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Perceptions of International Students in Poland Regarding Flipped Classrooms

Mustafa Alper Sarli
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Mustafa Alper Sarli

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Walden University
2019

Abstract

Perceptions of International Students in Poland Regarding Flipped Classrooms

by

Mustafa Alper Sarli

MEd, University of Cincinnati, 2012

BS, Bogazici University, 2002

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Education

Walden University

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Abstract

Many international higher education students do not study in their native languages. Unlike their peers who would only worry about the content of the course, they also struggle with the difficulties of the language of instruction. Flipped classrooms, providing students with the learning materials prior to the class, may assist in alleviating the academic burden and the language challenge the international students are experiencing. The purpose of this study was to gain insight into how flipped classrooms may help international students with course engagement and their adaptation processes. The conceptual framework was Keller's personalized system of instruction. The research questions in this basic qualitative study focused on understanding the experiences of international students with the flipped classroom. Semi-structured interviews were conducted with 12 international higher education students currently studying at a Polish university in a flipped classroom format. Data from the interviews were coded, and the following themes emerged during the analysis: international experience, flipped versus traditional, flipped classroom experience, and engagement in flipped classes. Results indicated a high approval rate of flipped classrooms among international students, and the PowerPoint presentations were the most preferred learning material during self-study. Hence, faculty members at Polish universities should consider the flipped classroom model to improve the learning experience for international students. Polish universities would benefit from an international student population and allowing them to overcome the initial language barriers and being successful will allow Poland access to potential employees with a global perspective.

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Dedication

I want to dedicate this work to my father, Mahmut Sarli. Without his example and constant encouragement, I would not be able to conclude my dissertation. He had his Ph.D. at around the same age as mine. His support, motivation, and continuous checks regarding how I was doing with the Ph.D. were some of the factors that helped me write my dissertation and finish it on time.

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Chapter 1: Introduction to the Study

Introduction

As technology advances, educators and educational institutions are seeking to uncover how technological innovations may enhance the way they teach in the classroom (Bulman & Fairlie, 2016). The surge in the number of home computers with internet connections prompted educators to turn this improvement into an advantage by incorporating teaching methods such as flipped learning method. Flipped learning method presumes to expose the learners to the new material outside of the class and to cover the first two basic levels of Bloom's Taxonomy at home before the actual classroom learning takes place (Zainuddin, 2017). In this study, the terms *flipped learning* (Hughes, Hall, Pozzi, Howard, & Jaquet, 2016), *flipped learning method* (Karabulut-Ilgu, Jaramillo Cherez & Jahren, 2018), *flipped method* (McCollum, Fleming, Plotnikoff, & Skagen, 2017), and *flipped classroom* (Lin et al., 2017) are used interchangeably.

Although certain aspects of the flipped learning method have been questioned by Hao (2016), Heuett (2017), and Lo, Hew, and Chen (2017), the consensus has been that students are more satisfied in flipped classrooms than in the traditional setting (Deri, Mills, & McGregor, 2018; Hughes et al., 2016; McCarthy, 2016; Lin et al., 2017; Roehling, Luna, Richie, & Shaughnessy, 2017; Shinaberger, 2017; Zainuddin & Attaran, 2016). The need for hardware and training as well as the initial workload to adapt classes to the flipped format are viewed as the drawbacks of the flipped approach (Heuett, 2017; Lo et al., 2017; Yildirim, 2017). On the other hand, the flipped learning method,

redirecting the attention from the teacher to the learner and learning, boosts knowledge retention (Heuett, 2017; Yildirim, 2017), enhances academic performance (Ihm, Choi, & Roh, 2017; Lo & Hew, 2017; Shinaberger, 2017; Yildirim, 2017), increases course satisfaction (Gross, Marinari, Hoffman, DeSimone, & Burke, 2015; Ihm et al., 2017; Swart & Wuensch, 2016), and offers opportunities for differentiation (Heuett, 2017; Roehling et al., 2017; Shinaberger, 2017; Yildirim, 2017).

Hughes et al. (2016), McCarthy (2016), Lin et al. (2017), and Zainuddin and Attaran (2016) demonstrated that the benefits of the flipped learning method apply to international students as well. In these studies, the most cited benefit of the flipped learning method to international students is the availability of the learning material before the class. As far as international students' perceptions of the flipped learning method in Poland is concerned, there is no research. The current study extended the previous research on the perceptions of international students towards the flipped learning method by analyzing the experiences of international students studying in Poland in English. Understanding international students' perceptions of this innovative method will allow decision makers to make data-driven conclusions regarding the adoption of the flipped learning method. Instructors will use it to enhance their teaching practices, international students will have better academic experiences abroad, and failure rates will drop eventually.

In this chapter, the introduction will be followed by the background, problem statement, purpose of the study, research questions, conceptual framework, nature of the study, definitions, assumptions, delimitations, limitations, and significance of the study

followed by the summary of Chapter 1. The background will summarize the key literature and pivoting ideas that will be utilized throughout the study.

Background

Flipped learning, a method that reverses the learning process (Hao, 2016) by having students study the learning materials before coming to the class, is evidently not new (Gross et al., 2015). According to Gross et al. (2015), early in the 19th century, a general at West Point had given his engineering students a set of materials so that they could master the core content of the lesson before coming to class. His idea was to maximize the class time that can be dedicated to group activities and critical thinking.

In 2007, two Chemistry teachers in a Colorado high school started implementing their Chemistry and Advanced Placement Chemistry courses in the flipped format (Bergmann & Sams, 2012). The idea had stemmed from the needs of the students. The school, being in a rural area, did not have many schools around and students were missing a considerable amount of school hours due to their travel between schools for events and sports activities. The idea first started when they offered their pre-recorded lectures to students who missed classes. Later, the clientele had evolved and started including students who were already in class and wanted to rewatch the recorded videos, students who would use them as a review before the exams, and in time, teachers from all over the country.

Current literature gives valuable insight into the problems of international students in their host countries (Baklashova & Kazakov, 2016; Gautam, Lowery, Mays & Durant, 2016; Haugh, 2016; Straker, 2016) and whether the flipped learning method can

offer solutions to their issues (Hughes et al., 2016; Lin et al., 2017; McCarthy, 2016; Zainuddin & Attaran, 2016). Researchers have indicated that the language barrier is the most prevalent issue among nonnative students when they study abroad (Baklashova & Kazakov, 2016; Gautam et al., 2016; Güven & Bahar-Güner, 2016). Studies by Haugh (2016) and Straker (2016) are also useful in establishing a background for the current study as they focus on the language related difficulties encountered by the international students as well as the negative perceptions of the other stakeholders regarding international students' inadequacy in commanding the English language.

Language problems the nonnative students face during their higher education experiences were pointed out in Gautam et al.'s (2016) qualitative study. The language issue turned out to be a challenge for all the international students (28) participating in the study. Some students mentioned that they had to double their work to receive the same grades as their local counterparts. In a case study conducted by Baklashova and Kazakov (2016), the adaptation issues faced by international students in the Volga-Vyatka economic region of Russia were analyzed. The participants reported that they could not understand many of the words due to their professors' rate of speech (Baklashova & Kazakov, 2016; McCarthy, 2016). The study documented that the language issue is affecting students' academic performances as well. Güven and Bahar-Güner (2016) found corroborating evidence: the language-related problems are the most prevalent issues among international students.

Additional research exists regarding the language-related issues of international students and how the other stakeholders react to those difficulties (Haugh, 2016; Straker,

2016). Haugh's (2016) qualitative study investigated the impact of negative discourse about international students' English language skills in Australian universities. The article examined in depth how the expressions of discontent regarding the language skills of international students were perceived by international students. The biggest concerns were that: (a) international students' English level negatively impacts the academic standards in Australian universities, and (b) that they graduate with low levels of English language insufficient for employment in Australia (Birrell, 2006). Straker (2016), on the other hand, argued that the literature on the issues of international students focused on the deficit discourse rather than providing guidance on how to solve those issues. Arguing that the field of problems of international students is undertheorized, Straker proposed activity theory—a motivational theory of learning—to provide a frame that puts participation in the center of the frame.

Current literature provides some insight into the lived experiences of international students with the flipped learning method (Hughes et al., 2016; Lin et al., 2017; McCarthy, 2016; Zainuddin & Attaran, 2016). The majority of the international students in all these studies were satisfied with their introduction to the flipped classrooms. The classroom material that was available before the class gave them the opportunity to prepare better for the class (Hughes et al., 2016; Lin et al., 2017; McCarthy, 2016). The students could look up any words that they did not know and felt more comfortable and more confident in the classroom thanks to the given acquaintance with the learning material beforehand (Hughes et al., 2016; Zainuddin & Attaran, 2016).

Students attributed their preference of the flipped learning approach to the availability of go-at-your-own-pace feature (Hughes et al., 2016; Lin et al., 2017). Hughes et al. (2016) studied 98 new international students who filled out online questionnaires regarding their experiences of a library orientation utilizing the flipped classroom approach. Hughes et al. found that the flipped method they used to introduce new international students to the library was highly successful. Students expressed that the longer time and the relaxed pace the flipped approach created better learning experiences for students. Lin et al. (2017) studied 44 international medical students to investigate if the flipped classroom approach to teaching could be a solution to the challenges students were facing in clinical ophthalmology clerkship teaching. Both students and the teachers in this study were more satisfied with the use of the flipped classroom where they watched the prerecorded lecture before entering the classroom.

McCarthy (2016) and Zainuddin and Attaran (2016) found results specific to the benefits of the flipped learning method to international students. In a mixed-method study Zainuddin and Attaran (2016) conducted with 13 undergraduate students in a Malaysian university, flipped classrooms generated a positive impact for quiet, shy, and international students who are not fluent in English. Although the sample was very small, the findings of the research indicate the utility of the flipped classroom method for international students. In another study, McCarthy (2016) analyzed the reflections of students and teachers using a quantitative study where 22 of 128 students who participated in the study were international. McCarthy used online surveys to gauge the satisfaction; both students and the teachers were satisfied with the use of the flipped

classroom. McCarthy indicated a higher level of knowledge transfer among all demographics and that the flipped approach was preferred over the traditional approach in particular by the international students. Almost all (97%) of the international students found the method easy to follow and understand compared to only 47% of them being satisfied with the traditional method.

While there is literature regarding the experiences and perceptions of international students with the flipped learning, what is yet to be explored is the international students' perceptions of the flipped learning method in Poland. There are a considerable number (65,793) of international students in Poland, and this number is growing by 20% each year (Siwinska, n.d.). The current study addressed the perceptions and lived experiences of international students in Poland with the flipped learning method. The findings of the study will inform decision-makers in higher education to make more informed decisions. The higher education institutions will provide enhanced learning opportunities to international students, and the failure rates will drop.

Problem Statement

The problem being addressed in the current study relates to a gap in the literature related to the experiences of international students of flipped classrooms in Poland. Many international students study in a language other than their native languages. They struggle not only with the content of the material taught but also with the difficulties of a second language (Baklashova & Kazakov, 2016; Gautam et al., 2016; Güven & Bahar-Güner, 2016; Haugh, 2016; Straker, 2016)). According to Hughes et al. (2016), international

students encounter cultural and social adaptation issues as well as anxiety issues about communicating in English. English language competence issue is one of the struggles the nonnative students go through when they study abroad that impacts their level of participation in the class, and overall performance during their studies (Baklashova & Kazakov, 2016; Güven & Bahar-Güner, 2016; Haugh, 2016; Straker, 2016).

The flipped classroom or the inverted classroom is a more student-centered form of blended learning where the traditional lecture and homework elements of a course are reversed (Flipped Learning Network, 2014; Lo et al., 2017). In flipped classrooms, students get acquainted with the new material prior to class through readings, PowerPoint, and often short video that suits different learner styles (Lo et al., 2017). Accessibility of learning materials before class allows the delivery of more engaging in-class activities (Heuett, 2017). Flipped classrooms improve students' readiness level and assist them in reaching higher-order thinking skills by giving them responsibility outside the classroom and has the potential to alleviate the language related anxiety the global learners are experiencing (Lo et al., 2017; McCarthy, 2016; Zainuddin & Attaran, 2016). Also, flipped classrooms help accommodate student's individual differences in *learning speed* by allowing them to learn at their own pace. In a mixed-method study conducted by Zainuddin and Attaran (2016), flipped learning method generated positive results for quiet, shy, and international students who are not fluent in English. Also, McCarthy (2016), Lin et al. (2017) and Hughes et al. (2016) showed that both students and professors were satisfied when classes were conducted utilizing the flipped learning method. There is only one study in Poland (Rutkowski, 2014) investigating students'

perception and adoption of the flipped classroom in general. However, there are no studies analyzing international students' experiences of flipped classrooms in Poland. There were 65,793 international university students in Poland in 2017 – a number that is increasing by around 20% each year (Siwinska, n.d.). The current study addressed a gap in the literature related to the experiences of international students of flipped classrooms in Poland.

Purpose of the Study

The purpose of this qualitative study was to understand how flipped classrooms may increase international students' course engagement and help them through their adaptation process, by gaining insight into their experiences of the flipped classroom. The current basic qualitative study was intended to understand, through interviews, the experiences of international students who are taught using the flipped classroom approach. Improving the overall college experiences of international students is one of the major goals of the Polish Ministry of Higher Education (Polish Ministry of Education, 2015). The current study sought to provide university professors, administrators and legislators with data that will assist them in decision making.

Research Questions

The central research question for the current study was:

What are the lived experiences of international students in higher education institutions in Poland who are taught with the flipped classroom method?

Also, the following subquestions helped guide the study:

1. What are the students' perceptions of flipped classrooms compared to traditional classrooms?
2. How do students perceive flipped classrooms contributing to their course engagement?

Conceptual Framework

The conceptual framework for the current study was based on the principles of the personalized system of instruction (Keller, 1968). The personalized system of instruction (PSI) is a mastery learning model that advocates providing learners with sufficient time until they reach mastery (Bloom, 1968; Carroll, 1963). The central assumption of the mastery learning model is that every student can learn a topic given sufficient time and appropriate learning conditions (Guskey, 2010). According to Bloom (1968), almost all students can learn a subject equally well.

The theory that was used to interpret the students' perceptions of the flipped learning method is personalized system of instruction (PSI) (Keller, 1968). PSI is rooted in the mastery learning model and had mostly influenced the way the college educators design their teaching (Block & Burns, 1976). PSI supported the current study through a focus on independent learning and an emphasis on self-paced structure. It helped in understanding the relevance of sufficient time and successfully mastering a given topic. PSI can be seen as a self-learning technique that has a sequential nature such as the student must master a concept before moving to the next step (Block & Burns, 1976). In this learning path, feedback is essential. A more thorough explanation of PSI will be provided in Chapter 2. The main propositions of PSI guided the creation of the research

questions that assisted in understanding the experiences of international students with the flipped learning method and construction of the data collection instruments. The theoretical propositions of PSI also informed the interview questions as well as the analysis of data derived from the interviews.

Nature of the Study

This study was conducted using a basic qualitative strategy of inquiry described by Merriam (2009). The purpose of this basic qualitative approach was to explore the experiences of international higher education students with the flipped classroom approach. The basic qualitative method attempts to uncover: (a) how people interpret their experiences, (b) how they construct their worlds, and (c) what meaning they attribute to their experiences (Merriam, 2009, p. 23). The basic qualitative strategy of inquiry was selected because the current study aimed to identify the recurring patterns and themes within the lived experiences of students attending classes taught in the flipped classroom.

Data were collected to thoroughly understand the lived experiences of international university students in Poland who are acquainted with the flipped classroom approach. Participant selection included 12 university students studying in a higher education institution in Warsaw. Semistructured interviews were used to collect data. Data collected via interviews were analyzed using NVivo to determine patterns and themes.

Definitions

Flipped learning: An instructional strategy in which the students are provided with the instructional content outside the classroom via technological instruments such as videos, casts, PowerPoint or pdf (Bergmann & Sams, 2012). In the current study, the terms *flipped learning* (Hughes et al., 2016), *flipped learning method* (Karabulut-Ilgu et al., 2018), *flipped method* (McCollum et al., 2017), and *flipped classroom* (Lin et al., 2017) were used interchangeably.

Traditional learning: A instructional strategy in which the students learn the material primarily from the teacher and assessment is seen as a separate learning activity rather than being part of the entire teaching and learning process (UKEssays. 2013, November).

Learning speed: The number of trials it takes a learner to grasp new learning material (Wang, 1983).

Mastery learning: An instructional strategy which is based on the idea that every learner can master a topic given sufficient time (Bloom, 1968, Carroll, 1963).

Personalized system of instruction: A mastery learning model where the content of the course is offered through self-paced study (Keller, 1968).

Assumptions

Several assumptions were made while investigating the perceptions of college-level international students regarding the flipped classrooms. My first assumption was that there would be professors in Poland who employ the flipped learning approach while teaching their international students and that their students would be willing to cooperate

in the current study. This was important because if there were no such professors or if their students did not want to cooperate, then there was no point in conducting this study. The second assumption was that the students who would participate in the current study would have enough knowledge and background to reflect on their experiences regarding the flipped approach. This assumption was critical because the study relies on their abilities to portray their lived experiences with the flipped approach. The third assumption was that the participants would accurately and honestly respond to the interview questions regarding their lived experiences with the method. Otherwise, the findings of the current study that are informed by inaccurate responses to the interview questions would lead to wrong conclusions.

Scope and Delimitations

The purpose of the current study was to understand the international students' perceptions of the flipped classroom method. The scope of the current study was limited to college-level international students in Poland studying in English. So, international students who are studying at the high school level or at the graduate level were not part of this study. Also, Polish students or international students who are delivered studies in Polish language were not included in the study. The participants of the current study, being college-level students only, the generalization of the findings to primary and secondary school settings as well as the graduate level will be limited. Second, the current study explored the lived experiences of international students exclusively with the flipped classroom method. Therefore, the results may not be used to inform studies

involving other types of blended learning. The results, on the other hand, are transferrable to countries with similar international student demographics as in Poland.

Limitations

One of the limitations of the current study was the access to international students who are being taught with the flipped classroom approach. I am in Poland for more than a year, and I communicated with the universities in English. It might happen that a university personnel who does not have a good command of the English language received my call for participation email in English. If she did not feel comfortable cooperating, this would narrow my access to all the students who are receiving instruction in a flipped classroom. I am a professor who is teaching international students as well, and I search for innovative methods that assist them in their learning on a regular basis. So, I might have expectations that the students' perceptions regarding the flipped learning method would be positive. It is a bias, and it needs to be taken into account when interpreting the results of the current study.

Significance

This research contributes to the literature by adding the perceptions of flipped classrooms held by international students, the most important stakeholders in the learning process. It was intended to understand how flipped classrooms may increase international students' classroom engagement and help them through their adaptation by gaining insight into their experiences of the flipped learning method. This understanding can encourage professors of international students to make more informed decisions when it comes to implementing the flipped learning method in their classrooms. Also, it will help

decision-makers and authorities responsible for internationalization in Poland make necessary adjustments, if any, in their internationalization strategy. Improving the quality of higher education for international students is one of the major goals included in the internationalization strategy published by the Polish Ministry of Higher Education (Polish Ministry of Education, 2015). International students will go through an improved college experience with classes tailored to their needs. Fewer international students will drop out of college, and more students will be able to complete their degrees. They will have enriched their English language skills with the retention of the information through the flipped approach. Also, with a more solid grasp of the subjects at the university, and a better learning experience overall, they will start contributing more to the success of their workplace after college.

Summary

Chapter I presented the main problems of international students throughout their studies in higher education institutions. They are not studying in their mother tongue. Therefore, the language issue emerged as the leading factor concerning the international students' adaptation processes in the countries they choose to study (Baklashova & Kazakov, 2016; Güven & Bahar-Güner, 2016; Haugh, 2016; Straker, 2016). According to Hughes et al. (2016), Lin et al. (2017), McCarthy (2016), and Zainuddin and Attaran (2016), flipped learning method that allows the students to access the learning material

before the class yielded positive results for quiet, shy, and international students who are not fluent in English.

Although extensive research has been conducted on college-level students' perceptions of the flipped learning method, little is known regarding the international students' perceptions of the flipped method, and of those, none have dealt with the Polish case. The current basic qualitative study contributes to the literature by providing insight into the experiences of students, the most important stakeholders in the learning process. In the current study I analyzed the experiences of international students in Poland regarding the flipped learning method. The data from the interviews were analyzed through the framework of PSI (Keller, 1968).

Chapter 2 will start with the conceptual framework where the concept that grounds the study will be defined. An exhaustive review of the current literature where studies related to the key concepts will be synthesized will follow the conceptual framework and the literature search strategy.

Chapter 2: Literature Review

The problem addressed in the current study relates to a gap in the literature related to the experiences of international students of flipped classrooms in Poland. The purpose of this qualitative study was to understand how flipped classrooms may increase international students' course engagement and help them through their adaptation process, by gaining insight into their experiences of the flipped classroom.

International students who are studying in a language other than their native languages are struggling with the difficulties due to their language incompetence (Baklashova & Kazakov, 2016; Güven & Bahar-Güner, 2016; Haugh, 2016; Hughes et al., 2016; Straker, 2016). Flipped learning, a method that appeals to a diverse group of students regardless of their academic levels, genders, and socioeconomic backgrounds (Deri et al., 2018; Roehling et al., 2017; Shinaberger, 2017), is widely preferred by international students as well (Hughes et al., 2016; Lin et al., 2017; McCarthy, 2016; Zainuddin & Attaran, 2016). The most appreciated convenience delivered by the flipped learning method is that it provides international students with flexibility regarding time and place. Little is known (Rutkowski, 2014) about the perceptions of international students in Poland—a country that hosted 65,793 international students in 2017 (Siwinska, n.d.). The current study extends the literature by exploring the perceptions of international students in Poland—a country that has ambitious goals ahead set by the Ministry of Higher Education (Polish Ministry of Education, 2015) regarding internationalization, and a growing number of international students each year.

The chapter will start with the literature search strategy used when conducting the current literature review and then will continue with the conceptual framework that describes how relevant theories inform the current study. In the following part, I will discuss the findings of the existing literature that have demonstrated the effectiveness of the flipped classroom method. After examining the existing research that discussed the problems of international students, and the benefits of the flipped classrooms to more diverse populations, in the last section, a review and synthesis of the literature related to the research questions will be made along with a rationale why the approach was selected. I will provide a detailed analysis of the uses of the flipped classroom method in the international students' context as well as the assistance offered by the flipped learning method to accommodate international students' individual differences in learning speed and English language command.

Literature Search Strategy

A variety of educational databases were utilized to conduct the search for peer-reviewed literature. First, the keywords *flipped classroom*, and *inverted classroom* were searched using the Education Resources Information Center to identify full-text peer-reviewed articles published as of 2016. Then, to narrow down the results and to prevent possible oversight, in the first search box, keywords *flip* classroom OR invert* classroom*, the Boolean operator "AND" between lines, and in the second search box, *international students OR nonnative students OR non-native students* were entered. The same search was made using the Education Source database. The reference lists of the collected articles were used to identify authors' names and explore new literature.

Conceptual Framework

The focus of the current study is the inspection of the international students' perceptions of the flipped learning method, an innovative learning method. One of the pillars of the flipped learning method is that it provides learners with flexibility regarding time (Lo & Hew, 2017; Lo et al., 2017; Shinaberger, 2017). In a classroom that is delivered by the flipped method, learners can enjoy a leisurely pace and utilize as much time as they want at home with the learning materials until they meet with their classmates and the professor. Personalized system of instruction (Keller, 1968), a mastery learning model that advocates providing learners with sufficient time until they reach mastery, provided the framework for the current study.

Mastery learning model is premised on the fact that all or most of the students can learn a great deal of the learning material if they are given enough time under appropriate learning conditions (Bloom, 1968; Guskey, 2010; Hiett, 2017; Schunk, 2012). In mastery learning, topics to be learned are divided into small chunks called units where students can only proceed to the consequent unit if they can demonstrate mastery of the current unit (Block & Burns, 1971; Slavin & Karweit, 1984). Feedback or correctives are essential for the mastery learning as well. Through formative assessments, any doubts that emerge should be clarified on a timely basis so that students can move on to the next piece of material for learning. Bloom (1968) cited major variables of the mastery learning model as follows: (a) student aptitudes, (b) quality of instruction, (c) ability to understand instruction, (d) perseverance, and (e) time allotted for learning. Time needed for a student

to learn what is being taught plays a central role in mastery learning (Bloom, 1968; Carroll, 1963).

Although researchers such as Block (1971) claimed that the origins of the idea of the mastery learning dates to 1920s—Washburn’s Winnetka plan, it is widely accepted (Bloom, 1968; Guskey, 2010; Slavin & Karweit, 1984) that the conceptual model for the mastery learning was created by Carroll (1963). In Carroll’s model, learning effectiveness is a function of the amount of time needed to learn a topic and the amount of time spent by the learner. Basically, the main factor that goes into the time needed is the learner’s aptitude for a specific subject. The amount of time spent, on the other hand, is determined by the student’s perseverance and the quality of instruction. In this model, perseverance of a student is illustrated by the amount of time spent on a topic (Carroll, 1963).

Bloom (1968) stated that some learners might have special aptitudes for certain subjects such as a student having a special talent in music or someone having special aptitudes for foreign languages. But for other subjects, a higher level of aptitude can be developed via appropriate training. Both Bloom (1968) and Carroll (1963) postulate that aptitudes of a learner give us an idea about the rate (speed) of learning; they are not indicators of the level (complexity) of learning. Therefore, given sufficient time, 95% of the students in a class can achieve mastery in a given subject regardless of their aptitudes for that particular subject. Bloom (1968) introduces the standardized test example: in standardized tests, some students master certain standards at their grade level while their

classmates reach those same standards at a later grade level (p. 3). Those who needed extra time to master those criteria demonstrated mastery in the coming years.

Carroll's (1963) definition of aptitude was the determinant factor in the formation of the mastery learning concept: aptitude is the amount of time required for a student to reach the required level of knowledge in a subject. Carroll rejected the common belief that students with low levels of aptitude can only grasp the basic ideas of a subject. If all students in a classroom with varying aptitudes receive the same amount and type of instruction in a course, then their achievements will vary. However, any intervention that suggests changing at least one of the two variables—amount (time) and the type of instruction—would result in different achievement results (Schunk, 2012). If students are provided with a higher quality instruction or more time for their learning, a majority of students will achieve mastery (Bloom, 1968, Carroll, 1963).

As for the quality of instruction, Carroll (1963) redefines it on an individual basis. For him, the quality of instruction for a given learner depends on the excellence in the administration of a few actions: the way the task was described, presented, sequenced, and the way it was delivered considering the individual needs of the student. According to this definition, the highest quality of instruction would be the one that is clearly presented, adequately explained, tailored to the individual needs of students, and sequenced in the optimum way (Bloom, 1968). Quality of instruction is one of the variables that, if improved, can lead to higher learning levels for students with different aptitudes.

Carroll (1963) asserted that being able to master the complex ideas of a subject is not a privilege denied to students with low levels of aptitude. His philosophy that every student can learn most of what they are taught under appropriate learning conditions was put into practice by two instructional approaches: Bloom's (1968) learning for mastery and Keller's (1968) personalized system of instruction (Block & Burns, 1976). Bloom's learning for mastery is a group-based approach to the mastery learning model that had an impact mostly on the elementary and secondary school settings. Keller's personalized system of instruction, known as the "Keller Plan," has been mostly adopted in colleges and universities. The current study benefited from Keller's personalized system of instruction for several reasons: (a) it focuses on an individualized system of instruction, (b) it is mastery-based and self-paced, (c) learning content is passed on to students using study guides.

Keller's (1968) interpretation of the mastery learning model, the personalized system of instruction (PSI), is an individualized learning approach that promotes self-paced learning. In this approach to mastery learning, working independently is essential. Compared to the learning for mastery approach, this model is more suitable for college-level implementation as it advocates for students' taking more responsibility for their learning (Block & Burns, 1976). In PSI, there is almost no classroom teaching (Kulik, Kulik & Cohen, 1979). Students are given the learning material; they are allowed to take as much time as they want until they feel comfortable taking the test for the current unit (Lei & Pear, 2016). Also, they can take the unit several times until they score enough to pass on to the next unit, i.e., they achieve mastery in that unit. The classroom is used as a

venue for test-taking and corrective intervention. When a student cannot make it to the unit test, student and the proctor, who is usually a student who mastered that particular unit, go over the errors on the test one more time to correct any mistakes. Then the student retakes the test. This procedure will continue repeatedly until the student achieves mastery for the unit.

According to Hartley (1974), the theoretical basis for PSI lies in Skinner's research in the 1960s on programmed instruction. So, PSI is a mastery learning model that has evolved from the field of psychology (Block & Burns, 1976). Some of the central components of programmed instruction are as follows: (a) the objective must be clearly communicated to the learner—what behavior is expected ultimately?; (b) the instruction must be broken down into small steps; (c) at each step, the learner will move at his/her own pace; and (d) at each step, the learner should be informed of the performance shown. For several reasons, the implementation of Skinner's ideas in the classroom was not as smooth as it was planned. The face-to-face aspect of a typical classroom was missing, and it was one of the biggest setbacks. In addition, breaking the topic into smaller parts was not successfully performed.

Keller (1968) added the human aspect that was missing in the original idea by engaging proctors who would fulfill the feedback component of the system. Also, the first implementation of the personalized system broke the course down into 30 self-contained units (modules). Such modifications were welcomed by the learner enthusiastically and paved the way for the creation of PSI—personalized system of instruction. The central elements of PSI are the same as those of the original programmed

instruction movement: students move at their own pace, unit perfection is required to continue to the following unit, and feedback is provided via proctors. Sherman (1974) added another feature as an essential characteristic: there is no penalty for errors in PSI, i.e., a student can take a unit test as many times as he wants until he achieves mastery (Block & Burns, 1976; Kulik, Kulik & Cohen, 1979).

Keller (1968) states in his “Goodbye Teacher” article that the story of the personalized system of instruction had begun in 1962 when they were initiating a Department of Psychology in the capital of Brazil, Brasilia, along with three other professors. Given the freedom to implement new methods for learning and being bored of traditional approaches, they had a chance to test their model in an introductory psychology course. Both the administration of the university and the students were highly satisfied with the method. However, due to some internal issues in the university such as a multitude of professors (200) being dismissed, the project was interrupted. In 1965, three years after the introduction of the original method in Brazil, Sherman and Keller continued their implementation of the new personalized system at Arizona State University. The method proved to be a success, and it was adopted by other colleagues as well. Each successive implementation provided better results.

A meta-analysis (Kulik et al., 1979) that combined results from 75 studies addressed the flexibility of PSI regarding time and place. According to the statistical analysis of the studies, final examination scores with PSI showed higher results (8%) compared to the exams from traditional classes. The impact of the personalized system of instruction was more evident when revision examinations that were administered several

months after the course were investigated. PSI has shown more promising results when it comes to knowledge retention. Students exam scores with PSI were 14% higher on average. In addition, students thought that PSI required more work, but it was more enjoyable and contributed more to their learning. Similarly, Hao's (2016) study that investigated students' perceptions regarding the flipped classroom method found comparable learner attitudes toward the flipped approach. They thought that it was demanding and required a lot of commitment and that it would be hard for them to keep track of the classes if all of them were administered via the flipped method.

The data collection instrument for the current study was informed by the conceptual framework: PSI. The creation of the interview questions benefited from PSI's go-at-your-own-pace and the individualized instruction aspects (Keller, 1968; Kulik et al., 1979). So, when creating the interview tool to address the research questions that are being investigated, I made sure the interview questions were aligned with the conceptual framework. The interview questions were asked to identify the extent to which the international students appreciated the self-paced approach offered by the flipped learning method. Also, the interview questions gauged students' satisfaction and engagement with the learning guides provided, to evaluate the personalization of instruction offered by the flipped approach.

Literature Review Related to Key Concepts

This part of the literature review will be dedicated to the presentation of key variables and concepts that are related to the student perceptions regarding flipped classrooms, and the accommodations the flipped classrooms can provide to international

students. Three themes emerged when reviewing the literature: (a) flipped classroom and its effectiveness (Deri et al., 2018; Gross et al., 2015; Hao, 2016; Heuett, 2017; Ihm et al., 2017; Jakobsen & Knetemann, 2017; Shinaberger, 2017; Swart & Wuensch, 2016), (b) flipped classrooms and international students (Baklashova & Kazakov, 2016; Gautam et al., 2016; Güven & Bahar-Güner, 2016; Haugh, 2016; Straker, 2016) and (c) attributes of flipped classrooms for international students in higher education (Hughes et al., 2016; Lin et al., 2017; McCarthy, 2016; Zainuddin & Attaran, 2016). The first theme covered is the effectiveness of flipped classrooms where the literature regarding the students' and the teachers' perceptions of the innovative method will be examined. Second, research investigating the differentiation aspect of the flipped classrooms will be analyzed. Last, the advantages of flipping classrooms and how international students can benefit from this approach is presented.

Flipped Classroom and Its Effectiveness

In general, the flipped classroom approach is defined as an innovative teaching method that redefines the concept of responsibility for learning the main course content by shifting it from the lecturer to the student (Jakobsen & Knetemann, 2017). However, there is not a standard practice for implementing the flipped classroom method (Lo et al., 2017). While some lecturers only provide students with text-based materials, there is a myriad of other practices such as using PowerPoint presentations, videos, screencast videos, YouTube, Khan Academy, and TED talks.

Although providing text-based materials so that students review at home to come to school prepared is also regarded as the flipped classroom, the most common

applications include the use of video that makes the class more engaging (Deri et al., 2018; Lo et al., 2017). Taking advantage of the prevalence of video-recording devices and the accessibility of the internet to masses lately, almost all the flipped classrooms started employing videos that make the classes more engaging. Some studies even go further: they define the flipped classroom method as a technology-enhanced teaching approach that delivers the content before the classroom using videos (Lo et al., 2017; Rutkowski, 2014). Also, there are literature reviews that only consider the flipped classroom implementations that involve the use of video or screencast devices (Lo et al., 2017).

As far as the effectiveness of the use of video in flipped classrooms is concerned, there are different views. In several studies, students testified that the videos improved their understanding (Lo & Hew, 2017; Shinaberger, 2017; White et al., 2017). A quasiexperimental study, on the other hand, carried out with more than 800 students proved that reading assignments and exercise worksheets were as effective as providing students with videos before the classroom (Moravec, Williams, Aguilar-Roca, & O'Dowd, 2010).

Having implemented the flipped classroom method for years and delivered workshops all over the country, Bergmann and Sams (2012) cite many advantages of the flipped classroom approach. In flipped classrooms, student-student interaction is immense. Instead of having the lecturer hold all the responsibility for student learning, in flipped classrooms, students help each other grasp the material. In addition, the flipped classroom method has the following advantages: (a) In flipped classrooms, students come

to class more prepared; (b) Flipped learning method increases student engagement and course satisfaction by boosting the interaction between the students and the teacher along with student-student interaction; (c) Flipped learning method improves academic performance; and (d) Flipped learning method enables better differentiation, allows students to study the content as many times as they want.

Flipped classrooms and students' readiness for class. One of the distinguishing features that separates the flipped classroom approach from the traditional approach is that in the flipped design, there is an effort to make students come to class more prepared. Students must fulfill their duties at home to be ready for the mini-lectures or the group work that is going to take place in the classroom (Lo et al., 2017). Students watch the video provided by the lecturer at home that introduces them to the core content. Here, the assumption is that the students accomplish the “remembering” and “understanding” levels identified by Bloom’s Taxonomy. When they come to class, they are ready for the “application,” “analysis” and further levels that will be taken care of by the activities that are guided by the lecturer.

Hao (2016), Ihm et al. (2017), and Jakobsen and Knetemann (2017) pointed out the readiness aspect of the flipped classroom method. According to their studies, students who come to class more prepared benefit more from the classroom. That is why they offered techniques to evaluate students’ level of readiness at the beginning of the face-to-face lesson. While Hao’s (2016) and Ihm et al.’s (2017) supported the administration of quizzes to verify student readiness at the beginning of the class, Jakobsen and Knetemann’s (2017) study offers a more sophisticated process, RAP—Readiness

Assurance Process to double-check that students who came to class are prepared for the more advanced educational activities that require prior acquaintance with the material.

Hao's (2016) mixed-method study aimed to unveil the readiness levels of 84 undergraduate students, freshmen and juniors, using surveys at the end of the semester. Many students (54.8%) were satisfied with their flipped learning experience. The study used self-directed learning readiness, grades, and group work preferences of students to predict their readiness and concluded that there is a strong correlation between students' readiness levels and their attitudes towards the flipped classroom. Some students did not like the idea of flipped learning because they had a lack of desire to conduct the preparation part that had to be taken care of at home. Therefore, it is essential for lecturers to assess students' level of readiness before they implement the flipped learning method.

Ihm et al.'s (2017) quantitative study was carried out with 61 pre-dentistry second and third-year students attending a 15-week three-credit course. Like Hao's (2016) study, Ihm et al.'s (2017) study and Jakobsen & Knetemann's (2017) studies, concluded that students' preparedness is a strong predictor of learning outcomes in a flipped classroom. In line with Eastmond's learning theory (Ihm et al., 2017) that focuses on learning readiness, the study utilized surveys to provide lecturers with practical suggestions on how to implement flipped classroom approach at the undergraduate level. Findings of the study suggest that learning readiness and classroom satisfaction are highly correlated. Those students who were more prepared were more likely to be satisfied with the course and were more inclined to be involved in the classroom discussions. The study suggests

that professors can use the flipped approach to make their classes more engaging to students and improve their academic performances.

Jakobsen and Knetemann's (2017) study discussed the team-based learning (TBL) method as a tool to make the flipped classrooms more effective. The method utilizes the Readiness Assurance Process, a process that prepares students to the classroom activities by holding them responsible for the assignments outside the classroom such as readings and watching videos as well as inside the classroom such as mini quizzes. Readiness Assurance Process is a lengthy process that takes around 50-75 minutes for each unit. That is why, from the students' point of view, as in the Hao's (2016) study, it is challenging to create student buy-in. From the teachers' perspective, implementing the TBL suggested by Jakobsen and Knetemann requires substantial initial effort, and it is time-consuming. Jakobsen and Knetemann (2017) argued that there will be more student buy-in if teachers are transparent with the whole implementation of TBL and the rationale behind it and if they communicate the purpose of each component to students clearly.

Flipped classrooms' impact on student engagement and course satisfaction.

In a flipped classroom, students come to class prepared (Deri et al., 2018; Zainuddin & Attaran, 2016). That is why students already have a basic grasp of the core material while conducting the activities or the group work guided by the professor (Bergmann & Sams, 2012). Studies by Swart and Wuensch (2016), Gross et al. (2015), and Ihm et al. (2017) found improved levels of course satisfaction among students who experienced the flipped classroom method. According to Deri et al.'s (2018) study, the reason is that the flipped

method frees up class time and allows the professor to implement more strategies that actively engage students. Heuett's (2017) mixed method study, on the other hand, concluded that students felt more confident when the classes were carried out using the flipped approach.

Swart and Wuensch's (2016) quantitative study used surveys to investigate the growth in student satisfaction in a required business class when the class was conducted with the flipped classroom method. Starting Fall 2013 and on, two sections of the course were delivered by the same instructor utilizing the flipped approach. No sections were designed to be taught in the traditional format. Therefore, neither the students nor the researchers had a chance to compare the two approaches. Instead, Swart and Wuensch benefitted from a combination of the relative proximity theory and Zhang's (2003) definition of Transactional Distance to assess whether the flipped classroom would generate higher student satisfaction without compromising their academic performances. According to this design, the Transactional Distance in a flipped classroom being smaller would mean that it worked better. The study did not aim to compare the gain in academic performance. The results of the multiple regression analysis show that the flipped learning method lessens the transactional distance and offers a better learning experience for students. Also, students think that they had made better progress towards their learning goals and had an improved learning experience compared to what they would experience had the classes been conducted with the traditional approach.

Gross et al.'s (2015) quasi-experimental study administered 121 surveys to compare the flipped learning model and the traditional classroom approach regarding

student engagement, student satisfaction, and their academic performances. Three courses out of six were administered via the flipped method, and the other three were delivered by the traditional lecture-based model. Both the 64 students who were registered in the flipped classes and the 57 students who were in the traditionally led classes received the same instructional materials during the Fall semester. Findings of the Gross et al. (2017) indicated high-levels of course satisfaction and student engagement among students who were in the flipped classroom. Also, there was no compromise regarding academic performance for this group of students when compared to the students in the traditional class. Gross et al. conclude that the main reason the flipped learning method was successful is that it increased student engagement.

Ihm et al. (2017) suggested that professors could use the flipped approach to make their classes more engaging to students and improve their academic performances. One of the aspects that the study aimed to assess was students' satisfaction with the flipped approach. The results of the study indicate that the flipped classroom approach stimulated self-directed learning. As a result, the students are more engaged during the discussions, and the course satisfaction was higher.

In a mixed-method study conducted with 82 college students taking an introductory statistics course, Heuett (2017) investigated the impact of flipped classroom on students' overall learning experiences as well as an assessment of strengths and weaknesses of the innovative model. Two of the three sections of the course were taught using the flipped classroom approach, and the third section was delivered utilizing the traditional lecture-based model. The lecture notes for all three sections were the same,

and they were made available to all students at the beginning of the semester. Several other measures were taken such as giving access to the same electronic textbook to all sections, recording the flipped classroom videos so that they simulate the traditional lecture, and using the same type of assessments for all sections to prevent any misinterpretations that might originate due to the content provided to the students in all three sections.

Heuett's (2017) study revealed the experiential aspect of the flipped classroom method that creates an active learning environment for students without compromising the core content. Unlike students in the traditional lecture section who had to reapply the techniques they learned in the classroom by themselves, students in the flipped classroom section had the opportunity to practice them in the classroom with the teacher. So, the students in the flipped classroom section had their questions answered immediately, and therefore it worked more efficiently. Students in the flipped classroom section were more confident about their understanding of the material in contrast to the ones in the traditional section.

Flipped classrooms and students' academic performance. One of the strengths of the flipped learning method is that it enhances student learning (Ihm et al., 2017; Lo & Hew, 2017; Yildirim, 2017). Students' course satisfaction (Schreiner, 2009) and engagement (Gross et al., 2015) are essential components of student success in a course. The facts that flipped classrooms boost student engagement and that the students are satisfied when the course is delivered with the flipped classroom approach subsequently imply that the flipped classroom has a positive impact on student learning. Also, studies

by Ihm et al. (2017), Lo and Hew (2017), and Shinaberger (2017) found empirical evidence that the flipped classroom method leads to improved academic achievement. In a meta-analysis, Freeman, Eddy, McDonough, Smith, Okoroafor, Jordt, and Wenderoth (2014) probed 225 studies that compared exam grades of undergraduate students in science, technology, engineering, and mathematics classes when the classes were conducted with active learning methods and traditionally. The results of the meta-analysis have documented that students' exam grades were improved by 6% on average, and their failure rates dropped by 1.5% compared to the traditional lecturing method.

Ihm et al.'s (2017) study confirmed through quantitative methods that faculty in higher education institutions could adapt the flipped learning approach to influence their students' academic achievement. Lo and Hew's (2017) paper incorporated two studies that were aimed to evaluate students' learning gains through two exploratory studies and concluded that there was significant growth between students' pre-test and post-test scores. In the first study, most of the 13 students declared that the flipped classroom approach facilitated their learning, and this was confirmed by their test scores. In the second study which was carried out by 24 relatively better-performing students, 87.5% of the students reported that the flipped classroom method improved their learning in the Mathematics classroom. Also, 79.2% of the students in the same study agreed that in the flipped classroom they are more motivated to learning.

Shinaberger's (2017) study provides valuable insight into the aspects of the flipped classroom method that makes it effective. A longitudinal study (Shinaberger, 2017) where an introductory business course was gradually transformed from a lecture-

intensive course to a course delivered via flipped method, introducing one methodological change per semester over a period of 10 semesters employed 1,103 college students from distinct levels. The longevity of the study allowed the observation of various interventions and their effectiveness on student performance using exam performance as the measure. Each semester one of the following changes were carried out to observe its impact: (a) homework were assigned but not collected, (b) homework were collected with feedback, (c) case studies were added, (d) course materials were released conditionally, (e) in-class exams were introduced, (f) flipped classroom replaced lecture, and (g) preclass quizzes were added and group projects were removed (Shinaberger, 2017, p. 123). Findings of the study (Shinaberger, 2017) proved that the flipped classroom method improved students' exam performances. Preclass quizzes to check whether students watched the online videos also proved to be an effective tool to boost watch rates. The preclass quizzes proceeded from the survey results showing that one-third of the students did not watch videos before coming to class. After the introduction of preclass quizzes, students interacted more with the learning materials.

McCollum et al. (2017) used qualitative interviews with 13 students as well as quizzes and test grades to determine whether the flipped learning method was a success in the Chemistry classroom. In Fall 2015, one of the three sections of a General Chemistry course were delivered implementing the flipped classroom method; the other sections were taught using the traditional approach. The student interview data showed that the flipped classroom was effective although it was delivered in a *text-centric* way—without the use of video. The study also focused on students' relationships with their

peers, group leaders, and professors that were accommodated by the flipped classroom method and concluded that relationships established among the parties above play a crucial role in the success of the flipped approach.

Flipped classrooms and differentiation in the classroom. Being able to “pause and rewind the teacher” was a metaphor pronounced by Bergmann and Sams (2012, p. 24) to express the ability to watch the video posted online by the lecturers as many times as the students want. In a typical traditional classroom, the teacher would explain the content once, and if there are students who need more explanation, the teacher could use different learning strategies to deliver the material if time permits. In the flipped classroom case, however, there is no time constraint. The students have the freedom to watch parts of the video as many times as they want online until they feel comfortable moving further (Lo & Hew, 2017; Lo et al., 2017; Shinaberger, 2017).

In a case study where the opinions of 34 undergraduate students who were studying in Computer and IT Department were sought through quasistructured interviews, Yildirim (2017) documented the following advantages of the flipped classroom approach. First, the flipped approach improved the readiness level of students. Also, it provided the students with a customized learning speed. Such a study environment that is independent of time and place gave the students the opportunity to review the material as many times as they wanted. Hence, knowledge retention was improved, and a better average academic achievement was noted.

Heuett (2017) identified an indirect benefit of the flipped classroom. As the flipped classroom method frees up class time by introducing the core content outside the

classroom, the professors will have more time in the classroom to differentiate their teaching strategies and will be able to dedicate more time for students that require scaffolding. Lo and Hew's study (2017), on the other hand, suggests that professors prepare additional revision videos for low-performing students. Shinaberger's (2017) study and Roehling et al.'s (2017) studies are in tune with Lo and Hew's (2017) suggestion. Findings of the study (Shinaberger, 2017) indicate that the flipped classroom benefitted all groups of students, but students with low attendance showed higher improvement. According to Roehling et al.'s (2017) study, students with lower test scores and lower grade point averages preferred the flipped method more than the students with higher test scores. The underlying reasons for their preference were the possibility of repeated exposure to videos, and lack of time limits.

Challenges. In addition to all the perks that students and teachers get with their introduction to the flipped classroom method, there are some pitfalls as well. One of the biggest challenges with the flipped classroom approach is the workload it requires for professors to create the materials, especially videos (Hao, 2016; Heuett, 2017; Lo et al., 2017; McCarthy, 2016), as well as the training and the experience that may be required to create them (McCarthy, 2016). Professors are usually the ones who create the learning materials in the flipped classroom method including videos and screencasts. McCarthy points out the drawbacks that can be caused by professor's lack of experience in creating video-based content. Their inexperience or not having adequate training may result in low-quality learning materials for students. Yildirim's (2017) and Jakobsen and Knetemann's (2017) studies view reliance on technology as an underlying challenge of

professors who want to start implementing the flipped classroom method while Gross et al.'s (2015) study found that carrying out courses in the flipped classroom format does not require advance technological skills. However, due to the extensive workload that is required to create the flipped classroom material, it is recommended that instructors who are teaching a topic for the first time avoid flipping their classes (Gross et al., 2015).

Yildirim's (2017) study brings up another issue: the need for hardware. The hardware needed to create videos or screencasts may generate an additional cost for underfunded districts. Also, Hao (2016) argued that the number of empirical studies on the flipped classroom method is limited and that causes conflicting results.

As for the students, their professors will have to communicate to them the details of how the overall class delivery will be adjusted with the introduction of the flipped approach. Lo et al.'s (2017) study cited students' unfamiliarity with the flipped method as one of the points in question. Heuett's (2017) study identified another issue that concerns flipped classroom students: Students may think that they are expected to learn the material just by the videos provided online.

The time and effort that is required to materialize flipped classrooms is not a challenge unique to professors. The students' case is not much different. In Hao's (2016) study, some students challenged the idea of flipping all of their classes. If all the classes were designed by the flipped classroom method, then they would all require previews and it would be a huge burden for them outside the class. That is why some students indicated that they prefer lectures over the flipped classroom method. Also, in Roehling et al.'s

(2017) study, students reported an overall preference for the traditional approach while wishing to keep the flipped approach for some of the classes.

Once the students are required to grasp the core content without the presence of a lecturer, some issues such as the following arose: (a) students' unanswered questions during videos (Heuett, 2017; Lo & Hew, 2017), (b) the need to provide the learners with incentives and consequences for watching the videos provided (Gross et al., 2015; Shinaberger, 2017), and (c) the necessity of online quizzes or gate check queries before the start of the class to verify students' engagement with the videos posted online (Hao, 2016; Ihm et al., 2017).

The issue about the students' inquiries that may arise while watching videos online by themselves is addressed by Heuett's (2017) and Lo and Hew's (2017) studies. Lo et al.'s (2017) study offers a solution to the issue. The study proposes the use of Question & Answer forums that would allow the students to leave comments in the forum to notify their professors about the difficulties they had encountered while watching online videos. This is a compelling issue that requires a solution as the comprehensive literature review by Lo et al. (2017) have documented that there are students who are disengaged from watching videos due to their unanswered questions. Bergmann and Sams (2012) instructed their students to use various note-taking techniques to document their questions so that they can bring them to the classroom for clarification.

Both the preparedness of students and the benefits of video access such as being able to watch the learning material several times are premised on the assumption that students who are being taught with the flipped classroom method are watching the videos

online before coming to class (Hao, 2016; Ihm et al., 2017; Jakobsen & Knetemann, 2017). How to make sure that those videos are being watched? If the students are not watching the videos posted before the class or not completing the other assignments as they are instructed to do, then the actual classroom will not be as active and engaging. The teacher will have to go the traditional path as the first two basic levels of Bloom's Taxonomy would not be fulfilled by the audience.

Shinaberger's (2017) study advocates providing students with incentives for watching videos online or using consequences such as the conditional release of the material while Hao (2016), Ihm et al. (2017), and Jakobsen and Knetemann (2017) promotes implementing *gate check quizzes* at the beginning of the lecture. The idea with the online gate check quizzes administered online utilizing *BYOD* (Hao, 2016) and traditionally (Ihm et al., 2017; Jakobsen & Knetemann, 2017) was to motivate students to watch the materials posted online as well as to evaluate their understanding of the online material. In all three studies, implementing prelecture quizzes improved student readiness.

Jakobsen and Knetemann's (2017) study criticized the flipped classroom approach for the lack of structure. On the one hand, teachers are free to implement the flipped approach tailoring the components of the method to the needs of their students. On the other hand, lack of a protocol outlining how each element of the flipped method should be conducted can be discouraging for potential adopters of the method. According to this view, the implementation of flipped classrooms may be favored by those who want to structure their classes as they wish; usually experienced teachers. But it can be a

burden for those who are new to teaching (Gross et al., 2015). Similarly, Missildine, Fountain, Summers and Gosselin's (2013) study underlined that students' perceptions might be affected negatively due to the lack of structure. Jakobsen and Knetemann (2017) argued that the introduction of the Readiness Assurance Process (RAP) component of TBL would minimize the lack of structure concern of the flipped classrooms. In RAP, each unit is presented in the same order; the completion of the RAP process is followed by the exercises. Also, this order is consistent across units. The consistency of the order of the material being presented as well as the uniformity of the entire process throughout the units will add structure to the flipped classes.

Flipped Classrooms and International Students

Globalization provides international students with a myriad of opportunities for traveling overseas, meeting new cultures, employability abroad, and obtaining a prestigious international diploma (Vasilopoulos, 2016). The number of international students, students that choose to study in a country other than their home countries grows each day (Güven & Bahar-Güner, 2016). Several studies agree that international students make a considerable contribution to the academic standings of the countries in which they are studying (Baklashova & Kazakov, 2016; Gautam et al., 2016). However, besides the advantages they bring to a new country, their academic performance may be the object of criticism (Haugh, 2016; Straker, 2016).

Challenges of international students. The language of instruction in the host countries has significantly shaped queries on issues of international students in recent years (Baklashova & Kazakov, 2016; Gautam et al., 2016; Güven & Bahar-Güner, 2016;

Haugh, 2016; Straker, 2016). Cultural barriers (Baklashova & Kazakov, 2016; Gautam et al., 2016; Güven & Bahar-Güner, 2016; Straker, 2016), gastronomic adjustments (Baklashova & Kazakov, 2016), homesickness (Güven & Bahar-Güner, 2016), and financial setbacks (Baklashova & Kazakov, 2016; Gautam et al., 2016) are other transitional challenges that international students experience when they move to a new country for studies. Linguistic factors such as language anxiety and fear of negative evaluation are causing by far the biggest hindrance in the adaptation process of the international students (Baklashova & Kazakov, 2016; Gautam et al., 2016; Güven & Bahar-Güner, 2016; Haugh, 2016; Straker, 2016). It is not a problem that is affecting them only in their campus lives. Students who do not command the language in which the instruction is delivered—mostly English—at the desired level may have a tough time in their day to day communications outside the campus such as renting an apartment, doing shopping and eating outside as well. During studies, some classmates may complain due to the conditions that arise from their colleagues' inadequacy in the language of instruction (Straker, 2016). Therefore, any solution to the language barrier the nonnative students are going through in the hosting countries is essential.

In a critical review of the literature that covered two decades of research, Straker (2016) analyzed the participation of international students in Western universities where the language of instruction is predominantly English. Analysis of the data suggested two themes: students' language competencies and their cultural origins. The comprehensive review that focused mostly on students from Confucian Heritage Culture argued that the literature had focused on the differences of international students rather than emphasizing

their participation. According to Straker (2016), the literature regarding the participation of international students is premised on the thought that international students cannot live up to the expectations of full participation set by the universities and that they may not participate in their academic studies on an equal basis with the other students. The study continues to claim that such an approach created a deficit discourse and misled the practitioners. One of the underlying reasons for the focus on the deficit discourse rather than on the participation is the controversy around what really constitutes participation in the classroom (Straker, 2016). For instance, while the silence of some students was treated as “participatory” in some studies, in others, it was regarded as “non-participatory.” Also, the article, claiming that the field of international students’ issues is undertheorized, offers a motivational theory of learning which would not only identify the “issues” but also would seek for the motivations that make those issues perceived as such.

Güven and Bahar-Güner (2016) carried out a case study with ten international language preparatory course students in a public university in Turkey in the 2013-2014 academic year. The study utilized semistructured interviews to call into question the major concerns of international students studying in a foreign country, and the techniques they used to overcome those dilemmas. The problems were categorized into four groups: language-related issues, problems stemming from the academic differences, social and psychological issues as well as problems related to the sense of belonging to the host university. Prior research substantiates the belief that problems related to language are the most prevalent among students (Güven & Bahar-Güner, 2016; Straker, 2016). Students

complained about the lecturer speaking too fast, not having a good command of the vocabulary, and most of all, having to master the material presented in the classroom while developing the English language.

Baklashova and Kazakov's (2016) study also aimed to discover the handicaps international students are experiencing in Russia and the measures that can be taken to overcome those concerns. In their case study where ten students from undergraduate and graduate levels were involved, Baklashova and Kazakov identified the main problems the international students went through. The issue with the rate of speech of the professor and the classmates were brought up in Güven and Bahar-Güner's (2016) study as well. Also, there is a consensus that the lack of specialist vocabulary hinders international students from following up with the lectures as their local classmates can (Gautam et al., 2016; Güven & Bahar-Güner, 2016; Haugh, 2016).

Haugh's (2016) study utilized semistructured interviews in a large Australian university to examine English language competences of international students. Several (11) small group interviews were administered with 31 international students coming from various parts of the world, and four supplemental small group interviews were made to obtain the input of the local students as well as the academic and the administrative personnel from the same institution. The author argued that the debate around the English language skills of international students in Australian universities often lacks the understanding of the moral and emotional complexity of the problems they are facing. This lack of understanding in return leads to an inaccurate analysis of the issue. Haugh's (2016) study is a call for all the stakeholders of the international student education to be

more sensitive and understanding regarding the English language capabilities of international students. An approach that is more embracing and constructive would serve the purpose more than identifying international students as objects for complaint.

In a different, small-town setting in the southern region of the U.S., Gautam et al. (2016) used in-depth interviews to uncover the challenges that international students confront. Online surveys were sent to all the international students (110 students) of a university with a population of 13,000, and 25% of them responded to the survey. Next, in-depth interviews were conducted with six of them. The paper was intended to reveal the challenges the international students go through and create awareness as a first step to finding solutions to those difficulties. Gautam et al.'s (2016) study substantiates the fact that inadequate proficiency in vocabulary is the leading challenge for international students (Güven & Bahar-Güner, 2016; Haugh, 2016).

The consensus has been that it is essential for the universities hosting international students to address the concerns of international students as well as to support them in developing their coping skills (Baklashova & Kazakov, 2016; Güven & Bahar-Güner, 2016). According to Baklashova and Kazakov (2016), universities must assume the responsibility for resolving the transitional adversities experienced by the international students they are enrolling. Haugh's (2016) study corroborates the Baklashova and Kazakov's (2016) study and suggests that universities may come up with various English language support strategies to address the issue. Güven and Bahar-Güner's (2016) study also underlines the assistance the universities should be providing the international students with, to ensure the continuity of their recruitment.

The setbacks the international students are experiencing due to their lack of necessary language skills are not limited to their adaptation process (Güven & Bahar-Güner, 2016). Widely accepted, not having a good grasp of the language of instruction impacts students' academic performances as well (Baklashova & Kazakov, 2016; Gautam et al., 2016; Güven & Bahar-Güner, 2016; Haugh, 2016; Straker, 2016). In Baklashova and Kazakov's (2016) study, students mentioned that they had to ask professors to speak slowly as they could not understand the lecture when there is new vocabulary. Students' reflections in Gautam et al.'s (2016) in-depth interviews that they had to double their work to get the same grade as their classmates support the findings. These students will need to invest more time in studying the material in a course which is rich in vocabulary rather than allocating their limited time for training themselves in other courses. Consequently, their academic success in other classes will be affected. Güven and Bahar-Güner's (2016) refers to the same dilemma. International students will have to master the regular courses in their programs while having to develop their language skills. This would double the work they do and would impact their performances in the courses they are taking. Haugh's (2016) and Straker's (2016) findings substantiate the fact that the language is the root of falling academic standards of international students.

Benefits of flipped classrooms to more diverse populations. As was mentioned before, the flipped classroom method offers numerous benefits to its users: students come to class more prepared (Hao, 2016; Ihm et al., 2017; Jakobsen & Knetemann, 2017), student engagement and course satisfaction are elevated (Gross et al., 2015; Heuett, 2017;

Ihm et al., 2017; Swart & Wuensch, 2016), academic performance is improved (Ihm et al., 2017; Lo & Hew, 2017; Shinaberger, 2017; Yildirim, 2017), and a better differentiation is enabled (Lo and Hew, 2017; Roehling et al., 2017; Shinaberger, 2017).

Are the advantages of the flipped classroom method pertinent to all types of student groups? Or is it more suitable for certain student groups than the others? Will this innovative method accommodate the needs of international students?

Rutkowski's (2014) and Hao's (2016) studies address the importance of readiness in the implementation of the flipped learning method. The studies suggest that the flipped approach would not be effective for every student. The method would be of use only if the students are ready to class. Rutkowski's (2014) study discussed the use of the flipped classroom method in the redevelopment of an engineering course from the traditional approach in the 2012-2013 academic year. The study was conducted with 200 freshmen and sophomores; 100 of them were taught in Polish, and the other 100 were taught in English. The materials for the flipped classroom implementation that consisted of 5-10 minutes recorded videos and 50 PowerPoint slides per lecture with a total of 1200 slides. The recordings were in English with Polish subtitles. The findings suggest that the failure rates were lower, and students' average grades were higher than ever before. First time ever the percentage of students who failed was less than 5%, and more than 50% of students received a "3.5" or above out of "5". More than 80% of the students in each student group confirmed studying the PowerPoint slides and more than 45% confirmed watching the podcasts.

The study (Rutkowski, 2014) refers to SDL – self-directed learning, to document several criteria to measure students’ readiness, some of which are the love of learning, creativity, and acceptance of responsibility for one’s own learning. The study addressed the vitality of *love of learning* as a prerequisite for readiness in the classroom. Also, the study claims that there is no point in introducing an innovation, in this case, the flipped learning method, if there does not exist a collective understanding of the love of learning among students in a group. So, the study suggests that a readiness test examining the criteria for readiness to be introduced to see whether the flipped learning method would work for a certain group of students. Hao’s (2016) study corroborates the findings of Rutkowski’s (2014) study. Some students who responded to the open-ended questions in the qualitative part of Hao’s study admitted that they did not like the flipped approach as it requires them to do work before the class. So, when students do not want to conduct previews of PowerPoint slides and video podcasts provided, they will not be ready for class, and the desired level of learning will not be accomplished.

Bergmann and Sams (2012) had noted that the flipped classroom method helps students from all academic levels to excel. What they meant was that students who need more exposure to the classroom material could do so by *pausing* and *rewinding* their teachers (p. 23). Corroborating results were highlighted by Deri et al.’s (2018), Shinaberger’s (2017) and Roehling et al.’s (2017) studies. According to these studies, the flipped classroom method was preferred by all types of students. However, students with lower GPAs and those with lower class attendance as well as those who were less well-

prepared for entering college benefited more from the perks of being taught in a flipped classroom.

Prior research investigated the students' preferences, and the effectiveness of the flipped classroom method predominantly in quantitative courses: Science, Technology, Engineering and Mathematics (Roehling et al., 2017). Roehling et al.'s (2017) study contributed to the literature by unearthing the student attitudes toward the flipped classroom approach in a nonquantitative course in a small liberal arts college in the Midwest: an introductory psychology course. Two sections of the course were flipped. Two professors delivered the course; the first one taught the flipped section, and the other one delivered the traditional section. As a comparison group, the test data of 126 students from the previous semester was used. The overall preferences of 121 students who completed the survey were measured at the end of the course along with the usefulness of the flipped method. Findings of the study evidence a modest preference of students toward the traditional lecture approach. A majority (56.2%) of the 121 students who completed the survey, slightly or strongly preferred the traditional classroom over the flipped classroom. Only 38% of the students expressed their preferences toward the flipped approach. More than half (57%) of the students, however, identified the flipped classroom method as more engaging than the traditional approach. Findings also suggest that the students who had prior online learning experience performed better than the others in the flipped learning setting. As for the effectiveness of the flipped method, students performed slightly better with the flipped method than in the traditional way. An outstanding finding was that students with lower GPAs and lower test scores preferred

the flipped approach more than those with higher GPAs and test scores. Low-performing students needed to spend more time with the material, and the repeated exposure offered by the flipped approach resulted in greater penetration, and better comprehension of the subject. In the limitations section, the study highlights the importance of the impact of the flipped classroom method on international students' performance. As the flipped classroom students have control over the pacing of the recordings provided, international students would expose themselves to the material that is not clear to them at first exposure as much as they want until they feel comfortable with the topic. The current study fills the gap in the literature in this area: international students' perceptions of the flipped classroom approach.

Deri et al.'s (2018) study introduced the use of the flipped classroom approach in a wide variety of class sizes ranging from 20 to 1000. Comparison of the student performances between traditionally delivered classes and classes taught materializing the flipped format in two general chemistry courses were reported over a four-five semester period using historical data from two different colleges within the City University of New York (CUNY) university system. One of the colleges was Hunter College—one of the most selective colleges under the CUNY system where the majority of students come from high performing high schools and better off families. The other college that provided the data for the research was Lehman College. In Lehman College, most of the students are first in their families to go to college and come from low performing high schools. Class size averages in two colleges differed highly. In Hunter College, class size ranges between 250 and 1,000 and in Lehman College, class sizes are between 20 and

180 depending on the intake semester. Both colleges, having different class sizes and different demographics, allowed the researcher to observe the impact of class size and demographics variables on performances of students who study in the flipped format. Findings of the study show that regardless of the class sizes and the demographics, student performance with the flipped learning method was improved. Passing rates at Hunter College were improved by 3.0% in General Chemistry I course and by 6.1% in General Chemistry II course when the format was flipped. In Lehman College, however, the growth in the passing rates was more drastic; 40.8% increase in General Chemistry I course and 31.5% in General Chemistry II course. Therefore, Lehman College that hosts mostly students from lower socioeconomic families benefitted more from the flipped approach. These findings substantiate the findings of Roehling et al.'s (2017) study that the flipped learning method was preferred more by the students with lower GPAs and lower test scores. Deri et al.'s (2018) study supports that the benefits of the flipped classroom method are not specific to certain student groups, it extends to more diverse student groups regardless of the demographics and the class size. The study, however, cannot provide an answer to the question: what makes the flipped classroom approach more effective? Following assumptions are made: (a) The videos being the primary source of content is attractive to twenty-first century students, and (b) the convenience of being able to stop, pause, and rewind provided by the video material allows for personalization of learning and this is appreciated by the students. Findings of several other studies (Lo & Hew, 2017; Lo et al., 2017; Shinaberger, 2017) justify the second assumption.

Shinaberger's (2017) study extended the literature on the flipped learning method by providing insight into what makes the flipped learning method effective, and by inspecting the contribution of certain practices to the effectiveness of the flipped approach. A distinguishing practice that was suggested by the study was the conditional release of the course materials. According to this practice, students would have access to the graded preclass quizzes only if they received a 70% or more from the homework for the previous chapter. The conditional release intervention was not welcome by the entire student body. But performances of less motivated students went up slightly. As a result, the flipped learning method was found to benefit all students, and students with low attendance turned out to benefit more from the approach.

Two studies challenged the transferability of the flipped learning method to all subjects regardless of the abstractness of the content. Swart and Wuensch (2016) have shown that students of the quantitative classes would particularly benefit more from the flipped classroom approach. Lin et al. (2017) manifested that the flipped method is not conducive to deliver subjects that consist of heavy and abstract content such as neuroanatomy in medicine.

Attributes of Flipped Classrooms for International Students in Higher Education

Flipped classroom is an innovative teaching strategy, and its benefits are evident and transferrable to various class sizes, demographics, and to students from diverse academic backgrounds (Bergmann & Sams, 2012; Deri et al., 2018; Roehling et al., 2017; Shinaberger, 2017). The method could offer substantial comfort to international students who are coming to a new country and are faced with all the difficulties of living and

studying in a new, unknown environment (Hughes et al., 2016). With so many perks offered, several papers were aimed to investigate the potential benefits of delivering the learning materials via the flipped learning method to international students.

Flipped classroom approach proved to be supportive in a library orientation that served international students in an Australian university (Hughes et al., 2016). The study differed from the common flipped classroom applications in the sense that it was not a mandatory course and no videos were utilized. Online questionnaires were employed to gauge international students' perceptions of a resource called Passport to Study that was designed to increase their awareness of the services provided by the university's library. The resource was a 12-question, self-guided quiz that was designed to be carried around the library and discover essential services and places. Students had 45 minutes to finish the quiz and attend a more thorough Q&A session with the learning guides where they extended their knowledge about the library and got rid of their doubts through discussions and hands-on sessions. International students comprise 15% of the student body in the Queensland University of Technology. In the first semester of 2015, there were 98 international students participating in the orientation and 90 of them filled out the surveys. The results suggest that the library orientation introduced in the flipped format was promising in getting international students acquainted with the library. The majority (90%) of the students reported that they felt confident about the services provided by the library after the flipped session. According to the learning guides, the learning format was interesting and well-balanced. Also, the learning guides' reflections

indicate that the Passport to Study resource has responded well to the needs of international students providing a student-centered learning setting.

Discussions regarding the positive impact of flipping the class have dominated Zainuddin and Attaran's (2016) study. In their mixed method study that utilized surveys, focus groups and individual interviews to delve into the student perceptions towards the flipped classroom approach, Zainuddin and Attaran interviewed ten students in-depth. A compulsory course, Research in Education was delivered in English using the flipped format through an online platform called SPeCTRUM through which students could watch the recordings, study the PowerPoint presentations, and communicate with other classmates. At the end of the three-month course, 80% of the students acknowledged that the flipped learning method was more engaging than the traditional lecture method. Some international students confirmed the satisfaction of being able to review the course materials before the class without having time restraints. The international students who took the survey also iterated that they felt more confident during the group discussion in the classroom due to the fact that they were prepared. A notable comment from most students was that they had enough time before the class to review the materials, and more control over their own learning gave them more confidence in the classroom.

Providing quantitative evidence, Lin et al.'s (2017) study attempted to illustrate, whether the flipped learning method would be an alternative in the field of ophthalmology. Using questionnaires, preclass quizzes, and a final exam, the study aimed to confirm if flipping the classes in the ophthalmology program would be a remedy to the recent issue of expanded course content despite the reduced teaching time. Flipped

learning method offers to deliver the learning activities that require lower order thinking skills (Bloom, 1968) at home, setting aside more time for the learning activities (Deri et al., 2018) that require higher order thinking skills to be conducted with the guidance of a professor in the classroom. The study involved 44 international students who come from different backgrounds and divided them into two groups. The first group took the flipped version of the ocular trauma classroom and the traditional version of the glaucoma classroom while the second group was delivered the other way around. Findings indicate no statistical differences in terms of preclass quizzes and final exam scores between two groups. So, the flipped classroom approach did not have an impact on student learning in the ophthalmology course. Regarding satisfaction with the course delivery, both the teachers and the students were more satisfied with the delivery of the flipped classroom version. Also, students in the flipped classrooms had developed their critical thinking and problem-solving skills. However, in a similar study carried out by Whillier and Lystad (2015), no differences regarding grades and course satisfaction were determined. Participants of the study were second-year neuroanatomy students during the summer term. Almost all (56) of the 60 students filled out the questionnaire at the end of the course. Lin et al. (2017) attribute the deviation between the results of the two studies that were both conducted in different branches of medicine to the abstractness of the neuroanatomy course. The inference was based on the idea that students who are enrolled in such abstract and heavy courses would require more time for preparation before the classes, and in fact to comprehend the material without the presence of a teacher.

Several authors illustrate the sense of confidence instilled in flipped classrooms because of the flexibilities offered by the method (McCarthy, 2016; Hughes et al., 2016). One possible explanation to the confidence could be that the flipped classroom approach is inclusive (Lin et al., 2017) and it encourages the students to actively participate in the discussions and make contributions to the team. Also, Zainuddin and Attaran (2016) had found that the flipped approach generated positive results for quiet, shy and international students. The quiet, shy, and international students who are hesitant about engaging in group discussions, teamwork and activities because of language and other reasons appreciated the extra confidence offered by the flipped approach. Therefore, the flipped learning method that implants confidence in the students would be a practical method for international students as well as quiet and shy students.

Another study that substantiated the functionality of the flipped learning method for international students was McCarthy's (2016) paper that aimed to investigate the efficacy of the flipped learning method among 128 first year 3D-animation students. International students comprised 16% of the 92 students who responded to the survey. So, the study allowed to observe the improvements in the learning process of international students accompanied by the innovative method. Throughout the semester, the students were alternatively exposed to the traditional tutorials and the flipped classroom implementation on a weekly basis. Overall, 69% of the students found the flipped learning method to be beneficial. Notably, the flipped approach was the most popular among international students with 93% preferring it over the traditional approach. Tutors' responses corroborated the students' responses to the survey results.

The main reason why most of the international students backed the flipped approach was the leisurely pace. Many students had complained about the pacing being a bit fast, and that it was hard for them to follow. The videos provided before the classes allowed them to repeat certain parts of the video as much as they could and stop when they needed to use the dictionary to check vocabulary. Findings also suggest that the flipped approach yielded higher knowledge transfer for all demographics. The method particularly proved to be an effective model that can cater to the needs of the international students. Some international students in Baklashova and Kazakov's (2016) paper had manifested that their classmates did not want them to join their group due to their inadequate language competencies. Thanks to the better personalization and more confidence it delivers, the flipped learning method would help international students deal with such issues more effectively.

Flipped classroom method, giving students the flexibility regarding time and place to get acquainted with the unknown vocabulary, can be a remedy to the international students' language problems and help them improve their academic performances by overcoming the vocabulary issue (Hughes et al., 2016; McCarthy, 2016; Lin et al., 2017; White et al., 2017; Zainuddin & Attaran, 2016). In the flipped classroom method, students are provided with the lesson materials before the actual class takes place; in pdf, PowerPoint or screencast formats (McCarthy, 2016). So, once the students have access to the video or the pdf –in whatever format the material is presented, they will be able to take their time to check the vocabulary by pausing and rewinding the video as many times as they want (Bergmann & Sams, 2012; Deri et al., 2018; Lo &

Hew, 2017; McCarthy, 2016; Shinaberger, 2017). The convenience to study at their own pace will give international students more control over their own learning. Also, the risk of having high ability students bored in the class by asking the professor to repeat several times is also resolved (Zainuddin & Attaran, 2016).

Rationale for Using the Basic qualitative study

The purpose of the current study was to understand what flipped classrooms can offer to international students throughout their adaptation processes by analyzing their experiences with the flipped classroom method. The central research question for the current study examined the lived experiences of international higher education students in flipped classrooms in Poland. According to Merriam and Tisdell (2016), a qualitative approach is suitable if a concept needs to be understood due to little research on it. If a topic has never been studied with a certain sample, then a qualitative study is the appropriate approach to adopt. Although the topic is new, there is some research on the potential benefits of flipped classrooms to international students (Hughes et al., 2016; McCarthy, 2016; Lin et al., 2017; Zainuddin & Attaran, 2016). However, previous studies regarding the benefits of flipped classes have not dealt with the Polish case. The current study revealed the lived experiences of international students in Poland with the flipped classroom method utilizing a qualitative study.

The form of the qualitative approach that the current study used is the basic qualitative approach (Merriam & Tisdell, 2016). Basic qualitative or basic interpretive studies can be found in any discipline. However, in applied fields of practice such as education, it is the most common form of the qualitative approach adopted. Merriam and

Tisdell (2016) describe the main objective of a basic qualitative approach as revealing and interpreting the ways people make sense of their lives and the world around them. The overall purpose is to understand what meaning individuals attribute to their experiences. The current study aimed to reveal the lived experiences of international students in Poland with an innovative teaching technique: flipped learning method. That is why the current study adopted the basic qualitative approach and design the research accordingly.

Summary

Three main themes emerged when reviewing the literature regarding the flipped learning method and what it can offer to international students: (a) flipped learning method and its effectiveness (Deri et al., 2018; Gross et al., 2015; Hao, 2016; Heuett, 2017; Ihm et al., 2017; Jakobsen & Knetemann, 2017; Shinaberger, 2017; Swart & Wuensch, 2016), (b) problems the international students encounter in their host countries and the benefits of the flipped learning method to more diverse populations (Baklashova & Kazakov, 2016; Gautam et al., 2016; Güven & Bahar-Güner, 2016; Haugh, 2016; Straker, 2016), (c) flipped learning approach in the international student context (Hughes et al., 2016; Lin et al., 2017; McCarthy, 2016; Zainuddin & Attaran, 2016). Flipped learning method is a novel method that has proven to boost academic performance (Ihm et al., 2017; Lo & Hew, 2017; Yildirim, 2017) and improve student engagement and course satisfaction (Gross et al., 2015; Ihm et al., 2017; Swart & Wuensch, 2016) for diverse populations (Deri et al., 2018; Shinaberger, 2017; Roehling et al., 2017). International students are also highly satisfied with the flipped approach implementation

(Hughes et al., 2016; McCarthy, 2016; Lin et al., 2017; Zainuddin & Attaran, 2016).

International students largely embrace the aspect of the flipped learning method that makes the course material accessible before the class. In flipped classes, they go to classes more prepared. However, the perceptions of international students in Poland regarding the flipped learning method remained unknown (Rutkowski, 2014). The current study fills the gap in the literature by extending the knowledge regarding the perceptions of the international students studying in Poland through the lens of mastery learning. Chapter 3 will discuss the methodology used to unearth the perceptions of international students regarding the flipped approach.

Chapter 3: Research Method

Introduction

The problem being addressed in the current study relates to a gap in the literature related to the experiences of international students of flipped classrooms in Poland. The purpose of the current study was to understand what flipped classrooms can offer to international students throughout their adaptation processes by analyzing their experiences with the flipped classroom method. This chapter will be dedicated to the research methodology for the current study. Major sections of the chapter are the research design and rationale, the role of the researcher, methodology (where the data collection and data analysis processes will be thoroughly explained), issues of trustworthiness, and a summary.

Research Design and Rationale

The central research question for the current study was:

What are the lived experiences of international students in higher education institutions in Poland who are taught with the flipped classroom method?

Also, the following subquestions helped guide the study:

1. What are the students' perceptions of flipped classrooms compared to traditional classrooms?
2. How do students perceive flipped classrooms contributing to their course engagement?

The central research question examined the lived experiences of international higher education students in flipped classrooms in Poland. According to Merriam and

Tisdell (2016), a qualitative approach is suitable if a concept needs to be understood due to little research on it. If a topic has never been studied with a certain sample, then a qualitative study is the appropriate approach to adopt. Although the flipped classroom is a relatively recent topic, there is some research on the potential benefits of flipped classrooms to international students (Hughes et al., 2016; McCarthy, 2016; Lin et al., 2017; Zainuddin & Attaran, 2016). However, previous studies regarding the benefits of flipped classes have not dealt with the Polish case. The current study reveals the lived experiences of international students in Poland with the flipped classroom method utilizing a qualitative study.

The form of the qualitative approach that the current study used is the basic qualitative approach (Merriam & Tisdell, 2016). Basic qualitative or basic interpretive studies can be found in any discipline. However, in applied fields of practice such as education, it is the most common form of the qualitative approach adopted. Merriam and Tisdell (2016) describe the main objective of a basic qualitative approach as revealing and interpreting the ways people make sense of their lives and the world around them. The overall purpose is to understand what meaning individuals attribute to their experiences. The current study aimed to reveal the lived experiences of international students in Poland with an innovative teaching technique: flipped learning method. That is why the current study adopted the basic qualitative approach and design the research accordingly.

Role of the Researcher

My role as a researcher for the current study was to conduct a face-to-face audio-recorded interview (Appendix B) with each of the 12 participants, transcribe the interview data and analyze their responses to interview questions. Face-to-face audio-recorded interviews were conducted with 12 international university students studying in a private university in Poland and being delivered a course in the flipped format. Students studying in an introductory management course in an international university were sent an invitation email (Appendix A) at the end of the semester. Those who consented to be in the study were invited for interviews.

I was the only person to collect, analyze and interpret the interview data. I have never taught in a flipped setting or was delivered instruction in the flipped format. I am not an instructor of the participants and do not serve as a supervisor to the participants or their professor. The participants were provided the copy of their interview transcript which helped validate the data by giving them an opportunity to affirm their words and to offer additional thoughts that might emerge upon revisiting the conversation. Also, I kept a journal throughout the data collection process to enhance objectivity. I was not introduced to the students, nor they were introduced to myself unless they consented to participate after IRB approval. Student reflections were not shared with the course professor to maintain confidentiality.

Methodology

In this section, the broad philosophical basis for the research methods in this current study was described. The participant selection logic, instrumentation, data

collection, and data analysis procedures as well as issues of trustworthiness are the topics that will be included.

Participant Selection Logic

Identifying the cooperating institution was not an easy task. There is no such organization as Flipped Learning Communities in Poland that could help me in finding classes that are taught with the flipped learning method. First, I have contacted the Ministry of Higher Education in Poland if they could be of help in finding out classes where international students are taught in the flipped format. Then, I got in touch with Scientific Activity Support Centers of public and private universities in Poland. I have communicated with more than ten universities hosting the highest number of international students to see if they have international students who are being taught in the flipped format. Flipped classroom method is not a very common method of teaching in Poland especially with those who teach international students. A professor who teaches a soft skills course utilizing the flipped learning method at a private university agreed to cooperate.

According to Patton (2015), there are no clear-cut rules determining the size of the sample in qualitative studies. I got in touch with ten universities in Poland hosting the highest number of international students. Only one of them responded to me saying they have international students being taught in flipped classrooms. In this university, a professor, having more than 100 students in four of her sessions, is teaching a soft skills course in the flipped format. She agreed to cooperate and allowed me to interview her students at the end of the course. After receiving IRB approval, I sent an invitation email

(Appendix A) to all the students taking the course to determine who would be willing to participate in the interviews.

If a researcher follows the general principles of conducting a qualitative study, the concept of saturation is what usually determines the sample size (Mason, 2010, August). After I received the IRB approval for the study, I checked with the university. The University IRB also approved my request to conduct the study with their international students and I started working with the professor as to when and how I would conduct the interviews.

Students had to sign the consent form (Appendix B) and send it to me electronically to participate in the study. At the beginning, I started the interviews with 10 students. The saturation was not achieved until then, and I continued to interview more students from the recruited group. Selection criteria were as follows: first 15 students replying to the invitation email (Appendix A) with the consent form would participate in the study. If a student does not show up, I would invite the next person in line for the interview. Saturation was achieved with 12 students.

Instrumentation

The main goal of interviewing in qualitative research is to unveil the lived experiences of people and to interpret how they make meaning of them (Seidman, 2013). In the current study, in-depth interviews were employed. I conducted face to face interviews in an empty classroom in the university the students are studying. My goal was to keep the interviews between 45 to 60 minutes so that the participants could stay focused and to respect their time. After I got the University IRB approval, I sent an

invitation email (Appendix A) for the interviews to all the students taking the course. The participants were determined according to the order they send the consent form. At the beginning of the interview, the purpose of the study, the fact that they can withdraw from the study at any time, the confidentiality, and the opportunity to review and edit their responses on the transcript of the interview were communicated. The transcript review opportunity reduced the researcher bias and increased the validity of the results. At the conclusion of the first round of interviews, a gift card worth around \$25 was handed to each participant to recognize their time and effort.

When writing the interview questions (Appendix B), research questions for the current study, the literature review, and the conceptual framework were used as the guide. I started with easy to respond “tell me about ...” questions to make sure the interviewee feels comfortable and gradually got deeper into the heart of the topic in the upcoming questions (Jacob & Furgeson, 2012). Open-ended questions that will make the interviewee comfortably and openly tell their views followed. The primary data sources would be the data collected through interviews and field notes taken throughout the study.

Procedures Recruitment, Participation and Data Collection

The data was collected through field notes and in-depth interviews conducted on the university grounds at the end of the semester. The interviews lasted two weeks. The field notes were taken during the interviews with the participants. The interview data was recorded by cell phone and an audio-recorder.

After I received Walden University's IRB approval, certain procedures were followed. The students were sent a letter of invitation to determine who wanted to participate in the interviews. The number of people that would be required to gather sufficient data for a qualitative study may vary from one to a hundred (Baker, Edwards & Doidge, 2012). Considering the type of approach as well as the saturation and the time constraint, I planned to interview 12 individuals. Based on the order of the consent forms I received, I selected participants for the interviews. They were asked to fill out the consent form electronically and send it back to me in an email if they wanted to participate. The interviewer was the only person who had access to the confidential interview data per consent form. Upon receipt of the consent forms, the participants were informed of the precautions taken to ensure confidentiality and transcript review opportunity. Pseudonyms were used for the name of the university, and the names of the participants. They were communicated that if at any point they decide not to continue, their interview data would be destroyed and not included in the final results.

Data Analysis Plan

The purpose of this qualitative study was to understand how flipped classrooms may increase international students' course engagement and help them through their adaptation process, by gaining insight into their experiences of the flipped classroom. The current basic qualitative study is intended to understand through interviews the experiences of international students who are taught using the flipped classroom approach.

The central research question for the current study was:

What are the lived experiences of international students in higher education institutions in Poland who are taught with the flipped classroom method?

Also, the following subquestions helped guide the study:

1. What are the students' perceptions of flipped classrooms compared to traditional classrooms?
2. How do students perceive flipped classrooms contributing to their course engagement?

The data collection tools for the current study were interviews. NVivo was utilized to help organize the data collected via interviews. Data analysis is an ongoing process (Patton, 2015). That is why I did not wait until I finished the last interview to start the analysis. If I did so, I might regret that I had not asked the second interviewee certain questions that came up in the first interview. After I finished each interview, I had it transcribed using software and then combined my field notes with the interview transcript. Utilizing software made it easier for me to classify the data as well as to copy and reproduce as necessary (Lage, 2010). Also, it was easier to connect the patterns across documents (Walsh, 2003).

Issues of Trustworthiness

I used triangulation to ensure the credibility of the study: I checked what I was told by the participants during the interview with my field notes and my observations throughout the study. According to Merriam and Tisdell (2016), triangulation is the best strategy to protect credibility. Also, member checks were made to avoid misinterpretation

of what the participants said in an interview. They were able to suggest fine-tuning to make sure their perspectives were reflected correctly.

The issue of transferability of a qualitative study, on the other hand, is a compelling task (Merriam & Tisdell, 2016). The researcher who aims to understand the lived experiences of a certain group of people would purposefully choose the sample. It is contrary to the nature of the understanding of generalizability. Still, the results of the current study will be useful to any decision maker at the higher education level and curriculum coordinators who are serving a population of international students.

Ethical Procedures

Patton (2015) argues that there is a high correlation between the trustworthiness of the data and the person who gathers the data. According to this definition, a study would be trustworthy only if the investigation is carried out in an ethical manner. Similarly, according to Merriam and Tisdell (2016), ethics of those who collect the data gives us to a large extent an idea about the validity and the reliability of the study. It is the researcher's responsibility to rigorously conduct the study to ensure credibility, transferability, and dependability. The extent to which I conducted the study with rigor would be the determining factor in the trustworthiness of the study. Therefore, I followed the ethical procedures and carried out all the components of the data collection and analysis process in an ethical manner.

During the recruitment process, one of the risks was that, students, with a fear of breach of privacy, might not want to participate in the study. I included a statement on the consent form that their participation in the research study would be confidential and also

would in no way affect their grades for the course to control for this risk. A similar risk was there for the interview questions as well. This threat was controlled by not associating the interview questions with the participants to make them answer as honestly as possible. Also, interview participation being voluntary nullified such concerns.

Summary

This chapter presented the subjects of the current study, the instruments that were used to collect and analyze the data, the measures that were taken to control validity and the rigor that ensured the conduct of ethical procedures. The following chapter will discuss the findings of the current study providing the results of the analytical process that were carried out throughout Chapter 3.

Chapter 4: Results

Introduction

The purpose of this qualitative study was to understand how flipped classrooms could increase international students' course engagement and help them through their adaptation process, by gaining insight into their experiences with the flipped classroom. I interviewed 12 international higher education students who were delivered a course in the flipped format to delve deeply into their experiences with this approach. Through basic qualitative inquiry method, my goal was to understand the perceptions of international students regarding their access to learning materials before the actual class. The following three research questions helped guide the study:

The central question is: What are the lived experiences of international students in higher education institutions in Poland who are taught with the flipped classroom method?

The subquestions are:

1. What are the students' perceptions of flipped classrooms compared to traditional classrooms?
2. How do students perceive flipped classrooms contributing to their course engagement?

The presentation of the results of the study will start with the description of the setting, certain demographics information of the participants as well as the data collection procedures including the number of participants, the duration of data collection and how the data was collected. The coding process, the emergence of categories and the

discussion of discrepant cases will follow the data collection procedures. Evidence of trustworthiness, including credibility and transferability, will be addressed consistent with Chapter 3. In the results section, each research question will be addressed by presenting data that supports each finding.

Settings

Participants of the study did not communicate any organizational or personal circumstances that might influence the results of the study. Still, the interpretation of the results of the current study must be considered in view of certain organizational and personal factors such as interviewing facility and academic level of the participants. Below, I will elaborate on the strategies employed to address those circumstances.

The interviews were conducted in an empty office in the university building where the participants are currently studying. The interviewees might have felt a sense of obligation to praise the course and the professor as a commitment to their university and the professor. The informed consent had addressed the issue ensuring the voluntary nature of participation to the study and the anonymity of the participants. In addition to this, at the beginning of each interview, the participants were reminded that no one would treat them differently in the institution they are currently studying if they chose to withdraw from the study at any time. They were also reminded that their professors would not have access to the interview data so that they answer openly to questions regarding the challenges they had throughout the course and their completion of the assignment required before the class.

The participants in the study were international students. Although they all had passed a written proficiency test to start the program in English, some of them might have refrained from participating in the study having concerns about their level of proficiency in spoken English language. This belief might have limited the access to students with all levels of English proficiency. Also, students who did not attend all the classes in this flipped course might have thought that the results would impact their grades and not opted into the study in the first place. The fact that the study would not have any impact on their grades was addressed in the invitation email.

Demographics

Participants of the study were selected based on the order they consented to have an interview. Over 100 students took the “Skills for Business: Communication” flipped course where 13 students replied to my invitation email confirming their wish to participate in the interviews. This is a first-semester course, and therefore all the participants were freshmen. Scheduling interviews was very smooth as I gave the interviewees the freedom to choose the day and the time of their choice the week after their final exam week. The interviews took two weeks to complete. Saturation was achieved with the 12th student, and I did not continue interviews after that. All the students were nonnative English speakers. More than half (seven) of the participants were female and the rest (five) were male. Some students (six) had an experience similar to the flipped classroom approach before in high school years. For the rest, the flipped classroom was something that they experienced for the first time. The following

pseudonyms were assigned to participants to maintain confidentiality: Alex, Sharon, David, Rob, Tony, Lenci, Clarine, Galina, Leves, Camero, Vinson, and Phelia.

Data Collection

The main data collection instrument for the study was in-depth interviews. After obtaining Walden University's IRB approval (02-08-19-0448851) on February 8, 2019, per letter of cooperation with the university where the study was conducted, I contacted the rector's office to provide me with contact information of students taking the Communications course. The invitation email along with a copy of the consent form was sent to all the students taking the course. Some of the students who agreed to cooperate sent the consent form by replying to my email while some of them chose to come and sign the form before attending the interview. A total of 13 students decided to participate in the interviews. Although all the measures ensuring anonymity and confidentiality were mentioned explicitly in the consent form, I explained them to all the interviewees one more time at the beginning of the interview to make sure they respond to all the interview questions in an open manner. The purpose of the study, and that it had nothing to do with their studies in their university was emphasized one more time.

The interviews were conducted in an empty office designated by the university administrators on the administrative floor. I was provided with the key to the room to prevent any distractions during the interviews. The interviews took two weeks. I was the only person given access to that office throughout the interviews. The interviews were recorded with an audio recorder and a cell phone consistent with procedures described in Chapter 3. There were no variations in the data collection procedure from what was

agreed in the previous chapter. There were no unusual circumstances during the interviews. All the interview data is saved on my Dropbox secured with a passcode and on a hard drive in a folder protected with a password. One of the students had asked if we could do the interview through the phone due to scheduling issues and we had agreed. Afterward, she chose to come and attend the interview session physically.

Data Analysis

As stated in Chapter 3, all interviews were transcribed using an online service either on the same day as the interview or the day after. Once all the interviews were transcribed from recordings to scripts, they were copied to NVivo to organize the data and determine themes and subthemes. After the organization of data, each research question was designated as a theme: *Flipped classroom experience, flipped versus traditional, engagement in flipped classes* and *international experience* where some demographic data was included.

Determining themes as research questions helped to classify categories and to place them under a theme. The coding process yielded 13 categories which were collected under four themes: three themes were identified using the research questions, and another theme emerged while analyzing the demographic data. *Perceived benefits* category referred to the advantages of being an international student, *perceived disadvantages* category referred to the difficulties students experienced as international students, and the *academic level* category referred to students' grades, class attention and level of English language. *Perceived benefits, perceived disadvantages, and academic level* were related to the *international experience* and placed under that theme. *Material*

choice category referred to students' preferred instructional material for self-study, *opportunities* and *challenges* categories referred to different aspects of the flipped classroom method as they were perceived by the students, and *more flipping* category referred to the interview data regarding whether the flipped classroom method was welcome by all groups of students. *Material choice*, *opportunities*, *challenges*, and *more flipping* categories were related to students' experiences with the flipped classroom approach and placed under the *flipped classroom experience* theme. *Added review* category referred to leisurely pace offered by the flipped learning method, *vocabulary support* category referred to the accommodations offered by the flipped learning method assisting students with their unknown vocabulary, *student attitude* category referred to students' responsibilities in a flipped classroom and *first flipped classroom* category referred to the data that was provided by students regarding whether this was their first time experiencing a flipped classroom. *Added review*, *vocabulary support*, *student attitude*, and *first flipped classroom* were related to the comparison of flipped classroom approach with the traditional approach and placed under the *flipped versus traditional* theme. *Engagement* and *confidence* categories referred to the interview data analyzing whether the flipped approach was useful in improving students' engagement or confidence in the classroom and were placed under the *engagement in flipped classes* theme.

What the study aimed to address was the experiences of international students with flipped classrooms. Their experiences with the flipped approach mainly included their comparison of the flipped approach with the traditional approach. Even when they

were asked to define flipped classrooms based on their own experience, they would often resort to comparing the flipped method with the traditional classroom experience they have had since elementary school. Therefore, at times, it was hard to decide which code to assign to certain data as it could belong to both themes. Many times, the solution to this dilemma was to code it in both themes because the data was pertaining to both themes. Also, the fact that the research questions were designated as main themes and each interview question was created in the beginning to represent a certain research question assisted in the coding procedure.

Evidence of Trustworthiness

The data collection and data analysis procedures were carried out as they were outlined in the previous chapter. According to Merriam and Tisdell (2016), triangulation is the best instrument to ensure credibility. I employed triangulation to protect credibility in this study. I compared what participants told during the interviews with my field notes and my observations throughout the study as it was set forth in Chapter 3. Member checks were utilized to prevent misinterpretation of interviewees' responses to the interview questions. In addition, all the participants were given the opportunity to review and suggest changes in their interview transcript to make sure their views were conveyed accurately.

Aiming to understand the lived experiences of international students living in Poland with flipped classrooms, the sample was chosen purposefully. Contrary to the notion of transferability or generalizability, I had to work with international students being delivered a course in the flipped format. Therefore, the results of this study may be

useful for those seeking to understand the perceptions of international students in higher education institutions regarding such an approach. Throughout the data collection process, I kept a journal to ensure objectivity. I never delivered a course in the flipped format, nor had I met with a professor who taught a flipped course.

According to Merriam and Tisdell (2016), dependability can be ensured by establishing consistency between the raw data and the researcher's findings. In my study, I used consistent strategies throughout the recruitment, interviewing, and coding stages, and clearly described the target population. During interviews, I refrained from employing targeted questions and provided opportunities for clarification to ensure the authenticity of student responses. As for establishing confirmability, special focus was given to student responses to ensure the voice was theirs, and that it was not imposed by the interpretation of the researcher. Also, I kept a journal to separate my experiences from those of the participants.

Results

The central research question for this study was: What are the lived experiences of international students in higher education institutions in Poland who are taught with the flipped classroom method? In addition, the two following sub-questions helped guide the study: (a) what are the students' perceptions of flipped classrooms compared to traditional classrooms? And (b) how do students perceive flipped classrooms contributing to their course engagement?

International Experience

This theme consisted of codes emerging from the responses to the first three interview questions concerning perceived advantages and disadvantages of studying in a foreign country in a nonnative language as well as demographic data including their level of English, class attendance and grades in the Communications course. There are three subthemes under the international experience theme: *perceived benefits*, *perceived disadvantages*, and *academic level*. The data coded by this theme provides information regarding participants' general view of living in a foreign country, difficulties of studying in another language as well as their expectations from education abroad.

Academic level. Students' grades for the Communications course, material completion rate, their need to use a dictionary in class, their class attendance rates and the difficulties they had in studying in a different language were the main contributors of the *academic level* theme. Alex, Sharon, David, Tony, Clarine, Galina, Leves, and Camero declared that they attended almost all of the classes while Lenci, Phelia, Vinson and Rob stated that they missed several classes for different reasons. Also, half of the participants indicated that they completed all the material that was assigned by the professor before the class while the other half confirmed that they had not done all but most. The grades "5", "4,5" and "4" were evenly distributed among the interviewees: Sharon, David, Lenci, and Phelia got "5"; Alex, Clarine, Leves, and Vinson got "4,5"; and Tony, Galina, Camero and Rob got "4." "5" is the highest grade, "4,5" and "4" are considered good grades, and "2" or "1" are failing.

Only three of the interviewees shared that they did not need to resort to a dictionary or translator during classes: Clarine, Vinson, and Phelia. The rest of the participants indicated their need to use the dictionary to look up words during classes. Referring to the understanding of the English language in class, Lenci, a high achiever stated:

Now [at the end of the first semester], it is better. When I started my education at this university, it [understanding the professor] was difficult for me, but I think it is normal, because it was so new for me, [a] new experience.

Galina, who attended most of the classes and earned a “4,5” as her final grade voiced similar concerns in her understanding of classes in English along with a particular solution:

It was difficult in the beginning. Then I got used to [it]. In the start of this semester, I was trying to understand every single word. But now, if I don't understand one word, I don't translate, I just try to understand the concept.

Later, she added:

It can be difficult because, when you concentrate on economics, you [would] focus [on the subject] and you [would] understand. But if you study in English, you should concentrate on [both] English and Economics. And it's sometimes very difficult because you should translate the words, [and in addition] you should understand the meaning of the sentences, and it is disturbing, because you want to concentrate on Economics, but you cannot because of English.

When participants were asked if they had to work harder studying in a language other than their native languages half of them indicated that they would need to work less if they studied in their native languages. Tony, who declared that he attended almost all of the classes and received a “4” noted:

If you're studying in your mother language, it will take you two hours [or] three hours of study. Well, like studying [in] another language will take more than five hours because of translating, [and] research more to understand the concept. It just takes more time.

Galina brought the discussion of difficulties of studying in another language to a totally different level by pointing out the comfort of translating the whole chapter into her own language:

Definitely [I have to work harder]. [When] I am trying to understand economics, and you should stop and translate some words and then sometimes you should translate the whole chapter into your language once again to understand it better. So, I think that if I were studying in my [native] language, it would take me not so, for example, one hour, but it would take me like 20 minutes to understand this chapter.

All the participants who talked about the difficulty of studying in another language brought up the time issue that would be lost during translation. Clarine, who said she would not typically have problems with the English language, noted a unique situation related to the difficulty issue about a particular class that was not originally flipped: “[I had to work harder in] Only one lecture, in Economics. The reason was that our teacher

went at a very fast pace.” She explained further introducing her way of overcoming the issue:

Most of us really found it really difficult to try and understand what he was trying to say. So that means I had to go a step further and try and get books and try to read to understand at least and I sometimes had to read ahead so at least he had given us the syllabus. So at least if we read ahead and as he was teaching at least you would actually understand where he was coming from.

Clarine’s solution to the issue was the mobilization of activities that are present in the essence of flipped classrooms: She read ahead, and when she came to class, she had a grasp of what the teacher was talking about. She was not complaining about understanding the topic; the issue was related to the pace of the lecture, and she overcame the issue by going the extra mile and studying ahead.

Perceived benefits. Better academic expectations had the largest contribution to the *perceived benefits* theme. It was discussed by seven of the participants where each one emphasized a different expectation. Camero, Lenci, and Alex addressed the higher quality of education in Poland compared to their home country while Sharon, Galina and Phelia indicated that studying in a foreign country where the language of instruction is in English would improve their skills in English. Alex, who attended most of the classes and got “4,5” as his final grade in this course expanded the academic expectations topic by referring to the degree recognition. The reason why Alex chose to study in Poland was that the degree he would earn in Poland would have wider recognition than the one he would earn in his home country: “If I study in a foreign country, then I get the

appropriate degree which can be legalized all over the world. The value of the degree gets more and more important as it isn't [the case] in my country.”

He later added referring to the quality of education:

[When] Studying in [a] foreign country, I feel better because, in my home country, there is not a good educational system. If I study in a foreign country, then I get a better education as well as applying it. I am from India, and there is a lack of some knowledge.

Phelia, who indicated that she missed some of the lectures but got “5” as a final grade addressed the improvements she could make in her English by studying in a foreign country: “I can improve my skills in this [English] language and also, I study business management here in this university. So, I know [learn] lots of new vocabulary here. So, it's nice to me.”

Meeting new cultures was the second most common idea that was presented when the participants were asked about the benefits of studying in a foreign country. Camero, a student with high class attendance, declared:

The advantage is [that] you actually meet new people, looking at Poland as it is, it's quite different when you see different nationalities, people from different places. So, you get to meet different people, you get to learn [about] different cultures, and it's actually quite fun. It is an opportunity to have international experience, blend with them.

All the other five participants who brought up meeting new cultures and people

from different backgrounds as benefits echoed Camero's statement. Camero and Rob, a student with lower class attendance and a "4" as their final grades, gave a different perspective saying that being away from their family, they will find more chances to focus on their studies. Rob stated:

[Here, in Poland] you are alone you have to count on yourself. You can just focus on your study because you're abroad [and] you have just a specific time to plan your future. It's a matter of to be or not to be, these three years let's say.

Referring to this matter, Camero addressed the benefits of being able to get out of one's comfort zone:

Studying in a foreign country has always been [an] advantage in my mentality because we are far away from our home and our comfort and great things come out of our comfort zone, and I'm standing here and know that I have to stand on my own. There is no one [here] to look back [worry about] for me.

Camero revisited the issue of being away from home when he was asked about the disadvantages and viewed it from a different perspective: "Being far away from home teaches me to stand on my own feet and matures me."

Perceived disadvantages. The ideas that had the largest contribution to *perceived advantages* theme were local language, homesickness, and loneliness. In Poland, international students may opt to study in Polish or English. For the purposes of this study, our participants study in an English language program. Therefore, they do not have a Polish language background, and the local language accounted for half of the issues that were cited in this category. Alex, Sharon, Clarine, Galina, Vinson, and Phelia voiced the

local language issue as the biggest disadvantage. Vinson, a student with no issues in the English language stated: “Probably the [local] language barrier is really and gets in the way of some stuff, but not many things.” As for Clarine, all the disadvantages mentioned by the other participants were addressed:

I think the biggest disadvantage will be language. And maybe you just feel that you miss home, maybe because you're not really getting much attention.

Technically there are so many people around you, but you're also lonely.

Later she added: “But then with time you have friends and you feel more accompanied to the place, and everything's all flowing.”

Four participants indicated that they missed home during their stay here in Poland: Sharon, Rob, Clarine, and Camero. With Poland being a member of the European Union, those who have a valid visa to visit Poland may visit other member countries without a need to obtaining a visa. Leves, a student who also viewed the biggest advantage of being in Poland from the international mobility point of view, gave a perspective similar to Clarine’s regarding the feel of loneliness saying: “Firstly, I felt not really good because I didn't have friends but now [as the second semester starts], I found them [friends] and I feel better.” For Clarine and Leves, one semester was enough time for some international students to make friends in the countries they go for studies.

Flipped Versus Traditional

Participants’ definition of the flipped classroom based on their experience, their comparison of the flipped approach and the traditional approach (and whether flipped classroom approach helped them with the vocabulary), and the pace of the classes were

the main ideas included in the *flipped versus traditional* theme. Subthemes that emerged were *first flipped classroom*, *added review*, *vocabulary support*, and *student attitude*.

Participant responses to the interview questions not only helped highlight the main propositions of the flipped approach but also identify if flipping the classes have alleviated international students' issues regarding the pace of the lecture and vocabulary.

First flipped classroom. Half of the participants commented that they have gone through an experience similar to flipped classes in the past. Some students told that they were exposed to a similar format of teaching in high school and others even before high school. Camero stated, "I had tutoring classes before, and the professor asked me to study certain materials before meeting."

The flipped classroom does not have a specific definition. That is why any teaching method that gives access to the learning material before the actual meeting of the professor and the student can be viewed as a flipped class. In Camero's case, the fact that he had the opportunity to review the learning materials before the class, we can confirm that he had his tutoring class flipped. As for Rob: "[We] Had [flipped classes] before. But the material formats were not as many; no videos, [no] PP [PowerPoint] presentations." Similar to the Camero's case, videos or PowerPoint presentations are not essential parts of flipped classes. Any material including book or pdf files may be assigned as learning materials before the class. Referring to this fact, Vinson noted, "It was not my first flip[ped] classroom experience, but this one was definitely done differently than what I am used to [do]." Explained further saying:

Back home they would give it [the material] to you and expect that you know how

to do it. And if you don't well, then you're going to spend the next hour learning how to do it here [in class]. And [they] give you material and it's more so than just studying and just reviewing, going over, instead of, like you should know this. So that's a lot less stress on my part especially.

Galina, who got a “4” in the Communications class and stated that her understanding of the English language is moderate, decided to try flipping after she saw a blogger’s post about reading the class materials before going to class when she was in high school. She stated:

When I was in high school, I saw a blogger where she gave us a very useful tip. [She wrote] If you want to learn better, you should just read the chapter before the class. And then I thought, why not? I decided to try maybe one week, not all subjects, but the most important ones for me. And what's interesting here [was that] I read one chapter before the lecture in the school. But it was for me. The teacher didn't tell us so, and I understood that it really helps because when you read that information, you see what you don't understand. And you already have some questions when you come to the class; some questions were [already] deleted [crossed out] because I understand. And then when you had something, more questions you asked, and you understand the topic completely.

Galina had taken care of some of her questions before even coming to class.

She noted that here in the university it was different because it was a class-wide implementation and they were asked to study the materials before class:

And here we have this flipped classroom in the university, it was official, and everybody understood that we should do this. And it was not new for me because I was used to it. But it was very helpful because I read the presentation and some videos, and I understood before the lecture and then I came, I was prepared.

David's experience echoed Galina's statements:

I can say that all of the people who have been reading the materials at home which were given in advance may have done much much better jump on their tests including me. I consider having the materials and the topics before the lesson very good because I have the opportunity to prepare, to do some research.

Added review. Almost all the participants addressed the opportunity to review the learning materials as much as they could when the inquiry was about the definition of flipped classrooms. Camero, Galina, Clarine, Lenci, Tony, Sharon, and David communicated that it was easier for them to master the topic given more opportunity for review. Sharon, a high achiever with no problems of understanding the English language stated "If you don't understand something, you have time to translate it. In class, all the material is repeated one more time." Lenci added:

I think it's a very good idea [to have the class materials available]. You can understand materials better because you see [them] first at home and [then, are able to] discuss these materials in class.

David explained further emphasizing the second opportunity to grasp a topic in class:

And of course, that was much easier for me to navigate through the class because the teacher was going through each slide which I [already] went through and if I

didn't know something, I did some research in advance. I was just refreshing my memory. I was maybe correcting myself if I made some mistakes in perceiving the material by myself. Yeah, it gives sort of second opportunity to be better at class.

Clarine analyzed the situation from the professor's point of view: "Good thing. At least you have most students understanding what the teacher is going to say before the teacher actually gives depth to what we are going to learn." The professor will have an audience who already has basic knowledge about what s/he is going to teach. S/he thinks that having such an audience is better than having a class full of people who have no idea of what is going to happen in the class in case new material is being presented. Vinson claims it is much more stress-free and a lot less pressure.

Vocabulary support. Majority of the participants (nine) confirmed that the format of the flipped learning method assisted them with the vocabulary issue. Most of them (eight) addressed the fact that they could look up unknown vocabulary before class and come to class more prepared in terms of specific terminology and other words that would otherwise require a dictionary. Alex stated: It is hard to check all the vocabulary during class time. Tony, who attended most of the classes noted that he did not miss a word in class because he would translate all the unknown vocabulary before class. Rob brought up a unique situation where some teachers do not allow the use of translators in class:

Some teachers never allow you to use your phone to translate. Sometimes you don't have a lot of time to type the word and find a translator. You can just look at

[translate] the words you don't know, and that's all, that will be easy for you to understand the lecture. Even if you didn't understand it on your own, when the teacher explains it, you will understand the idea and the missing vocabularies.

Clarine had to contact the professor to get answers to her questions before the class:

You've got time to actually research, even more, when you are given [the access to material]. I recall when she [the professor] gave us a certain video and I didn't understand some parts of that video and I was able to communicate with her through email. So, in a way it [having materials ahead of class] really does assist, you actually learn even more on your own. And then when the teacher explains, there is now [a] deeper understanding to it.

Student attitude. Given all the benefits of having access to learning materials ahead of the class, Camero, Rob, and David made connections to the attitude of the main player; the student. While Camero points out the attachment between the student and the learning material, Rob and David commented that benefitting from what flipped classes offer has a lot to do with the student. According to Camero, the student will be able to relate more to the material when he does the research first by himself. The teacher's presentation of the topic in class would be a double revision. Rob thinks that the student must want to rehearse the material before the class. Otherwise, s/he will not benefit.

David added by stating:

The idea itself and the teacher's realization was on a very decent level, but the

biggest problem was with the student. People who are lazy, they just don't use their opportunities to participate and flip[ped] classrooms, unfortunately, don't help them.

Flipped Classroom Experience

In the Communications class, students were given access to materials in different formats including videos, PowerPoint presentations, and pdf files as well as small quizzes. During the interview, they were asked if there were any implementations that they did not like or that they would want to be done differently. Also, the students I inquired of the students whether they would want more classes delivered in the flipped format. The *flipped classroom experience* theme included ideas related to students' choice of the learning materials provided before class, opportunities, and challenges that were involved in the implementation of the flipped approach and whether students would like more classes delivered in this format. So, the subthemes that emerged from the coding practice were *material choice, challenges, opportunities, and more flipping*.

Material choice. The most cited favorite material was PowerPoint presentations by nine citations. Videos followed the presentations as the choice of six participants and pdf files were mentioned only by two of the interviewees. As for the materials that the participants were critical of, videos were cited by four interviewees, and pdf files were introduced three times.

Proponents of PowerPoint presentations emphasize the fact that you can open the presentations even during the class time when the professor is teaching. Phelia stated "It [PowerPoint presentation] is really comfortable during class. Sometimes it is not visible

[teacher's notes on the board]." Most participants, whose favorite material were PowerPoint presentations also noted that presentations were self-explanatory and did not require translation or help from the professor. Also, the fact that it was written helped to see the words if a translation was needed. Vinson stated "PowerPoints were simple to understand. Everything was there. There wasn't an explanation needed. It was there."

On the contrary, videos, required translation. Tony stated "In videos, I just don't understand what they're saying. Sometimes, I am too lazy to watch the whole video." Lenci echoed the language issue with videos "Videos are more interesting to see, but because of my English, sometimes I can't understand some words. Yeah. And PowerPoint it's easier to understand, you can translate. You see words." Sharon voiced similar concerns: "Cause now, on the videos, the person that was talking, was talking too fast for me. And there were some words that I couldn't understand." Camero's suggestion for the videos was worth noting: "They must be short and grab interest." Rob, being a proponent of videos as learning materials indicated that he is a visual person and noted "[When] you're listening and seeing something that demonstrates the material in front of you in video format, it'll be easier for you to remember and that keeps the material in your mind." Only one interviewee cited pdf files as favorite. Phelia had some concerns regarding pdf files being used in flipped classes: "I think pdf, it's not comfortable for me at all. Because I don't like reading it at all. So, it's a lot of information, and it's written sometimes it's like an old card."

Challenges. Interview question number seven was dedicated to the challenges students had throughout the entire flipped classroom implementation. They were asked to

communicate anything they perceived as an obstacle in the implementation process and to elaborate on how they managed when they had difficulties. Professor support and the boredom were the most common codes that led to the creation of the *challenges* theme.

Camero, who got “4” as his final grade, and Phelia and David, who got “5” as their final grades, addressed the fact that it was boring for them to see the same material that they studied before the class was reviewed by the professor in the classroom. David noted “Sometimes it is boring in the lesson because, well, you come, and you listen everything which you have already memorized completely, and you're sort of doing nothing.” Phelia explained further saying “Sometimes everything was the same. For example, one lesson, it was the same thing and another lesson the same but in other words. So, I don't like it when people repeat all this.” Camero expanded by discussing his reluctance to attend the classes because of the same issue: “Having content available to you has a downside. You know what will be taught and you may not want to go to class.” As for Galina, knowing that the teacher would review it in the class served as a justification to not be prepared: “Sometimes you are lazy and don't do the assignment. The professor teaches, and you know it.”

The following comment from Galina will contribute to the discussions regarding the necessity of grading the assignments that are designed to be completed by students during self-study. Galina, a student who confirmed she did not complete all the tasks assigned before class stated, “Professor who might ask you the question, will not give you the marks.” She noted that she did not complete the tasks assigned because the professor did not grade them. Referring to the challenges, Rob brought up a unique

argument addressing the organization of the online system where the online learning material was stored:

At the beginning, it was difficult for me to find where the materials are on the website because it wasn't labeled as communication of skills. So, it is about designing or organizing of the website.

Regarding how students managed when they had questions while studying the materials without the presence of a teacher, comments centered around YouTube and Google.

David stated “Google is my friend. I just checked in Google what it means. And after that everything clarified itself and the videos. They are mostly replacing the professor.” Alex, Sharon, Lenci, and Galina gave a different perspective addressing the professor. Galina voiced “I write this question and then ask the professor after the lecture because maybe during the lecture she will answer it.” She continued making connections to translation to her mother tongue “Sometimes I Google it in my language. It's better to understand if you understand in your language, you can explain in English. But sometimes it's very difficult, and you should go to the teacher.” Camero’s suggestion was unique. He believes that an additional session before the actual class would be useful:

A session with students before the class. If the teacher can arrange some sort of a personal meeting for people who really study. I just want to have a personal session because I have to correct my things. I cannot ask everything in class.

Opportunities. Interview question number eight was designed to explore the implementations that contributed to participants’ success or failure in this class. All the participants, having a grade “4” or above in this course, highlighted the practices that led

to their success. So, access to learning material, more review opportunity and preparedness were the codes that provided the *opportunities* theme with the largest contribution. Alex stated “Definitely, the fact that we are getting the material before the class [contributed to my success in this class]. So that was a bit of wisdom.” Camero echoed Alex’s statement: “When we have [the] material, we can learn part of the material and build a foundation. With the teacher, it is revised.” Later, he added, “Having material available [in Moodle] is good because it's not possible to have attention all the time at the teacher.” Rob gave a different perspective stating:

Yes. The lecture halls are so big, and the microphones are not clear, there's a lot of echo inside the class, so sometimes if you sit at the back you don't find a place in front, you don't understand anything.

Galina explained further saying: “For example, when you are sitting on the lecture, you can open the material and read it do something with it.” Galina continued, noting the preparedness aspect: “I'm really more prepared, more confident and I learned more. [When you] have access to the information or the presentation, you can check it wherever you want to.”

For her, having access to the learning material is not only an opportunity that occurs before the actual class but also, when you have everything online, you can study the material regardless of location whether it is at home, at the library, on the bus and so on. Rob also thinks that this is useful in the final exam: “It helps mostly on the final exam. When you want to study, you just go to the internet to the website and download the materials so you can study them easily.” David claims that videos of high quality may

sometimes take the place of the course or the professor: “So good quality made videos which we had are like a partial replacement for the course, and they assisted in participating better.” Last, Clarine’s comment was worth noting:

I personally do not want to dispute anything about the flipped classroom, if anything, I actually encourage it. It's actually quite good. I mean you've got time to comprehend so many things and then you've got a teacher to even put more flesh to what you already know.

There were two discrepant cases that went into the opportunities theme. They were coded as academic boost and peer collaboration. Both codes were designated as discrepant because they were only voiced by a single participant. They will be mentioned here to ensure they were not left out. When students were asked to elaborate on what contributed to their success or failure in this class, David brought up the academic boost issue, and Vinson mentioned peer collaboration. David argued: “It really enhances the students’ ability to learn more, to concentrate on the lesson.” He thinks that flipped classrooms contribute to a student’s academic performance. Vinson addressed the peer collaboration opportunity: “It is nice to be able to study together before the class even starts. Well, it's nice to have that week ahead of class so you can review everything and get a better grasp for it.”

More flipping. The last interview question was about participants’ readiness for more flipped classrooms. The majority (eight) confirmed that they would like to have more classes delivered in this format while Phelia, Clarine, and Galina explained further that they would like to have their Economics and Finance classes delivered in the flipped

format. Tony, on the contrary, noted that he would like all classes, but Mathematics delivered in this format. Galina stated:

Yes [I would like more classes delivered in this format]. Because if we had this in Economics, I think I would have a better grade. If I had the materials before the class, I would have a better understanding of the class.

Clarine, later added:

I think that'll be good for most students because even today we started our Finance and Accounting, and most students were actually asking the lecturer, teacher, please give us the materials and then we can just go read over it as well.

She explained further addressing participation:

Yes, but then the moment you've got information, you participate even more. And you understand even more. We have more questions to ask, but the moment we don't know what's coming in the lecture, we become so dead, so quiet. That is how it is.

On the other hand, Tony, for a similar discipline, noted, “Yes [I would like more classes delivered in this format]. Not in Math though. I cannot understand Math without a professor.” As for David, it was a matter of being able to download and keep the material:

I would prefer to have the ability to have every lesson in the format of a flipped course. I [would] have all the materials with me and I'm sure they won't be gone anywhere. I mean, [I can] download them keep them.

He later added: “FC helps you revising, sometimes correcting.” So, the student might have learned or interpreted certain information incorrectly. The meeting with the teacher will be the opportunity to correct such issues. Referring to this fact, Camero and David also addressed the convenience of having material available for download. Camero stated, “Having the material available is good because it's not possible to have attention all the time at the teacher.” Vinson also made connections to the availability of the classroom materials and noted:

It's just a way to lessen their [students'] stress with school because it's just so much easier. Instead of writing down notes and notes or pages and pages of notes every day or every once a week having to review that, it's better to just have everything beforehand and go over it again, [and] then in the classroom

Engagement in Flipped Classes

The second research question addressed the level of engagement in the flipped classes as it was perceived by the participants. The theme included subthemes *engagement* and *confidence*. There were two questions where participants defined the level of overall course engagement and the confidence, given they had access to the material before the class.

Engagement. This theme consisted of participant responses regarding the extent of their engagement in the flipped classroom. The majority of the participants (nine) confirmed that the way the flipped class was delivered had contributed to their engagement in the actual class while three of them confirmed that the format did not have any impact on their engagement. The most cited reason for better engagement was their

acquaintance with the material before the class. Alex put it simply: “By seeing the material before it was very easy for me to raise my hand in the class. If a professor [is] going to ask a question we can easily answer the question.” Phelia echoed Alex’s statement: “It was really comfortable especially if I know already about what’s going to be in the class. So, it was nice.”

David noted that his engagement was always high and addressed those who, according to him, did not study the materials assigned:

My engagement was always high. Because I studied the materials which we were discussing in the classes. I had the opportunity to already know a lot of answers to the questions with the teacher. So, I have been very engaged with the class because since I already knew the material and I had a chance to study more. I could easily interact with the teacher when she had questions to us. But people who didn't read the materials and most of whom were sitting in the back they were quiet, and I didn't even hear them throughout the whole semester.

David made a connection between some students being quiet and their unpreparedness for the class. Lenci stated that she is not active because she is shy: “I'm not active because I am a little bit shy person and also, it's maybe because of my English.”

Later she added:

Yes. It [the flipped format] helped me sometimes. As I said earlier, I'm not very active in classes, but sometimes I was participating in this class if I think it is needed. It's helpful in discussions and as I said [it] helps in understanding and learning materials better.

Rob, Galina, and Sharon did not think that their engagement was correlated to the format of the flipped classes. Sharon noted, “I was not engaged. It [the flipped classroom] could help me, but I prefer to listen, not to speak.” Rob explained further saying:

But even if I don't check the materials when I go to class, I have no problem engaging with the teacher. Because it isn't that difficult. I really like the subject. When I like something, I have the mood to learn.

Confidence. As for confidence, again, the majority of the participants indicated that the format contributed to their confidence in the classroom. Some students associated the confidence to the availability of the material and being able to check vocabulary while some students addressed their acquaintance with the upcoming topic. Phelia noted, “When there is a new topic, then you feel yourself more confident because of some new words.” Alex, Lenci, and David addressed the preparedness. Alex stated:

I felt more confident in the class because we got the material before the class and we could go through the material. So, we could be more confident about our answers which was asked by the lecturer.

As for Galina, it was about knowing what was coming:

I was more confident because I know what was going on. And I understood that I could ask some question more. So, the main reason that I was more confident was because I knew what was going on.

Clarine also referred to being able to review the material before class:

I was actually very confident. Yes, I know actually, there was a time when I was unable to read some of the materials because of work. But the time that I got to

actually go through the material, I would feel really confident in class that OK, I know I've got knowledge, even if maybe we're not going to have a lecture, I would be certain that you know I've got enough knowledge.

Vinson thought that seeing the material before made the class was more enjoyable:

It just made the class more enjoyable because. It's more enjoyable because I saw the material and I know what the teacher is explaining. If I didn't see the material, I would just be there somewhat dumbfounded about what's been talked about, and we haven't heard before. It definitely helps a lot.

Sharon and Rob confirmed that they either did not pay attention or do not think that the format had any impact on their confidence in the classroom.

Summary

Chapter 4 started with a description of the setting and information regarding the data collection procedures including the number of participants, the location and the duration of the interviews: the only data collection instrument for the study. There were no variations from the data collection procedures that were described in Chapter 3 and no unusual circumstances were observed during the data collection process.

Designation of each research question as main themes after the organization of the data using NVivo, helped in identifying the subthemes and determining which codes would go under certain themes or subthemes. The responses to the first three interview questions investigating participants' overall experiences in a foreign country and collecting certain demographics information regarding students' academic performances accounted for the data that formed the *international experience* theme. The most common

reason for choosing a foreign country for studies was cited as the higher quality of education while the biggest perceived disadvantage was mentioned as the local language.

The main research question was “What are the lived experiences of international students in higher education institutions in Poland who are taught with the flipped classroom method?” The responses to interview questions 5, 7, 8, and 9 contributed to the data for the *flipped classroom experience* theme. The participants addressed the *opportunities* and the *challenges* they faced throughout the implementation of the flipped classroom. Material access was the highest appearing code during data collection related to opportunities. As for challenges, professor support was the highest appearing code as students mentioned that they had to wait until the class time to ask their questions that appeared while studying the learning material at home. When students were asked if they would like more classes in the flipped format, the majority noted that they would want all of their classes delivered in the flipped format.

The second research question asked participants to compare the flipped format with the traditional format. Many (six) participants confirmed they experienced practices similar to flipped classroom when they were in high school or before where the professor assigned materials to be studied before the class. Added time (more review) was the code that appeared in most responses. Also, there was a consensus among students that the flipped format helped them with the vocabulary issue.

The last research question investigated whether the flipped format contributed to students’ engagement or confidence in the classroom. Most students stated that they felt more confident given access to the learning material before the class. As for engagement,

nine participants confirmed that being able to review the material before class has improved their engagement and participation in the classroom. The thorough analysis of participant responses to interview questions and the introduction of their authentic quotes in Chapter 4 will assist in the accurate interpretation and discussion of data in Chapter 5.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this basic qualitative study was to understand how flipped classrooms may increase international students' course engagement and help them through their adaptation process, by gaining insight into their experiences of the flipped classroom method. The goal was to give voice to the most important stakeholder in the learning process—students—to inspect their perceptions of the flipped approach. Several (12) international university students in Poland who were delivered an introductory management course in English, were interviewed to investigate their experiences with the flipped learning method. I analyzed participants' perceptions of the flipped classroom method through the lens of Keller's (1968) personalized system of instruction to draw inferences and to thoroughly understand their experiences and level of satisfaction with the approach.

There were many key findings regarding international students' experiences in a foreign country and their perceptions of the flipped classroom approach; mostly confirming, but sometimes expanding the knowledge that has been found in the peer-reviewed literature reviewed in Chapter 2. Regarding the contribution of the flipped classroom approach to student engagement and confidence, the data that were collected from the participants demonstrated corroborating evidence. Majority of the participants (eight) stated that the flipped classroom contributed to their engagement in the classroom as they attended the class with a prior acquaintance with the learning material while seven participants confirmed that they felt more confident in the actual classroom given

access to the learning material before the meeting with the teacher. As for student satisfaction, eight participants indicated their approval of the flipped classroom method highlighting the fact that they would like all of their classes to be delivered in the flipped format. In the literature, on the other hand, student satisfaction was high, and students would prefer having classes in the flipped format, but not all of their classes to be flipped due to possible workload concerns (Hao, 2016; Roehling et al., 2017). The workload concern was never brought up during the data collection process.

In the literature review, leisurely pace feature of the flipped classroom approach was documented as the most appreciated convenience offered by the method (Lo & Hew, 2017; Lo et al., 2017; Shinaberger, 2017). Being able to “pause and rewind the teacher” was the metaphor used by Bergmann and Sams (2012, p. 24) to demonstrate the accommodations brought by the format of the flipped classroom method. Likewise, my participants underlined the comfort of self-paced learning. They were able to invest as much time as they wanted in their learning as they had access to the learning material that was posted online. Equally important was the readiness aspect of flipped classrooms. Hao (2016), Ihm et al. (2017), and Jakobsen and Kneteman (2017) provided evidence that the students benefitted more from the flipped classroom when they come to class more prepared. In my analysis of data, the preference of the flipped classroom method among students who came to class more prepared was not different than those who did not complete all the tasks. Of the six students who confirmed that they completed most of the learning materials assigned to them before the class, more than half (four) indicated their satisfaction with the flipped classroom method and that their engagement was better in

the class. However, similar results were found with those who confirmed (six) they did not complete most of the task assigned: four students out of six stated that they were satisfied with the flipped classroom approach and that they would like all their classes to be flipped. For these students, readiness does not appear to be an indicator of student attitude towards flipped classrooms.

Interpretation of the Findings

The data in this study was analyzed through the theoretical propositions of personalized system of instruction (PSI)—a mastery learning model that promotes self-paced learning and sufficient time until students reach mastery (Keller, 1968). The central assumption of PSI, like all other mastery learning models, is that all students can learn equally well if they are provided with sufficient time. Interview data with the participants of this study indicate that leisurely pace was the most welcome feature delivered by flipped classes. Struggling with difficulties due to their lack of proficiency in the language of instruction (Baklashova & Kazakov, 2016; Güven & Bahar-Güner, 2016; Haugh, 2016; Hughes et al., 2016; Straker, 2016), international students appreciate the assistance provided by the flipped classroom approach regarding time and place. Students are given access to the learning material—generally on an online platform—before the class, and they can take as much time as they wish until they feel satisfied with their comprehension of the material.

Personalized System of Instruction Interpretations

According to the principles of the personalized system of instruction (PSI) (Keller, 1968), every student can learn a given topic given sufficient time and appropriate

learning conditions (Guskey, 2010). One of the pillars of PSI is that it focuses on an individualized system of instruction (Keller, 1968). In the communications class, the individualization of instruction was achieved by giving all the students access to the learning materials a week ahead. The learning materials were posted online on a platform called Moodle, and students were given the liberty to download them or review the material online at any time they want, and at any length. Those who could comprehend the given topic quicker would spend less time while those who would need more time had the chance to take as much time as they wanted until they reach mastery. Types of interactions discussed by students indicate their satisfaction with the individualized, self-paced approach. Students who would require more time for the mastery of the topic would have it.

Another significant aspect that was brought up by the participants related to the go-at-your-own-pace element of PSI (Keller, 1968; Kulik et al., 1979) was that students who would be bored in a traditional class when the teacher had to spend more time with the low performers was no more the case. All the students in the classroom regardless of their academic levels would have at least a basic grasp of what the teacher was talking about as they had reviewed the material before during their self-study. So, less time was dedicated to bringing up the low-performers to the desired level, and the class would be less monotonous for high-achievers.

As PSI promotes passing of the learning content on to students through study guides (Keller, 1968), it is the student's responsibility to get acquainted with the material before class. Learning material is divided into small chunks called units. Students are

allowed as much time as they want with the study guides until they feel ready to take the unit test. In case they cannot pass the unit test, the proctor and the student go over the unit one more time to make sure student masters the topic and retake the test. This process will continue until the student passes the unit test, i.e., masters the topic. In my study, the study guides—learning materials—were delivered to the students in the form of videos, PowerPoint presentations, pdf files. The proctor component that is a central element of PSI was missing in this study (Keller, 1968). There was not a session between student's self-study time and the actual delivery of the material in class. When participants were asked how they handled when they had questions during their self-study, most of them told that they would wait until the classroom to ask the teacher or conduct internet searches on Google and YouTube. One of the interviewees had offered an intervention that is similar to the proctor element of PSI: a mid-session between self-study and the actual class. The goal of the mid-session was to bring together the student and the professor or the proctor—generally a student from upper classes—to get rid of the questions that would appear during the review before the class.

There is no standard practice for flipping classrooms. Some professors use quizzes—called gate check quizzes—to check whether the material was reviewed while some do not. In PSI, there is no penalty for errors or failure in the unit test as well (Sherman, 1974). Students are not held responsible if they fail a unit test; they can retake it anytime they feel ready. This is a significant matter that was voiced by my participants. The students' responses to the practice that the professor did not grade the completion of the self-study materials varied. Some students stated that they were reluctant to review

the material as there was no penalty while others indicated that this version of flipped classroom—no penalty for the completion of the task—was stress-free and more enjoyable for them.

Relationship to Existing Literature

In my review of the literature, three themes had emerged: (a) flipped classroom and international students, (b) flipped classrooms and its effectiveness and (c) attributes of flipped classrooms for international students in higher education. In the first theme, the challenges the international students are facing in their host countries and possible benefits of the flipped approach to different student demographics including international students was discussed. The second theme was related to the literature regarding the effectiveness of flipped classrooms as well as teacher and student perceptions of the flipped classroom method. In my study, only student perceptions were examined. In the last part, the benefits of the flipped learning method and how international students could take advantage of this method was reviewed.

During data analysis, the experiences of international students in their host countries emerged as a theme. It is imperative to inspect international students' perceptions of studying in a foreign country before reaching any conclusions regarding their perceptions of an innovative learning method. That is why the interpretation of findings will start with a discussion of international experience where international students' adventure in their host countries including their challenges with the English language will be portrayed. Then, the order in the results section of Chapter 4 will be followed to compare the findings of this study with the current literature: a comparison of

flipped classrooms with traditional classrooms, students' experiences in the flipped Communications course and engagement in flipped classes.

International experience. Research has shown that international students go through certain challenges when they move to a new country for studies including cultural barriers (Baklashova & Kazakov, 2016; Gautam et al., 2016; Güven & Bahar-Güner, 2016; Straker, 2016), gastronomic adjustments (Baklashova & Kazakov, 2016), homesickness (Güven & Bahar-Güner, 2016), financial setbacks (Baklashova & Kazakov, 2016; Gautam et al., 2016), and the language of instruction in the hosting country (Baklashova & Kazakov, 2016; Gautam et al., 2016; Güven & Bahar-Güner, 2016; Haugh, 2016; Straker, 2016). Linguistic factors—not studying in their native language for most international students—are the most prevalent issues among international students that affect their lives in and out of the campus negatively in the adaptation process to a new country (Güven & Bahar-Güner, 2016; Straker, 2016). Parallel results were documented in my study: the majority (nine) of the students confirmed they had to look up words using a dictionary during classes. Only a few of them (three) indicated that they never had to use translators or dictionaries. Homesickness was also brought up by four students. However, the local language issue—Polish in this case—that was voiced as a disadvantage by half of the participants did not appear in the literature. In that respect, Poland has a particular situation—the local language does not match the language of instruction for most international students.

Another significant matter cited in the literature was that students had to work harder due to language (Gautam et al., 2016). Likewise, data from my study demonstrate

that students would have to work less had they studied in their native languages. They had to double their work as they had to cope with the English language while having to master the material taught. Regarding the language issue, the literature had referred to students' complaints about professors speaking fast (Güven & Bahar-Güner, 2016) and that they had to ask them to speak slowly (Baklashova & Kazakov, 2016). In my study, half of the participants confirmed that the pacing of the lectures was fast.

Flipped versus traditional. Bergmann and Sams (2012), McCarthy (2016), and Shinaberger (2017) highlighted the leisurely pace offered by flipped classrooms as the most notable accommodation acknowledged by international students. My study yielded similar results. The participants emphasized the importance of being able to watch or review the material as many times as they want. When videos were provided, students were able to stop the video, check vocabulary using a dictionary, and rewind the video if there were parts that required a second exposure for a better grasp. Some students stated that in some classes, professors might not let them use their phones as translators. Also, there may not be enough time in class to do all of the translation if there are plenty of words to translate. The material access before the class gave them the opportunity to take care of all translation issues before class and concentrate solely on the material when they come to class. The convenience of being able to review the material regardless of location was another advantage that was mentioned by the participants.

According to Roehling et al. (2017), students with lower test scores and lower grade point averages preferred the flipped classroom more than the students with higher attendance and higher grade point averages. Also, Shinaberger's (2017) study have

documented that students with low attendance showed higher improvement with the flipped classroom method. My study was not designed to gauge academic improvement. However, the data shows contrasting results regarding the higher preference of the flipped classroom method by students with lower test scores and lower grade point averages. The students who stated they would like more of their classes flipped were distributed evenly among those who got “4”, “4.5”, and “5” as their final grades. As for the attendance, my analysis of data supports the current literature. The preference for flipped classrooms was higher among students with lower attendance than students with high attendance.

Research found a strong correlation between student attitudes towards the flipped classroom and their readiness level (Hao, 2016; Ihm et al., 2017). Based on such results, Hao (2016) suggested the administration of quizzes to ensure students’ completion of the assigned material. According to Shinarberger’s (2017) study, preclass quizzes to check whether students completed assigned tasks increased video watch rates. Some students did not want their classes to be flipped because they did not like the idea of doing work before class. On a similar note, Rutkowski (2014) referred to the importance of *love of learning* as an indicator of readiness in the classroom. My analysis of the interview data did not reveal similar results. The rate of preference of the flipped classroom method was the same among students who noted that they came to classes prepared and those who confirmed that they were not well prepared. However, a student made a connection between being prepared and benefitting from the approach. He stated that the biggest

problem throughout the implementation of flipped classrooms is the student: if they do not complete the task, the method will not help them.

Flipped classroom experience. Research suggests that students of the quantitative classes would take more advantage of flipped classrooms (Roehling et al., 2017; Swart & Wuensch, 2016). Also, Lin et al. (2017) underlined the fact that the flipped classroom method is more conducive to deliver subjects that do not contain heavy and abstract content. My analysis of the interview data yielded confirming and disconfirming results. When students were asked if they would like more classes to be flipped, some of them stated that they would especially like their Economics and Finance classes to be flipped. However, one student confirmed that he would like all classes but Mathematics to be flipped. He declared that he would not be able to understand Mathematics without the presence of a professor.

There is no consensus in the literature regarding which material is best in the implementation of flipped classrooms. While White et al. (2017) suggested that videos improved students' understanding of the material, Moravec et al. (2010) evidenced that reading assignments and exercise worksheets were as effective as videos. The findings of the current study suggest that PowerPoint presentations are the most preferred learning material among international students. Although half of the students confirmed that they liked the videos posted online, nine students cited PowerPoint presentations as their first preferences. Some of them indicated that the videos were not helpful without subtitles and some stated that the person in the videos was talking too fast. Also, the fact that

PowerPoint presentations included materials in the written format, students were able to see the word and check the meaning in case there was unknown vocabulary.

Lo et al. (2017) pointed out students' unfamiliarity with the flipped method. Heuett's (2017) identified a similar concern: some students thought that they were expected to learn the topic just by the material provided before class. Some participants in my study voiced their concerns regarding the organization of the online material and that they had a hard time at the beginning of the course identifying which material they were responsible for reviewing. Better communication would resolve all such issues: clear expectations set at the beginning of the semester and orientation of how the material would be accessed.

Another topic where there was disagreement in the literature is the impact of flipped classrooms on students' academic performances. While some studies provided empirical evidence that flipped classrooms improved students' test scores (Ihm et al., 2017; Lo & Hew, 2017; Shinaberger, 2017), a study carried out by Whillier and Lystad (2015) documented no differences regarding student grades between classes delivered in the flipped format and the traditional format. One student in my study declared that the flipped format enhances the student's ability to learn more by assisting students in concentrating more on the task during classes.

Engagement in flipped classrooms. Prior research substantiated the belief that flipped classrooms contributes to student engagement in the classroom (Deri et al., 2018; Ihm et al., 2017; Zainuddin & Attaran, 2016). Deri et al. (2018) refers to the improved availability of conducting activities to engage students, once students learn the basics of

the material before class. Ihm et al.'s (2017) study suggested that the engagement in flipped classes is higher because it stimulates self-directed learning. In Zainuddin and Attaran's (2016) study, the majority of students confirmed that their engagement with the flipped learning method was better than in traditional classes.

Zainuddin and Attaran (2016) have shown that the flipped approach generated positive results for quiet, shy, and international students. The findings of my study neither confirmed nor disconfirmed the literature. One of the students who declared that she is a shy person confirmed that the flipped classroom approach had no impact on her engagement. Another student, who also declared that she is a shy student stated that the format of the class sometimes helped her with engagement in discussions and learning the material better.

My analysis of the data confirmed the results in the literature. The majority (nine) of the students agreed that the flipped learning method helped them to engage more in the class discussions. Comments centered around the availability of the material before class and that they had an idea what the class would be about. Having a basic grasp of the material, some students confirmed they already had the answers to many questions the professor would direct. One of the students stated that he did not miss a word in class. He had the opportunity to study potential unknown vocabulary pertaining to the topic studied. Another student brought up the self-directed learning that was discussed in the literature by Ihm et al. (2017) when he was asked about engagement. He pointed out that trying to understand the material by yourself first will get you more attached to the topic and you will be more engaged in class activities.

Improved confidence offered by the flipped learning method was another significant topic discussed in the literature (Heuett, 2017; Zainuddin & Attaran, 2016). In Heuett's (2017) study, students stated that they felt more confident when the classes were delivered in the flipped format. Referring to confidence, international students in Zainuddin and Attaran's (2016) study confirmed that their confidence in group discussions was higher. The students made connections to the fact that they had enough time to review the material before class and that they had more control over their own learning.

Data disclosed by my participants supported the data in the literature. The majority (seven) of the students communicated that they had improved confidence given access to the learning material before class. Students indicated that they were more prepared and potential unknown terminology that could appear during class was taken care of during the self-study state.

Limitations of the Study

There were two limitations associated with this study: the access of international students studying in Poland to classes in the flipped format, and potential researcher bias. During interviews, I have noticed another potential issue that should be considered while reviewing the findings of this study: the fact that the data is being reported by students. Students might have felt an obligation to praise their professors or the course as a manifestation of their commitment to their course professor or the university.

Regarding the access to international students, my concern was that the communication email that I sent to Scientific Activity Support Centers of more than 10

universities could be ignored by the university personnel in case they do not command the English language well. This would restrict my access to all the potential international students. I had controlled this concern by allowing them up to two weeks to respond to my email. All the universities, public and private, responded to my email regarding international students being delivered a flipped course. In case I did not get a response from a university, my goal was to ask a colleague who speaks Polish to contact the university for me.

Potential researcher bias was addressed proactively. First, I have never taught a flipped class, nor I have witnessed an implementation before. Also, when creating the interviews, the order of the questions was carefully designed to be not leading, and the wording of the questions was structured to be neutral. In addition, throughout data collection, I kept a journal to ensure objectivity by separating my personal experiences from those of the participants.

The potential bias regarding students was controlled through anonymity of the study that was communicated to the students on several occasions including the consent form that they had to sign before participation. Also, they were reminded at the beginning of each interview that the professor or any other university official would not have access to interview data and that the current study was carried out for my dissertation and had nothing to do with the institution they were currently enrolled. The fact that all students already had their final grades posted during the interviews might have served to reduce student bias concerns as well.

Recommendations

The current study addressed the perceptions of international higher education students of flipped classrooms in Poland. The results of the study can be generalized to countries hosting similar international student demographics as in Poland. Considering the fact that every country has its distinctive demographics, more studies can be conducted to represent countries hosting international students with different demographics than Poland.

In many aspects, the flipped learning method offered international students an improved classroom experience including self-paced approach, engagement in class discussions and helping them with their vocabulary issues. A quantitative study measuring the impact of flipped classrooms on students' academic performance would be useful. It would be an opportunity to measure the effectiveness of flipped classrooms in boosting academic performance for different demographic groups.

Students' *love of learning* was cited in the literature (Rutkowski, 2014) and was brought up in my analysis of data as well as a prerequisite of benefitting from the flipped approach. Without students' intrinsic motivation to employ flipped learning method, it will not be instrumental. Students will not take full advantage of the method if they do not complete the tasks assigned to them before class. Therefore, future studies may focus on ways to improve students' intrinsic motivation towards learning and doing the assignments in addition to investigating student perceptions of different aspects of the flipped classroom method.

Implications

The findings of the current study may lead to a positive social change at different levels. Having a good grasp of perceptions of international higher education students in Poland towards the flipped approach, professors will be able to make more educated decisions regarding the adoption of this innovative approach in their classrooms. Authorities and decision-makers in Poland responsible for internationalization, may use the results of this study to make necessary adjustments, if any, in their internationalization strategies to make it more appealing to international students.

International students may go through a smoother adaptation process to a new country when their challenges are recognized by the responsible authorities. They will have an enhanced and enriched college experience tailored to their individual needs. Fewer international students will drop out of college and more students will be able to complete their degrees on time. Having a positive college experience, their contribution to all levels of life including their workplaces will be improved.

Findings of this study indicated that international students have adaptational issues regarding language. Some of them confirmed that they had to work twice as much as their local counterparts do as they did not study in their native languages. In practice, such concerns must be considered when assigning tasks and setting expectations for international students; at least in their first year of studies. Otherwise, not all international students may have the strength for such a challenge and the motivation to continue their studies.

Conclusion

The focus of the current study was the perceptions of international students with the flipped classroom method. Research and theory suggest that the format of flipped classrooms encourages readiness, increase engagement and satisfaction in class (Deri et al., 2018; Gross et al., 2015; Hao, 2016; Jakobsen & Knetemann, 2017; Keller, 1968). There is no consensus regarding its impact on academic performance. Research indicated that international students preferred flipped classrooms over traditional classes (Hughes et al., 2016; Lin et al., 2017). Also, the popularity of flipped classrooms among international students was higher than its approval among local students (McCarthy, 2016). Another ambiguity regarding flipped classrooms is that there is not a standard practice. Any implementation that holds students responsible for certain tasks before they come to class is regarded as a flipped class. One of the key findings of the current study is the higher preference of international students for PowerPoint presentations over videos. PowerPoint presentations, being in the written format, was more welcomed by international students as they could see the words written. On the contrary, videos without subtitles were hard for most of them to understand as they could not capture certain words from the speech. Being able to *pause and rewind the teacher* was a great feature acknowledged by most international students. Flipped classrooms may offer further growth in terms of student satisfaction and engagement for international students if professors find a remedy to students' unanswered questions during the self-study stage. Adding mid-sessions before the class as stated by one of the participants may be the solution.

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Appendix A: Invitation Email

Hello, my name is [REDACTED] and I am doing a research study to find out the perceptions of international students towards the flipped classroom method. Flipped classroom method is an instructional strategy in which the students are provided the learning material outside the classroom via tools such as videos, casts, PowerPoint or pdf. I am inviting international students who have experienced the flipped classroom method to take part in a research study regarding their perceptions and experiences with the flipped classrooms.

The practice will include completing an Informed Consent statement and allowing me to interview you in person. The whole process should take no more than 90 minutes of your time.

If you consent to participate, please fill the attached Informed Consent form electronically by typing your name on the name line, email on the signature line and date on the date line. Then, save the file and send it to me by replying to this email.

You can contact me by phone [REDACTED], e-mail “[REDACTED]” if you have any questions.

Appendix B: Interview Protocol

Hello, my name is [REDACTED] and I am a doctoral student at Walden University. I am working on my doctoral dissertation and the topic is the perceptions of international students towards flipped classrooms. I am an educator and I always looked for ways to improve the quality of teaching in the classroom. That is why, perceptions of students, the most important stakeholders of the educational process toward this innovative approach, is crucial.

I am glad that you agreed to volunteer as a participant for my study. I am here today to listen to your experiences with the flipped classroom method. Anything we discuss today will be confidential and not shared with anyone without your permission. I will use pseudonyms for you and for the institution. I will record the interview and take notes to make an accurate transcription of the interview. The recording will be destroyed when the dissertation is approved by Walden University. If at any time during the interview you feel uncomfortable with a question, please stop me and I will pass on the next question.

Before we begin, do you have any questions about the recording, the consent form, the confidentiality, or any other topic that is related to the interview?

1. Tell me how you feel about studying in a foreign country.
 - a. Give me an example when studying in a foreign country has been an advantage.

- b. Give me an example when studying in a language different than your mother tongue has been a disadvantage.
2. Describe yourself as a student. Do you attend all the classes?
3. How do you feel about understanding the English language? It is not your mother tongue and the lessons are delivered in English.
 - a. Tell me about the pace of lecture in most courses.
 - b. Do you ever need to look up words from the lecture?
 - c. Do you think that you have to work harder/more because of the language?
4. Was this your first flipped classroom experience?
 - a. Probe. How would you define flipped classroom based on your experience? In what ways learning is different in a flipped classroom?
 - b. Do you think that the delivery format of the flipped classrooms—that you have access to learning materials before the class—alleviated the issues you have been experiencing due to language barrier regarding?
 - i. Pace of the lecture
 - ii. Unknown vocabulary
5. Please describe the formats of the material provided before the class? (Videos, pdf)
 - a. Which of these materials would you consider your favorite? Why?
 - b. With which of these are you not comfortable? Why?
6. How do you define your level of engagement in the actual class?

- a. Have you completed all the assigned materials before classes? Videos, pdf?
 - i. How did your completion of the material contribute to your engagement in the classroom?
 - b. How do you define the level of your confidence (given you had access to materials)? Do you think that access to the classroom materials beforehand contributed to your participation in class discussions?
7. Tell me if there are any challenges that you encountered throughout this class?
- a. Probe. How did you manage when you had questions while watching videos?
8. What grade do you expect to get in this class?
- a. Probe. From your perspective, what contributed to your success or failure in this format?
9. Would you like to have more classes delivered in the flipped format?

Anything you want to add?

We have now concluded the interview. I want to thank you one more time for participating in the interview. I will email you a written copy of the transcript at the email address you provided in the consent form. May I get in touch with you via the email address above if I have any questions? Also, here is my contact info:

████████████████████. Thanks.