanged; learners collaborate, investigate, elaborate, and reflect on what is stated by the instructor (Arbaugh, 2001; Baker, 2004; Richardson and Swan, 2003).

Discourse, that is, all meaningful and productive discourse has to be regulated with a structure or design. All interactions must have a purpose, and similarly presented content must scaffold learners to engage in assimilation and accommodation. It is the responsibility of the instructor to moderate all queries and explanations leading to group collaborations. Interaction in a discourse must be structured and cohesive with a unifying thread, argument, or question, usually posed by the instructor (Pawan et al., 2003). This avoids disjointed monologues, and progresses the discourse through the stages of inquiry (Pawan et al., 2003, Meyer, 2003).

Romeo argues that the tool of discourse has been improperly used in contemporary education (Romeo, 2001). Learner diversity and abundant growing use of technology has led many learners and instructors, including instructional designers and researchers to think that discourse has no place in an online community. But this is a misconception. Discourse leads learners to think critically, reflect, interact, query, collaborate, investigate, elaborate to construct holistic knowledge bases, within a regulated and focused time frame and direction. Thus, the concept of instructional design is central to meaningful discourse. Here, it is important to distinguish between discourse and meaningful discourse (Romeo, 2001; Meyer, 2004). Meaningful discourse is not a monologue, but healthy dialogue and interaction. It is productive and active, where learners have to engage in critical thinking and reflection. Learners develop a sense of belongingness as all of them are absorbed in learning a particular piece of information, or solving a problem, and participating in authentic tasks (Shea, 2006).

Meaningful discourse leads to collaboration, communication, group cohesion, higher-order thinking, and exploratory attitudes (Shea, 2006). Meaningful discourse is teacher-directed leading to learner dialogue.

Discourse is a teacher-centered monologue, where students have to enact the role of passive recipients of knowledge. There is negligible interaction resulting in minimal active learning, networking and community development. This kind of dialogue is meaningless, and unfruitful. Garrison and colleagues contend that dialogue has to be more than a series of social exchanges and opinions with no direction and focus (Garrison et al., 2001). Meyer states that dialogue has to be meaningful, learner-oriented, academic, and goal driven in nature (Meyer, 2004). Instructors need to adopt directive approaches, ensuring that all learners are involved and focused in solving a particular problem (Gilbert and Dabbagh, 2005).

Dialogue does not mean asking students to answer a question, or a few questions related to the content. This actually makes the process of dialogue and discussion a chore. There is no active learning as such where the student has to think and share information, ideas with peers and instructor. Dialogue becomes a monologue where the student merely participates for a good grade (Meyer, 2003). Learners have the opportunity to participate in dialogue at any time and any place. This might limit development of an academic community where learners ascertain knowledge for accomplishment of a particular goal. But, online learning environments actually bring learners closer. They now have the opportunity to engage in interaction building a sense of connectedness (Tiene, 2000). But dialogue is a function of learner motivation and commitment. Dialogue can accomplish learning and knowledge construction if learners are motivated to engage in critical thinking, elaboration, sharing knowledge to aid in scaffolding to modify, expand, or build knowledge constructions. Learners must be motivated to share, interact, collaborate and engage in fruitful, meaningful dialogue (Tiene, 2000). The concept of moderated dialogue seems to merge with meaningful discourse. Learner-oriented dialogue needs to be more productive than random social communication which do not add or modify knowledge.

Meaningful dialogue demands the presence of an instructor to moderate learner dialogue, keep emotions of learners in check, and verbalize rules and regulations for dialogue. Thus, the concept on online threaded discussions has emerged, where instructors need to embrace roles of leadership and facilitation (Stodel et al., 2006). Instructors have to ensure that dialogue is fair and participatory. It is their responsibility to train learners on
how to engage in fruitful dialogue. Instructors should also emerge as active participants keeping abreast of learner exchanges and attitudes. It is also the function of instructors as moderators to steer the discussion in correct direction and keep the discussion flowing, so that learners can build a holistic knowledge construct. Online threaded discussions closely resemble meaningful productive discourse, where the instructor has to participate in learner dialogue.

The related concept of teacher immediacy refers to the “psychological distance between communicators” (Swan, 2003, p. 11). Teacher immediacy is the verbal behavior of instructors-- what learners can see, hear and feel (Weiner and Mehrabian, 1968). This spans a range of behaviors meaning praise, encouragement, anger, criticism, and ridicule. Instructor body language also comes to the fore as even a shrug, a shake of the head could signal pleasure or displeasure. Face-to-face classroom interactions have the advantage of teacher immediacy over online learning environments. As can be seen from the diagram above, teacher immediacy brings about learner motivation, leading to cognitive and affective learning. According to Rodriguez and colleagues, teacher immediacy behaviors increase student affective learning, which increases their cognitive learning (Rodriguez, Plax and Kearney, 1996). Instructor verbal and non-verbal behaviors can encourage learners to be more attentive and listen, which increases their interaction with the content, and consequently can promote a greater cognitive learning. However, Garrison and Cleveland-Innes opine that teacher immediacy does not mean interaction, and learning (Garrison and Cleveland-Innes, 2010). Immediacy refers to a perceived psychological distance, dependent on the communicators. Hence, instructor immediacy will be consistent in face-to-face and online learning environments as long as the learner perceives the instructor a visible presence in the ensuing discussion, playing a participatory and facilitative role.

**Blended teaching and learning**

The concept and practice of blended learning is not new. According to Collins and colleague, blended learning is an extension of the traditional classroom, where the curriculum is delivered via the classroom and online method (Collins and Moonen, 2001). It is a flexible form of instruction where the delivery format is a function of the course content features. For instance, particular content lends itself to group collaborative assignments and threaded discussions over a fixed course of time, for example two weeks. In such a case, classroom lecture delivery method can prove unfruitful and incomplete. The learner benefits from an online delivery mode for that particular topic. In contrast, certain points can only be explained and discussed in the classroom, such as scientific processes. Here, it is advantageous for the instructor to rely on classroom lecture method followed by meaningful and productive discourse. Blended learning is using both methods to achieve the goal of learning. Graham describes it as the effective integration of both methods (Graham, 2006).

The emphasis is on the words “effective integration.” This is a function of the course content and objectives—what does the instructor aim to achieve through the course content? Does he/she want the students to learn, actively process, inquire, share, elaborate, investigate, critically reflect, and develop holistic knowledge constructs? Or, is the instructor aiming for passive learning, where the student simply takes in information and follows the monologue of the instructor? Is the instructor focusing on a teacher centered learning environment, or looking to create a collaborative learner-oriented environment?

Blended learning and teaching has shifted focus from the end result of instruction, but rather on how that instruction is being delivered- in what format. This ties in with the constructivist learning environment, which looks closely at how learning occurs that is, process of learning. For the learning constructivists the performance or the end result of the learning process is a by-product (Driscoll, 2004, Koohang, 2009). Blended learning connotes a method where there is a healthy, feasible, and appropriate use of face-to-face and online instruction to meet learner and course content demands. Blended learning does not mean simply adding one method on top of the other (Garrison and Kanuka, 2004). For instance, adding online threaded discussions and online collaborative assignments simply to equalize or balance the use of face-to-face and online delivery methods cannot be deemed a blended teaching method. It is a method of proving one's personal knowledge of both delivery formats. It does not benefit the learning in any way. Blended learning is based on the evaluation, conceptualization of learning needs, tangible available resources, content or curricula requirements, and learning objectives. Thus, the role of instructional designers becomes prominent in blended learning systems.

Blended learning aims to promote and achieve “learning” (see diagram). As depicted above, blended “learning” occurs when all three components of social, cognitive, and teaching, come together (Swan et al., 2008). This type of learning is also referred to as “meaningful educational experiences” (Garrison and Kanuka, 2004). Meaningful educational experience or learning is a function of three kinds of interaction:

a) interaction with content (cognitive presence)

b) interaction with peers (social presence)

c) interaction with instructor (teaching presence)

The former two types of interactions are teacher-centered, where the teacher has to take a backseat and enact the role of a facilitator encouraging students to participate in discourse. Here, the discourse becomes a
This critical discourse is identified as being productive characterized by able instructor leadership, constant exchange of ideas regarding content and its comprehension between students (Hudson, 2002). According to Hudson, blended learning is a function of dialogue (Hudson, 2002). This brings the third COI component of teaching presence into focus. Teaching presence, as previously discussed, refers primarily to immediacy (Rourke et al., 2001). The instructor has to select content, set the climate or tone for classroom discussion, and guide the critical discourse to a healthy dialogue (Swan et al., 2008). Hudson states that the root of all blended learning lies in dialogue, which has to be supportive, meaningful, and caring. He further elaborates that dialogue creates opportunities for development of communities, a sense of connectedness and responsibility among learners, and collaboration (Hudson, 2002). Blended learning provides learners access to shared meaning, which allows and encourages a scaffold acceptance of responsibility to construct meaning and understanding. (Garrison and Anderson, 2003; Hiltz, 1997; Rimmershaw, 1999; Williams, 2002).

Another aspect of blended learning and teaching method lies in the attainment of deep learning. Deep learning is defined as the comprehension, evaluation, critical reflection of the information presented to propel the learner in search for “truth” – “material is embraced and digested in search of learning” (Garrison and Cleveland-Innes, 2010). Deep learning is specific to higher education, and depends primarily on learner-instructor interaction (Cleveland-Innes and Emes, 2005). This kind of learning is in contrast to surface learning wherein the learner experiences minimum comprehension-- surface learning employs the least amount of effort towards realizing the minimum required outcomes" (Garrison and Cleveland-Innes, 2010). The main objective of surface learning is task completion, and that of the former is learning. Deep learning occurs when the three COI components meet to create a “learning experience.”

A popular example of a blended learning method is the virtual classroom, which supports online and face-to-face instructional methods. The virtual learning environment such as a classroom in second life is built on the concept of online teaching and learning. Going back to the beginning, the success of any online and consequently blended learning method is a function of learner maturity. If a learner is not committed to the learning process, the basic objective of instruction is lost. The delivery format of online teaching gets relegated to a social networking outlet. Thus, virtual classrooms demand total learner commitment and focus. In the virtual classroom, the learners and instructor create avatars, or digitalized representations of themselves to sit in the classroom, engage in interactions and dialogue with each other.

The VLE blended teaching and learning method can also be transferred to the traditional classroom environments (CLE). The instructor can effectively blend traditional face-to-face lectures and discourses with online delivery methods of threaded discussions, collaborative tasks, webquests, research activities, and group presentations. In all this, it is critical for the instructor to keep abreast of learner activities and thoughts. This is usually accomplished by making admirable use of online instructional tools of “live chats, messenger, and blogs.”

**Solutions and recommendations**

Blended learning formats call for transformative changes in three related areas. Foremost, the need and urgency to put such methods into action has to be decided at the strategic organizational level. Resources and equipment need to be carefully analyzed. Practical considerations such as budget, learner needs, trained instructional design personnel have to form a cornerstone of the plan. Implementing blended teaching and learning methods is not a single course of action which can be implemented in a single day. It has to be approached from three different angles.

a) Resources and Staff- What is available and what needs to be available to implement blended teaching and learning? Academic departments within universities have to investigate, and collate existing resources, support, and equipment. This includes technology resources, finances, and instructional design personnel.

b) Training the faculty- Teachers and instructors who are going to use this method to deliver course content have to be fully trained and equipped in the method. Panel discussions, workshops, and seminars can meet this requirement. What is needed today is a new kind of instructor, who has the ability to reach out to his/ her students, can effectively teach, explain, propel his/ her students to engage in critical thinking, collaboration and, develop a line of disciplined inquiry. This type of instructor should be technologically savvy, be able to generate dialogue and healthy exchange of ideas and views. In short, the contemporary education scene needs and demands a teacher who can create, maintain, and sustain a community of learners through gentle leadership, facilitation, and mentorship – a teacher who aims to develop a community of learners, and not students.

c) Training the Learner- Blended learning has every chance of failure if the learner does not do her/ his part. It is the responsibility of the instructional design staff to train the learners to be fully functional and adept at using the blended technology.

**Future research directions**

Blended teaching and learning methods are a challenge-their implementation and viability still being explored. Many questions regarding its practical feasibility remain-
how does blended learning contribute to development, and maintenance of a learning community? Do learners benefit from blended learning and communal learning? Doesn't the existence of blended learning minimize the importance of teaching presence? Isn't blended learning at crossroads with COI? Empirical investigations in the field can successfully answer these questions, and build a sound body of knowledge regarding the role of blended learning in COI.

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