

CHAPTER THREE

METHODOLOGY

3.1. Introduction

This chapter is going to give an outline of the methodology. First, it will discuss the research design being used in this study. Next, it will discuss the data collection and analysis procedures to be followed in this study. The context of the study along with the participants and their selection criteria will also be discussed. The map of the proposed course will be outlined. Then the online and face-to-face components that will be used for the conduct of the course will be discussed in this chapter. The procedure through which the course will be conducted will also be explicitly outlined. The data analysis procedures will also be discussed in detail.

The design selected for this study is a case study embedded in the qualitative research method to explore the contribution of blended learning to enhance the employment skills of Bangladeshi university graduates. This study also investigates the experiences of two teachers teaching and fifteen students doing an English Writing Course in blended learning method in the English Department of a university in Bangladesh. This study also aims to investigate whether the blended learning method might be able to meet the enrolment crisis in the universities of Bangladesh.

3.2. What is Qualitative Research?

Qualitative research is used to “understand the meaning that individuals or groups ascribe to a social or human problem” (Creswell, 2013, p. 3). As Lapan et al. (2011) stated, “Qualitative research is an approach that enables researchers to explore in detail social and organizational characteristics and individual behaviors and their meanings. To obtain this information, qualitative researchers depend primarily on face-to-face data collection through observations and in-depth interviews” (p. 70). According to Creswell (2013), qualitative research is applied to know the intricate details and not to depend on existing data and other research.

A qualitative study “involves an interpretive, naturalistic approach to the world” (Creswell & Poth, 2018, p. 7). Qualitative research understands the human meaning of problems in their original setting, establishing themes or patterns to reveal data. The researchers use guided questions leading to semi-structured, open-ended conversations to gather data (Yin, 2018). A qualitative researcher follows her own path of inquiry, remaining neutral while asking questions throughout a study (Yin, 2018). Data analysis identifies significant but common statements and themes to understand the gist of the data. The researcher reveals significant statements through the research and narrates the meaning of the main themes spotted in the data (Creswell & Poth, 2018).

Qualitative methodology is used across disciplines like anthropology, education, nursing, and sociology with the help of a variety of data collection tools such as ‘interviews, participant observation, and documentary analysis (Creswell & Poth, 2018). Being influenced by the interpretivist-constructivist tradition, qualitative researchers maintain that unbiased reality can never be fully understood or identified and that many feasible ways are there to interpret realities. Qualitative researchers give importance on rich descriptions of the phenomenon under analysis and try to show individuals’ experiences through words and interpretations (Creswell & Poth, 2018).

In the past, the investigations of blended learning have used similar methods to what I have used in this study. For example, Alebaikan and Troudi (2010) indicated that their study “was informed by the interpretive paradigm that appears to be the most appropriate to understand and interpret the perceptions of students and instructors towards a new learning environment” (p. 509). Alshahrani and Ward (2014) also relied on qualitative research approaches adopted from an older study to build a new understanding of blended learning. In addition, Graham et al. (2013) used qualitative data collection methods (interviewing) and analysis (drawing themes from responses).

3.2.1. Research Design: Case Study

Grounded theory, case study, narrative inquiry, ethnography, and phenomenology are some research designs of qualitative research (Yin, 2014). A case study is useful when the investigator tries to understand a complex social issue from a holistic standpoint.

Based on Yin's (2014) definition of a case study, this design is appropriate for this study because of the aim of understanding the experiences of the learners with a blended learning course. According to Merriam (2009), a case study is a bounded system of exploration where the determining features establish the criteria of a study. Eisenhardt (2002) defines a case study as "a research strategy which focuses on understanding the dynamics present within single settings." (p. 8).

Yin (2018, p. 2) posited three criteria of a case study: the purpose is to address "how" or "why" questions; the investigator is to have little sway over events, and the concentration of the research is to be on a 'contemporary issue having a real-life context, especially when the demarcation between the issue and context may not be explicitly clear. According to Creswell (2013), in a case study, the researcher investigates a "real-life, contemporary bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple sources of information" (p. 97). There are three main types of case studies in qualitative research (1) explanatory, (2) exploratory, and (3) descriptive (Yin, 2014).

This research uses a qualitative approach especially with a case study design. This is more aligned with an exploratory case study because my objective here is to understand adult learners' experiences with a blended learning course. Neuman (2004) recommended an exploratory study while "creating a preliminary picture of the situation" (p. 15), which concentrates on a small group of people. Both Neuman (2004) and Tsai (2016) say that an exploratory case study method provides the researcher with the scope to generate and promote relevant ideas for the future. As Merriam noted, it is difficult to

quantify a reality that is not a single, fixed phenomenon. Therefore, I used the interpretive qualitative approach to find out the meaning that individuals imposed on their experiences (Creswell, 2007). I gained an in-depth understanding by collecting and interpreting shared stories from all samples selected for the case study (Creswell, 2007). To avoid bias, I chose stories that illuminate and reflect the truth. In this case study, my goal was to discover the meaning originating from the experiences of the participants. Therefore, the emergent and flexible nature of the qualitative method benefitted my study (Merriam, 2009).

The theoretical framework for my study is also in alignment with the research approach I have adopted. CoI is an educational experience which calls for collaborative and constructivist approach to education. CoI denotes an educational experience where learning happens through three 'presences,' teaching, social and cognitive. The collective contribution of three presences makes an effective learning experience where sharing of knowledge, interaction among students and between teachers and students play an important role through providing insightful, in-depth knowledge and information from all participants of the learning community. Similarly, case study method means a way of investigation that tries to give a thorough description of a problem through in-depth data collected from a number of sources (triangulation). Therefore, my research method goes in tune well with the theoretical framework of my study.

In this study, the units of analysis are 15 students and 2 teachers who are instructors of a blended course. A case study is a design where a single case is under inquiry through collecting rich information with the help of a variety of data collection

procedures (Yin, 2014). The approach of collecting data from two or more sources helps to understand different aspects of the phenomenon, which will support the validity of the study. This is called data triangulation when researchers collect data from different sources to understand the phenomenon (Stake, 2010). For this study, I collected data through interviews and other documents.

3.2.2. Location and Context of the Study

This course was offered in parallel with a regular face-to-face writing course in English at the Department of English of a university in Chattogram, Bangladesh. This university was selected for two reasons. One is that, the researcher has access to the university and familiarity with the administrator of the Department, and the two course instructors of the blended course work here. Another reason is that there is no university either public or private in the greater locality where the researcher lives, and as an experiential blended course needed to be designed and offered, I selected this university for the purpose. This Department has 400 students in total at the Undergraduate and Graduate level. The University has six Departments and all have undergraduate programs but two have Master's Program.

Those who were doing the course in blended format needed not do it in the face-to-face mode because there was no way to do any course face-to-face for covid-19 at that time. Permission was taken from the Academic Committee of the Program offering entity for conducting this course in blended method side by side the online method. Moreover, those who had to retake the course for not taking it earlier or have failed the course

before, could do the course. Or even those who wanted to do it in advance, could also take it. That is, it was an open-credit course.

In total 98 students had to do the course in the semester in two sections. Two teachers taught this course online. I communicated with them to discuss the research purpose. I asked them if it would be possible to offer the course in a blended format too. They arranged an online meeting with the students of both the sections where the two instructors and I were present. When I explained the research objective and asked them who were interested to do the course in blended format. 38 students agreed. The two teachers consented to conduct the blended course together in addition to their online courses for the two sections. There was really no option to do this writing course face-to-face because due to Covid-19 related restrictions, all in-person classes were suspended at that time in Bangladesh. 60 students did the course fully online. Only 38 students did the course in the blended format. It is a fact that this blended course carried same weight as the one done by 60 students doing online. It was also a compulsory course, not elective one though done for the experimental purpose. We maintained the Covid-19 related health rules of social distancing, and disinfecting the room and hands of the students frequently. The two teachers conducting the class also had to abide by the health rules of Covid-19. Students came only on Sundays for three months.

3.2.3. Step -by-step Research Procedure

The sequences of the research design have been narrated below followed by a flow chart as a figure numbered as 3.1 for a quick overview.

Design Phase

As there is no blended course operating at the research site, a blended course in English Writing Skills was designed and offered in the research site to record the experiences of the students doing the course and teachers conducting the course. Then the two teachers to be teaching the course were trained in teaching blended courses. Then participants interested to do the course were contacted. Side by side a blog was created to which all students doing the course had access.

Implementation Phase

A three-month-long blended course was conducted with the participants. with 24 hours of online classes and 18 hours of face-to-face classes. The online classes were conducted through the zoom platform. The asynchronous online parts were conducted through Google Classroom, a Learning Management System (LMS). The students who did the course needed to register for the course. 15 of them were interviewed once before the start of the course. The topics of the essays were given in the blog for students to write their essays and the peers and teachers gave feedback. Students were continuously editing their essays based on the feedback from their peers. Students were winding up their essays before the completion of the course.

Data Collection phase

After the completion of the course, although all the students wrote essays in the blog and gave postings on the Google Classroom Discussion Forum, fifteen participants from the students were selected for interviews. Before the in-depth interview, there was

the piloting of the interview with two participants. After that, interviews with two teachers teaching the course were also conducted. The data collected from the participants were recorded; secondly, data analysis from documents such as postings of the students on the Student Discussion Forum of Google Classroom, student diaries, and essays written by those selected fifteen students on the blog was also done. Their essay scores were also checked to assess their progress. The course curriculum and learning activities were also reviewed and critically analyzed.

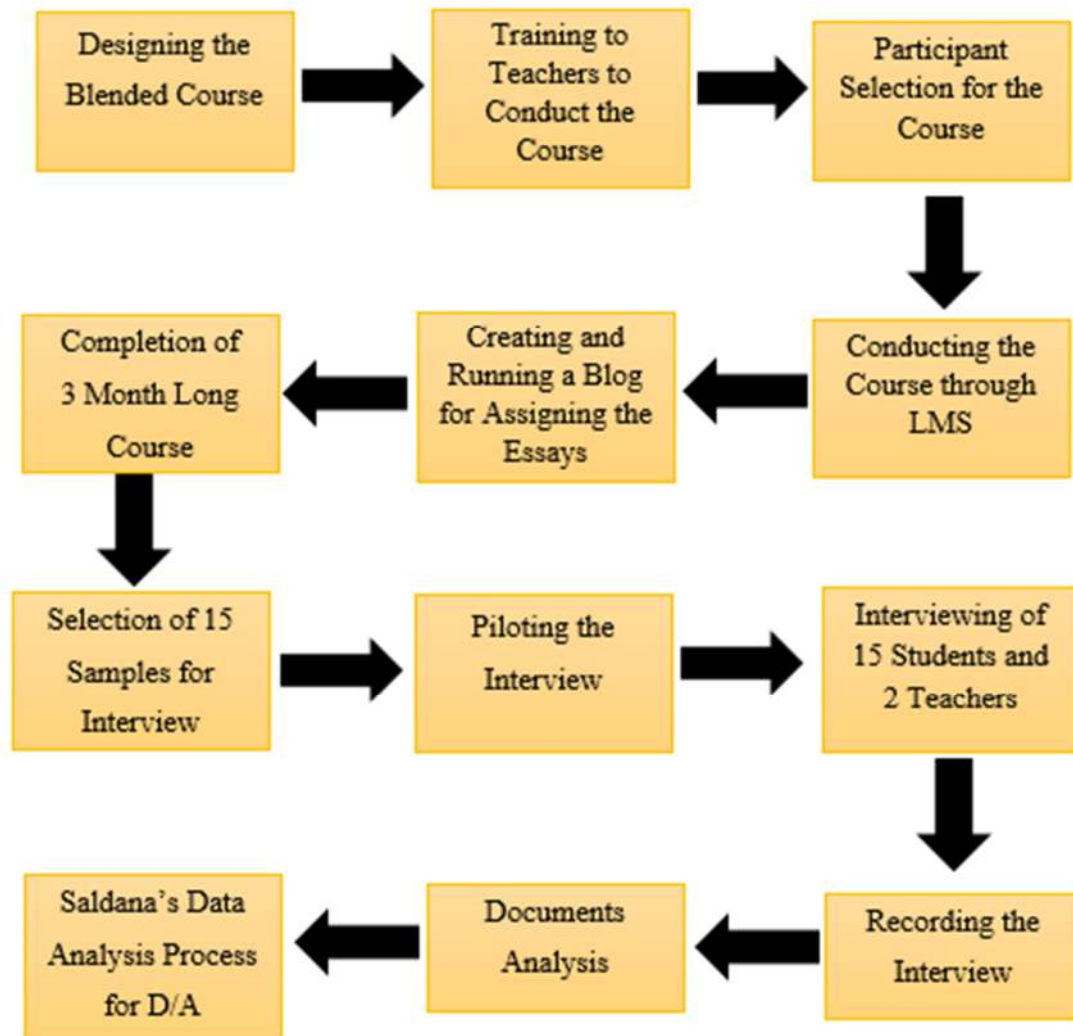


Figure 3.1. Research procedure Flow Chart

3.2.4. Participants in a Qualitative Research

Instead of gathering information from the most conveniently available samples like convenience sampling and quota sampling, purposive sampling targets specific groups who can provide the desired information. Purposive sampling is the means of describing the particular criterion of a group (Merriam, 2009). An advantage of purposive sampling is the researcher's discretion to choose participants based on affinities (Gay et al., 2011). A drawback of purposive sampling is that it might create researcher bias.

There is no hard and fast rule about the number of participants to include in a case study (Fusch & Ness, 2015). Researchers should choose a sample size depending on the chance of reaching data saturation. While conducting a case study design, researchers tend to use small sample sizes (Yin, 2014). The number of respondents for data saturation depends on the homogeneity of the sample as well as the nature of the qualitative design. For more homogeneous sample, fewer cases are needed for data saturation. The more heterogeneous the sample, the more cases are needed for data saturation. The main point is that the importance lies not in the number of participants but on the rich, insightful data from each participant (Yin, 2014). As in my study the samples are more homogenous, fifteen samples from the students are sufficient to reach the saturation level. The two teachers conducting the blended course were from the same Department. These two teachers taught the same course as a shared course to the same batch of students. Primary data were also collected from these two teachers and that helped to ensure the validity of the data and avoid the risk of bias.

3.2.5. The Participants of the Study and Criteria for Participant Selection

The participants of my study were undergraduate students at the Department of English at a university in Bangladesh. The level of my students' English language proficiency is between Lower-intermediate and Intermediate. They got admitted into this university with average Grade Point Average (GPA) of 3:00, i.e., 60 percent marks in English in their Secondary School Certificate Examinations and Higher Secondary Certificate Examinations. They were then in the third semester of the program.

The course aims to develop the students' writing skills to help them improve their language proficiency and prepare them for writing academic essays in a number of subjects they are doing at the university. During the first two semesters, these students have learned how to write one-paragraph essays of several types, such as descriptive, narrative and argumentative, with the focus on teaching things like organization of the topic sentence, supporting examples and conclusions. These two courses were taught in face-to-face mode only. Though neither the University nor the Department had any virtual Learning Management System (LMS) in operation for teaching, the recent Corona Pandemic has familiarized the students with online teaching- learning mode.

3.2.6. Participants

I followed the purposive sampling technique because the samples used to fulfill some criteria. For the pre-course interviews, 15 participants out of 38 were selected. It was ensured that they would attend both the face-to-face and online classes regularly for the course. They are committed to doing the maximum of the blended course to be offered at the campus, not only in online classes offered for the remaining 60 doing the

course full online. They must have sound technological skills in operating LMS and writing in a blog. Moreover, they live 25 -45 kilometers away from the campus. I chose those participants who could provide me with adequate data and fulfilled the requirements to be participants. I ensured that they contributed to all the online and face-to-face activities. Though the blended course was taken by 38 students, participants for interview were 15 from students.

The two teachers conducting the course were interviewed because they had the direct experience of conducting the blended course. The sampling technique here was also purposive. As my study is a case study, interview with teachers without direct experience would not be authentic. These two teachers were pre-interviewed before they conducted the class to ensure that they have motivation to conduct the course, working knowledge of technology to conduct the course and have minimum 3 years of English language teaching experience. One of them was male and 29 years old and another who was female was 30 years old. They had previously taught writing courses following the process approach to writing. They were also provided with a short idea and briefing on integration of technology in education. Most importantly it was verified that they had conducted online classes during the Corona pandemic through any virtual platform like Google Classrooms or Microsoft Teams. They were interviewed after the course to record their experiences with the blended learning mode.

Table-3.1. Demographic Information about Participants

Gender	
Male	8
Female	7
Residence	
City	11
Village	4
Distance from campus	
20-25 kilometer	1
26-30 kilometer	2
31-35 kilometer	3
36-40 kilometer	4
41-45 kilometer	5

Table-3.2. Demographic Information about Instructors

Educational Qualifications	
Teacher-1	Master in English Literature
Teacher-2	Master in English Literature
Experience	
Teacher-1	3 years
Teacher-2	3 years
Workshop attended	
Teacher-1	2 in ELT
Teacher-2	2 in ELT, US Exchange program Alumnae
Publications	
Teacher-1	3
Teacher-2	1
Experience in teaching online/blended	
Teacher-1	1 year
Teacher-2	1 year
Training in online/ended method	
Teacher-1	“Accessibility: Designing and teaching courses for all learners”, hosted by CANVAS
Teacher-2	“Revisiting e-learning: Approaching the Blended Environment”, hosted by SUB and TESOL.BD

3.3. About the Proposed Blended Learning Course

In order to understand participants' experience of blended learning, a twelve-week course on writing titled, English Writing Skills was designed in the blended format following a sample blended English Writing course and the i2flex model of the blended method. It is an existing course delivered face-to-face before but the blended one was implemented with the approval of Academic Committee of the Department. The twelve-week time was selected for the main reason that the intended contents were appropriate to be covered within this time. At the start of each week (on Sundays) a one-and-a-half hour's face-to-face class was held and zoom classes were held on Thursdays of the week at a convenient time mutually agreed upon by the teachers and students. The activities that were scheduled in the course plan were carried in the zoom classes or teachers decided upon the activities for the zoom classes. Though the course stipulates 42 contact hours, actually the feedback from peers and teachers were given throughout the course for three months through asynchronous platforms and blog. This means that over the whole semester, face-to-face instruction was scheduled for 18 hours out of 42 total class hours. The remaining 24 hours were conducted online via Zoom. The ratio of the course was 43% face-to-face and 57% online. Research from the past lends credence to this blending ratio. According to Banyen et al. (2016), blended learning should include 40% of traditional instruction and 60% of online instruction. According to Owston and York (2013), students who were exposed to 36 to 50 percent online blended learning outperformed their peers who only received less than 30 percent online exposure.

A learning management system based on a student blog and Google Classroom was used to run the course. All handouts in Google Classroom had notifications periodically published for the students' constant access. Wix (www.wix.com), a free hosted workspace that enables collaborative editing of pages and files, was used to create the blog. Additionally, this platform is simple to use and access, which is crucial in the context of my research.

During the weekly face-to-face sessions, students read sample essays and discussed materials. Then the students were offered a series of activities and exercises to help them to improve different aspects of writing and the language. During the face-to-face sessions students also did brainstorming and prepared their essay outlines. In addition, depending on the availability of time, the students were asked to work on their own to free-write on the topics of their essays and then discuss what they have written with their peers. Then, this work was continued on the course's Wix-hosted blog (www.wix.com) to which students have access for the whole week from home. The students uploaded their rough drafts or in-progress works to the class blog. The blog was easy to navigate because each of them had his or her own folder. To provide their peers enough time to comment on their work, the students were asked to upload their works to the blog at least one day before the face-to-face session.

In order to motivate them to do it for others, they were typically requested to remark on at least one of their peers' works. Then, using feedback from their teachers and peers, the students updated their initial essay versions. The students were able to go through each stage of the writing process and continuously edit their essay drafts in this

way. It is very easy to create, modify, and edit essay drafts on a blog, which made it possible for comments to be easily shared and for there to be a variety of commenting options, including changing the work and/or adding comments in the thread. After editing continuously through peer feedback and teacher feedback, they could finally submit the completed essays by the deadline of each essay.

The roles and activities of the two teachers were demarcated so that there was no overlapping. The two teachers conducted separate activities which were assigned at the beginning of the course. The two teachers attended the face-to-face classes alternately, i.e., at one week's intervals. And the two teachers also dealt with two separate essays each. The course curriculum was checked and validated by an expert in designing blended course for writing in Bangladesh. It was also cross-checked by an expert who was trained in outcome-based curriculum design by the Accreditation Council of Bangladesh. The course outlines are given below:

Course Title: English Writing Skills

Credit Value-3

Course Type-Core Course

Semester-3rd

Contact Hours-42

Marks-100

Course Eligibility:

Students who have completed the two courses in English writing, i.e., English Writing (Pre-intermediate) and English Writing (Intermediate) are eligible to do the course.

Course Rationales:

This course is for those who are to reinforce the theory and practice of writing as a recursive process and to concentrate on practical writing focusing on principles of styles, correct and effective expression and organization. It will also improve critical thinking skills as they reflect the interdependence of critical thinking and written discourse. It will also encourage students to

deal with both descriptive and analytical writing and teach them how to write academic paragraphs and essays.

Course Learning Outcomes (CLOs):

Upon successful completion of this course, students will be able to-

1. Apply the six fundamentals of effective writing (focus and coherence, organization and structure, development of ideas, voice, word choice, and conventions).
2. Exhibit various invention practices: brainstorming, free writing.
3. Write in multiple modes: personal narrative, expository, analytical, descriptive, argumentative.
4. Practice the phases of writing: draft, revision, final copy.
5. Explore sources of paper: reading, thinking, analyzing, discussion.

Table--3.3. Mapping the CLOs with the PLOs

Course Learning Outcomes	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PL O 6	PL O7	PL O8	PL O9	PLO 10	PL O 11	PL O 12
CLO1	-	-	3	3	2	-	-	-	-	-	-	-
CLO2	-	-	3	3	2	-	-	-	3	-	-	-
CLO3	-	-	3	3	2	-	-	-	2	-	-	-
CLO4	-	-	3	3	2	-	-	-	2	-	-	-
CLO5	-	-	3	3	2	-	-	-	1	-	-	-

1= Low Correlation

2= Medium Correlation

3= High Correlation

Assessment Strategies:

Assessment Strategy: Formative and Summative

Marks Distribution: Formative assessment-20, Summative assessment- 80

Table-3.4. Assessment Procedure:

Bloom's Category	Presentations (10)	Test & Quizzes (10)	Final Exam (80)	Total (100)
Remember		05		5
Understand	05	05		10
Apply	05		5	10

Bloom's Category	Presentations (10)	Test & Quizzes (10)	Final Exam (80)	Total (100)
Analyze			20	20
Evaluate			20	20
Create			35	35

Table-3.5. English Writing Skills Course Outline in Blended Format

Course Title-English Writing Skills Activities Practice brainstorming, free-writing, sentence construction (in the context of short writing assignments), and error correction. paragraph construction, the organization of ideas, general essays, planning, writing, and revising essays, and experiencing writing and reading as a multi-step process, the process of peer-to-peer editing. Discussion: Generating Ideas, Collaborative Work in Groups: Planning, Developing effective arguments, the expository, compare and contrast essay. Texts- Advanced Writing Skills-John Arnold & J. Harmer. 2. Writing Skills in Twenty Minutes-Judith F. Oslon 3. From Paragraph to Essay- Mourice Imhoop and Herman Hudson 4. Online resources Media

1. Google Classroom 2. Blog hosted by Wix 3. Technological Requirements- 4. A well-equipped multimedia classroom with wifi connection, a good sound system and computer for each student. Teachers used a laptop/ desktop with internet connectivity. 38 students need to have a laptop, desktop/ smartphone at home with internet connectivity for doing the online classes.
Week-1. Teacher-1. Time-1:30 hours in-class/ Online (zoom)-2 hours or more Activity: Reading and Discussion Modality: On line / In class Activity: Introducing sample compare/contrast essay and discussion on that essay. Introducing students to Google Classroom. Bloom's Level: Analyze / evaluate Pedagogical Role: Choose short essays and explain compare/contrast devices. Assign the 1st essay-Backpacking versus staying in hotel. Deadline-week-5. Social Role: Encourage communication Technical Role: Upload sample compare and contrast essays in the Google Classroom and ask students to read them
Week-2. Teacher-2. Time-1:30 hours in-class. Online (zoom)-2 hours or more Modality: On line / In class Activity: In class-Reading and Discussion, Introducing sample compare/contrast

essay and discussion on that essay.

Bloom's Level: Analyze / evaluate

Pedagogical Role: Choose short essays and explain expository devices. Assign the second essay College versus University: Style of studies. Deadline-week-6.

Social Role: Encourage communication

Technical Role: Upload sample compare/contrast essays in the Google classroom and ask students to read them. Introducing students to the Blog.

Week-3. Teacher-1. Time-1:30 hours in-class/ Online (zoom) 2 hours or more

Modality: On line /In class

Activity: In class-Topic of the 1st compare and contrast essay will be discussed.

Brainstorming and Discussion with teachers and among students.

Online: students will start writing the first essay on the blog

Bloom's Level: Analyze / Create

Pedagogical Role: Understand narrative devices, create

Social Role: Encourage communication and collaboration

Technical Role: Facebook Group created for the students

Week-4. Teacher-2. Time-1:30 hours in-class/ Online(zoom) -2 hours or more

Modality: On line /In class

Activity: In class- Topic of the 1st compare/contrast essay will be discussed.

Brainstorming and Discussion with teachers and among students. Introducing students to the blog.

Online: students will start writing the first essay on the blog. Teacher will create a work-sheets with common student errors made in the first essay and post it on the blog.

Bloom's Level: Analyze / evaluate

Pedagogical Role: Understand argumentative devices, create

Social Role: Encourage for communication and collaboration

Week-5. Teacher-1. Time-1:30 hours in-class/ Online(zoom) -2 hours or more

Modality: On line /In class

Activity: In class-Teacher feedback on the first compare / contrast essay.

Online: students will peer-edit on the first essay on the blog. Teacher will create a work-sheets with common student errors made in the first essay and post it on the blog.

Bloom's Level: Analyze / Create/

Pedagogical Role: Understand compare/contrast devices, Create, Give feedback

Social Role: Encourage communication and collaboration

Final Submission of essays – 1 in the blog

Week-6. Teacher-2. Time-1:30 hours in-class/ Online –(zoom)2 hours or more

Modality: On line /In class

Activity: In class-Teacher feedback on the second compar/contrast essay. Teacher will create a work-sheets with common student errors made in the first essay

Online: students will peer-edit on the first essay on the blog Bloom's Level: Analyze / Create Pedagogical Role: Understand argumentative devices, create Social Role: Encourage communication and collaboration Final Submission of essays – 2 in the blog
Week-7. Teacher-1. Time-1:30 hours in-class/ Online (zoom)-2 hours or more Modality: On line /In class Activity: In class- Teacher introduces problem/solution essays Online: students will discuss the problem/solution essay. Bloom's Level: Analyze / evaluate Pedagogical Role: Understand/ discuss/compare/contrast devices, Create, Give feedback. Announcing the score of essay-1. Assign the essay topic- Professionals leaving our country- causes and solution. Deadline-week-11 Social Role: Encourage communication and collaboration Technical Role: Upload sample problem/solution essays in the Google classroom and ask students to read them, Asking students to engage in the collaborative online media.
Week-8. Teacher-2. Time-1:30 hours in-class/ Online(zoom) -2 hours or more Modality: On line /In class Activity: In class- Teacher introduces sample comparative essays on literary characters Online: Teacher introduces sample comparative essays on literary characters

Bloom's Level: Analyze / evaluate Pedagogical Role: Understand argumentative devices, create Announcing the scores of essay-2. Assign essay -4 . Comparative analysis of Sara and Arya in the Play Game of Thrones. Deadline week-12. Social Role: Encourage communication and collaboration Technical Role: Upload sample compare /contrast essays on literary characters in the Google classroom and ask students to read them, Introducing students to the collaborative online media
Week-9. Teacher-1. Time-1:30 hours in-class/ Online(zoom) -2 hours or more Modality: On line /In class Activity: In class- Teacher discusses and peer-edit the problem/solution essay. Online: Students will start writing the problem/solution essay and discuss and peer-edit. Bloom's Level: Analyze / Create Pedagogical Role: Understand compare/contrast devices, Create, Give feedback Social Role: Encourage communication and collaboration Technical Role: Asking students to engage in the collaborative online media.
Week-10. Teacher-2. Time-1:30 hours in-class/ Online (zoom)-2 hours or more Modality: On line /In class Activity: In class- Teacher feedback on the 2nd compare/contrast essay Online: students will start writing and peer-edit on the 2nd compare/contrast essay

on the blog

Bloom's Level: Analyze / evaluate/ Create

Pedagogical Role: Understand argumentative devices, create

Social Role: Encourage for communication and collaboration

Week-11. Teacher-1. Time-1:30 hours in-class/ Online(zoom) -2 hours or more

Modality: On line /In class

Activity: In class- **Teacher feedback on the problem/solution essay. Teacher will ask students to bring the 2nd essay to a good finish in the blog.**

Online: students will peer-edit on the 3rd essay on the blog

Bloom's Level: Analyze / Create/

Pedagogical Role: Understand compare/contrast devices, Create, Give feedback

Social Role: Encourage for communication and collaboration

Technical Role: Asking students to engage in the collaborative online media

Final Submission of essay-3

Week-12. Teacher-2. Time-1:30 hours in-class/ Online(zoom) -2 hours or more

Modality: On line /In class

Activity: In class-**Teacher feedback on the 4th essay. Teacher will ask students to bring the 4th essay to a good finish on the blog**

Online: students will peer-edit on the 4th essay on the blog

Bloom's Level: Analyze / evaluate/ Create

Pedagogical Role: Understand argumentative devices, create

Social Role: Encourage communication and collaboration

Final Submission of essay -4

3.4. Assessment

Each student had to submit four essays in total, i.e., two essays to each teacher, two compare/contrast essays, one problem/solution essay and another comparative study essay of literary characters from English fiction after improvement having been done from the feedback given both by the teachers and peers. The two teachers were keeping the track record of student essays in the blog. As told earlier, 38 students did the course in blended method. So, it was easy for these two teachers to check the review thread of the blog to confirm that students were giving feedback and doing corrections accordingly. They were to follow more strictly the essays of those 15 participants whose essays were reviewed for data input and analysis. The two instructors processed the record of student submissions and peer feedback on attendance sheets register.

There were no pen and paper examinations for the 38 students who registered for the blended course. Neither was there any onsite examinations for those 60 students who did the course full online because in-person examination was not held at that time due the Covid-19 related restrictions on physical education. These four essays were graded and counted for the complete results of the course. Each essay was scored at 20 marks. Thus, the marks of 4 essays accumulated to 80. I had to follow the assessment criteria of marks distribution rules of the University and Department. The system of assessment in the Program focuses on summative written examination where 80 marks are allotted to the

summative assessments. However, a test rubric which was given to students at the beginning of the course was followed in assessing these essays. The marks of these 38 students were recorded in the Integrated Marks Management System (IUMS) of the University like the marks of 60 students who did the course online.

Table-3:6. Test Rubrics

ESSAY RUBRIC

Use: This rubric is intended for grading an assigned essay in 700-800 word limits.

ASSIGNED ESSAY RUBRIC Use: This rubric is intended for grading an assigned essay with three writing prompts and a 700-800 word limit.				
Category	(Marks-16-20)	(11-15)	(6-10)	(0-5)
A. Response to Essay Question Writing Prompts (content)	The written response addresses all essay question writing prompts clearly and directly.	Written response addresses at least 2 of 3 essay writing prompts clearly and directly.	Response to writing prompts is unclear or vague and/or addresses only one writing prompt in a clear, direct manner.	The response lacks any comprehension of the essay question or appears to address a different essay question. <i>No essay response provided.</i>
B. Quality and Clarity of Thought (content)	The response indicates depth and complexity of thought in answering the essay question.	The response indicates simplistic or repetitive thoughts in answering the essay question.	The response lacks focus or demonstrates confused or conflicting thinking.	The response is unfocused, illogical or incoherent. <i>No essay response was provided.</i>

ASSIGNED ESSAY RUBRIC Use: This rubric is intended for grading an assigned essay with three writing prompts and a 700-800 word limit.				
Category	Category	Category	Category	Category
C. Organization & Development of Ideas (writing)	The response is well organized and developed with appropriate support to make meaning clear (well-chosen examples).	The response is organized and developed with general supporting ideas provided (reasons/general examples).	The response is fairly organized and developed, presenting generalizations without adequate support.	The response is disorganized and underdeveloped, providing little or no relevant support. <i>No essay response was provided.</i>
D. Grammar, Usage, and Mechanics (writing)	The response is free from any errors in grammar, usage, and mechanics.	The response has 3 or fewer errors in grammar, usage, and mechanics.	The response has 4-5 errors in grammar, usage, and mechanics.	The response has 6 or more errors in grammar, usage, and mechanics. <i>No essay response provided.</i>

3.5. Research Mapping

The research objectives, research questions, data collection tools and data analysis tools need to be aligned for it helps to direct the researchers and readers of the study to a planned and well-organized goal. Hence, an alignment of these things has been designed for this study too to have a quick overview of the mapping of the study. It is as follows-

Table-3.7. Research Map/Alignment

Research Objectives	Research Questions	Data Collection Tools	Data Analysis Procedure
Investigate the effectiveness of using the blended learning approach in the 21st century	How much effective is blended learning in the 21 st century ?	Interview Blog, diary and online posts	Content Analysis Thematic Analysis
Investigate the experiences of teachers and students in using blended learning for an English Writing Course.	How do teachers and students experience the use of blended learning for an English Writing Course at undergraduate level?	Interview Document i.e. syllabus, essay scores, blog and online posts	Content Analysis Thematic Analysis
Find out the prospects of blended learning to increase educational opportunities in Bangladesh.	How can blended learning increase tertiary learning opportunities among Bangladeshi students?	Interview Document Diary, blog and online posts	Content Analysis Thematic Analysis

3.6. Data Collection Tools

The research instruments are (i) Interview protocol (ii) Document analysis (syllabus, course curriculum, learning activities) and (iii) journal writing (student diaries, essays in Blog, online posts). For this case study, I used two instruments. Primary data sources include interview protocol collected from the Blended Learning Toolkit (2011) with some customization. The interview tool for students (Appendix-A and Appendix-B) and the interview tool for teachers (Appendix-C) were used. An interview tool

(Appendix-A) was used before the start of the course and another interview (Appendix-B) was conducted after the completion of the course to compare the experiences of the students before and after the blended course. The pre-course interview was conducted with 15 out of 38 students who would be doing the blended course. The post-course interview was conducted with the same 15 participants so that their opinions can be compared and data validation can be ensured. The second type of data source includes documents. They are Facebook and Google Classroom postings, journal entries, syllabus and course objectives, outcomes and contents, essay scores of those 15 participants who gave interviews.

3.6.1. In-Depth Interviews

I conducted interviews with students at two stages, once before the conduct of the blended course and another after the completion of the course. The pre-course interview took 21 days to complete and the post-course interviews took approximately five weeks to complete. In the latter interview, the students had the opportunity to compare their experiences. It is important for the researcher to compare the experiences of the samples with the blended mode before and after the interview. However, before the latter interview, the interview was piloted among two samples. Besides giving importance to the interview questions, the pilot study helped the researcher to understand how long the interview would last, whether the interviews would flow naturally, logically and coherently, and whether there was any need for a change of questions. It also gives the researchers idea about the type of data that will be retrieved from the questions. The piloting of the interview ensures face validity for the interview questions.

I tried to select a time and locations that were suitable for each participant. Interviews with students and teachers were held face-to-face. However, as such arrangements were not always possible; interviews with 3 students were conducted through the online meeting applications Zoom. Face-to-face interviews were recorded on a digital audio recorder. Online interviews were recorded through zoom record option. Moustakas (1994) prefers small talk as appropriate because it allows participants to give a more relaxed and comfortable feel. By following Moustakas's recommendations for the interview guide, I was able to maximize the benefit of the limited time available for the interviews by eliciting valuable information needed for the study. Questions were open-ended, so that samples could share their experiences and perceptions of having education through blended learning in the context of Bangladeshi universities in an unrestricted way.

These participants were sent a formal invitation to participate in the study voluntarily. The one-to-one interview was the method of data collection. Participant identifiers are participant -1 to participant- 15 for student-1 through student-15 rather than using the names of the participants. The two teachers teaching the blended course were identified as T-1 and T-2. The recording of the interviews was done with the permission of the participants, and the interviews lasted for at least 30 minutes. The pre-course interview did not last longer than 10-12 minutes. The researcher transcribed the data independently after the interview sessions and removed the names and any other confidential information to enforce the confidentiality agreement with the participants during the data collection process. The interviews were in English, except one. The transcriptions excluded irrelevant data that did not describe the experiences or had

repetitions of words (Patton, 2002). All the participants received a copy of the final transcription to confirm the information they gave and provided approval.

The main data source consists of semi-structured interviews. The questions of the pre-course interview were designed by me on the basis of literature review. The post-course interviews questions had a replication of questions from the Blended Learning Toolkit (2011) survey tools which are given as appendices in this study. In April 2011, the University of Central Florida (UCF) developed the Blended Learning Toolkit, a comprehensive resource for individuals and institutions to draw upon to develop and deploy blended learning initiatives. This toolkit contains resources, models for blended learning as well as tools and sample survey tools for data collection on blended learning. I transformed the survey tool questions to interview questions keeping the themes intact. The question number 9, 10, 11 and 13 in the post-course interview protocol for students and the question number 8, 10, 11 and 12 of faculty interview protocol were contextualized by me. The open-ended interview questions allowed the researcher to inquire into the participants responses in more detail (Knox & Burkard, 2009). In this study, interviews were useful tools to know about the feelings and opinions of the participants. According to Qu and Dumay (2011), conducting an open-ended session in a planned way permits the researchers to bring out responses that are more elaborate. In accordance with (Yin, 2014), it is important to keep the interview session short. Therefore, in this study, the pre-course interview was 10-12 minutes and the post-course interviews lasted between 30 and 40 minutes. During the interviews, participants had the opportunity to reflect on their experiences (Gay et al., 2011).

The students' pre-course interview includes 8 open-ended questions about points like experiences with online education, the advantages and the disadvantages of recent online education they have done during the pandemic in Bangladesh, the advantages and the disadvantages of face-to-face education, their perceptions about blended education, intention to participate in a blended course at the University, the reasons for participating etc. The post-course interview had 16 open-ended questions. The questions were about issues such as what aspects of blended learning did they like most as well as least, their feeling about the technical component of the blended course, the scope of opportunities to interact with others in a blended course, benefits/ harms blended learning can yield to the higher education of Bangladesh, the scope of blended course to solve the seat crisis and other nagging problems of higher education in Bangladesh, the usefulness of blended learning in enhancing employment skills of university students, their level of satisfaction with the blended course in English Composition, their suggestion to a student intending to do blended courses, and expectations from their teachers in a blended course.

The teachers' interview protocol contained 12 open-ended questions in total all of which were based on literature review of blended learning. It also contained some demographic questions. The open-ended questions were about any additional support, technology, or training they felt, could help them in blended courses, the differences in assessment of student achievement in a blended course and face-to-face assessment, between assessment of student achievement in blended classes and recent online assessment during Covid-19 pandemic, the most positive and the least positive aspects of teaching a course using the blended method, their advice to a faculty member who is considering teaching a blended course for the first time, the prospects of blended course

in solving the accommodation crisis and other nagging problems of higher education in Bangladesh, the contribution of blended learning to the higher education of Bangladesh, the usefulness of blended learning in enhancing employment skills of Bangladeshi university students.

The interviews provided the majority of the qualitative data that were used for analysis in this study. Once all interviews had been completed, transcription work began. The accuracy of the transcriptions was checked by listening to the audio recordings numerous times. For every 10 minutes of the audio-recorded first interview, it took me one hour on average to transcribe the raw data. A twenty-thirty minute interview took me approximately four hours to transcribe the data.

3.6.2 Artifacts/ Documents

Documents (Posts in Discussion Board of Google Classroom, Face book, Student diaries)

I also relied on some other sources for data, i.e., artifacts or documents related to the blended course for data. They are-(i) interviews, (ii) documents (the course syllabus, course learning objectives and assignments, learning activities), (iii) Journal writing, (iv) four essays, (v) blog. The students and teachers gave postings in the Discussion Forum of the Google Classroom created for the course. There they were discussing their opinions about the course. The Facebook group that was created for communication among students and teachers was also used for the data. The FB posts of teachers and students were analyzed for thematic purposes. In addition to that, students were asked to reflect on their learning experiences every week in personal journals because they might help to

keep record of the feelings in an organized way. Though a lot of posts from the Google Classroom and Face book Group could be used as data, I could not have adequate data from the student diaries. Students were reluctant to write the dairies in their spare time. Only three students wrote in their diaries and 4 quotes from these journals could be used as data in this study.

The course curriculum has stipulated such objectives and outcomes as would promote the higher-order thinking skills of learners, such as analyzing, evaluating and creating according to the revised Taxonomy of Blooms through brainstorming, generating ideas, self-exploration, self-evaluation of materials by students and finally writing the essays on their own without remembering and copying. The activities done by students both online and face-to-face also promoted higher order thinking skills of students. The roles that the teachers and students of the blended course play are enough to encourage creative, collaborative and constructivist educational experiences.

3.6.3. Data Management and Storage

Following each interview, recordings were saved in my computer and then labeled in the following way: Participant-Letter, Date (e.g., Participant-A, source of data, Dec,7. 2020). One copy of each digital audio file was stored on an external hard drive that was kept in a safe place. After all the interviews were transcribed, these text files were also labeled and stored in the same way as the audio files were kept. I removed all identification marks from the transcripts and recordings, thus “maintaining the

confidentiality of the names of the participants” (Seidman, 2013). These same storage procedures were followed for all other digital and hard copy materials such as online forum chats, while the hard copy materials were the interview guides, informed consent agreements and so on related to this study.

3.6.4. Data Analysis Procedure

The purpose of this qualitative case study is to explore how adult learners feel and experience blended method for an English Writing Course at a university. The qualitative research may have a large amount of data. So, the analysis of the data should be iterative and usually begins during the collection process (Merriam, 2009). I used thematic analysis for reviewing the data collected from the one-on-one interviews. Thematic Analysis is a scientific process used in data analysis to investigate understanding of a complex phenomenon (Alhojailan, 2012).

Data analysis in qualitative research is rigorous because generally there is a lot of data to be analyzed at different stages of analysis. Moreover, data analysis is different from one qualitative design to another. Generally qualitative researchers start the first steps of data analysis when they collect the data rather than waiting till the collection of all data. This makes the data analysis easier and also helps them to know the time of data saturation.

In a qualitative case study, the data analysis is iterative and starts with the first access to the data and the review of the data to interpret the information (Gay et al., 2011). As a result, the researcher begins the analysis with the return of the first interview

protocol. A rich description of the experiences of the students, in addition to their expectations and problems regarding the blended method was expected to emerge. So, the analysis of data for this research study began with the technique of data reduction. Data reduction means the process of choosing, streamlining, and transforming the data from multiple sources: student questionnaires, teacher questionnaires, and document reviews (Gay et al., 2011).

I followed a combination of data analysis suggested by both Saldana (2015) and Clarke & Braun (2013) for both data from interviews and other documents. I thoroughly reviewed the data three times to support the accuracy of the information. I managed the sets of data by reading the data and highlighting the text. Open coding was done to condense the raw data into discrete parts and to determine similarities and differences (Saldana, 2015). I ascertained the open codes during this first data review. Saldana (2015) suggested that after assigning the initial codes, it is necessary to go through the data for a second time. During axial coding, I re-read the data to identify and cross out any redundant codes. I did the second coding to have solid information to develop themes or concepts. After organizing the data, I categorized the data based on the relationship between the codes and code frequencies to generate themes. These themes were presented as a summary of the findings. Clarke & Braun (2013) suggested the following procedure for qualitative data analysis.

- Examining Themes: I looked at how the coded data set related to the themes and the research question. Before coming up with the final list of themes, this was done iteratively to make sure each theme was significant.

- Naming and Determining Themes:
- Writing up: I wrote a report to tell the story of the analysis.

Table 3.8 shows the data analysis procedure in a simplified way through a flow chart.

Table-3.8. Data Analysis Procedure Flow Chart

Data Analysis Procedure in flow chart
Step-1. Open coding- Read 1 st time, highlighted the texts, wrote notes on the margin and gave data codes.
Step-2. Axial Coding- Read 2 nd time to refine original codes and leave out redundant data and create themes.
Step-3. Read 3 rd time to create overarching themes and subthemes by looking at the relationship and frequencies of patterns.
Step-4. Named themes and subthemes and took subthemes under main themes.
Step-5. Aligned themes and subthemes under three research questions.
Step-6. Then summarized the findings under each theme and subthemes as the conclusion

Three themes arose as a result of thematic analysis, reduction of the data, investigation of the data, and integration of the data that was studied (Saldana, 2015). The sub themes were categorized under the main themes according to the three research questions of this study. The main themes were revealed by strategically fusing and combining the codes. Three themes emerged from the coded data:

- Effectiveness of blended learning,
- Technology facilitates the learning process, and

(c) Scope of blended learning to create opportunities for education in Bangladeshi universities.

In the results section, I emphasized the three themes in connection with the study's research questions. The conversions of the codes into themes are shown below in Table 3.9. Table 3.9 shows the number of final codes or sub-themes under each main theme from the post-course interviews and other documents such as posts in Facebook, Google classroom diaries. The theme and subthemes were chosen on the basis of both preponderance of data and whether they fit well at all with the three research questions.

Table-3.9: Codes and Themes

Themes	• Codes
Effectiveness of blended learning in enhancing 21 st century graduate skills	• Teacher feedback • Peer feedback • Interaction • Self-paced learning • Student satisfaction • Learning new techniques of writing • Development of employment skill and • Higher order learning • Quality of Education and Assessment
Technology facilitates the acquisition of English writing skill of tertiary students	• Development of Technological Skill • Ease of using technology • Contribution of technology to writing skill development • Constraints in Implanting blended learning • Cost of device and internet • Internet Problem • Institutional support • Physical and Mental Stress
Impact of blended learning to increase opportunities of tertiary education for Bangladeshi students	• Reduction of session jam • Less Tuition fees • Cost-saving • Women education • Job and education • Admission in tertiary education • Flexibility

3.7. Ethical Issues of the Research

To ensure the reliability and trustworthiness of data collection and data analysis procedure in qualitative research, the following factors should be ensured. They are validity, confidentiality, ethical protection of participants and the trustworthiness of the research procedure. To ensure these critical factors for this study, the following ethical issues were followed and ensured.

Validity

For the validity of data, I have done data triangulation. I have collected data from interviews, posts from Google classroom, Facebook, diaries. I have also checked essay score of the participants. For data validation, I have done member-checking and theme validation, I have checked the themes with the two course instructors.

Confidentiality

Cooper and Schindler (2003) suggest that confidentiality be ensured through hiding the identities of the participants. The research participants provided written permissions to record the interviews, but no names or any information leading to the participants' identities would appear anywhere in this study. A computer storage device stores the consent forms, audio recordings, and transcripts of this study. The information will only be available to the researcher for a minimum of 3 years after the completion of the study.

Ethical Protection of Participants

All study participants had the right to privacy, as well as the assurance that there would be no potential conflicts of interest in the study's conduct and that there would be no obvious risks to their physical health, psychological health, financial condition, or professional lift from taking part in the study (Cooper & Schindler, 2003). Even if they were in the middle of the interview, my participants were free to leave the study if they felt it was too sensitive or personal. I ensured them that their identities would remain confidential and got the participants read the consent forms before signing them.

Trustworthiness

Peer review and debriefing is the first method to boost the discovery's credibility (Creswell & Miller, 2000). The goal is to get a second opinion from a colleague who is knowledgeable about the subject of the study and who can "question the investigator's assumptions" (Shenton, 2004, p. 67). The study's credibility can be increased by using the debriefing sessions' feedback to support it (Shenton, 2004). I talked about the steps involved in the data analysis process with my two co-workers who took part as course instructors and responders. Another way to ensure credibility is the prolonged engagement with the research. Data from students and teachers were cross-referenced. Direct quotations were also given. I also described the methodological process, data collection and analysis procedure in detail.

3.8. Conclusion

This chapter first gave an outline of the methodology in detail. First, it discussed the research design being used in this study, including the data collection tools, participants, sampling techniques and analysis procedures, the context of the study along with the participants and their selection criteria. The experimental blended course was discussed in detail. The data analysis procedures were also discussed in detail.

In the next chapter, the findings will be described. Then the data collected from different sources and through different tools will be reported as texts or stories. The interviews held at two different phases of the study, i.e., one before the conduct of the course and another after the course yielded different results. The results will be presented as themes and subthemes. Then the findings of this study will be compared with the previous research to see how much they conform or not with them.