

CHAPTER TWO

REVIEW OF LITERATURE

2.1. Introduction

The literature review presents the theoretical foundation of the Community of Inquiry, the i2flex model, and its relation with blended learning. Blended learning has become a viable choice for students of higher education who focus on work-life balance everywhere. It can become a strong alternative method of education at the higher education level in Bangladesh. The proposed study investigates the experiences of undergraduate-level learners with a Writing Course in the blended method. Research databases, such as ProQuest, and Google Scholar, facilitated for me a comprehensive literature search. In addition, peer-reviewed articles from different sources have contributed to the literature review. The search words used to find current literature and studies include blended learning, online learning, e-learning, and English Writing Courses.

In this chapter, I will present a short discussion on the higher education in Bangladesh with emphasis on private universities, the Theoretical Framework, previous research relevant to the study of blended learning, learning technology, and English

writing course. The aim of the literature review is to explore blended learning environments specifically, as it relates to higher education students. This section includes the following important topics: (a) Theoretical framework for blended learning environment (b) I2flex model of blended learning (c) Definition and position of blended learning and its types (d) Evolution of blended learning, (e) Effectiveness of blended learning in enhancing employment skills of the 21st century (f) Use of blended learning method by universities around the world (g) Disadvantages of online education and (h) Perceived effectiveness of blended learning and its challenges.

2.2. Higher Education in Bangladesh

In Bangladesh, there are primarily two types of tertiary education: general and specialized. The general tertiary education consists of a 3-year "pass" course and a 4-year honors course followed respectively, by a 2-year and 1-year master's course. The 'specialized' tertiary education, such as a bachelor's degree in medicine, requires the completion of a 5-year course of studies, whereas degrees in engineering, agriculture, textiles, and leather technology only require the completion of a 4-year undergraduate program irrespective of public or private universities (Chowdhury & Sarkar, 2018).

2.2.1. Private Universities

By the 1980s, social demand for higher education in Bangladesh as a whole had dramatically increased, challenging the capacity of the country's public educational institutions. So, the state went for privatizing higher education because it couldn't afford

to pay for the establishment of the additional new institutes. The Parliament in 1992 approved the establishment of private universities in Bangladesh contemplation for almost ten years (Alam et al., 2007). Bangladesh's private higher education sector has developed incredibly quickly over the last 30 years following the passage of the Private Universities Act of 1992. There are currently 105 private universities in Bangladesh, according to a UGC's annual report of 2022. The student community in Bangladesh as a whole has benefited from this development by having access to a wider range of academic specialties with domestic comparative cost advantages over studying abroad and that saved the capital drain and ultimately generated rich human capital, which is thought to be essential for a country's success in the twenty-first century (Ashraf et al., 2009). Though the establishment of private universities opened an era of potential for higher education in Bangladesh, the cost of education at the nation's private universities is still unreasonably high due to an imbalance between rising tuition fees and the non - availability of financial aid and scholarships (Ashraf et al., 2016).

In spite of the high tuition fees on private universities in Bangladesh, many are expanding quality higher education and the majority of private universities have become used to changes during the last 30 years and have continued offering education during Covid-19. But the public higher education institutions have struggled to meet the educational needs of students and the needs of teachers in light of the COVID-19 epidemic and this new learning experience, the private ones had to cope with the situation and many of them could successfully do it. The private ones continued their education online without loss of time, money and resources of students (Shohel, et al., 2022). The private university students mostly attended the online classes because they would

financially lose if the study period were prolonged. A study conducted across the country discovered that 40% of students were taking classes online, and the majority of these students (70%) were from private universities (Islam et al., 2020).

2.3. Theoretical Framework Underpinning this Study

I used the Community of Inquiry (CoI) as the theoretical framework to design and guide the study. I also focused on the relationship between the i2flex model, a blended learning model, and CoI which have informed my design of a blended learning course for the research participants of this study. Community of Inquiry was used to explain the nature of teaching-learning in a blended learning course and the i2flex model was used to design the proposed blended learning course. The Community of Inquiry framework, devised by Garrison, Anderson, and Archer (2000) gives a framework for designing educational experiences. The three main constituents of this framework are: 'teaching presence, cognitive presence, and social presence' (Garrison et al., 2000).

2.3.1. Community of Inquiry: Further Explanation

Technology has changed the face of teaching-learning at all levels of education. The Community of Inquiry framework (CoI) evolved out of a general concern within education that technology was merely offering access and convenience at the cost of real learning and achievement (Garrison et al., 2000).

Garrison, Anderson & Archer at the University of Alberta in Canada realized the advantages of blended learning and introduced the CoI framework to show that the platform could contribute to learning as well as produce communities of inquiry that could be carried on after the class. Since its start, much research has found CoI a necessity in facilitating students to gain a deep understanding of the material taught and thereby promoting higher-order learning (Akyol & Garrison, 2011; Swan et al., 2009). After the completion of higher-order learning, the quantitative and qualitative learning outcomes would be increased (Akyol & Garrison, 2011). This, according to Marton and Saljo (1976), permits 'deep' rather than 'surface' learning. Surface learning means reproductive and unreflective exercises, such as rote learning whereas deep learning promotes the student's comprehension of the true meaning and implications of all the material that is being taught. CoI is an accepted framework as the basis for the blended learning experience and activities. I have selected it as the theoretical framework for this study for the following reasons.

2.3.2. The Rationale for Using CoI

The CoI framework has proven to be an important theory for many researchers investigating the impact of blended learning on students. By separately addressing the three aspects of learning - social, teacher, and cognitive presences-researchers are able to identify specific areas of weakness in the course delivery in the blended platform. This realization allows for the development of the best practices to overcome those weaknesses.

Higher-order thinking and learning emerge when one focuses on the process of inquiry (Garrison & Vaughan, 2012). Lipman (2003) defines higher-order thinking as being “conceptually rich, coherently organized, and persistently exploratory” (p. 19). The process of inquiry needs a good amount of intellectual discipline. In a subject of inquiry, participants develop the attitudes and abilities to become critical thinkers and to sustain their learning beyond the confined scope and time limit of a formal educational experience (Garrison & Vaughan, 2012). An academic community is viewed as a formally formed group of persons whose connection is for academic purpose and need (Garrison, & Vaughan, 2012), and who as a group work toward intended learning objectives and outcomes. So, it can be said that as blended learning facilitates cooperative and interactive learning as well as self-directed learning, my choice of COI as a theory for this study is justified.

Recent research has shifted focus to teaching presence. In a review of the CoI literature, Garrison (2017) has demonstrated that learners in an online CoI desire a strong teaching presence. Perry and Edwards (2005) state that talented online teachers form a community of inquiry consisting of a strong social, cognitive and teaching presence (Perry & Edwards, 2005). Conrad (2005) states that the scope for face-to-face interaction can increase connectedness and satisfaction. Similarly, according to Arbaugh et al. (2007) teaching presence is a strong indicator of perceived learning and satisfaction with the mode of delivery. The unifying force of teaching presence is assumed to help to form and sustain a CoI in a blended environment where students are shuttling between direct and coordinated communication. Similarly, blended learning communities form a new

learning relationship that can go beyond the fixed time of the class and course even without teachers' direct presence (Garrison & Vaughan, 2012).

While comparing face-to-face and online education, Garrison and Vaughan (2012) say,

Fully online communities take time to develop social and cognitive presence to support the necessary commitment and collaboration. Face-to-face communication provides an opportunity to create a sense of community and connectedness more quickly. While a face-to-face classroom dynamic may provide the best opportunity to begin the formation of a community, online communities can expand the opportunity for both 'sustained and flexible communication', and give useful links to other resources (Garrison & Vaughan, 2012, p.12).

Only face-to-face and only online education is confined by limitations. Hence, their merging is beneficial for both modes. The face-to-face classroom is collaborative before being reflective. Here students lack the time to reflect and offer a thoughtful opinion in face-to-face mode and students feel rather eager to critique peers' work in an online environment because of the asynchronous nature of online learning. Similarly, online learning should be reflective before it is collaborative. The advantage of online learning is the opportunity for thinking and strictness. It takes more time to write a message and communicate clearly and concisely so that others may read and answer. So, a CoI would benefit from the combined advantages of blending face-to-face and online learning (Garrison & Vaughan, 2012).

Pedagogically, the CoI framework provides directions for the design of genuine and interactive 'higher-order learning experiences.' For a high cognitive presence, reflection as well as collaboration is essential. Cognitive growth depends on

collaboration by a community of learners through reflection (Wenger, 1998). Blended learning provides scope for all students to be cognitively engaged and have the idea that they are learning individually with participation and a contribution to, a community of inquiry (Garrison & Vaughan, 2012).

The CoI's foundation came from the constructivist educational philosophy of John Dewey and Dewey's views on community and inquiry (Garrison et al., 2010). In its broadest sense, a community of inquiry is a group of people who come together in the learning process in order to inquire into a problem. This thereby makes the CoI framework both a collaborative and an individual constructivist learning experience (Vaughan, et al., 2013). The CoI framework calls for collaboration among students which is essential for critical thinking skills to be developed and also believes that learning in separation does not offer an educational experience conducive to deep learning (Vaughan et al., 2013). The individual learner making his own inquiry is at the center of the learning only through collaboration and open interaction with other students, who similarly bring in their unique experiences and opinions, and through this process real and lasting insights can be gained.

The Community of Inquiry consists of three constituent elements: social presence -the necessity for students to communicate and collaborate; cognitive presence - the creation of an environment for the deep learning to take place discovered through the development cycles of inquiry; and teaching presence - giving leadership along the course, paving the way for the design, execution, and direction of the community of inquiry (Garrison & Vaughan, 2009). The conglomeration of all three gives a cooperative

constructivist educational experience (Garrison & Vaughan, 2009). No one part is more important than the other, because the CoI framework is “dependent upon the interaction of all presences to a greater or lesser degree depending on the subject matter, the learners, and the communications technology” (Garrison et al., 2010, p. 6). To simplify, the absence of one presence will create an in-operative community of inquiry, regardless of the strength of the other two. The original diagram of the community of inquiry from Garrison et al. (2000) is shown in Figure 2 below, followed by descriptions

Community of Inquiry

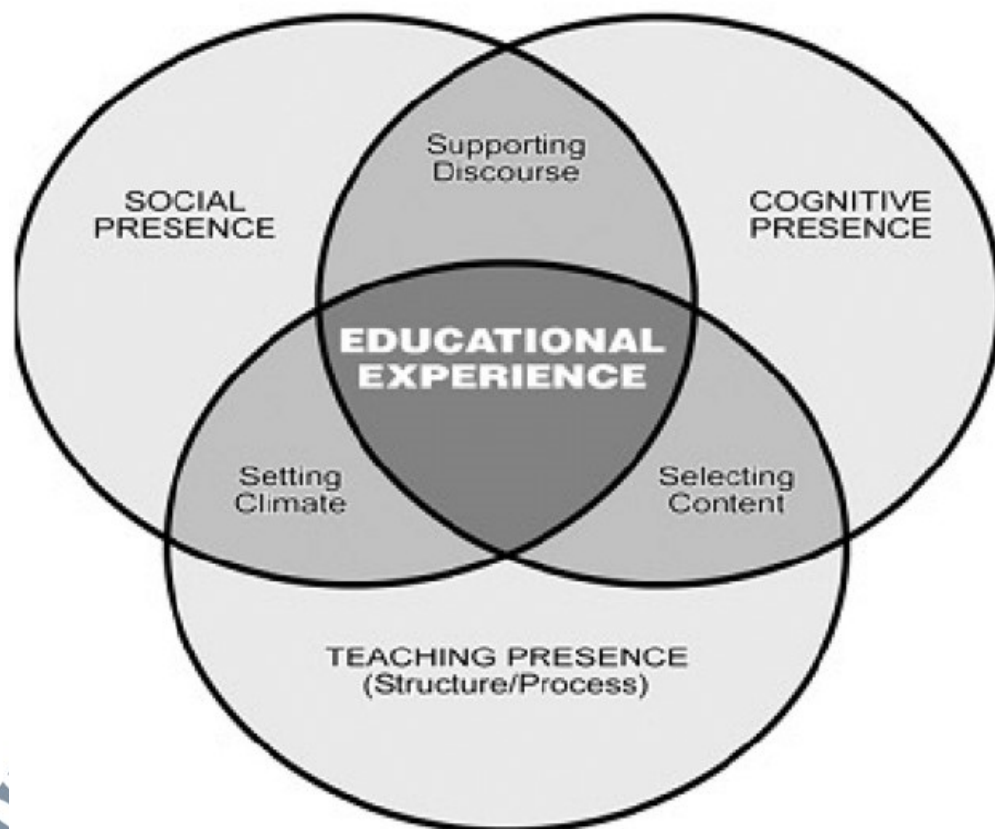


Figure-2.1. The Community of Inquiry Framework (adapted from Garrison et al., 2001).

2.3.3. Constituents of CoI

The CoI consists of three presences, i.e., social presence, teacher presence, and cognitive presence. The presence of all three components makes the learning experiences and activities effective, and the absence of any of the three does the opposite.

Social Presence

The need for students to communicate and collaborate is at the heart of CoI framework. Effective and meaningful communication between students paves the way for reflection on the content of a course, which, in turn, allows for the exercise of higher-level learning (Garrison & Vaughan, 2009). Social presence needs trust, unhindered communication, and group unification, and the need for feeling comfortable enough to share and collaborate freely and openly with their peers is helpful.

One of the fears regarding online learning was that it being too one-dimensional does not permit the level of social presence needed to achieve deep learning (Garrison & Vaughan, 2009). However, Garrison and Vaughan (2009) found written communication, which is necessary for online platforms, offers great power and flexibility. Notably, written communication offers social and emotional attachment and fraternity, the highest level of social presence in an educational community. A similar study by Heckman and Annabi (2005) compared face-to-face discussions to online discussions, and found that communication could be cognitively richer in a written online setting because written communication demanded the students' less rote-learning and facilitated the learners to understand any material in a self-paced way and to have the time to construct their own meaning.

Teacher Presence

Teacher presence provides leadership throughout the course, allowing for the design, execution, and direction (Garrison et al., 2000) of the community of inquiry. The teacher's presence unifies the remaining two elements of the CoI framework to create an effective educational platform. In many ways, it is the teacher who creates and maintains the opportunities for higher-level learning by properly integrating the cognitive and social presences and also ensuring challenging and stimulating educational experiences with academic integrity (Garrison et al., 2000). While the teaching role is normally assigned to one person, in an effective community of inquiry the students also assume varying role of teaching responsibilities (Vaughan & Garrison, 2005).

Cognitive Presence

Cognitive presence is the development of an environment where deep learning can take place and is identified through the development phases of inquiry. Most commonly this is demonstrated through the practical inquiry (PI) model, which has been described as the most pertinent to the analysis of the cognitive directions and reflects a good picture of the knowledge-building procedures happening in online discussion (Schrire, 2004). In particular, Schrire (2004) discovered that student-to-student interactions were essential for deep learning to take place. PI model has been deemed to be an effective tool for exploring the cognitive presence within the learning experience (Chang, Paulus, & Pawan, 2003; Schrire, 2004). The PI Model from Akyol and Garrison (2010) is shown in Figure below.

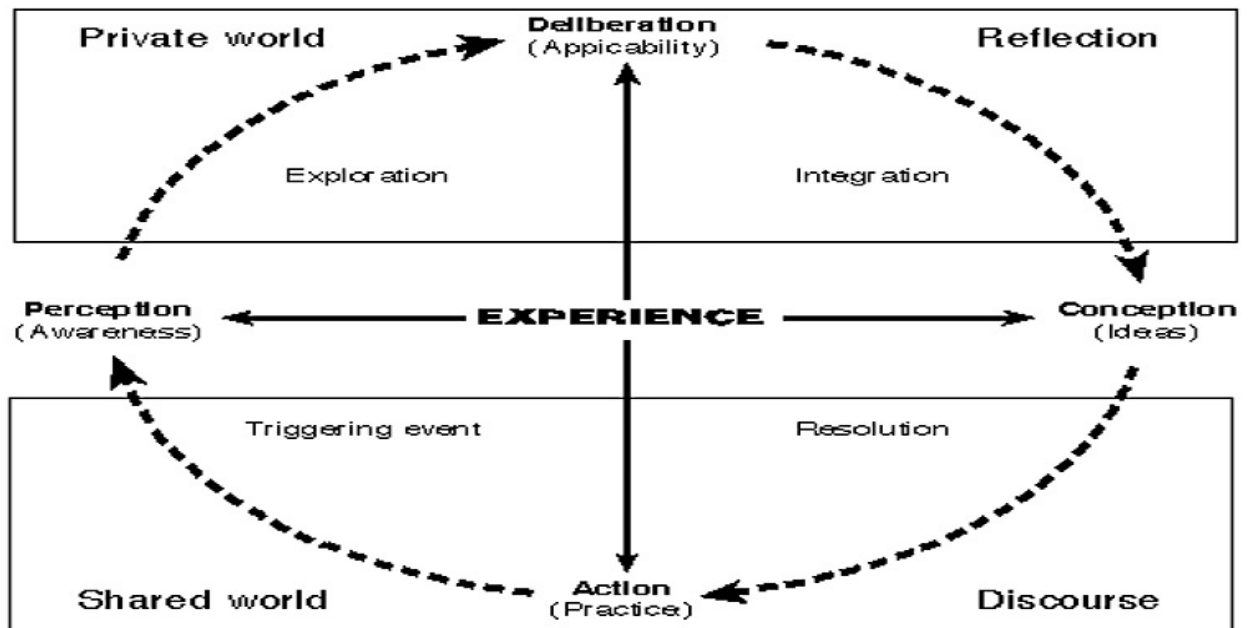


Figure 2.2. The practical inquiry Model. Akyol and Garrison, 2010, p. 235.

The PI model shown in Figure 3 consists of two dimensions and four phrases (Akyol & Garrison, 2010). The vertical axis shows the continuum of the dimension from deliberation through to action, while the horizontal axis shows the continuum of the dimension from perception through to conception. There are four phrases in the PI model, starting with a trigger event. The trigger event can be the identification of a course project or assignment. This event will stimulate the need to look for information that will provide the learner with an idea of the requirement. This will lead to the third phrase, i.e., the integration of the information and knowledge gained in the second phrase into a meaningful concept. After this has been accomplished, solutions and hypotheses can be debated, tested, and concluded in the action phrase. If the result is not satisfactory, the whole process can re-start (Garrison & Vaughan, 2009, p. 22).

2.3.4. The Use of Community of Inquiry in Research

Some studies have justified the CoI framework as a tool for evaluating whether blended learning permits deep learning to take place (Arbaugh et al, 2008). In 2008, Arbaugh (2008) led a multi-institutional effort and developed a quantitative instrument to measure a community of inquiry known as the Community of Inquiry Survey. It is a 34-question survey using a five-point Likert-type. Clarke and Bartholomew (2014) used the CoI to assess the importance of instructor comments in online discussion boards. Clarke and Bartholomew (2014) concluded that often instructors relied on social rather than cognitive codes, which could negatively impact the quality of community of inquiry and learning. Zydney et al. (2012) also investigated into the use of discussion board protocols, concluding that protocols were needed for discussion boards to be effective.

The CoI framework has also been used to identify how the most effective community of learning can be built. York and Richardson (2012) found that a range of strategies were needed to be used by instructors to effectively create a community though they found resistance to students doing collaborative assignments. This is somewhat concerning given that collaborative assignments necessitate a much greater level of communication and could indicate that blended courses are not as able as research shows to create an effective community of inquiry. While Garrison, Anderson and Archer (2000) were all college professors, the CoI framework was never created specifically for college-level students.

2.3.5. Critique of the Community of Inquiry Framework

There are a growing number of researchers who consider the CoI framework, in its current form, too limiting. The CoI framework “might be further developed and re-thought in the light of more than ten years of application and research” (Remesal & Friesen, 2014, p. 1). Aykol and Garrison (2010) suggested that a ‘meta-cognitive presence’ needed to be included. Schraw (2001) describes the two parts of meta-cognition as knowledge of cognition and control of cognition. In short, “meta-cognition consists of knowledge and regulatory skills that are used to control one’s cognition” (Schraw, 2001, p. 6). The first involves the knowledge of oneself and plausible implementation tactics. The control of cognition, on the other hand, “refers to a set of activities that helps students control their learning” (Schraw, 2001, p. 4)

Shea et al. (2012) further developed this point by suggesting the need for a ‘learner presence,’ which has been described as “the proactive stance adopted by students who marshal thoughts, emotions, motivation, behaviors, and strategies in the service of successful blended learning” (Shea et al., 2012, p. 90). Shea et al. (2012) identified three parameters of learning presence that is often associated with self-directed learning: forethought, performance, and reflection. The forethought phase consists of ‘planning, coordinating, and delegating’ (Shea et al., 2014, p. 10) blended tasks. The performance stage includes monitoring the understanding of others and strategizing from whom to seek help for gaps in knowledge. The reflective component involves articulating any changes in thinking and the “causal attribution of results to individual or group's performance” (Shea et al., 2014, p. 10). Akyol and Garrison (2013) in turn critiqued the efforts of those researchers seeking to amend the CoI framework. Akyol and Garrison (2013) argued that

the learner presence was so fundamental to the entire CoI framework, that the only adaptation should be to the role the learner played in the teaching, social, and cognitive presences, rather than the creation of a fourth and separate presence.

2.4. The I2Flex Environment and CoI

The I2 Flex approach is a non-conventional learning method that was invented by the ACS Athens community of learners (Avgerinou et al., 2014). The I2 Flex methodology blends student-independent learning, and internet-based learning and is guided and overseen by teachers with face-to-face learning. The main objective of this student-centered method is the development of higher-order cognitive skills mentioned in Bloom's new Taxonomy (Anderson & Krathwohl, 2001), in the perspective of a learning framework that is motivating and flexible about time, pace, place, and/or mode (Gialamas, & Maria, 2015).

The I2 Flex model may be compared with the L2Flex model. L2 Flex courses also include self-controlled internet-based learning done by the student. But the online parts of L2Flex courses emphasize on 'knowledge acquisition' and activities targeted to develop the lower domains of Bloom's Revised Taxonomy (Anderson & Krathwohl, 2001) - remembering, understanding and application.

Like the CoI framework, the I2Flex model not only facilitates online learning through social constructivist, inquiry-based, and project-based teaching and learning, but keeps the scope for face-to-face learning (Swan, 2018). So, the in-person activities in i2Flex classes center on learning activities that focus on developing the 'intellectual skills

of analysis, evaluation' and creation, i.e., the upper layers of Bloom's Revised Taxonomy. The I2Flex model is thus in proper alignment with the CoI (Tucker, 2012).

According to Swan (2018), the secret to successfully implementing the i2Flex model, is the teacher's commitment to creating high-quality, web-based course environments and to a continuous process of assessing, improving, and enriching them with relevant resources, materials, strategies, platforms for peer to peer and student-teacher communication and collaboration, and user-friendly navigation.

Another model of the blended method, Blending with Purpose Model (Picciano, 2009) could also be helpful to acquire the 'six levels of Bloom's Revised Taxonomy – remembering, understanding, applying, analyzing, evaluating, and creating' – as the learning objectives and outcomes. Media and technology choices should be wisely considered suitable for achieving each objective. Garrison and Vaughan (2008) applied the CoI framework to structure the development of blended courses. In their book, *Blended Learning in Higher Education* (2008), the authors mention the principles for the design and conduct of blended courses. Swan (2018, P.9) says, "The principles are grounded in the three teaching presence constructs – design and organization, facilitation of learning, and direct instruction – simply because teaching presence has been shown to be critical for the development of a communities of inquiry."

The I2Flex website also mentions that the creation and evaluation of i2Flex course are based on research-based principles, in conformity with the criteria that would be applied to good teaching practice in any context. The CoI survey focuses on student opinions about implementation and the learning processes offered by it. As the CoI

framework is based on a ‘social constructivist epistemology’ akin to that of I2Flex, the CoI survey may be used in the ongoing process of evaluating and improving I2Flex courses (Swan, 2018). As both the Community of Inquiry (CoI) framework and the I2Flex approach deem inquiry and the social construction of knowledge as the bases of the educational experience, the choice of CoI as the theoretical framework for my topic is justified (Swan,2018). During the budding days of the internet, there were debates over whether a blended course, or an online course, could offer the scope for social interactions, or a community of inquiry, sufficient to permit deep learning for the lack of visual hints within the format in comparison with a traditional face-to-face course (Gunawardena & McIsaac, 2003; Vaughan & Garrison, 2005), and the answer to these questions when applied to college and the university level was affirmative (Osguthorpe & Graham, 2003; Tabor, 2007; Sorbie, 2015).

2.4.1. Social Connections through Technology in Blended Learning Environments

The use of technology in blended learning environments facilitates learners to connect in ways that are difficult to achieve in only face-to-face course models (Enrichsen et al., 2013). Blended learning provides an opportunity to build social connections through both face-to-face and asynchronous learning with the help of discussion boards and collaborative activities. This mode of “dialogic pedagogical approach reflects a social constructivist epistemology” (Shea & Bidjerano, 2010, p.1722), supported by Vygotsky (1978) as a “means for collaborative knowledge construction” (Shea & Bidjerano, 2010, p.1722). Vygotsky (1997) surmised that “education is realized through the student’s own experience, which is wholly determined by the environment”

(p. 50). It is through these experiences in the blended environment and through teacher and student collaboration that a student's learning improves (Whiteside, 2015).

2.4.2. Teacher and Peer Feedback Vis a Vis CoI and Blended Method

Feedback from both peers and teachers is essential because it supplies learners with the stimulus for learning that they look for. In the early 80's, there was concern about the absence of social interaction found in technology-based learning environments of that time. So, research began to focus on the best ways of the student learning method and the role of social interaction. Through the 90's, the research to focus on learner-centered models of teaching started where students started to cooperate with others using computer-based tools. Since adults like to have good relationships with their peers and teachers and a considerate and cooperative community is crucial for their learning, blended learning has posed to be a good option for many (Afip, 2014; Bliden 2014). Since it is believed that adults have different learning requirements than children (Afip, 2014), courses and programs should be designed in different way for these learners in consideration (Baker, 2010). As most adults are used to very conventional and formal models of teaching, blended learning may pose as a potential challenge for them until they become comfortable with these new and alternative ways of learning (Cercone, 2008).

To conclude, the CoI was used as the theoretical framework for this study for the fact that the framework has been used for a long time by education theorists and researchers working with the research of the collaborative and constructivist theories of education. In addition to that, the link between the I2flex and the blended model and the

CoI was described to show how the implementation of the blended course had an impact on the attitude and experiences of the participants of this course. The three main constituents of this framework: teaching presence, cognitive presence, and social presence' is what helped to build up a community of learners for the writing course in the blended method I have designed and conducted with the samples of this study. The discussion above about the theoretical framework highlighted the fact that the choice of this theoretical framework for my study was appropriate and justified.

2.5. Where does Blended Learning Stand?

Blended learning is the mingling of face-to-face and online learning that enhances the classroom experience and increases learning via the innovative use of ICT (University of Calgary, Teaching and Learning Centre, 2008 from <http://commons.ucalgary.ca/teaching/programs/itbl/>). Blended learning is believed to teach the learners through the best techniques by providing learners with a 'high level of attention and guidance' that is available in the classroom as well as the 'flexibility and freedom of self- paced learning' of online learning mode (Loaran et al, 2014). Blended learning caters to the different learning needs and preferences of students and motivates students to learn in an 'engaging and collaborative way at their own speed and at their own opportune time' (Graham, 2006).

The following diagram was created by Ira Ehrlich in 2014 and taken from his Online and Blended Teacher Portfolio.

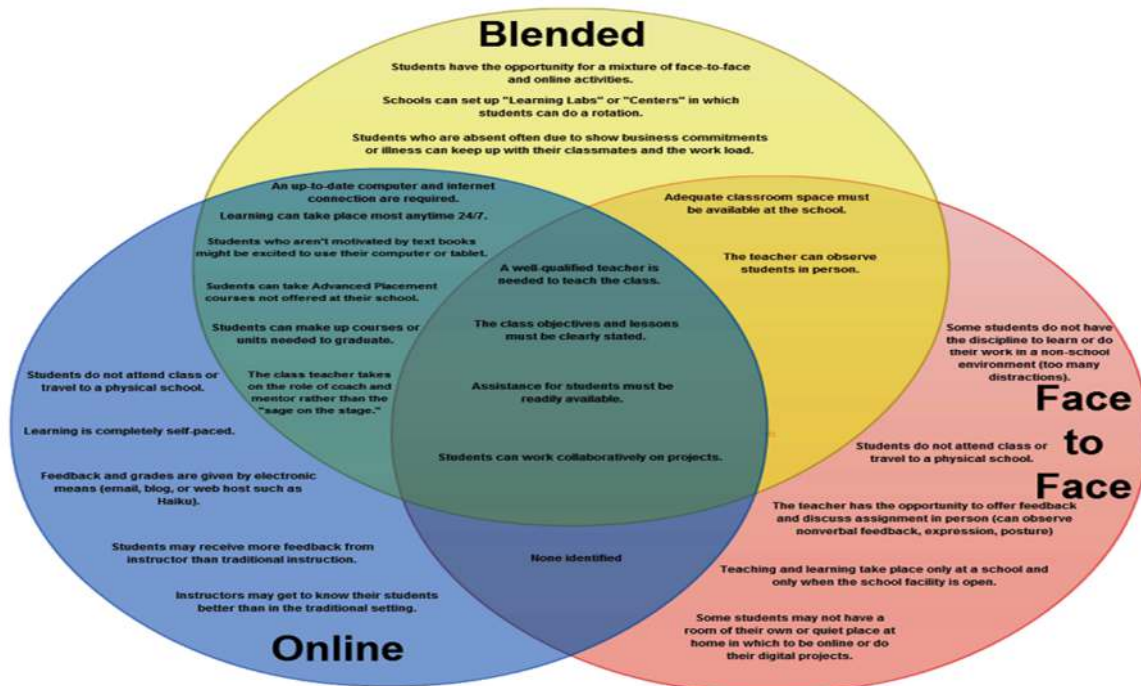


Figure. 2.3. Spectrum of Delivery Modes. Venn diagram: Online vs. Blended vs. Face-to-Face Instruction

2.6. What is Blended Learning?

There are a good number of definitions of blended learning but the commonly agreed upon definitions of blended learning are few (Picciano, 2009). Picciano (2009) wrote: There are different forms of blended learning but a generally agreed upon definition does not exist. One school's blended learning is another school's hybrid, or another school's mixed mode. Furthermore, the issue is not just one regarding labels but the lack of consensus on a comprehensive versus exclusive definition as well (p. 5). So, it is important to decide upon a commonly agreed-upon definition of blended learning that

investigates the impact and use of the platform in education. But it is difficult to settle upon such a definition because there are some conflicting beliefs (Picciano, 2009).

A more complete definition of blended learning was given by Reed and Singh (2001), according to which, “blended learning focuses on 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’ person at the ‘right’ time” (p. 2). These definitions entail improved learning and student-centered teaching through utilizing appropriate technology. Blended learning does not simply mean combining face-to-face and online learning. Singh (2003) explains that blended learning means combining a number of other characteristics such as “blending offline and online learning”, “blending self-paced and live collaborative learning”, “blending structured and unstructured learning”, “blending custom content with off the shelf content”, and “blending learning, practice and performance support.” (pp. 53-54).

Singh mentions that the blended method extends the reach, and optimizes development cost and time, combining different delivery modes (Singh, 2003). He adds that research from institutions such as Stanford University and the University of Tennessee has given us a valuable understanding of some of the techniques by which blended learning is better than both traditional methods and individual forms of e-learning technology alone (Singh, 2003). This research gives us confidence that blending not only offers us the ability to be more efficient in delivering learning, but also to be more effective (Singh, 2003).

Blended learning entails differentiated instruction in education (Bonk et al., 2012). Blended learning caters to students' abilities, learning styles, and interests. Educators select curriculum material, products, learning activities, and high-quality learning contexts that serve students' needs. Based on the foregoing, the Christiansen Institute (2013) defined the blended learning approach as a formal education program where a student learns at least in part through online learning with some element of student control over time, place, and/or pace and at least in part at a supervised brick-and-mortar space away from home. Simply put, blended learning is a new approach to learning [that] blends the positive sides of face-to-face and online learning in a synthetic manner to create a new learning experience in conformity with the student's needs (Zhang & Zhu, 2017). It is essential to create a harmonious congruence between face-to-face and online teaching in a blended course. The balance between online and face-to-face learning depends on factors such as instructional objectives, student characteristics, instructor skills, and online resources. Thai et al. (2017) used a 50-50 approach, implying that half of the course is taught in person and the other half online.

But why do people blend digital learning with more conventional higher education techniques, such as lectures, workshops, and classroom instruction? "I think it certainly meets the needs of people's lives," Ms Gautsch said to US News, mentioning that many students choosing blended learning classes at University of Southern California (USC)'s Sol Price School of Public Policy are people with full-time jobs and family obligations. Seng, Director of Marketing for UMass Online, says that for some students blended learning facilitates the return to higher education. Blended learning can be a great resource for students out of school for a long period of time, he says. It can be a natural

shuttle between everyday life and the return to school (Johnson, et al., 2015, New Media Consortium (NMC) Horizon Report).

2.6.1. Blended Learning Tools

The three main categories of blended learning technologies are synchronized tools, social networking tools, and LMS systems. The term learning management system (LMS) refers to web-based tools like Moodle and Blackboard that facilitate the creation, distribution, and evaluation of specific learning content (Alias & Zainuddin, 2005). Facebook, WhatsApp, Twitter, Skype, and other social networking sites are utilized for debate and sharing of educational content. The synchronized technologies that are freely available fall within the third group (Wang et al., 2014). Examples are Dropbox, Google Apps, and Zoho Apps. Blended learning techniques are utilized to improve critical thinking, communication, and collaboration skills, claim Sarfo and Yidana (2016). The majority of "the tools used in blended learning are the same as those used in e-learning," according to a study by (Roszak, et al., 2014 (p. 298).

2.6.2. Kinds of Blended Learning Method

Staker and Horn (2012) talked about four different models of blended learning. These models may be applied to both higher education and training organizations. Staker and Horn (2012) says that the four combinations are the rotation model; flex model; self-blend model (now La Carte Model), and enriched-virtual model (Staker & Horn, 2012). The researchers opined that blended adoption is gaining popularity within higher

education because of its flexibility. The first is the rotation model where learning is cyclical, with a fixed schedule for learning online and face-to-face with the instructor. The flex model is the second within the blended taxonomy. This model primarily teaches online, under an instructor's supervision. The self-blend model is the third within the blended learning taxonomy in which the student selects various online courses, taking part either on or off campus to complement the traditional learning program. The classroom instructor also supervises the students' learning online. The enriched-virtual model is the fourth within the blended learning taxonomy which provides a whole school experience, with learners doing courses online with negligible or no classroom attendance (Staker & Horn, 2012).

While the basis of student learning in the flex model is online, students still learn mainly in their classes. Students in the Flex model get benefit from both learning online and teacher guidance in their classroom (Horn & Staker, 2014). As students pass more time studying basic content online, this permits teachers to use more of their time helping students in complex areas or exploring deeper in topics a student has already studied. This learning time is facilitated by teachers through small group activities, project-based learning, or one-on-one tutoring support (Horn & Staker, 2014).

In self-blend model (formerly À La Carte model), students can choose courses to take online to supplement their current course-load at their school campus. This model is most common at the high school level, where students can register in a course not presently on offer by their school, for example, Advanced Placement course (Horn & Staker, 2014). In the À La Carte model a student can do this course entirely online,

beyond the school time. This model is not like full-time online school course because it does not offer students the complete school experience. Though some courses are online, others are taken face-to-face so that students can have interaction with teachers and classmates (Horn & Staker, 2014).

The Enriched Virtual model allows students to finish coursework online, supplemented by face-to-face learning sessions with their teacher (Horn & Staker, 2014). While online learning is crucial to the Enriched Virtual model, it is not like full-time online schools because through in-person learning it is a necessary part of the coursework, not optional like the full-time virtual schools. The fact is, many full-time online schools have changed their programs to an Enriched Virtual model so that students can have the invaluable experiences of a school environment (Horn & Staker, 2014).

From among the four models, flex model is the convenient one in a country like Bangladesh because in this model students can get teacher guidance and supervision during the face-to-face classes. My research adopts the flex blended model and I have designed and conducted the Writing Course in that model for the students and then investigated their experiences with this model of blended learning for the proposed Writing Course.

There is no hard and fast rule about the blending ratios. However, Graham (2006) defines four levels of Blended Learning, such as activity, course, program and institutional blending levels, suggesting that blending ratios differ at each level. Allen et al. (2007) defines blended learning as a course in which the online content percentage ranges between (30%-79%). Alajab and Hussain (2015)'s mixing rate was about 60% for

the traditional mode, and 40% for e-learning, provided via the electronic system (Moodle). Banyen et al. (2016) suggested blended learning with a rate of 60% for e-learning and 40% for the traditional mode. Owston and York (2013) found that students who were put to 36-50% of online blended learning out-performed their peers who were exposed to less than 30% of online. They recommended at least one-third of the face-to-face time to be replaced with online activities. So, it can be concluded that online content should cover 30 to 79% of the educational materials and classes, depending on the targeted mixing levels, and face-to-face learning should cover the rest.

2.7. Blended Learning Programs by Universities across the World

In the backdrop of drawbacks of full online education, universities are increasingly offering blended mode of delivery. The 2015 New Media Consortium (NMC) Horizon Report points out that as of 2012, 13.3% students were doing blended mode at the college and university levels. “Drawing from best practices in online and face-to-face methods, blended learning is on the rise at universities and colleges,” (Johnson et al., 2016, New Media Consortium (NMC) Horizon Report, 2016, pp.16-17).

In the United States blended learning program has become popular. The University of Maryland decided to include blended learning mode for 10 of their courses in 2011, and since then it has increased. The Massachusetts Institute of Technology (MIT), fifth in the world grading, has also floated the blended model via MITx, its online learning system. MITx caters to the requirements of the different courses of the institution (Uloop, 2013). Another good example highlighted in The Chronicle of Higher Education, is Peirce College, an institution in Philadelphia that offers courses to adult learners;

allows its students to shuttle between face-to-face or online classes, according to convenience in any given week. This self-paced learning mode was started in all of the college's programs by September 2016.

Other countries are also joining the spree of floating blended learning. Another best university in the world, the Imperial College London, started a project in 2016 where engineering students enrolled in online business courses and the remaining in the face-to-face. The objective of this pilot project was to gradually orientate a small group of students to flexible blended model (Uloop, 2013). A few years ago, Tufts University began a blended initiative named 'Connected classrooms for undergraduates' (Uloop, 2013). In Mexico, after the September 19 devastating earthquake, Tec de Monterrey, Mexico City Campus has started a blended learning model for these tough times. Now, 90 teachers and 150 tutors, mostly volunteers, provide daily an average of 1,600 video teachings. This effort has helped high-school and undergraduate students to re-start lessons, and complete their studies on time, in spite of damage to the physical facilities of the campus (Ed. Staff, 2017).

The biggest universities operating blended learning programs are the British Open University, The University of South Africa, Sukhotai Open University, Thailand, Athabasca University, Canada, and Open University Malaysia. Open University Malaysia uses a blended learning approach while offering its program (Abas, 2008). For the blended learning approach, OUM's students have increased from 721 in 2001 to about 53,000 in 2008. In recent times, students of OUM are from different countries of Asia and

the Middles-East. Students can have access to learning from any place in the world (Abas, 2008).

In Malaysia, almost all higher education institutions have accepted the benefits of Blended Learning. Blended Learning has increasingly gained the interest of higher education leaders in Malaysia. In 1991, Vision- 2020 (W2020) was started by Malaysia government with the target of turning into a developed country by 2020 (Attaran & Zainuddin, 2018). Universities started to be using online platforms for teaching. The University of Malaya (UM) started Blended Learning like any other university. In 2003, e-learning systems such as learning care and MOODLEs were used. University Malaysia Sarawak (UNIMAS) manages a learning platform known as Morpheus to strengthen student engagement. At UNIMAS, Moodle is widely used in blended mode in which normal face-to-face classes are supplemented with activities given by the instructor. It includes forum, wiki, quiz mind map. It has the features of content-related videos, online discussion, student published contents (Man & Sam, 2014). Other than these, other universities offering blended courses are Tun Abdul Razzak University, Multimedia University, and many more are ready to start it (Stew-Eang, 2011).

The use of blended learning in the developing countries also needs to be mentioned here. In their celebrated edited book, Blended Learning in English Language Teaching: Course Design and Implementation, Tomlinson and Whittaker (2013) describe how countries spanning from the developed to the developing countries are using blended method in areas like English for Academic Purposes, Teacher development, English for Specific Purposes and English as a Foreign Language/General English. Aborisade (2013)

narrates how the Federal University of Technology Akure (FUTA), Nigeria, starting with one English for Academic Purposes (EAP) course has increased the number to six courses and the intake of students has increased exponentially in a couple of years. In Turkey, in spring 2010, an English course in blended format for the taxi drivers was offered at the request of a local taxi driver association (Kern, 2013).

A study by Rizvi et al. (2017) in the context of Pakistan shows that though it is not possible for teachers to be available 24/7 in any format of learning, Pakistani students expect teachers to be available all the time and it could be possible to be asynchronously available only through the blended learning. The study recommended that universities be sincere about faculty development and start relevant programs to develop teaching capacity in blended learning. Another study by Hassan and Sajid (2012) done in the context of Pakistan states that blended learning could be a good choice in the developing countries looking for 'flexible and effective solutions' to adjust to a challenging situation with limited technological facilities. The challenges being faced by teachers in Pakistan in the use of technology in the teaching process are mostly related to the teacher training, support and lack of knowledge about the technical skills for utilizing these technologies (Hassan & Sajid, 2012).

Though Indian Technology universities are offering many blended courses, it is insufficient. So, Indian educationists feel the importance of popularizing blended and online learning to make higher education accessible to mass people (Bansal, 2014). In order to increase the intake rate to 20 percent so as to come closer to a world average of 23%, Indian universities need to expand access to both public and private higher

education institutions quite substantially. The study suggests that in the backdrop of the looming challenges in Indian HEIs, blended learning and online learning can be good solution (Bansal, 2014).

Considering the contexts and countries as discussed above where blended learning is in practice, it is expedient and convenient to introduce blended learning in Bangladeshi higher education sector following the models of the developing countries. It can be well assumed that blended learning will become an effective and popular method in higher education in the context of current socio-economic, technological and academic scenario of Bangladesh provided that we follow here blended learning model of countries having similarly challenging infrastructural and technological constraints and socio-economic scenario.

2.8. Literature on Blended Learning

There are a number of researches that highlight the effectiveness of blended learning as a method of teaching-learning in the 21st century. Many of them have been very significant and have explored the various aspects of this approach. The positive impacts as found in this research are: increase in students' proficiency; motivation; success; collaboration and team work skills; learner-centeredness (Al-Sarrani, 2010; Alebaikan & Troudi; 2010; Kwak et al., 2015). Many researchers also put a high value on the effectiveness of blended learning in increasing student motivation (Kwak, et al. (2015). It appears that blended learning is in high demand in many educational training programs today compared to traditional teaching. On the other hand, many institutions face various problems and challenges in implementing blended learning methods. The

challenges are: lack of interest; training and IT skills among teachers; insufficient logistic support including internet access; the danger of plagiarism and so on (Porter et al., 2016; Tshabalala et al., 2014; Moskal et al., 2013; Wong, et al., 2014).

The research done so far in regard to blended learning will be discussed in the following sections. The literature will be discussed along thematic lines. The themes are: a) learning outcomes b) achievement of higher-order learning c) student satisfaction d) student motivation e) learning flexibility with blended learning f) cost and time-saving g) student –teacher’s interaction h) student-student interaction. The themes related to challenges of blended learning are: student attitude and dropout, resistance to blended learning from teachers and students, perception about the efficacy of the blended method, and redesign of blended learning course. Some studies dealing with the use of blended method in teaching English will be discussed. Then the challenges of online education will also be reviewed. After that, the obstacles to the implementation of blended learning in Bangladesh will be discussed. Then some studies on e-learning and blended learning in Bangladesh will be discussed. After that the research gap in the area of blended learning in Bangladesh will be discussed. At the end of the chapter, the key terms are defined.

Learning Outcomes

In a century when everything is revolving around advancements in technology, improving a course through technology may help to achieve an effective teaching and learning environment. Vaughan et al. (2017) have implied that blended learning enhances student learning and involvement, essentially better performance. Nasser’s (2020) qualitative study in the community colleges in the US investigated the integration

of blended learning in the community college setting through the experiences of professors using this approach. The participants stated that the integration of technology both in the in-person and online classes has favorable impacts on student engagement. The five themes that emerged as a result of these mixed-learning activities are accessibility, visualization, motivation, social skills, and critical thinking. Since the learning objectives are met through improved learning abilities with a greater emphasis on reflecting experiences as modern technologies start to play a part in education through blended learning, the learning experience feels better and more realistic for learners (Wornyo, et al., 2018).

Abbas (2018) investigated student satisfaction in a blended English writing course for Academic Purposes in Iraq. A modified questionnaire of student satisfaction in an online course was used to determine the approximate level of satisfaction. The majority of the students reported improvement in their problem-solving, written communication and critical thinking skills throughout the course. The findings suggest that the blended course was effective in providing knowledge to the students through feedback mechanisms, open communication, and additional course materials. But 30 percent believed that blended course was not effective. The result of the research helped the administration office to apply some improvements to the newly-founded blended courses in Iraq.

Sheet (2018) investigated if there were any real differences in the writing achievement of students taught through the blended learning method and the students taught through the face-to-face method in Lebanon. The results indicate that the use of the blended teaching method can create a favorable condition to develop students' writing

skill and blended learning has significantly increased students' participation and their performance in writing.

Tawfiq and Jaafar's (2017) study investigated the effectiveness of using blended learning in teaching a Home Economics course for improving students' achievement and attitudes towards it in the College of Education, University of Najran, Kingdom of Saudi Arabia and found the effectiveness of blended learning in the selected course on raising the experimental group's achievement and attitudes. Sahni (2019) in Saudi Arabia found better student learning in the group where blended learning was followed, in terms of achieving learning outcomes and more participation in online and class activities because of the students' motivation to learn with some control over time, place, or speed of learning.

From the above studies, it is evident that blended learning method has a positive impact on enhancing the learning outcomes of students at all levels and across all disciplines if it is delivered properly. It helps to reduce student dropout, increase student satisfaction and motivation that ultimately ensure the quality of blended education.

Higher Order Thinking Skills

Higher-order thinking abilities including creativity, evaluation, and critical thinking are the main focus of blended learning. The model-driven instructional design is highlighted by the student-centered environment. By grooming students with the socialization skills they need, blended learning helps them feel as though they are a part of a larger learning community (Shand & Glassett, 2017). Additionally, the online

component of the course enables them to be active learners at any time and to be productive. While the teacher-student relationship is prioritized, peer-to-peer interaction is also a key component of independence in blended method (Shand & Glassett, 2017). The idea of the 21st-century classroom gets expanded through blended learning.

The exposure to blended learning provides students with the opportunity to gain the 21st-century skill sets that they need to compete in the global marketplace (Tucker, 2012). Tucker (2012) identified several benefits of a blended learning model: saving time, saving money, increasing one-on-one interaction among students, more effective communication, and building community and relationships with students. Mastering these skills and learning to communicate in a variety of mediums prepare students for the workplace. Many researchers mentioned that the advanced technology and the introduction of various Learning Management Systems (LMS) have improved learning activities in a blended environment thus enhancing their technological skills (Horvat, et al., 2015). Taiwo (2007) highlighted the benefits of using ICT for blended learning teachers and students indicating that it enhances the technological skill of teachers and prepares the students for careers in technical education.

Researchers have stated that blended education increases employee performance and productivity. For example, Margolis, Porter, and Pitterle (2017) conducted a qualitative study to investigate students' attitudes about blended learning in a pharmacy course. According to this study, the benefits of a blended course included flexible timing, teacher support, and classroom exercises that could be applied to problems in the actual world of the twenty-first century (Margolis et al., 2017).

To conclude, blended learning promotes the higher-order skills of the graduates by inculcating hard and soft skills among them. The skills such as socialization skills, team work and collaborative skills, independence, and technological skills that can be transferable to the 21st century job market skills, are the learning outcomes from the blended method. If all these skills can be achieved through the blended method, the question about the quality of higher education through blended mode will not arise.

Student Satisfaction

Satisfaction leads to higher student achievement. Research shows that more student satisfaction with their course leads to higher academic achievement (Kurucay & Inan, 2017). Deschacht et al. (2015) mentioned that lower achievement in blended learning may accrue from a lack of interest and ease in using technology in blended learning courses.

A Ph.D. study by Chin (2015) shows the high success rate and pleasure with blended learning among the Asian students. The fact that the study's subjects were all locals, presents a significant issue. Second, it included an investigation of one aspect, namely, Confucianism, in a framework of a culture that may be used in the study of blended learning. Greater student satisfaction was found by Herloa (2015) and Lim et al (2014) in a blended learning environment when teachers actively engaged and supported learners at every step and with every component of the program. Herloa (2015) discovered that a blended master's program improved student learning. The researcher discovered that blended learning had a beneficial effect on student-centered learning. The

researcher identified the following advantages of a blended environment: greater students' self-efficacy, student curiosity, and intrinsic motivation (Herloa, 2015).

Gyamfi and Gyasse's (2015) study in Ghana showed favorable perceptions of students about the blended learning environment. However, slow internet connectivity and the lack of internet access for students living outside the university campus were mentioned as problems for a few students. Moreover, student perceptions of the blended approach were very favorable and the majority of students (83%) opted for the blended learning approach. The non-experimental nature and the non-random sampling of participants were limitations of this study.

Feleae et al. (2017)'s research found a positive attitude of the Romanian students towards blended learning. The findings also indicated enhanced student learning experiences and learning outcomes. The limitations of the study are the small and the overwhelmingly female majority participants. Poon (2013) hinted that blended learning helps students and institutions by offering enhanced outcomes, increased flexibility, facilitating a sense of community, and intensifying student satisfaction.

Osgerby (2013) did a qualitative study to investigate the student perceptions of an accounting course in a blended environment. The researcher collected and analyzed data from eight accounting and financial management students who took part in various focus groups. Osgerby (2013) stated that students doing the course through Moodle and face-to-face mode reported more satisfaction in the blended learning approach.

According to Dumont and Raggo (2018), teachers have seen better levels of student satisfaction and enrollment in a mixed course. They discovered that the engagement in blended mode led to students' perceptions of favorable academic development. Students benefit from a strong sense of cooperation for the integrated learning techniques of blended method (Kintu et al., 2017). Students develop a sense of community in a blended course (Ebadi & Ghuchi, 2017). When students are exposed to blend learning instructional methods, there will be effective learning experiences for learners to significantly increase learning outcomes and ensure quality of education (Ebadi & Ghuchi, 2018).

Student Motivation

Numerous studies (e.g., Al-Sarrani, 2010; Alebaikan & Troudi, 2010; Kwak et al, 2015; Shand et al. (2016) mentioned the impacts of blended learning to enhance students' motivation in the classroom and the level of learning in higher secondary levels. Motivation increases when a teacher guides a student to have ownership of his/her learning (Bray, 2016; Siegle et al., 2014). Personalizing a student's education gives the student the scope to take ownership of his/her learning (Bray, 2016). Bray (2016) argued, "Personalized learning helps learners become intrinsically motivated to learn, so they own and drive their learning" (p. 1).

Shand et al., (2016) describes the experiences of a post-baccalaureate course in a blended learning model. 18 students participated in an online survey of 15 questions to show their satisfaction with the blended course model. The survey results were positive, because the course redesign effectively increased the motivation of the students. Tarvyd's

(2019) studies conducted in two high schools in US came out with six positive outcomes of blended learning course. They are flexible learning routine, alternative method for education, supportive, diverse learning styles, enhanced learning supports, and multi-faceted motivations to enroll in a blended learning program.

Nasser's (2020) phenomenological studies in community college in US reported that the varied strategies and the mingling of technology both in in-person and online classes served as positive elements for student involvement. These blended learning components yielded the following five themes i.e., Accessibility, Visualization, Motivation, Social Skills, and Critical Thinking.

In fine, it can be said that blended learning helps to increase student motivation for technology integration, student involvement, personalization of learning and development of social skills of learners. Students also find blended learning motivating if they feel that their critical thinking skills are developing and their learning is flexible, varied and autonomous too.

Learning Flexibility and Blended Learning

Researchers often cite increased flexibility as one of the notable advantages of the blended learning platform (Fogal et al.; Osgerby, 2013). Blended learning facilitates the way for flexible learning through participation at different times and at different places, at least for certain portions of the course (Stone & Perumean-Chaney, 2011). This allows students the opportunity to develop a deeper levels of student reflection and greater critical thinking (Ellis et al., 2016; Graham et al., 2013; Huang & Hsiao, 2012; Jokinen &

Mikkonen, 2013). Other advantages are increase in the number of course offerings, flexibility in timing for teachers and students, along with greater access for students in all places (Sarwar et al., 2015).

Antwi-Boampong (2021) investigates the blended learning experiences of students of a public university and found that the students in the blended learning class hold a positive perception of blended learning as a convenient, flexible and conducive to learning beyond the limitations imposed by the classrooms. He says that blended learning is an effective pedagogic tool that helps learning to take place in a socially constructive manner through the use of Learning Management Systems (LMS). The findings indicate that blended courses offer more convenience and flexibility than face to face delivery.

According to Afip (2014), “Blended learning allows the learners to make choices about their learning time and place of their learning, what and how they want to learn and their goals in learning” (p.5). According to Enrichsen et al. (2017), students are happier with their courses when they perceive flexibility, the instructor's involvement, engaging communication, and a variety of tasks. In mixed learning environments, the emphasis is on personalized learning styles, and Laer and Elen (2017) discuss how these characteristics affect students' happiness with their educational experiences. All these interactions and experiences create a positive attitude to learning. Barker (2015) says, “The major advantage of hybrid classes is that this forum allows some flexibility to students with multiple responsibilities to maximize their time” (p. 144). Blended learning can also be a way to cut students' educational costs. According to Barker (2015), “hybrid

courses provide an alternative to spending time on campus; it reduces commuting time and travel expenses.” (p. 145).

To conclude, blended learning offers more flexibility to teachers and students, greater access for students, more convenience for both teachers and students than the face-to-face method, more involvement of the teachers, and interactive communication between teachers and students and among students which ultimately leads to a positive attitude to learning.

Cost and Time-saving

Research indicates that the blended method has a role in reducing education costs and time spent on continuing education (Poon, 2013; Marcucci et al., 2008). According to Poon (2013), blended learning in higher education has reduced student dropout rate and other potential costs and ensured resource savings (Poon, 2013). Marcucci, et al.(2008) say that institutions of higher education worldwide are facing increase in costs of education on the one hand and diminishing financial support from the government on the other. The blended method can help to reduce the pressure on the costs of higher education. Blended learning has become popular owing to its potential for providing additional access to content and instructions that are flexible and barrier-free (Kastner, 2019).

The Stanford research strongly suggests that using the blended method could have a profound effect on overall completion rates by helping institutions to radically raise the return from their current investments in self-paced content (Singh & Reed, 2001).

Research by the University of Tennessee's Physician's Executive MBA (PEMBA) program for mid-career doctors has shown that blended learning programs can be completed in approximately one-half the time, at less than half the cost. This program also demonstrated an overall 10% better learning outcome than the traditional classroom learning method because of different forms of physical and virtual live e-learning, coupled with the ability of the students to test their learning in the workplace immediately (Singh, 2003).

It is evident from the studies mentioned above that blended method reduces cost of higher education for students because there is less travel, less space required for holding classes and other associated expenditures.

Student-teacher Interaction

Learners interact with content, instructors, and other learners in three different ways in blended learning environments, according to Kurucay and Inan (2017). In blended learning contexts, these interactions are essential to the success and enjoyment of the students. According to certain research, student-to-student interaction enhanced the students' blended learning experience, which ultimately increased their satisfaction and performance in the course (Kurucay & Inan, 2017). Garrison (2017) thought that as teachers' responsiveness to students' needs tends to diminish location and space, faculty engagement appears to have the greatest impact on students' satisfaction (Garrison, 2017).

Vaughan and Cloutier (2016) conducted a study that examined the student-faculty interaction to assess the effectiveness of a blended four-year education program. The

recommendations for increasing the interaction emphasized on expanding the online activities through virtual office hours and social media for cooperative and community-centered assignments (Vaughan & Cloutier, 2016).

So, it can be said that teacher-student interaction, a common characteristic of face-to-face education can also be ensured through blended method because in this method students can have contact with teachers not only during the face-to-face classes but also through the asynchronous online platform and activities for 24/7, if required.

Student-student Interaction

According to research, blended learning environments can boost student-to-student interactions, empowering learners to become far more active participants in their own education (Osguthorpe & Graham, 2003; Tabor, 2007). The relationships between teachers, students, and peers affect how satisfied students are with their courses. The use of a blended learning approach fosters student interaction and strengthens peer relationships (Owston et al., 2013).

According to Sorbie's (2015) qualitative study using the constructivist methodology, blended learning takes into account students' preferred learning styles, encourages student participation, and involves both students and instructors in active conversation and hands-on training (Sorbie, 2015). Bouilheres et al. (2020) investigated usefulness and effectiveness of blended learning in promoting interactions between students and their peers, their teachers, and course materials in Vietnam. Online surveys were conducted on sixty-six students enrolled in eight blended learning courses. The

results proved the claim that students' perception of their learning achievement as a result of interactions in blended learning environment in each of their classes at the university was beneficially impacted.

Previous studies (Cole, et al., 2014; Kuo et al., 2014) have mentioned student dissatisfaction especially, the lack of interaction between the instructor and the learners in online education. Poon (2013) calls for the incorporation of effective in-person interaction in blended courses. Blended learning does not merely combine online and face-to-face teaching, but the objective is to “create dynamic and vital communities of inquiry” (Vaughan, 2010, p. 61). To re-design the courses, instructors need to invest additional time to learn new technology, teaching skills, and think about the face-to-face and online proportions of the course content (Vaughan, 2010).

2.8.1. Blended Learning in Teaching English

The use of technology for teaching English dates back a couple of centuries and the media of teaching-learning of English are changing in tune with the advancement of technology. Online and blended methods are being used for teaching English widely around the world. The research on the best techniques and technology for teaching-learning has profusely grown. I will discuss here a number of researches dealing with the effectiveness of using blended and online methods for teaching English skills. As scholars have explored ways to employ blended learning methods to teach English as a second/foreign language (ESL/EFL), they have intensified their study on blended learning and English teaching and learning. Blended learning has been the focus of many research

studies (Adas & Bakir, 2013; Akbarov et al., 2018; Alias & Pandian, 2012; Ghazizadeh & Fatemipour, 2017; Grgurovic, 2011; Liu, 2013; Manan et al., 2012; Shih, 2010; Yoon & Lee, 2010; Zhang & Zhu, 2018) that investigated the use and the effectiveness of blended learning in the ESL/EFL context.

Blended learning has been found to improve ESL learners' writing ability, essay composition, critical arguments, linguistic competencies, grammar, spelling, topic sentence, punctuation marks, capitalization, organization, planning as well as reduce language anxiety and outline ideas (Adas & Bakir, 2013; Challabo et al., 2016; Lam et al., 2017; Permana & Santosa, 2018; Spanou & Zafiri, 2019; Yusuf et al., 2018). Additionally, studies have been carried out in other regions of the world, such as Saudi Arabia (Alrouji, 2020), Palestine (Keshta & Harb, 2013), and Greece (Spanou & Zafiri, 2019). A few research (such as Rahman et al., 2020; Annamalai, 2019; Challob et al., 2016) concentrated on the Malaysian context.

An English language course that combines in-person instruction supplemented with wiki interactive tools was developed by Ryabkova in 2020 to compare the results of the blended learning method with traditional writing skills by using Rosetta Stone software on a sample of 48 first-year technical students at MAI. 24 students made up the experimental group, and 24 students made up the control group being taught through the same program. Throughout the whole course, students using the conventional paradigm consistently adopted the common communicative strategy whereas the experimental group participants were given instructions to see the content on the Rosetta Stone platform and do additional homework multiple times each week. The results show

advancement in writing and other abilities. It is seen that the experimental group outperformed the control group receiving instruction in the conventional manner.

Adas and Bakir (2013) tried to ascertain if blended learning can be effective in improving students' overall writing skills. The study included 60 EFL students from a Palestinian institution. The students were split into two groups; one control group using the conventional face-to-face method, and the other experimental group receiving instruction via a blended learning model. The study's conclusion noted that the use of blended learning improved the participants' writing in numerous areas, including grammar, spelling, punctuation, and paragraph coherence.

Liu (2013) conducted a study with an academic English writing course at a prestigious university in Beijing, China with 90 minutes of face-to-face and 1 hour of online classes every week. The blended technique was found to have several benefits, including stimulating independent learning, increasing classroom interactions, removing communication anxiety, and improving learners' academic writing competencies, according to the teacher's feedback and the student's evaluation of the course.

By using a quasi-experimental analysis with pre- and post-tests as data-gathering tools, Hassan et al. (2021) tried to assess the effectiveness of blended learning in developing English writing skills, particularly among ESL learners at a Polytechnic in Malaysia. It was conducted on 60 ESL students who were divided into an experimental group and a control group as part of a purposive sample. The results demonstrated that ESL students benefit greatly from blended learning in terms of improving their writing

abilities. Further investigation showed that students who learned via the conventional method made a small improvement.

Alrouji (2020) studied how Saudi female students' written English communication abilities improved through the blended learning that encourages interaction and communication while also lowering stress levels in the English writing course. Focused group interviews were also employed by Rahman et al. (2020) to investigate how ESL students perceived blended learning in the English writing course. The study found improved communication skills, self-esteem, and interest in learning English writing.

In their qualitative study, Madarina et al. (2020) used focus groups with six second-year students from Malaysia's Universiti Sultan Zainal Abidin (UniSZA) to examine the advantages of blended learning in the learning of writing among university students. The results demonstrate that the blended learning strategy fosters students' interest in writing, self-esteem, and written communication skills. The students felt that this strategy had given them the chance to learn in an accommodating and flexible setting, which had a favorable effect on their writing. However, the small number of participants was a weakness of this study.

Pedagogy of English Writing in a Blended Learning Situation

Students in a blended writing course must use computers to complete self-paced learning activities. According to a study by Cui and Hu (2018), students and teachers

should interact in the classroom where real-life scenarios are replicated in order for them to produce meaningful output with one another. Teachers evaluate students' online writing by offering suggestions and criticism. Students are also motivated to participate in a number of extracurricular writing activities. Peer writing groups in a classroom improve student-to-student connection, which has several positive effects on student learning (Cui & Hu, 2018). To assess the quality of their students' online writing, teachers provide advice and critique. Additionally, a number of extracurricular writing activities are encouraged for students to participate in. Peer writing groups are formed in a classroom, which improves the value of student-student contact creating several positive learning outcomes (Cui & Hu, 2018).

In this method, students read, retell, discuss, write essays, outline texts, answer questions, create projects, translate newspaper and magazine articles according to their area of expertise, and watch movies in traditional offline sessions with the aid of a platform. They also continue their academic work at home with the help of the internet platform (King, 1999, pp. 87-115). Students' performances are used to evaluate their learning. Assessments that are formal or informal, high- or low-stakes, individual or communal, private or public can be used to measure students' performance) Ahmadi & Sultani, n.d).

2.9. Challenges of Blended Learning

Next, I will discuss the challenges of the blended method being faced around the world. These challenges are both faced by and originate from teachers, students and institutional management. The challenges are- student attitude and dropout, resistance to

blended learning from teachers and students, perception about the efficacy of the blended method, redesign of blended learning course and infrastructure and administrative support.

Student Attitude and Dropout Rate

Many studies describe how students find blended learning to be frustrating. According to Suprabha and Subramonian (2015), learners may experience the following issues with blended learning, including technological issues, learner accountability through self-managed learning, insufficient time-management skills, and reduced physical classroom instruction, which reduces opportunities for communication and fosters a sense of isolation among the students.

Additionally, studies show that students who take blended learning courses have greater dropout rates than their face-to-face counterparts (Deschacht & Goeman, 2015). According to Kurucay and Inan (2016), the lack of interpersonal contact is the main cause of student dropout. It indicated that the lack of teacher support, poor assessment plan, and inadequate logistics at the institutional level reduced the acceptability of the blended method among the Saudi Arabian female college teachers.

Blended Learning and Faculty Members

In contrast to students' willingness to utilize technology in the learning process such as the blended platform, several studies identified faculty's hesitation to embrace the model (Porter et al., 2016). This unwillingness is traced to their negative perception of the

blended learning model vis-a-vis the traditional face-to-face courses (Power & Gould-Morven, 2011).

Faculty Resistance to Blended Learning

At the college level, however, many studies have found a substantial level of faculty resistance to the blended model. A large-scale study of over 4,500 college faculty by Allen and Seaman (2012) found that 65 percent of the respondents showed more apprehension about the use of technology than excitement about utilizing it in the teaching process. Other researchers have started to analyze that fear and draw a positive correlation between faculty members' willingness to embrace the blended platform and their general sense of worth to the institution at which they work (Steward et al., 2010). If teachers feel that their work is being neither recognized properly nor paid adequately, they will not feel interested in using any technology in teaching. The other factors of resistance might be lack of prestige, lack of training in technology and lack of belief in student learning. Some studies have indicated that faculty resistance to the blended platform may lie in a level of unwillingness to undertake the workload required to change a traditional face-to-face class into a blended class, perhaps caused by an uncertainty on how to accomplish this (Kliger & Pfeiffer, 2011; Porter & Graham, 2016; Porter et al., 2016; Power & Gould-Morven, 2011).

Fear of Loss of Control

Studies have indicated that students feel much more in control of the learning process when taking blended courses, mainly owing to spending less time under the direct

control of a teacher (Bottge et al., 2001; Kazu & Demirkol, 2014; López-Pérez et al., 2011). This in turn leads to faculty's developing a reluctance to accept blended learning (Shea & Bidjerano, 2010). The faculty members who consider themselves as the depository of all knowledge are concerned about the loss of control caused by the use of technologies.

Perceptions about Student Learning Outcomes

Other studies have indicated that faculty resistance to blended learning may stem from a genuine perception that the blended method does not lead to an increase in student-learning (García-Valcárcel et al., 2014). However, these researches are contradicted by other studies that show equal if not more student learning through blended learning than the face-to-face mode (Bottge et al., 2014; Kazu & Demirkol, 2014; López-Pérez et al., 2011).

Need for the Redesign of the Blended Learning Course

If I summarize the challenges of blended learning faced mainly by instructors, it can be said that new instructional delivery models have created different challenges for educators and institutions. As a matter of fact, offering a hybrid learning course has, to some extent, become a challenge to many teachers (Beldarrain, 2006). Reynard (2007) pointed out that there has been a challenge for teachers to consider the pedagogical significance of both methods and to develop new designs for teaching and course conduct that maximize the benefits of the dual modes.

Designing a blended course can be even harder than creating an online one because it is necessary to combine both online and face-to-face content and activities (Swan, 2018). Picciano calls this “blending with purpose” and suggests that teaching objectives should decide the approaches used in blended instruction. In particular, he suggests that different media can be suited to teaching objectives by their capabilities, by the kind of activities they support most (Swan, 2018). Carloni (2013) indicated that providing support and resources to teachers would ensure the effective use of technology. Also, it should be ensured that teachers learn how to teach their courses in a variety of learning environments. Instructors need more than just resources for their teaching (Sockalingam, 2012).

Infrastructure and Administrative Support

Many factors can contribute to a lack of success in blended learning environments (Afip, 2014). For some students and teachers, the lack of appropriate technical knowledge and access to technology can make blended learning difficult to handle (Afip, 2014; Erichsen et al., 2013; Torrisi-Steele & Drew, 2013; Van et al., 2017). Zaiter’s (2020) study collected data from 144 faculty members belonging to different faculties and academic disciplines across the American University of Beirut (AUB). It showed that faculty members were reluctant to implement distance education though they preferred blended teaching over online because of the face-to-face component. The faculty members believe that teaching and student learning outcomes of distance courses depend on the quality of the e-learning infrastructure, availability of technical assistance, and administrative support.

Cavanaugh et al. (2009) detailed how challenges such as start-up costs, accreditation, and student readiness act as hindrances to going for the blended method. Smith (2014) discussed that students doing virtual education may fail to acquire presentation skills and ultimately lack the “communion” like experience coming from a teacher’s actions and words.

Though blended learning is perceived to be an effective alternative to face-to-face and full online education, it creates some practical problems for the developing countries. As in other developing and under-developed countries, the introduction of blended learning in Bangladeshi universities is expected to create a number of practical problems. They range from pedagogical issues to logistic challenges. So, this section will discuss how the implementation of blended learning may pose challenges for Bangladeshi higher education institutions.

2.10. Disadvantages of Online Education

While discussing the reasons for the popularity and prospects of blended learning, it is necessary to highlight the disadvantages and challenges of full online education in general irrespective of the status of countries. So, I will discuss the disadvantages and challenges of full online education. Then the points of the need for blended learning as an alternative to full online education can be justified.

Marciniak (2018) reported the lack of specific or compelling methods to make an assessment of the quality of online education. The author said that there are no standard criteria to fix the components that should be incorporated in the online learning courses or

those that can be used to evaluate the success of such programs. The reason is that each of the programs is individualistic, and therefore, its components and structures are dependent on its 'resources, objects and objectives' (Marciniak, 2018). This then makes it difficult to evaluate the quality of online education.

Despite the advantages of online classes, retention is a concern for academic leaders (Yukselturk et al., 2014). Yukselturk et al. (2014) noted that limited involvement with course content, with restricted access to the teacher and other peers, might lead to high dropout rates in online education. Horvat et al. (2015) say that the proven concerns of online environments are: the learners' isolation and less social interaction with other students, reduced student-instructor interaction and cheating. On the other hand, the conventional learning style provides the learners with face-to-face communication and assistance whereas e-learning makes it possible to study anywhere and anytime such as at the learners' home or workplace. The disadvantages are narrated below. The disadvantages are- a) lack of training for teachers, b) stress for students, c) limited teacher-student interaction, d) high dropout rate and, e) digital divide in developing and under-developed countries.

Lack of Training for Teachers

A formidable challenge has been a lack of faculty and staff training opportunities (Baran & Correia, 2014). The lack of training in online teaching is a major problem for faculty members. While faculty training is essential, faculty are also expected to have suitable 'skills, proficiencies, and personality types' supportive of online instruction (Portugal, 2013; Davis, 2011). Design of online course by inexperienced faculty might create

troubles. Literature has shown that much of online courses have been designed by faculty with insufficient or no training in teaching methodologies or design (Giering, 2012).

Stress for Students

Online education is seen to create stress for students. The younger students prefer to use social media and technology for consumption but not formal learning which requires 'critical thinking, constructing knowledge' (Clarida et al. 2015, p. 98). The study by Conrad and Donaldson (2012) mentioned that in online learning, a teacher cannot compensate for the inefficient design of the system. Teachers cannot understand directly if the students can cope with the course. Therefore, students without technological skills fail to keep pace with the course (Shea & Bidjerano, 2018).

Limited Interaction

Online learning's lack of contemporaneous engagement has a negative effect on teaching and learning, and consequently, on the skills of students. There is a belief that students participating in in-person programs do better than those taking online courses because they have more opportunities for direct physical contact with their instructors and other students (Arviso, 2019). Again, for the flexible system of online education, students do not feel motivated to work on coursework for the lack of monitoring. This can result from their inefficient management of time (Arviso, 2019).

High Student Dropout Rate

Students who register for online courses are more supposed to drop out of the course than those in a face-to-face mode (Cheri & Lampley, 2016). This is due to a lack of motivation among students from teachers which leads them to achieve poor grades. Access to the practical and visual parts of the course materials is somewhat constrained by the online method. As a result, students struggle to understand what they read, which increases the number of dropouts. In some schools and universities, the dropout rate for online courses was 45%, but for face-to-face students, it was only 11% due to a lack of institutional support, according Ryan et al., (2016).

Digital Divide

There are growing concerns that students from less fortunate backgrounds or from schools with lower financial support may be excluded from online learning. The fact that students are also denied access to campus perks and facilities, i.e., tools like libraries, computer labs, and common areas, has made the economic and technological divide in Asia more pronounced than ever (Lau, 2020). The home environment also tends to put poorer students at a disadvantage. These challenges inherent in online education are supposed to be similarly faced in Bangladesh.

2.11. Twenty-First Century Graduate Skills and Blended Learning

As the blended learning method is a noble method that integrates face-to-face and online methods, there is a greater scope for the students doing blended courses to attain some skills which are necessary for the employment of university graduates in the 21st century competitive job market. If we discuss the 21st century graduate skills and

investigate how these skills can be achieved through blended learning, we can realize the effectiveness and necessity of the blended learning method to equip our graduates for the 21st century competitive job market.

Managers now-a-days complain that they are having young employees with weak meta-cognition; people who are more responders rather than learners (Medina et al. 2017). In the US and abroad there have been in the workplaces students whose studies have not imbibed them with critical thinking; understanding and an ‘other-centered view’ instead of a ‘self-centered view’ of the world to achieve the ‘emotional and cultural intelligence’ required by a global marketplace. The National Task Force on Civic Learning and Democratic Engagement (2012) of the US explained:

The kind of graduates we need at this moment in history need to possess a strong propensity for wading into an intensely interdependent, pluralist world. They need to be agile, creative problem-solvers who draw their knowledge from multiple perspectives both domestic and global, who approach the world with empathy, and who are ready to act with others to improve the quality of life for all (p. 23).

As higher education also aims at the graduates’ employability, then it is to be considered what graduate attributes are truly required in the twenty-first century job market. The findings of several famous consultancies hint that in a world of ‘constantly-increasing knowledge-building and sharing’, the millennial employees cannot fulfill it. Citing their own Accenture Volatility and Agility study 2016, Accenture mentioned the skills required of future leaders are- problem-solving (78%), leadership (75%), communication (73%) and technology (73%). ‘The world’s knowledge is expanding

rapidly, expected to double every 1.2 years. Ironically, 4 out of 5 businesses cannot find labor with the analytical skills needed to interpret this data. By 2020, a global deficit of 40 million skilled workers is predicted (Accenture 2016, p. 14). And Deloitte's (2018) Human Capital Trends report mentioned that their survey participants foretold the future demand for "complex problem-solving (63%), cognitive abilities (55%), and social skills (52%) among graduates" (p.8).

To sum up, the scope for doing blended education where technology is an inalienable necessity is assumed to open avenues of potential for Bangladeshi university graduates. This mode of education will enhance their all-round graduate skills for the 21st-century job market. Their content knowledge, critical thinking skill, team work skill, and cultural sensibility will develop when they will be engaged in various noble learning activities of the blended leaning method. So, blended learning is assumed to play a positive role in enhancing the graduate skills that the Bangladeshi university graduates are reported to be lacking in the introduction chapter of this study. If these skills can be achieved through the blended mode, like the face-to-face education, the importance of blended learning will be established.

2.12. Obstacles to the Implementations of the Blended Learning in Bangladesh

It is a fact that using technology in education at every level is crucial for the adoption of blended learning in the educational system. However, for a developing nation like Bangladesh, incorporating technology into the educational system depends on a number of prerequisites, including a strong infrastructure, a dependable power supply,

solid technical knowledge, and most importantly, a shift in mindset and sufficient funding for training programs (Khan et al., 2012). Therefore, the biggest barriers to establishing blended learning in Bangladesh are a lack of logistical assistance and the resistance to changing prevalent ideas. (Khan et al., 2012,). In Bangladesh, blended learning is a relatively new concept. Despite the efficiency and benefits of blended learning in the delivery of education, the majority of Bangladesh's higher education institutions may not be enthusiastic about it. Teachers have a lot of difficulties utilizing these EdTech start-ups, including how to begin using it, when to use it, how to minimize distractions for students, and how to utilize students' skills via EdTech, which can be partly attributed to their resistance to online teaching systems and a lack of knowledge in new innovative pedagogies (Dhawan, 2020).

The majority of teachers at Bangladeshi higher education institutions currently have limited access to online tools for their instruction, and their only online activities are limited to posting their teaching materials, like lecture notes on online platforms and giving students their grades electronically. Shrestha et al. (2022) found that the majority of teachers did not like to use online resources during the pre-pandemic time of teaching. Around 8% of teachers never used online resources during that time and around 15% of teachers reported they might not use online resources even during post-pandemic teaching.

At present, the majority of the teachers and students in Bangladesh have difficulties in using technology in the classroom which includes slow internet connection, system crashes, and hardware issues, power cuts, the lack of devices to attend class, getting

distracted by social media, being unused to working in the online environment, costly data packages and scare of online assessments. Teachers hinted at the high cost of the internet (Shrestha et al., 2022). Moreover, frequent electric power failure is another problem that is making the digitalization work of the government more challenging (Khalid et al., 2011). To solve these problems, it is imperative for all Higher Education Institutions in Bangladesh to construct and improve their network infrastructure.

In Bangladesh, most teachers do not have basic knowledge of computer operation and online applications and programs to improve their teaching quality. According to Mahmuda (2016), the lack of training in applying new technology is a formidable barrier to the digitalization of education at universities in Bangladesh though most of the students in Bangladesh are adept at using various online tools for learning. Moreover, implementing blended learning in higher educational institutions is difficult due to a lack of necessary tools and technologies, a lack of drive for self-regulated learning, a lack of interaction between facilitators and students, and a lack of appropriate assessment strategies (Al-Amin et al., 2021). Another important issue might be the flexibility of blended method because students might not feel motivated to attend the online classes or do the online activities which are binding in the face-to-face classes. A review of studies on e-learning and blended learning in Bangladesh will help to further understand the situation of blended learning in Bangladeshi universities.

2.13. Studies on E-learning and the Blended Learning in Bangladesh

In Bangladesh, there have been numerous studies on blended learning. In their study, Tamal, et al. (2022) used a sample of 694 university students in Bangladesh during the COVID-19 crisis to investigate the acceptance of e-learning (perceived usefulness, and perceived ease of use) among university-level students. Findings showed that the majority of students (70.2%) liked face-to-face education systems for their future study, whereas a considerable number of students (46.8%) were dissatisfied with their e-learning experience overall. The study also emphasized the underlying causes of students' low acceptance of e-learning, including their lack of technological proficiency, lack of acquaintance with it, lack of simplicity, low productivity, inefficiency, and others.

Ara & Mahmu (2021) conducted a study on 50 students and 12 teachers from 6 public colleges in Bangladesh to inquire into any challenges they encountered when using blended learning instruction as opposed to traditional learning. While 60% of the students loved the method and anticipated a better learning outcome, 30% of the students experienced significant challenges. 90% of educators believe that a blended learning environment may help students advance their technological literacy and 90 percent say that blended learning provides them the option to continue doing a part-time job. When asked if their university had enough resources for infrastructure assistance to implement a blended learning education system, 60% of the teachers replied affirmatively. Thirty percent of the teachers complained about their lack of financing and got bad feedback.

The study conducted by Al-Amin et al. (2021) sought to investigate the potential from a sample of 230 university students. In this study, participants considered technical

courses challenging to understand and were dissatisfied with how online courses were assessed. According to several respondents, blended learning would be beneficial for slow learners, would promote digital literacy, and would cut down on the amount of time spent in traditional classes even though overall learning might rise.

Khan (2021) tried to identify the challenges and opportunities of blended learning in the new normal situation in Bangladesh's education sector through Focus Group Discussions (FGD) with twenty-one university teachers. The study identified certain obstacles to blended learning, such as poverty, a lack of familial and institutional support, limited internet access, teachers who are not tech-savvy, and power outages in rural and coastal locations. Nevertheless, 71.43% of research participants expressed support for blended learning and flipped classrooms in the wake of the pandemic. It was then discovered that the majority of participants believed that Covid-19's online education was not as successful as anticipated. However, during the Covid-19 pandemic, just 42.85% of teachers commented on how happy they were with the online sessions. Such viewpoints suggest that it is difficult to execute blended learning or the flipped classroom in Bangladesh. The majority of responders (76.19%) disagree that the country's educational institutions needed technical support for blended learning. Eighty-nine percent of the participants questioned if the current teachers are prepared to use technology.

A study on the application of flipped instruction in Bangladesh and Japan was undertaken by Mustary (2019). She demonstrates that in Bangladesh, 75% of instructors believe that the failure of flipped education to improve is due to a lack of teacher training in computer technology. Additionally, according to 95% of Bangladeshi students, the

region's delayed adoption of blended learning is largely due to a lack of amenities like electricity and computers. In this study, 85% of Bangladeshi teachers advocated for financial support from the government for blended learning. The government should supply computers to every student, whether they live in the city or the country, according to 86% of Bangladeshi students. For the effective implementation of flipped learning, the remaining 14% of Bangladeshi students recommend that the government update the school curriculum first. This would allow kids to study using computers starting in kindergarten (Mustary, 2019).

According to Jony et al. (2017), a wiki-based reflection method used after regular in-person classroom teaching and learning helps students in higher education increase their capacity for higher-level thinking. They demonstrate how this approach could be included in a blended learning strategy to encourage reflective and critical thinking.

According to Chowdhury's (2020) study, universities in Bangladesh may significantly raise educational standards, lower costs, and gain the support of all stakeholders by implementing blended learning methods. The author also provided some useful advice on how to build a blended learning program and how to use technology to get around obstacles that stand in the way of doing blended learning successfully.

The samples in Joher's (2018) study had a variety of views on using the internet. Despite the need for an online course, it claims that participants find it difficult to say goodbye to in-person instruction. In fact, they favor in-person education over online learning. However, the study suggests that the adoption of online learning would assist students in achieving higher education and reduce the number of Bangladeshi students

quitting their higher education programs. Additionally, it implies that firms where these employees doing the blended coursework, will profit from it (Joher, 2018).

2.14. Research Gaps

The majority of blended learning studies focused on how happy teachers and students were with it (Chin, 2015; Herloa, 2015). Some of them addressed issues including students' development, success, and acquisition of cooperative and collaborative abilities (Nasser, 2020; Margolis et al., 2017). Some discussed issues and difficulties that teachers and students encountered when implementing blended learning (Suprabha & Subramonian, 2015; Kurucay & Inan, 2016). Though there are many studies on e-learning, distance learning, and the application of technology in education in Bangladesh (Mustary, 2019; Joher, 2018), there aren't many studies on blended learning in Bangladeshi higher education or on the effectiveness and application of blended learning in the aforementioned field.

Whatever study there is, it focuses primarily on issues, difficulties, and mixed learning mode solutions. The experiences of the students and teachers using the blended education paradigm were not studied. In addition, my research compares the views of the same group of samples on the three types of educational delivery- face-to-face, online, and hybrid. I shall do a comparative study among these three modes of education in terms of themes such as flexibility, interaction, quality of education, teacher feedback, learning varieties, and some constraints in the implementation of blended learning such as people's negative perception, the infra-structural and the digital divide in Bangladesh. My

research will not only investigate the experiences of university students with blended learning, but also suggest the prospects of blended learning in Bangladeshi higher education.

Research Gaps (Table-2.1.)

Research	Themes
Tomal, et al.,(2022) Ara, et al.,(2021)	Acceptance of e-learning(usefulness, ease of use)
Jony et al., (2021) Chowdhury et al., (2020) Nasser (2020)	Higher level thinking , critical thinking, educational standard
Ara and Mahmud (2021) Al-Amin et al., (2021) Khan, M.E.I. (2021) Joher (2018)	Flexibility, simultaneous studies and job, facilitates higher education
Al-Amin et al., (2021)	Assessment
Khan, M.E I.(2021) Mustary (2019) Suprabha (2015)	Logistic and infrastructural challenges in implementing blended learning
My research	Compares the views of the same group of samples on the three types of educational delivery- face-to-face, online, and focusing on themes like flexibility, interaction, quality of education, teacher feedback, learning varieties, constraints in the implementation of blended learning

2.15. Conclusions

To conclude, the literature review has presented the theoretical foundation of the Community of Inquiry, the I2flex model, and how they have related to blended learning. It has also discussed how these three presences of the CoI can contribute to fruitful learning experiences. It has also discussed the four types of blended learning methods and the one that matches my course being implemented for investigation, i.e. i2flex model, the evolution of the blended method into its present status, using the blended method by

universities across the different social contexts, disadvantages of online education in general, reasons for the popularity of blended learning, the attitude of people towards the blended method, 21st-century graduate attributes, the contribution of the blended method to enhance these 21st-century graduate skills, challenges of blended learning in Bangladesh, research on blended learning in Bangladesh, and finally, the research gaps in this area in Bangladesh.

I have used research databases, such as ProQuest, and Google Scholar for a comprehensive literature search. In addition, peer-reviewed articles and theses from different sources have contributed to the literature review of the study. I have used the search words such as blended learning, online learning, e-learning, and English Writing Course to find current literature and studies. The aim of the literature review was to explore blended learning environments in the context of the higher education sector.

Considering the role that online and blended learning play in higher education across the world, it can be summed up here that it has drastically changed the façade of higher education across the world. The recent Corona pandemic has shaken the base of the delivery of education and brought about revolutionary changes in the perception of people about the necessity of online education as an alternative to face-to-face education. Considering both the limitations of online education and the precariousness and helplessness of people in the face of unexpected natural calamities like flood and pandemic, social and political unrest being faced by universities in delivering face-to-face education, blended learning can pave the way for sustaining higher education without loss of time, motivation and money to the university students of Bangladesh. If the negative

perception in Bangladesh regarding full online education is taken into consideration, blended learning can be a viable solution to higher education. In addition to that, limited number of seats in the public higher education institutions of Bangladesh along with other paraphernalia associated with urbanization, the need for job and income simultaneously with studies by the young people, the option of blended learning will offer a golden opportunity to the young people aspiring higher education in Bangladesh.

My next chapter is about the methodology. First, it will discuss the complete research method being followed in this study. Next, it will discuss the research design including the data collection and analysis procedure to be followed in this study. The locale, context of the study along with the participants and their selection criteria will also be discussed. The map of the proposed course will be provided. Then the online and face-to-face components that were used for the conduct of the course will be discussed in this chapter. The procedure through which the course was conducted will also be explicitly outlined. The data analysis procedure will also be discussed in detail. The maximum input of data collected from different sources will be analyzed and presented through the qualitative research approach to investigate the experiences of samples in regard to these three types of education they were exposed to, i.e., face-to-face, online, and the experimental blended course, titled English Writing Skills.

2.16. Definition of Key Terms

Artifacts- According to Goetz and LeCompte (1984), artifacts are things that individuals create or do. Writing-based artifacts are frequently of interest to educational

technologists, but computer activity traces are now becoming study subjects. Textbooks and other teaching aids, such as media materials, meeting and activity logs, memos, letters, and now e-mail records, as well as demographic data, such as enrollment, attendance, and specific details about subjects, are a few examples of artifacts that may shed light on research questions (<http://members.aect.org/edtech/ed1/40/40-02.html>).

Blog- also known as a Web log or Weblog, is an online journal where a person, a team, or an organization keeps a record of their actions, ideas, or convictions. Some blogs serve primarily as news aggregators, gathering information from numerous web sources and adding succinct remarks and hyperlinks. Other blogs focus on showcasing original content. Additionally, a lot of blogs offer a forum where readers can discuss and engage with the author. "To blog" is the act of creating content for a blog. Even though written content predominates, many blogs also include substantial visual, aural, and video components(Dennis, 2019, June 7). *blog. Encyclopedia Britannica.*
<https://www.britannica.com/topic/blog>

Community of Inquiry- The Community of Inquiry (CoI) framework, devised by Garrison et al. (2000) gives a framework for designing educational experiences. It refers to the fact that for any successful learning experience the presence of a teacher, peers, and knowledge is essential. The three main constituents of this framework are: 'teaching presence, cognitive presence, and social presence' (Garrison et al., 2000).

Digital Divide- It is a problem affecting people from all walks of life. It is a multifaceted issue, but there are two main characteristics of this gap: access to high-speed internet and access to reliable devices. There are many who suffer from the digital divide of both types. In some areas, internet access is limited, unavailable, or unaffordable for those who have devices. Again, even with a dependable internet connection, access to certain digital devices is a challenge. It leaves many more, especially, those in rural areas or living under the poverty line, without the device.

Distance Education- also called distance education, e-learning, and online learning, form of education in which the main elements include physical separation of teachers and students during instruction and the use of various technologies to facilitate student-teacher and student-student communication (<https://www.britannica.com/topic/distance-learning>).

E-learning- It is an “extended concept of e-learning that includes offline methods of distributing learning contents through CD-ROM, audio and videotapes, satellite broadcast and even interactive television” (Benson et al., 2002; Clark, 2002). Hence, from a broad perspective, any use of well-known and acceptable computer technologies in learning can be deemed as e-learning (Fallon & Brown, 2016).

Face-to-face Education- Face-to-face education is a teaching method where teaching and learning happen in person. This allows for live interaction between a learner and an

instructor. It is the most conventional kind of learning instruction.
(<https://tophat.com/glossary/f/face-to-face-learning/>)

Flex Model- The flex model is the second model within the blended taxonomy. This model primarily teaches online, under an instructor's supervision. While the basis of student learning in the Flex model is online, students still learn mainly in their classes. Students in the Flex model get benefit from both learning online and teacher guidance in their classroom (Horn & Staker, 2014).

Higher-Order Thinking- In Bloom's taxonomy, higher-order learning means the top three levels of the taxonomy (analyzing, evaluating, and creating), in contrast to the bottom three: remembering, understanding, and applying. The idea of higher-order thinking skills (HOTS) is common in American education. It contrasts low-order learning outcomes, such as those gained through rote memorization, from critical thinking skills. (<https://www.thoughtco.com/higher-order-thinking-skills-hots-education-3111297>).

I2 Flex Model- I2Flex (isquareFlex), a non-traditional teaching approach that the ACS Athens student body naturally created (Avgerinou et al., 2014). The i2Flex methodology combines face-to-face instruction with student-independent online learning that is supervised and guided by academics.

Learning Flexibility- It means the learning opportunities offered by technology for a learner to learn from any place and at any time, on condition that s/he has a digital device that can be connected to the Internet, such as a mobile phone, laptop, or iPad.

Learning Management System- A learning management system is a piece of software or web-based technology used to organize, carry out, and evaluate a particular learning procedure. It is used for e-learning procedures and, in its most basic form, consists of two components: a server that handles the essential operations and a user interface (UI) that is controlled by teachers, pupils, and administrators.

(<https://www.techtarget.com/searchcio/definition/learning-management-system>).

Online Education- Online education is a form of distance education with computers and the Internet as the delivery mechanism (Allen & Seaman, 2008; Shelton & Saltsman, 2005).

Peer Feedback- is peer-to-peer interaction that enables someone to get helpful feedback on their work. It can aid in mutual learning between the individual getting feedback and the one offering it. It is an excellent technique for students to raise their academic performance (<https://matterapp.com/blog/what-is-peer-feedback>).

Peer- Interaction- Peer interaction can be termed as a forum for sharing of experiences and co-learning in accepting others' viewpoints, which is necessary for both social and knowledge development (Williams, 2007). It leads to social interaction.

Session Backlog- In Bangladesh, the phrase "session-jam" refers to the failure of various public institutions to graduate students on time as a result of protracted closures brought

on by politically driven violence. Students in Bangladesh's public universities may complete their degrees months or years after their countrymen enrolled in private counterparts. http://en.wikipedia.org/wiki/Session_Jam

Teacher Feedback- It is the comments, and suggestions provided by teachers to students during the formative and summative assessments. However, it is recognized as having a formative effect on learning if given on formative assessments. Research on formative assessment has emphasized the importance of feedback being a vital link between teacher assessment and student learning following that assessment (Black & Wiliam, 1998; Sadler, 1998). As a result of feedback's formative effect on learning, students' knowledge and skills are transformed into a more developed stage than they were before the implementation of the particular feedback intervention.

Thematic Analysis- A technique for assessing qualitative data called thematic analysis is reading through a collection of data and searching for patterns in the meaning of the data to identify themes. Making sense of the data is an active reflexive process where the researcher's personal experience is crucial. In qualitative research, thematic analysis is common. It places a strong emphasis on spotting, deciphering, and understanding qualitative data patterns. (<https://www.questionpro.com/blog/thematic-analysis/>).

Virtual Learning Environment (VLE)- The Virtual Learning Environment (VLE), which was first designed for distant learning, is now most frequently used to enhance traditional face-to-face classroom activities, also known as blended learning. In order to

offer the course to students through multimedia and/or web pages, these systems typically run on servers. VLEs are frequently utilized in educational institutions like schools to make learning more interactive. (<https://www.coursera.org/articles/what-is-virtual-learning>).

