Students' perceptions of learning engagement when using mobile devices in compulsory English lessons on an International Foundation Year programme

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Abstract

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The use of mobile devices in the classroom can impact positively on learning engagement, yet research pertaining to student engagement and mobile device use in the higher education classroom is scant. Existing studies are mainly quantitative in nature and although many suggest mobile devices can impact student engagement, the question of how is largely ignored. Therefore, the purpose of this qualitative study was to explore the perceptions of students on their international foundation year (IFY) with regard to the impact mobile device use for learning has on their engagement in compulsory English lessons. Research questions were designed to explore the types of mobile devices learners were bringing to lessons and how students believe their learning engagement is impacted by mobile device use, as well as any challenges faced. Redmond et al.'s (2018) Online Engagement Framework was adopted for the theoretical underpinnings of this project. An interpretive case study of twenty-two students on their IFY was undertaken with a deductive-inductive hybrid approach to thematic analysis employed to make sense of the interview data. The findings showed that all participants brought a smartphone to English lessons and over half of the participants also brought a secondary device, most likely a laptop. However, almost a quarter reported not having access to a computer at their university accommodation. On the whole, students'

perceptions of their learning engagement when using mobile devices in compulsory English lessons on an IFY programme are mainly positive with regard to social, cognitive, behavioural, emotional and collaborative engagement. However, the disruptive impact of unsociable device use was noted, not just at university but in society in general, as were technological accessibility issues and external challenges faced by international students, namely visas, accommodation and cost of living, potentially hampering opportunities for learning engagement. The results show students on the IFY want to use their mobile devices for learning but the technological challenges faced by the students suggest mobile device integration is not as entrenched in higher education as it is in other parts of society. However, technology is evolving rapidly so, for educators, collaboration is key in keeping abreast of updates and evaluating the best options regarding choices in software and integration into lessons. The thesis contributes not only through its focus on International Foundation Year students, but also by offering broader insights into the pedagogical, technological, and institutional conditions that influence engagement with learning technologies across higher education.

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Author's Declaration

This thesis results entirely from my own work and has not been submitted previously for any other degree or diploma.

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Chapter 1: Introduction and Background

The use of mobile devices with smart technology continues to accelerate around the globe. In the UK for example, mobile devices are becoming increasingly more commonplace than owning a landline telephone or personal computer. Indeed, mobile subscriptions are nearly four times higher than landline connections (Ofcom, 2025). Unlike older models, present-generation mobile devices equip users with easier access to the internet, social networking and countless other applications to assist with everyday tasks from banking to buying bus-tickets. It is unsurprising, therefore, that this global embrace and utilisation of mobile technologies has spilled over into the field of education with students accessing apps on their phones to learn languages or partake in interactive maths puzzles.

As the differences between social and educational mobile device use are realised, it is apparent that more research is needed for better understanding their potential (Merchant, 2012). However, unlike other sectors (such as banking, for example), where mobile technologies have been substantially integrated into day-to-day operations and in some cases, completely replacing previous systems (Ashique & Subramanian, 2024), mobile technologies are present, but not truly embedded into the education sector as a whole. This is particularly acute in the context of higher education. Bass and Hessenauer (2023) made a similar point in their investigation of mobile device use in learning environments in higher education. They noted that although such technologies have been used to enhance the learning experience, they have not been officially immersed into it. The evolving nature of these technologies, in terms of rapid advancements and accessibility to the masses, has made it difficult for practitioners and researchers alike to keep abreast of optimising the presence of mobile devices in learning environments.

Opinions remain divided amongst educators regarding whether mobile devices should have a place in the classroom, and perhaps depends, to a certain extent, on the level of education and the purpose of the devices' presence. It is widely acknowledged that the use of mobile devices can be considered a

distraction for students if they are not integrated as a structured part of the lesson (Kuznekoff & Titsworth, 2013). Apprehension surrounding mobile technologies in the classroom could stem from feelings that the devices were thrust upon teachers and institutions before they were ready. This idea of an unwelcome intrusion is shared by Siddiq et al. (2016), who noted such devices started to appear in classrooms before teachers were aware of the potential learning benefits.

Despite perceived drawbacks of allowing mobile devices into the classroom, such as the potential for cheating, causing possible distractions and perhaps fostering an over-dependence or addiction to technological device use (Katz, 2017; Kuznekoff & Titsworth, 2013; Mendoza et al., 2018), much research has found that structuring mobile device use into lessons can positively impact the learning experience. An integral aspect of learning is undoubtedly engagement and the impact its presence, or indeed its absence, can have on the learning experience. The unquestionable importance of the role of student engagement with regards to learning is apparent across the literature (Baek & Lee, 2018; Bass & Hessenauer, 2023; Hill & Fielden, 2017; Kahu, 2013; Salhab & Daher, 2023; Trowler et al., 2022). Given this importance, the research project presented in this thesis focuses on the impact mobile device usage in the classroom can have on learning engagement. Specifically, it investigates students' perceptions of their engagement when using mobile devices in compulsory English lessons on the International Foundation Year (IFY) programme. While mobile devices form the core of the analysis, the study also encompasses the interconnected platforms that function both within and beyond mobile technologies. For example, apps that can be used on both mobile devices and computers. This project is novel in its precise focus, yet it is anchored at the intersection of five scholarly conversations that, to date, have rarely—if ever—been examined collectively within a single study. It draws on higher education pedagogy (e.g., Biggs, 1996; Biggs & Tang, 2011), engages with research on international students' learning experiences (e.g., Andrade, 2006; Lomer et al., 2023; Mittelmeier et al., 2023), and incorporates perspectives from English for Academic Purposes (e.g., Hyland, 2006; Hyland

& Hamp-Lyons, 2002; Lea & Street, 1998). In addition, it situates itself within literature on Foundation Years as a distinct and understudied sector of higher education (e.g., Black, 2022; Leech et al., 2016; Wood & Lithauer, 2005), while also connecting to the expanding field of Technology-Enhanced Learning (e.g., Beetham & Sharpe, 2019; Kirkwood & Price, 2014; Selwyn, 2017). Although each of these domains is well established in its own right, they have seldom been brought together in a single empirical investigation, making the contribution of this study both timely and uniquely positioned within contemporary higher education research.

This chapter proceeds with my personal motivation for the study, before considering references to Bring Your Own Device (BYOD) and mobile learning more generally. It moves on to consider mobile device use in university settings as well as student engagement. The chapter concludes by presenting the research aims and detailing the significance of the study.

1.1 Personal Motivation

My interest in researching international students' perceptions of their learning engagement in English classes during their foundation year at university stems from my position as a teacher-researcher. When I started teaching at my current institution, I did not initially work on the IFY programme. I mainly taught on short, intensive pre-sessional programmes (PSE) and optional in-sessional programmes (LEAP), where students were usually highly motivated to either pass an exam in a short space of time or improve a specific skill to help with an assignment with an imminent deadline. Whatever the reason, they had chosen to study English at university. That is the difference between these programmes and studying English on the IFY. English is a compulsory element of the IFY with strict attendance monitoring, linked to visa requirements. Students do not choose to study English. They choose their degree pathway, such as Computer Science with IFY or Art and Design with IFY, and a mandatory element of IFY is English.

After teaching English to such highly motivated students on PSE and LEAP, adjusting to teaching English on IFY was a challenge. I should clarify that some IFY students are naturally very conscientious and motivated to improve their English, but when I first started, many would arrive late to lessons without books and pens, showing little interest in the tasks, but a lot of interest in their phones, and only engaging to check their attendance had been recorded. During my first few years at my current institution, classrooms were donned with signs stating, 'Mobile phones must be switched off', and constantly asking students to put their phones away felt tedious and frustrating. Admittedly, some students were using their phones for non-educational purposes, but when I started to look and ask what students were using their phones for, I was genuinely surprised to find that some were using their phones to look up words they did not know, make notes and take photographs of the lesson content on the board. Students who I had assumed were not paying attention, because they were looking at their phones under the table, were in fact engaged with the lesson content.

After that, I started integrating structured interactive activities into my lessons, which entailed students to use their phones. In line with phone capabilities of the time, tasks were quite simplistic at first, for example, using phones as dictionaries or taking photographs of objects to show and describe to classmates. There was a noticeable improvement in behaviour and engagement and students were telling me that they had enjoyed the lessons. Instead of reprimanding students for looking at their phones when they should be doing something else, I started saying that we were not using phones at that point in the lesson, but we would be later. This seemed to evoke a more positive response than simply telling students to put their phones away.

Over the years, I spoke more with IFY students to ask what they liked and did not like about the lessons, what they felt worked and did not work, and integrated more phone use into my lessons accordingly. I attended sharing good practice events and read articles to find out how other practitioners were using phones in the classroom. There seemed to be research into phone usage at undergraduate and postgraduate level, where students were studying

their chosen subjects, research into using phones to improve English skills where students had enrolled specifically onto English programmes, as well as research into phone usage in compulsory school settings. Although interesting, none of the events I attended or articles I came across directly related to international students learning English in a compulsory setting in higher education. I was intrigued to research further, especially as not all practitioners shared my view that mobile phones could have a place in the classroom. Purely from observation, I felt that using phones with my students was improving their engagement and I knew I was enjoying creating interactive tasks for them and teaching my lessons. However, I was starting to wonder whether my enjoyment of using my phone for learning and my interest in how my phone's capabilities can make elements of my life easier were making me inflict my preferences on my learners. In general, students appeared to be more engaged when phone usage was integrated into lessons, but I wanted to ensure that I was not just seeing what I wanted to see. I needed to go beyond my role as a practitioner, interested in how mobile devices can be used in the classroom, and delve deeper as a teacher-researcher.

Being a teacher on the programme of focus and being the person conducting the research places me in the category of 'insider-researcher', meaning that I was known to the participants. Often, in university settings, an insider-researcher is an academic who is "immersed, embedded and strongly connected with both the setting and those being 'researched' in a shared setting where they operate together in an ongoing basis" (Smyth & Holian, 2008, p.34). For some, I was a teacher in the department and for others, I was their teacher. Insider-research is often conducted in an effort to improve a situation through understanding (Fleming, 2018) as is an aim of this study, and this will be discussed in depth in Section 4.2.

1.2 Bring Your Own Device > Mobile Learning

Prior to mobile devices becoming an indispensable part of many people's lives and almost an extension of the body, references in educational research to BYOD – Bring your own device – were commonplace (Afreen, 2014; Bass &

Hessenauer, 2023; Cheng, 2022; Limniou, 2021; Song & Wen, 2018). Even before the capabilities of present-generation smart mobile devices, the potential of integrating mobile technologies into classrooms generated much interest. It was seen as a way of incorporating technology into existing learning environments without significant cost to the institution (Afreen, 2014; Cheng et al., 2016). Moreover, it was argued that student learning could be made more personalised, with Cheng et al. (2016) noting that learners could connect with their friends and lesson materials anytime, anywhere from their personal devices as opposed to using borrowed devices for a limited time from their institution. Furthermore, Song and Wen (2018) found that incorporating BYOD into lessons helped improve students' knowledge, without the constraints of time and place, and encouraged learners to take ownership of their learning. However, before mobile technologies became an integral part of life for many, strategic planning was needed from practitioners in terms of asking students to bring devices to class next lesson as well as incorporating contingencies into the lesson for students who forgot their device or did not have a device to bring.

Over the last decade, mobile device use has permeated into virtually all aspects of life (Cheng, 2022; Fitra & Raudhatul, 2024) so it is unlikely that students in the present day would need to be told to bring their own device to class. In fact, in higher education, practitioners may assume that students would have a mobile device to use during the session, rather than more conventional stationery items like a pen and paper. This is in part due to the number of people, and younger adults in particular, owning a mobile device, coupled with relatively affordable subscription costs for internet access (Cheng, 2022). Indeed, the UK was found to be "broadly at the cheap, efficient end of pricing across Europe in… mobile internet services" (House of Lords Select Committee on Communications and Digital, 2023). Students would likely have their mobile devices on their person, regardless of whether they were going to university, the gym, the cinema or the shops, whereas the same cannot be said for a pen and paper. The term BYOD has largely been replaced in more recent research with 'mobile learning' (Zulfakar & Zabidi, 2020), with the term 'm-learning' (Traxler, 2005) making a resurgence in some sources (Esawe et al., 2024;

Suliman et al., 2024). Fairly unified definitions across the literature pertain to the use of mobile devices for learning across multiple contexts, accessing learning resources, studying and interacting with other learners and contacting teachers (Al-Furaih & Al-Awidi, 2021; Crompton & Burke, 2018; Zulfakar & Zabidi, 2020).

Research suggests that using devices, such as smartphones, effectively in lessons can encourage interaction, communication, collaboration and provide additional support for students (Anshari et al., 2017; Twum, 2017). Students can use smartphones to look for information, hold discussions, share ideas and record instructions from teachers (Al-Furaih & Al-Awidi, 2021). As university students use their mobiles for texting, email, web-browsing, social media, listening to music and watching videos, as well as learning (Zulfakar & Zabidi, 2020), there is a degree of trust required between teacher and students that mobile device use in the classroom is restricted to educational purposes, related to the current task.

1.3 Mobile Device use at University

Research concerning mobile device use on university foundation year programmes is scant, but one such investigation by Khrisat and Mahmoud (2013) explored students' attitudes to using mobile devices in the classroom on a foundation year programme at a university in the Kingdom of Saudi Arabia. The results from the questionnaire, using Likert scales, showed generally positive results towards using mobile phones in the foundation year classroom. Although not focusing on foundation year, Fernandez (2018) surveyed students at a South African university to determine their views on mobile device use in the classroom, using Likert scales. Fernandez (2018) reported students were generally motivated by using mobiles for learning. Furthermore, Vahedi et al. (2021) surveyed first year undergraduate students at a Canadian university to examine perceptions of their portable device use in the classroom through a combination of open-ended and closed-ended questions. The participants' perceived benefits included an increase in "attention", "engagement" and "understanding" with responses indicating "engagement translates to

perceptions of stronger understanding" (Vahedi et al., 2021, p.223). Baek and Lee (2018) studied undergraduate students from an English conversation class at a South Korean university to investigate their perceptions of mobile learning. Using Likert scales and multiple-choice questions, they reported the majority of students showed positive perceptions towards using their mobiles for learning.

Whilst conducting a systematic review of literature pertaining to mobile learning in higher education between 2010-2016, Crompton and Burke (2018) found that 70% of the 23 relevant studies reported positive outcomes, suggesting that "the use of mobile learning resulted in increased student learning" (p.58). The studies mentioned above show that mobile device usage in the university classroom can improve the learning experience and integration of the devices into learning is often viewed favourably. This will be discussed further in Chapter 2.

1.4 Student Engagement

Although scholars might not agree on what exactly student engagement is (see Chapter 3), there is an overall consensus across the literature regarding the instrumental role it plays in the learning experience (Adiyono et al., 2024; Fredricks et al., 2004; Schnitzler et al., 2021; Teoh et al., 2025; Trowler & Trowler, 2010; Trowler et al., 2022). In fact, Reschly and Christenson (2022) specifically commented on how they are "often struck by the overwhelming acknowledgment/agreement/understanding of the importance of student engagement to learning" (p.3). Moreover, it has been shown that the use of technology in the learning process can have a considerable impact on student engagement (Adiyono et al., 2024) with several studies noting that learning with mobile devices can increase interaction and engagement (Naciri et al., 2020; Salhab & Daher, 2023; Xie et al., 2019).

Despite this, literature pertaining to student engagement and mobile device use in the higher education classroom is scant, with many existing studies focussing on the use of specific apps on mobile devices rather than mobile devices in general. Research into student engagement and mobile device use in the

context of the foundation year is even more scarce. Reviewing the literature has not only shown that there is a gap in research pertaining to mobile device use and engagement on the university foundation year but also highlighted that what little research does exist at undergraduate level predominantly uses quantitative research methods. It was felt that a qualitative case study would be a fitting design to frame this project in order to gain an understanding of students' perceptions and ensure their voices are heard, particularly as "the heterogeneity and multiplicity of identities and lived experiences of international students – both as individuals and as a population group" need to be addressed (Bennett et al., 2023, p.13).

1.5 Research Aims and Significance of the Study

Driven by my position as a teacher-researcher and in response to the research problem mentioned above, this project uses an interpretive case study design to investigate how students on the IFY think using mobile devices in lessons impacts their engagement with learning, if indeed it does. Teachers' attempts to engage learners include designing activities for mobile device use in these classes and it is hoped that this research will help teachers better understand students' views on this subject, with the findings feeding into a bigger picture of improving student engagement and the learning experience in the department. On viewing the literature, it is evident that research into this area is scant (see Chapter 2). Existing studies are mainly quantitative in nature and although many suggest mobile devices can impact student engagement, the question of how is largely ignored. Therefore, the study will not only help practitioners when considering mobile device integration into their lessons, but it will provide a qualitative perspective to a vastly underrepresented area of research in higher education. Furthermore, the study will add value to the academic bodies of knowledge across the five scholarly areas it brings together: Higher Education Pedagogy, International Students, English for Academic Purposes, Foundation Years, and Technology-Enhanced Learning.

1.6 Research Questions

Based on the research aims, this study seeks to answer the following research questions (RQs):

> RQ.1 – What mobile devices do students on an international foundation year programme use for their compulsory English lessons?
>
> RQ.2 - What are students' perceptions of learning engagement when using mobile devices in compulsory English lessons on an international foundation year programme?
>
> RQ.3 – What challenges do students on an international foundation year programme face with regard to using mobile devices for learning engagement in compulsory English lessons?

Redmond et al.'s (2018) Online Engagement Framework was adopted for the theoretical underpinnings of this project. The framework, with its five strands of engagement, served as a basis for constructing the structured questions in the semi-structured interviews, ensuring the conversations with participants remained on track for extracting information needed to answer the research questions. The framework was also used as a guide in the deductive thematic analysis of the interview data, helping to ensure the information was analysed alongside the research questions.

1.7 Structure of the Thesis

The thesis consists of six chapters.

Chapter One begins with a brief introduction of the research background for this project and my personal motivation for conducting the study. The concept of Bring Your Own Device and mobile learning is discussed, then more specifically, mobile device use at university, before briefly discussing the importance of engagement in learning. Briefly introducing the methodology employed and the theoretical underpinnings, the chapter concludes with a

discussion of the aims of the research, the significance of the project and sets out the research questions.

Chapter Two outlines the five interrelated conversations at the intersection of which this research is positioned and reviews the literature with regard to mobile device use at university and student engagement.

Chapter Three moves on to discuss student engagement more generally to lay the ground for the research focus, research design and theoretical framework for this project.

Chapter Four elaborates on the methodology of this research. It begins with detailing the researcher's leanings and preferences with regard to the chosen research paradigm. It proceeds to include the process involved in choosing the research design, before going on to discuss the research population and sampling techniques. Next, details of the data collection instruments are discussed, followed by information about the pilot study and the data analysis procedure. The chapter concludes with discussions surrounding quality issues, ethics and data storage.

Chapter Five interprets and discusses the study's findings in the context of the reviewed literature, the setting and the people.

Chapter Six concludes the research findings in full based on the foregoing analyses and discussions, in the context of the research questions. It summarises the contributions of this study, the limitations, potential for future work, implications and recommendations.

Chapter 2: Literature Review

This chapter begins by outlining the five interrelated conversations at the intersection of which this research is positioned: Higher Education Pedagogy, International Students, English for Academic Purposes, Foundation Years, and Technology Enhanced Learning. The chapter moves on by outlining the approach to the literature review, followed by a discussion of the two main conceptual areas: research on mobile learning in higher education and research on relevant technologies in IFY settings.

2.1 Higher Education Pedagogy

Higher education pedagogy has increasingly drawn on constructivist approaches to learning, which position students as active participants in the co-construction of knowledge rather than passive recipients of information (Bruner, 1996; Piaget, 1972; Vygotsky, 1978), an approach that aligns strongly with contemporary aspirations for inclusive, student-centred higher education (Biggs & Tang, 2011; Bovill, 2020; Wenger, 1998). Rooted in the foundational work of Piaget (1972), Vygotsky (1978), and Bruner (1996), constructivism emphasises that learning is an active, social, and meaning-making process. In university settings, this can translate into pedagogical designs that foreground inquiry, collaboration, and authentic engagement. Biggs and Tang (2011) argued that constructive alignment enables students to build understanding through purposeful activity, while Healey et al. (2016) demonstrated how partnership approaches position students as co-creators in the learning process, strengthening engagement and ownership. Social constructivist perspectives further enrich this view. For example, Wenger's (1998) Communities of Practice illustrated how knowledge emerges through participation in shared academic contexts, while Garrison et al.'s (1999) Community of Inquiry framework demonstrated how cognitive, social, and teaching presence interact to support collaborative meaning-making in higher-education learning environments.

2.2 International Students

A long-term goal for universities has been to enhance engagement in teaching and learning for international students (Bartram, 2008; Quan et al., 2013). According to Bourdieu and Passeron (1990), transitioning to a new educational establishment can impact a student's confidence and engagement as they may feel a lack of belonging. Indeed, for many students, the move into higher education can be challenging but moving from a different country to an English-speaking university can be particularly daunting for some international learners, a point also raised by Lee (2010).

Much of the reviewed literature pertaining to international students' experiences at university is often "shaped by deficit narratives", with a focus "on the challenges and adjustments international students are likely to experience" (Lomer et al., 2023, p.75). A common theme across the literature is the concept of 'culture shock' (Almukdad & Karadag, 2024; Ayub et al., 2024; Blasco, 2015; Gu & Maley, 2008; Mulyadi et al., 2024; Quan et al., 2013). Culture shock "encompasses the feelings of disorientation, anxiety, and stress that arise when students encounter unfamiliar cultural norms, languages, and social behaviours in their host countries" (Mulyadi et al., 2024, p.248). In a review of literature pertaining to culture shock, Mulyadi et al. (2024) identified three themes: culture shock syndromes (such as homesickness, isolation and loneliness), aspects of culture shock experienced by students (such as language barriers and daily schedules) and effects of culture shock on students' lives during their study (such as differences in approaches to learning). It was concluded that culture shock can negatively impact international learners in their navigation of new academic environments, contributing to deterioration in well-being.

In a study of international learners studying in the United Kingdom, Eze and Inegbedion (2015) used the term "adjustment barriers" (p.61) to describe the issues reported by students, which negatively impacted their daily living, such as a lack of family support and settling into a new place. The authors reported that most of their participants had problems with adjusting to a new

environment and these challenges negatively impacted their academic performance. Likewise, Mehdizadeh and Scott (2005) and Ayub et al. (2024) highlighted problems of adjustment for international learners with often unexpected challenges connected to living costs, transportation and securing accommodation. These adjustments can be made more difficult with societal labelling of international learners, positioning them as foreign, outsiders or 'Others', adding to feelings of isolation and lack of belonging (Bennett et al., 2023; Liu & Qian, 2023). Lomer et al. (2023) noted that, across the literature, limitations in language competence are often cited as underpinning perceived deficits. Indeed, several studies noted that for some students, issues with language can be the most difficult challenge faced (Bamford, 2008; Eze & Inegbedion, 2015; Foley, 2010). As well as impacting daily life, problems with language can also create barriers for international students in relation to academic studies (Andrade & Evans, 2009; Eze & Inegbedion, 2015; Gutiérrez & Rogoff, 2009).

Terminology specifically relating to culture shock in academia can be found in the literature. In a study of the experiences of international students transitioning from overseas higher education partners to a UK university, Quan et al. (2013) referred to "academic shock" in the context of differences experienced with regard to workload, scholarly skills and learning styles between the home and host countries (p.225). When researching culturally inclusive pedagogy to facilitate international student academic adaptation, Blasco (2015) discussed how differences between a student's prior educational experiences and the demands of a new learning environment may hinder their ability to engage with new material, potentially leading to "study shock" (p.88). Furthermore, Gu and Maley (2008) suggested international learners can experience psychological and emotional stress when studying abroad and acknowledge that learning in an unfamiliar environment with different academic expectations and traditions can contribute to "learning shock" (p.225).

An example of such learning shock is discussed by Edwards and Ran (2006), who looked at the needs of Chinese students in British higher education. It was

argued that some of the issues identified as affecting the students' academic performance were related to cross-cultural differences in educational approaches and traditions. These included student-teacher relationships, working with other students in groups, study skills and plagiarism. Similarly, when researching key factors influencing academic performance of international students in UK universities, Eze and Inegbedion (2015) discussed how learners who were high academic achievers in their home country could suffer stress and depression if current grades did not meet prior expectations. Concerns about student-life are amplified for international students with a potential contribution being differences in cross-cultural teaching and learning processes, assessment methods and marking systems (Andrade & Evans, 2009).

Mulyadi et al. (2024) found that it is often an accumulation of factors relating to culture shock, which lead to enhanced anxiety and a decline in wellbeing, for example, trying to juggle a new daily schedule, adjusting to only speaking English and adapting to a new educational environment. Eze and Inegbedion (2015) mentioned a student who had "started to be independent since [leaving]… high school", noting that "was in the same country, it's different in another country" (p.61). Potentially challenging for students of any age, it served as a reminder that for many IFY learners, the programme is the very next step from high school so likely, the very beginning of their independence is in a foreign country, with little or no prior 'practice' of being independent in familiar surroundings.

2.2.1 Defining "International"

Attempting to define what is meant by 'international student' is layered with complexity. "There is no single definition that makes sense for all places", with much of the literature failing to recognise students as individuals with different identities, instead appearing to focus more on visa status (Mittelmeier et al., 2023, p.3). Unfortunately, old-fashioned and out-dated concepts of what is meant by 'international student' can still be found in literature, often oversimplifying the complex identities of international learners. This point was

also mentioned by Bennett et al. (2023), who noted these conceptions “may also be camouflaging or even perpetuating underlying assumptions and discursive understandings about international students, many of which are denigratory and manifest as invisible baggage through the course of their educational journey and beyond” (p.11). Some of this baggage, which could weigh very heavily on learners, could relate to visa classifications, legal and immigration labels as well as more ‘everyday’ terms such as ‘foreign’, positioning the student as an outsider or ‘Other’ (Bennett et al., 2023; Liu & Qian, 2023). Gutiérrez and Rogoff (2009) noted that international learners are often considered in terms of cultural “traits”, and these “characteristics of cultural groups are located within individuals as carriers of culture” (p.19), leading to overgeneralisations about all aspects of life, including studying. For example, Watkins and Biggs (1996) explored the concept of the “Chinese paradox” concerning a stereotype in the West that students from China, Hong Kong, Singapore, Japan and Korea are associated with rote memorising large chunks of information without understanding, which led to a belief in the West that students from these countries would likely perform badly in a Westernised education system. Watkins and Biggs (1996) noted that learners from these countries often outperform their Western counterparts and that Western misperceptions about learners from these countries, in general, are unfounded, stemming from a lack of understanding of the cross-cultural differences in teaching and learning processes. Over two decades later, Heng (2018) noted that although students from mainland China make up the largest group of international undergraduates in the United States, they are frequently represented through deficit-based narratives. Heng’s (2018) study of Chinese undergraduates found the students faced challenges related to language use, academic norms, sociocultural adjustment, and balancing study with leisure, largely due to differences between Chinese and US contexts. However, the study disrupts deficit assumptions by showing that these students actively exercised agency through their responses to challenges and through observable changes in attitudes and practices over time (Heng, 2018). Through a systematic review of journal articles (2013–2019) presenting empirical evidence on pedagogical practices concerning international students

in the UK, Lomer and Mittelmeier (2023) found that “international students continue to be subtly framed as in deficit or passive, rarely as partners or knowledge agents” (p.1243). Furthermore, Bennett et al. (2023) stressed the importance of addressing “the heterogeneity and multiplicity of identities and lived experiences of international students – both as individuals and as a population group” (p.13) in research.

Such overgeneralisations, as mentioned above, can result in incorrect assumptions being made about individuals without taking into consideration their personal circumstances and life experiences. Researching IFY students as individuals and a population group is important because studying on an international foundation year is different to studying on a foundation year as a native speaker in the student’s usual country of residence, and studying on an international foundation year is different to studying on an undergraduate or postgraduate degree as an international student, focusing on one chosen programme of study.

2.3 Foundation Years

Foundation years—often referred to as bridging programmes—emerged in the UK within the broader widening participation agenda, responding to policy and sector-level efforts to expand access to higher education and address social and educational inequalities (Osborne, 2003). Unlike foundation degrees, which are commonly delivered through partnerships between further and higher education institutions, foundation years are university-based programmes offered as an additional preparatory year prior to entry onto an undergraduate degree. As outlined by Leech et al. (2016), foundation years are explicitly conceived as transitional spaces designed to support students’ movement into higher education by addressing academic, cultural, and structural barriers associated with non-traditional entry routes. Their primary aim is therefore to provide alternative access routes for students who do not meet conventional entry requirements, including those from vocational or access pathways, mature learners returning to education, and students who have narrowly missed standard entry grades or studied non-aligned Level 3 subjects (Black, 2022;

Wood & Lithauer, 2005). Existing research suggests that foundation years can play a critical role in widening access by supporting students' transition into higher education through the development of subject knowledge, academic literacy, and familiarity with university learning practices (Black, 2022; Warren, 2002).

2.3.1 International Foundation Year

In general, International Foundation programmes (including the IFY) are designed to bridge the gap between the student's current qualifications and those required for an undergraduate course at a UK university (Jones et al., 2020; Leech et al., 2016). In addition, the IFY enables learners to demonstrate the level of English required for their chosen programme. For example, for undergraduate degrees, University of Salford asks for 'IELTS 6.0 (with a minimum 5.5 in each component) or equivalent' (University of Salford, 2024). IFY programmes aim to equip international students with the necessary skills and experience to adapt to expectations of higher education in the UK as well as enough time to become familiarised with the culture of UK universities (Griffiths et al., 2005; Jones et al., 2020; Jones & Fleischer, 2012).

Although there is no upper age limit for IFY enrolment, there are slight differences between institutions regarding the minimum age with some universities stipulating applicants must be at least 16 years old (Northumbria University, 2024; University of London, 2024) and some stating 17 years old (University of Sheffield, 2024; University of Sussex, 2024). Many students enrolling on IFY have recently completed high school outside the UK. The transition from high school to university can present many challenges to learners, which can impact engagement and retention (Pan et al., 2008; Simeoni, 2009). However, much research pertaining to learner engagement in higher education focuses on undergraduate programmes. Although engagement can still be an issue, students on undergraduate programmes have generally chosen the subject(s) they want to focus on. When exploring students' motivations for choosing their degree subjects, 74% of UK applicants expressed "it is the subject I enjoy most" (UCAS, 2023, p.11). Motivation and

engagement are very different on the university IFY because learners have to study subject specific skills to prepare them for their chosen undergraduate pathway as well as compulsory English lessons to help them pass the module.

Studies relating to the university foundation year are hugely underrepresented in the literature with even fewer studies focusing on the IFY. Bennett et al. (2023) recommended defining international students in the specific context of the study because acknowledging heterogeneity is crucial in developing a deeper understanding of specific group(s). Therefore, it was deemed crucial to this piece of research that the focus be on students on the IFY and their perceptions of mobile device use in English lessons with regard to their learning engagement because the students are considered international.

With regard to assessing suitability for the "international" foundation year at University of Salford, the website advises "You may need to complete a foundation year before you enrol for a UK university degree if you have not completed your education in the English Schooling System, you have studied in a country with fewer than 13 years of school, you have not taken A-levels or the International Baccalaureate" (University of Salford, 2024). Each year, the IFY comprises of a diverse range of learners, from students with the minimum entry requirements in English (IELTS 4.5) to students from predominantly English-speaking countries like America and South Africa. Even without considering other challenges faced by students on the IFY, levels of English skills alone can profoundly influence motivation and engagement when attending compulsory English lessons, with each scenario (lower level versus higher level and everything in between) presenting its own set of unique adversities for that individual.

2.4 English for Academic Purposes

English for Academic Purposes (EAP), often situated within broader English as a Foreign Language (EFL) and English as a Second Language (ESL) provision, occupies a distinctive position within higher education when compared with traditional academic disciplines or degree subjects. Whereas academic

disciplines prioritise the development of specialist knowledge, methodologies, and epistemological traditions, EAP is primarily concerned with enabling students to participate effectively in academic communities through the acquisition of discipline-sensitive language and literacy practices (Hyland, 2006; Hyland & Hamp-Lyons, 2002). Central to EAP is the development of academic literacy, including critical reading, academic writing, argumentation, and engagement with genre-specific conventions, rather than the mastery of subject content as an end in itself (Lea & Street, 1998). As Hyland and Hamp-Lyons (2002) argued, EAP is inherently situated and context-responsive, drawing on analyses of academic discourse and genre to support learners' meaning-making within specific institutional and disciplinary settings. This orientation distinguishes EAP from general EFL/ESL instruction, which often emphasises communicative competence in non-academic contexts, while also differentiating it from degree subjects, as EAP is typically positioned as a transitional form of provision designed to mediate students' entry into academic study. As such, EAP functions as both a site of language development and a process of academic socialisation, underpinning students' engagement with the genres, conventions, and textual practices that characterise higher education (Gardner & Nesi, 2013; Lea, 2004).

2.5 Technology-Enhanced Learning

Technology-Enhanced Learning (TEL) refers to the purposeful integration of digital technologies to support and enrich teaching, learning, and assessment in higher education, with emphasis placed on pedagogical enhancement rather than the simple digitisation of existing practices (Kirkwood & Price, 2014). TEL encompasses a broad range of tools and approaches, including virtual learning environments, digital collaboration platforms, and mobile technologies, and is shaped by ongoing debates concerning educational value, learner agency, and the extent to which technology can support meaningful learning. A central concern within the literature is whether digital technologies operate merely as delivery mechanisms or enable more transformative, student-centred forms of learning, with scholars cautioning against tech-dominant approaches that

privilege tools over pedagogy (Selwyn, 2016). In response, pedagogically grounded perspectives argue that learning is enhanced when technologies are aligned with constructivist principles that foreground interaction, reflection, and active engagement (Beetham & Sharpe, 2019; Kirkwood & Price, 2006). Within this context, mobile learning has received increasing attention due to the ubiquity and personal nature of mobile devices, which allow learning to extend beyond traditional classroom boundaries and support flexible, situated, and learner-controlled engagement (Crompton, 2013; Traxler & Kukulska-Hulme, 2005). However, the use of mobile devices in higher education remains contested, with concerns raised around distraction, surface engagement, and digital inequality alongside evidence of their potential to enhance participation and engagement when integrated intentionally into pedagogical design (Selwyn, 2016). By foregrounding students' perceptions of mobile device use and its influence on their learning engagement within the classroom, this thesis contributes to contemporary TEL debates by examining how mobile technologies are experienced by learners and how these experiences shape engagement.

2.6 Reviewing the Literature

In March 2024, then repeated in June 2025, literature searches were conducted across three databases – Academic Search Ultimate, Google Scholar and Scopus – with the 'search within Article title, Abstract and Keywords' function on Scopus (Figure 2.1) returning the most relevant results of the three. As the focus of the research is mobile device use, variations of the term included: 'mobile AND phone OR mobile AND device OR cell AND phone OR smart AND phone'. To concentrate on the education sector, while ruling out studies in primary and secondary schools, the terms 'AND higher AND education OR university OR college' were added. Many of the studies pertained to outside of class usage, and as this research focusses on in-class usage, 'AND classroom' was included. A central part of the research is that it is from the perspectives of students, so to rule out studies only from teachers' points of view, 'AND student' was included. It seemed that the majority of studies related to learners at

undergraduate and/or postgraduate level. The students at the core of this research are foundation level so ‘AND foundation’ was added.

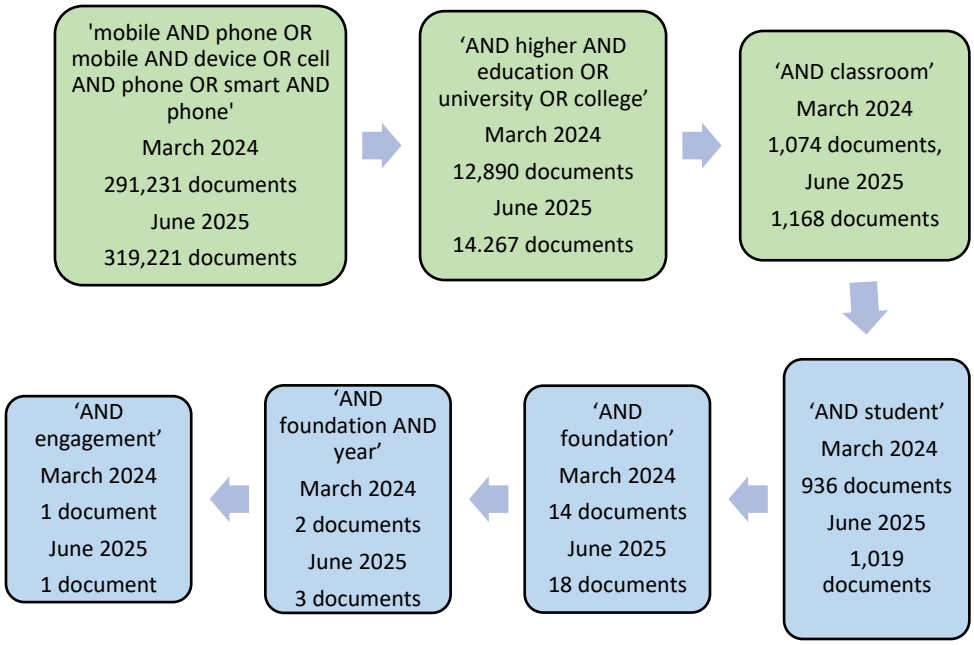


Figure 2.1 Scopus searches (including 'foundation year’).

Reading the abstracts revealed ‘foundation’ was not referring to ‘foundation year’ and the word had been used in different contexts. Including ‘AND foundation AND year’ returned three papers on the repeated search, in June 2025, with only one focussing on a study on mobile phones in a foundation year classroom. Including ‘AND engagement’ took it down to one paper, but not the one about foundation year, leaving an actual result of zero (the same as March 2024). Although this search strongly suggests a gap in the literature pertaining to mobile device use and engagement in the university foundation year, and clearly demonstrating the purpose of this study, it was felt studies at undergraduate level could be useful to consult so the search was amended to reflect this (Figure 2.2), returning 15 results in March 2024 with two more appearing in June 2025.

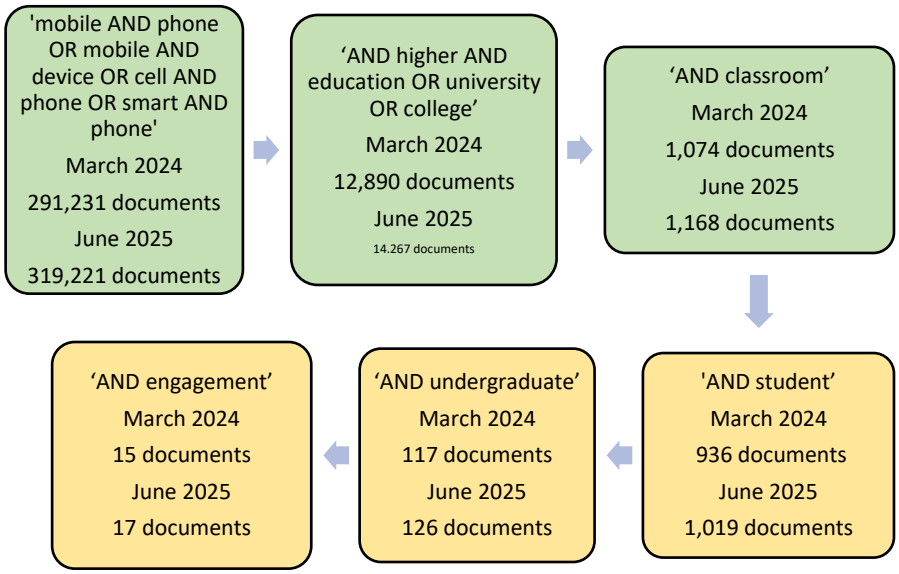


Figure 2.2 Scopus searches (including 'undergraduate').

After reading the abstracts on the repeated scoping exercise in June 2025, eleven of the documents were ruled out for irrelevance as, like earlier, some of the keywords were used in different contexts or the studies did not specifically focus on engagement from students' perspectives. The focus of five of the remaining six documents was on using specific apps on phones, namely Socrative (Ha, 2020; Lim, 2017), Group Notes (Reilly et al., 2014), Kahoot! (Nicolaidou, 2018) and classroom response systems (Brown et al., 2014). Witecki and Nonnecke (2015) studied student engagement and mobile device use during lectures but this was unstructured use.

The searches on Academic Search Ultimate and Google Scholar produced similar results in terms of irrelevances as well as some of the studies mentioned above. However, Academic Search Ultimate did return an additional study of some relevance by Baek and Lee (2018) who focussed on undergraduate students' engagement and perceptions of mobile learning in English lessons. However, further reading of the study showed the quantitative questionnaire only focussed on students' perceptions of mobile learning, for example, with regard to usefulness and satisfaction, with student engagement being measured from the teachers' perspectives from notes and observations.

The above studies are discussed in more detail in Section 2.2. However, with such limited options regarding existing literature combining mobile device use in the classroom with regard to engagement at foundation or undergraduate level at university, it was felt that more general reading around the topics was also needed. Using the same three databases as before (Academic Search Ultimate, Google Scholar and Scopus), targeted searches on specific tools were conducted. A discussion of the most relevant literature follows in Section 2.3.

2.7 Mobile Device use at University and Student Engagement

As noted, literature pertaining to student engagement and mobile device use in the higher education classroom is scant, with many existing studies focussing on the use of specific apps on mobile devices rather than mobile devices in general. Lim (2017) and Ha (2020) used Socrative (the brand-name of an online audience response system) on mobile devices to help improve student engagement with activities such as polls, quizzes and games. A similar game-based audience response system, Kahoot!, was the focus of Nicolaidou's (2018) study of student engagement. Brown et al.'s (2014) research was interested in whether students brought mobile devices to university which had the technological capability to facilitate audience response systems (namely iClicker, Top Hat and Poll Everywhere). Reilly et al. (2014) specifically looked at the mobile real-time collaborative notetaking app, GroupNotes and the focus of Baek and Lee's (2018) study was the social networking app, Kakaotalk. Each study is summarised in Appendix 1 and will be discussed in more detail below.

Lim's (2017) study investigated the effectiveness of a mobile-based interactive teaching model, utilising the online audience response system, Socrative, in improving student engagement in higher education. The research was conducted over a 14-week period at a Malaysian university and involved 45 undergraduate computing students. Both in-class and out-of-class learning activities were incorporated and included pre-class polls, quizzes (graded and ungraded), quick questions, exit tickets, and gamified activities, such as “space

race". All tasks were accessed via Socrative on students' personal mobile devices. A mixture of qualitative and quantitative feedback was collected through an online survey (Likert scale and open-ended), academic results, attendance records and teaching evaluation scores. The findings suggested that students responded positively to Socrative, their engagement was improved as was focus and satisfaction. The majority of participants indicated a preference for online quizzes compared with traditional paper-based tests and appreciated the instant feedback provided by Socrative. Furthermore, compared with the previous year, there was a significant improvement in academic performance in quizzes and/or exams. However, it was reported that the implementation of Socrative did not improve engagement of project work, nor did it improve attendance rates. The findings suggested improved student satisfaction levels with regard the topic and the teacher with a rise in teaching evaluation scores. Overall, the results indicated that mobile-based interactive teaching models, especially those that incorporate immediate feedback and gamification, can enhance student engagement and academic outcomes in higher education. With regard the focus of this present piece of research, a limitation of Lim's (2017) study is that only the first four questions in the survey pertained to engagement and answers were indicated using Likert scale-based questions.

Another study of Socrative was conducted by Ha (2020), who explored 82 students' perspectives of the audience response system on an undergraduate course at a Korean university. The main focus was to use Socrative to improve participation, collaboration and engagement in problem-based learning tasks on an American Culture and Society course. Data was collected through an end-of-semester questionnaire (using Likert scale and open-ended text questions) and classroom observations. Results from the Likert scale questions were analysed to compare mean scores between females and males as well as to measure differences between individual and group learning styles. Responses to the open-ended questions were analysed by the researcher. The findings suggested Socrative was positively perceived for increasing interest, engagement, critical thinking, conceptual understanding, motivation and

participation. There were no significant differences by gender or discipline, except females reported higher interactivity. With specific regard to engagement, Socrative was reported to improve engagement in group working situations, enabling the sharing of opinions, collaborative knowledge-building, instant feedback and active learning. Participants who indicated a preference for group learning showed higher participation and motivation compared with those participants who indicated a preference for individual learning. Students identified key strengths of Socrative as facilitating opinion sharing, enhancing engagement, and enabling immediate feedback. However, technical problems (namely poor internet connectivity) negatively affected usage and the time spent waiting for all students to enter their responses was listed as a weakness. The research suggested that integrating Socrative into large classes with a focus on problem-based learning tasks can encourage active learning, collaboration, and engagement, but the technological infrastructure and overall pedagogical design of the lesson and course need to be considered. As with Lim's (2017) study, and in relation to the present piece of research, the data collection method is a limitation in not being able to find out the reasons for particular answers, unless students wrote more information. In fact, Ha (2020) noted that some of the comments in answer to the open-ended questions would have made useful question items to ask all participants.

In a study of another game-based audience response system, Kahoot!, at a university in Cyprus, Nicolaidou (2018) aimed to assess participants' perceptions of the impact of Kahoot! on engagement and learning, examine the relationship between participants' performance in classroom games and their academic performance and investigate the relationship between participants' perceived learning through games and their actual academic achievement. Data was collected from 137 undergraduate students, who participated in 32 multiplayer games of Kahoot!, using a Likert scale questionnaire, Kahoot! platform statistics and course exam grades. Participants reported highly positive perceptions of using Kahoot! for its ease of use as well as enhanced engagement and learning. The majority of participants reported feeling more active, motivated and focused during lessons, as well as having a better

understanding of course concepts. The instant feedback function was also noted as a positive. The findings suggested a moderate to strong correlation between game performance and academic performance, indicating a relationship between higher performance in gamification tasks and improved academic outcomes. There was also a slight positive correlation between participants' perceptions of Kahoot!'s impact on their learning and their actual course grades. Overall, the research suggested that platforms like Kahoot! can improve student engagement and may contribute to an improvement in academic performance at university. Although the accessibility of the application was listed as a positive, some technical issues were reported (namely, poor internet connectivity). A limitation of the study is that only quantitative data was collected and so there are no qualitative insights from the participants.

These three studies support Brown et al.'s (2014) findings that undergraduate students were "able and willing to use a classroom response system [on their mobile devices] to increase engagement" (p.80). Brown et al. (2014) surveyed undergraduate hospitality students at Iowa State University to assess their willingness and ability to use response and engagement technology (namely iClicker, Top Hat and Poll Everywhere) in the classroom. A primary motivation for the research was a departmental need to understand the extent to which learners would be willing to use mobile devices in classroom settings. The study also sought to assess the feasibility of incorporating technologies with a reliance on students bringing their devices to lessons. Data was collected through a web-based questionnaire, distributed to 413 students. The findings indicated that all participants owned at least one mobile device with the functionality to participate in an audience response system. Participants expressed a strong desire to use technology in the classroom and indicated they would be more likely to use their mobile devices for lesson-related tasks if incorporated into lectures. The results also suggested increased engagement and participation with response systems, especially if responses were anonymous. Participants indicated a preference for using their own devices rather than purchasing or carrying an additional device solely for response

purposes. Moreover, it was suggested that technology could make large classes more interactive. The research concluded that students were both able and willing to use classroom response and engagement systems and that such technologies can improve engagement, particularly in lectures. However, there were concerns regarding device battery life and a need for back-up devices if participating in such activities. As with the other studies, a limitation of this research is the data collection method in that unless students wrote more information, explanations and reasons for answers are unknown.

Reilly et al. (2014) examined the impact of the mobile real-time collaborative notetaking app 'GroupNotes' on student engagement during university lectures. The GroupNotes application enables small groups of self-selecting students to share their individual workspaces and these can be viewed and edited by the members of their group in real time. The aim is to facilitate collaborative learning without the need to adjust the lecturer's pedagogy. Data was collected from 32 undergraduates through four experimental lectures, video recording, post-session questionnaires (Likert scale) and group preference tracking. During the lectures, the students experienced four different notetaking conditions: no interaction with peers, spoken interaction with peers using a commonly shared physical workspace, silent peer interaction with a common virtual workspace and silent peer interaction with multiple shareable individual virtual workspaces (the GroupNotes application). The findings suggested that students were more engaged when they used their mobile devices for collaborative notetaking and preferred sharing their individual workspace as opposed to common workspace sharing. The results indicated that collaborative notetaking using mobile devices can enhance student engagement in lectures when the individual workspace function is implemented. Again, in relation to the present piece of research, a limitation of Reilly et al.'s (2014) study is the data collection method does not allow for further explanations from the students or following up questions for clarification.

Baek and Lee (2018) investigated 112 undergraduate students' perceptions and engagement in mobile-assisted blended learning in English conversation classes at a Korean university. The participants were studying different degree

subjects and were participating in an English programme, which incorporated both in-class and out-of-class tasks using mobile devices and the social networking app, Kakaotalk. Participants used their smartphones for a variety of tasks, including recording discussions, participating in groupwork and receiving feedback from their peers and teacher. Data was collected via questionnaire (Likert scale and open-ended questions) and engagement was judged by teacher observation of student participation in the in-class and outside of class activities. The findings suggested that participants' perceptions of mobile-assisted blended learning were very positive with students reporting the tasks as useful and engaging. Tasks pertaining to listening and writing were reported as the most interesting and satisfying, while mobile discussions and presentations were considered less interesting and more challenging. Teacher interactions via mobile devices were perceived very positively. Peer interactions, while generally positive, were considered most difficult, often due to group dynamics and scheduling issues. Some of the activities were hampered by technical difficulties, negatively impacting the given tasks. The study concluded that mobile-assisted blended learning can facilitate improved engagement among learners in English speaking classes. With regard to this present piece of research, a limitation of the study is that the quantitative questionnaire focussed on students' perceptions of mobile learning with regard to multiple aspects, not just engagement. Questions pertained to usefulness, interest, difficulty and satisfaction as well as perceptions of teacher and peer interaction. Although 112 students participated in the study, some of the questionnaires were not completed. This resulted in data from only 40 questionnaires being analysed. High student engagement was reported overall but this data was mainly taken from an analysis of the students' participation in the Kakaotalk tasks, for example on the group chat, and from the teachers' perspectives of students' participation in the activities.

The findings from the above studies were generally positive with regard to mobile device use and student engagement. In contrast, Witecki and Nonnecke (2015) found a negative connection between smartphone use and student engagement during lectures when 972 undergraduates were surveyed

using a Likert scale-based student course engagement questionnaire. The study investigated the relationship between student engagement and the use of mobile devices (smartphones, laptops, cell phones, and tablets) during lectures in large undergraduate groups at the University of Guelph. The findings indicated widespread usage of mobile devices, with 93% of participants bringing at least one device to lectures. Smartphones were the most commonly used device, followed by laptops, while tablets and cell phones were less frequently used. Smartphone use (compared with the use of laptops, tablets and cell phones) most strongly correlated with lower engagement with only 18% of students indicating use of the devices for learning. The use of smartphones was also associated with lower scores in engagement of skills, emotion, participation and performance. Although laptops were more often used for academic tasks such as notetaking and accessing course materials, laptop use was also associated with lower overall engagement (but not to the same extent as smartphones), as much of the usage was non-academic. Tablet and cell phone use showed no significant relationship with regard to overall engagement. The study concluded that unstructured mobile device use, particularly smartphones, is correlated with reduced student engagement in lectures and the researchers recommended restricting smartphone use during lectures because usage is rarely for academic purposes. A limitation of the study is that it pertained to unstructured mobile device use during lectures rather than mobile devices being used for specific learning activities. This study also shows how quickly technology changes as smartphone and cell phone are separate categories for devices that students might bring to a lecture, with cell phones noted as being less disruptive due to limited functionalities.

While these studies provide valuable insight, they are predominantly quantitative in nature, typically involving students completing questionnaires or surveys using Likert scales or multiple-choice questions. However, “numerical Likert scale data… cannot provide a complete picture of educational phenomena” (Nemoto & Beglar, 2014, p.8). These types of questionnaires offer some benefits in terms of ease of use, scalability and the potential for statistical analysis, but limit the response options available to participants. This

limitation can potentially be mitigated by inclusion of open-ended questions, such as those used by Lim (2017) and Vahedi et al. (2021). However, it is not guaranteed that participants will write anything or, if they do, there is no option for clarification or expansion. Vahedi et al. (2021) acknowledge limitations of the methodological design including "students succumbing to social desirability bias or misinterpreting survey questions and consequently responding incorrectly" (p.225).

Reviewing the literature has not only shown that there is a gap in research pertaining to mobile device use and engagement on the university foundation year but also highlighted that what little research does exist at undergraduate level predominantly uses quantitative research methods. As a result, a qualitative approach was selected for the research project undertaken for this thesis, in order to gain an understanding of students' perceptions. The research design for the study will be reported in detail in Chapter 4. Although quantitative research can be useful in establishing if a student feels engaged or not when using their mobile device in the classroom, qualitative methods were used in this study in order to enable students to express how and why. Furthermore, the use of interviews allowed the researcher to ask for clarification or further explanation and to delve deeper into the students' experiences.

Having informally asked teachers in the department which mobile apps and tools they were using with their students, it became apparent that, out of the apps included in the literature above, only Kahoot! was mentioned by the teachers. Therefore, it felt prudent to search for more general studies pertaining to apps and tools the teachers were using because it was likely these would be discussed by their students in the interviews.

2.8 Mobile Apps and Features

Informally asking teachers in the department, and incorporating the researcher's own usage in lessons, indicated most structured student device usage pertained to Microsoft Teams. Teachers also reported using an eBook version of one of the module's coursebooks, Macmillan English Language Hub,

student response systems, namely Kahoot! and Mentimeter, interactive dictionary sites, such as Longman and a site where teachers can create interactive games and puzzles for their students to access, Learningapps.org. Although accepted that all of these applications can be accessed on a computer as well as a mobile device, it was deemed beneficial to review recent literature pertaining to general usage in education.

2.8.1 Microsoft Teams

Martin and Tapp (2019) highlighted Microsoft Teams is an "iteration of Vygotsky's notion of socially co-constructed knowledge" (p.59). The application has been found to improve communication between learners and teachers as well as encourage students to collaborate with each other as part of an online community (McVey et al., 2019). Each English group on the IFY programme is attached to its own Microsoft Teams site, set up by the Module Leader and maintained by the group teachers. This model was adopted by the department in March 2020, during the lockdown, which forced many universities to operate virtually to mitigate the spread of the SARS-CoV-2 virus. As noted by Bligh et al. (2022), this situation was a challenge for the entire education sector but more so for institutions with little or no prior experience of online delivery. For institutions such as these (and, on the whole, ours), where digital tools and platforms were not used before the pandemic, the sudden transition to online teaching and learning was difficult. However, once the English teachers got used to using Teams, the overall feeling was that it made life easier and it should be a permanent part of the programme. Recent research indeed suggests Teams is a useful platform for collaboration with features including multiple chats, discussion boards, content sharing, real-time collaborative authoring and video conferencing (Allison & Hudson, 2020; Henderson et al., 2020; McVey et al., 2019). This ease of content sharing on Teams supports findings from more general research into mobile device use (as discussed in the previous chapter) with several studies mentioning resource accessibility as a positive (Al-Furaih & Al-Awidi, 2021; Ally et al., 2014; Crompton & Burke, 2018; Sarrab, 2012; Zulfakar & Zabidi, 2020). Much research into Microsoft Teams relates to students' experiences during lockdown (Nguyen & Duong,

2021; Sobaih et al., 2021; Wea & Kuki, 2021; Yen & Nhi, 2021) when the software was relatively new to many people at a surreal point in time. In more recent research, Oliemat et al. (2024) considered Microsoft Teams as an online education system for higher education and Al-Shboul (2024) not only recommended the implementation of Microsoft Teams for courses delivered remotely but also for other programmes, across all levels.

These views align with how Teams is being used on the English programme, since returning to the classroom, post-lockdown. Furthermore, in addition to using Teams in the face-to-face lessons for sharing documents and ideas and, given that the software was also difficult for students to get used to during lockdown, the department decided to incorporate one remote lesson per week into the face-to-face programme and hold tutorials online, so new students could benefit from, and learn how to use, Teams. Essentially, incorporating Microsoft Teams into the programme has changed the makeup of, what is still referred to in the department as, a face-to-face programme, raising questions of whether it should now be referred to as blended or hybrid or something else. According to O'Byrne and Pytash (2015), "the terms blended learning, hybrid learning and mixed-mode learning are used interchangeably" (p.137). Ferdig et al. (2015) defined this type of learning as a pedagogical approach, combining face-to-face instruction with the use of technology to facilitate teaching and learning. Although the focus of this study fits these definitions of blended learning, questions in the back of the mind start to form surrounding the difference between these scenarios and a face-to-face programme enhanced by the use of technology. However, Staker (2011) categorised six types of blended learning (face-to-face, rotation, flex, online-lab, self-blend and online driver), detailing that in the face-to-face driver model, it is the teachers on campus who deliver most of the programme, using online learning to supplement or for intervention, often case-by-case (Staker, 2011, p.7). As blended learning advances, previous research indicates there is no set ideal suitable for every eventuality (Garrison & Kanuka, 2004; O'Byrne & Pytash, 2015). Therefore, for now at least, a face-to-face programme (enhanced with

the use of technology embedded within it) seems to fit, especially in a digital era where using technology in the classroom is somewhat expected.

2.8.2 eBooks

eBooks, sometimes referred to as interactive books or digital textbooks, combine textual content with a range of multimedia components, such as animations, audio and video clips, simulations as well as interactive activities, including puzzles and games (Dahlan et al., 2024; McKnight et al., 2016). The main coursebook used in the English classes on the IFY is Language Hub Upper Intermediate by Macmillan Education. An accompanying app is available; "The student's app allows learners to practise on-the-go with over 300 activities designed to offer quick and flexible practice. It also includes access to the digital student's book for face-to-face or online classes" (Macmillan Education, 2025).

Kuforiji and Williams (2017) noted that much research into eBooks focusses on usage outside of classroom environments and after conducting initial searches on Google Scholar and Scopus relating to eBook usage, it soon became apparent that this was indeed the case with an overwhelming number of studies appearing to pertain to library settings or general users, reading eBooks for pleasure. As this current study is set in a university, it was important to locate literature undertaken in educational settings and, in particular, classroom environments. eBook usage appears to be generally positive across the literature with Lohr (2014) reporting 81% of students preferring to use digital books rather than paper copies. Several studies noted the advantages of using interactive books in the classroom, namely for their portability (Karakoç Öztürk, 2021) ease of use (Almekhlafi, 2021; Lohr, 2014), multimedia elements and interactivity (Almekhlafi, 2021). Moreover, Jeong et al. (2018) linked eBook usage to increased student motivation. However, challenges of using eBooks in the classroom were also reported across the literature, including issues with technology and/or device compatibility problems (Jeong et al., 2018; Karakoç Öztürk, 2021; Lohr, 2014) and potential health problems of prolonged device use (Almekhlafi, 2021). Some teachers reported students becoming easily

distracted and a general deterioration in positive learning behaviours (Jeong et al., 2018). In a systematic review of 123 empirical studies on eBooks in education, Tlili et al. (2024) found the development and adoption of eBook usage by countries vary, which serves as a reminder not to assume all students will be familiar with using eBooks, especially when teaching on international programmes. Indeed, a lack of knowledge with regard to using eBooks in educational settings by both learners and instructors was listed as a challenge.

2.8.3 Student Response Systems, Interactives and Dictionaries

As mentioned, the coursebooks on the English programme are upper intermediate level to reflect that most students need the equivalent of an IELTS 6.0 to achieve a place on their undergraduate programme. However, students can enrol on the IFY with a minimum of IELTS 4.5, which is considered lower intermediate. At the other end of the spectrum, some students have far more advanced English skills. Therefore, although all groups follow the themes of the coursebook for continuity, the level is not always suitable for all students and teachers have to supplement the scheme of work with easier or harder materials, depending on the level of learners in their classes. Teachers on the IFY report integrating Mentimeter, Kahoot!, LearningApps.org and interactive dictionaries through mobile device use into their lessons.

The University subscribes to Mentimeter and teachers can login using their University email and password to create and share resources. Through interactive multiple choice quizzes and the ability to enable students to ask anonymous questions during lessons, Mentimeter can be used to promote an inclusive and engaging learning environment (Hill & Fielden, 2017). In a study of learners' perceptions of the software, Hill and Fielden (2017) reported students felt the quizzes were a fun way to break up the session and consolidate learning. There was also a perceived improvement in focus. Furthermore, the feature allowing anonymous questions to be asked during the session, provided an opportunity for less vocal students to be heard. The researchers concluded that Mentimeter was an effective tool for improving learner engagement and participation. Likewise, while conducting a study of

the impact of using Mentimeter on student engagement, Sari (2021) reported positive attitudes from learners regarding the practicality of the software and the feature allowing anonymity. While integrating Mentimeter into a programme at a university in Oman did not make a significant difference to exam scores, Madiseh et al. (2023) noted a high level of motivation and autonomy from the students using Mentimeter, suggesting the software can help to overcome demotivation in the classroom.

The focus of a study by Tarazi and Ortega-Martín (2023) was teachers' attitudes toward the use of the Mentimeter and their perceptions of the role of the Mentimeter platform in improving students' engagement in online synchronous classes. The results from the study suggested that teachers had positive attitudes regarding the implementation of Mentimeter in synchronous education. Furthermore, the findings also indicated that the majority of teachers, who participated in the study, perceived that Mentimeter plays a crucial role in enhancing student engagement in online synchronous classes. Teachers expressed that the use of Mentimeter reduces the likelihood of students becoming bored, which in turn encourages active participation. In a comparative analysis of interactive tools in higher education, Ayandibu (2025) concluded that the key strengths of Mentimeter are its user-friendly interface, range of question types, and real-time feedback functionalities because these assets facilitate active participation and help students retain knowledge. However, the study asserted limitations of Mentimeter as its dependency on a stable internet connection and limited features for assessment, which were deemed as complex to use.

Kahoot! is a free online learning platform, enabling educators to tailor their content based on their students' performances on quizzes, with the survey feature also allowing for anonymous participation during the lesson (Plump & LaRosa, 2017). From an investigation into the software, Plump and LaRosa (2017) identified the following advantages: the simple process for students in that there was no need to register or download the app, it was compatible across mobile devices, the bright colours and jaunty music encouraged energy and excitement from the students, with use of the software generally improving

student engagement. In a literature review, pertaining to 93 studies of the effect of using Kahoot! for learning, Wang and Tahir (2020) found Kahoot! can have a positive impact on the dynamics in the classroom, the attitudes of learners and teachers, on learner anxiety and on learner performance. However, the researchers also noted challenges including technical problems (often associated with poor internet connections), difficulties with reading questions and answers on a projected screen, stressful time-pressure of answering questions and being scared of losing. When comparing interactive tools used in higher education classrooms, Ayandibu (2025) concluded that the strengths of Kahoot! are its gamified approach, which creates a competitive environment and the ease of use of the application. However, it was noted that the design of the application could favour rote-memorisation rather than a deeper learning style. The study also questioned whether Kahoot! would be suitable for all educational content and all forms of assessment.

LearningApps is also a free platform available in multiple languages, with an interactive exercise creation feature. Once the activity has been created, it can be shared with learners via a weblink or QR code. There are a range of exercise templates including fill in the gaps, matching pairs, crosswords and guessing words. Duthoit (2024) praised the website for its assistance in helping to convert the tasks into SCORM packages, which can be embedded in virtual learning environments as graded items. In a review of the software, Powell (2021) noted the tool enables teachers to express their creativity and praised the site's ease of use for instructors and students. Similar findings were highlighted by Stepanyuk et al. (2020) in a study of using the app with biology learners with "access to unregistered users" also listed as an advantage (p.464). Furthermore, when integrating the app into an economics Moodle site, Horbatiuk et al. (2024) reported an increase in learner motivation and an improvement in learning outcomes. Albeit a small study of five students, learning English, Fitra and Raudhatul (2024) reported observed improvements in students' reading and listening abilities after using the app, noting "the platform's engaging and fun approach, combined with the ability for repeated practice, makes it a valuable tool for comprehensive language skill

development" (p.35). Although Duthoit (2024) hailed LearningApps for being free to use, the study noted the only way to insert audio files is via YouTube. It was suggested that an improvement could be the functionality to upload an audio file from the user's computer.

Electronic dictionaries are dictionaries that are available online and accessed via a browser or mobile app as opposed to a traditional paper copy in book form (Levy & Steel, 2015; Mohamad et al., 2017). The teachers in the department mentioned using the Cambridge and Longman dictionary sites, which were free to access. In a study of students' perspectives on the functionality and use of electronic language dictionaries, Levy and Steel (2015) found such software plays a crucial role for language learners. The results indicated that out of all the technological resources declared by the students, inside and outside of lessons, use of an interactive dictionary had the highest frequency. Dashtestani (2013) reported positive attitudes from teachers and students in the use of interactive dictionaries, with most learners accessing a dictionary via a mobile device. Some of the challenges to using electronic dictionaries in the classroom included unsuitable versions of dictionaries in use by the students, lack of training in how to use the dictionaries and possible distraction when using them during lessons. Mohamad et al.'s (2017) study of language learners revealed similar disadvantages but students acknowledged interactive dictionaries as one of the tools which would help them learn vocabulary. The main advantages included the ability to learn new vocabulary at any time and in any location, the audio features are helpful for learning how to pronounce words, the word origins can be identified easily and the interactive element is visually more appealing than a paper dictionary as well as allowing the inclusion of more details and clearer explanations.

As the technology of interactive dictionaries evolves, drawbacks, such as limited word definitions and examples as well as low quality audio features (Mohamad et al., 2017) may be resolved through more advanced integration of artificial intelligence (AI). A more recent study (Ptasznik et al., 2024) focussed on the effectiveness of an AI chatbot, ChatGPT, versus the electronic Longman Dictionary of Contemporary English in supporting English language learners in

accurately understanding and producing English. From the findings, the researchers suggested ChatGPT has the ability to provide instant lexical assistance, relevant to context, engaging learners with interactive and adaptive conversation. Ptasznik et al. (2024) noted that "An intelligent chatbot largely relieves the learner seeking lexical information from the error-prone and time-consuming task of locating relevant information in a 'generic' dictionary entry. Instead, they can get immediately relevant feedback without the accompanying noise" (p.334).

Both dictionary sites (Cambridge and Longman) used by the teachers associated with this present study are primarily monolingual, with English being the language used for definitions and examples. Both sites offer functionality to switch to bilingual dictionaries for some languages. In an exploration of Chinese students learning English and their acceptance of mobile dictionaries, Zhang et al. (2025) reported that participants generally found mobile dictionaries useful for learning vocabulary with regard to spelling, word-meaning, parts of speech and pronunciation. When comparing mobile dictionaries that contained English-only definitions, English definitions with Chinese translations and Chinese-only definitions, the students generally preferred being able to access definitions in English with the option of translating into Chinese. This type of mobile dictionary was generally preferred for its comprehensive information, clarity and user-friendly design. Zhang et al. (2025) highlighted that students' language limitations and reference needs (and their own awareness of these) can influence acceptance and usage of mobile dictionaries. The researchers recommended that future mobile dictionaries should incorporate intelligent, adaptive features, such as instant feedback and personalised tutoring. As in Mohamad et al.'s (2017) study, AI is suggested by Zhang et al. (2025) as a possibility for creating more personalised, adaptative and interactive language learning environments.

The studies highlight some of the advantages and limitations of the technological tools mentioned by the teachers associated with the present piece of research. Understanding these strengths and weaknesses can assist practitioners when making decisions regarding the selection and

implementation of suitable educational technologies to enhance the learner experience and improve student engagement. Although some studies directly compare particular applications (Ayandibu, 2025; Zhang et al., 2025) and discuss their different merits and weaknesses, it is important to choose the most appropriate tool for the situation. Recommendations include selecting tools that align to specific learning outcomes, balancing fun with academic rigour, encouraging collaborative learning, providing real-time feedback to support learning, ensuring accessibility and ease of use (Ayandibu, 2025).

2.9 Summary

This chapter discussed the five scholarly conversations at the intersection of which this research is positioned. It outlined how the literature review was approached and made a justification for the study. Literature focusing on mobile device use at university and student engagement was discussed. The following chapter will focus on student engagement more generally and outline the theoretical framework chosen for underpinning this project.

Chapter 3: Theoretical Framework

This chapter begins with a more general discussion of student engagement to lay the ground for the research focus and theoretical framework underpinning this project, which is Redmond et al.'s (2018) Online Engagement Framework for Higher Education.

3.1 Student Engagement and Theoretical Underpinnings

Teachers on the English programme are using mobile devices with their learners in an attempt to engage students because student engagement is widely acknowledged for its crucial role in learning (Kahu, 2013). Wang and Eccles (2012) argued student engagement is critical for learners to acquire knowledge and skills to be successful in furthering education and careers. Much of the research highlights the importance of student engagement, leading Trowler and Trowler (2010) to suggest “the value of engagement is no longer questioned” (p.9). Links to student engagement can also be found alongside research into areas such as wellbeing (Boulton et al., 2019) and academic motivation (Skinner & Raine, 2022), suggesting overlaps and similarities with other concepts. In addition, studies have been conducted into ways for improving student engagement, such as through icebreaking tasks at the start of lessons (Liang, 2024).

There are many definitions in the literature regarding what is actually meant by student engagement (Trowler, 2010). For example, Kuh (2009) defined student engagement as “the time and effort students devote to activities that are empirically linked to desired outcomes” (p.683). Moreover, many researchers are of the opinion that engagement is a multifaceted concept. Fredricks et al. (2004) identified three constructs: behavioural engagement, cognitive engagement and emotional engagement. Some researchers have focused on one or more aspects, others have discussed potential overlaps and some researchers have expanded on the three constructs. A study by Trowler (2015) of student engagement in higher education contexts instigated the proposed

inclusion of three more categories: critical, political and socio-cultural, creating a six-faceted model.

With the focus on higher education, this framework was seriously considered for the underpinning of this current study. The main reason being Trowler's (2015) belief that, although still relevant for university level education, Fredricks et al.'s (2004) three concepts do not completely encapsulate how being a university student differs from being a student at school or further education college. In more recent research by Trowler et al. (2022), the inclusion of the three additional concepts was justified as providing differentiation from “student engagement in a compulsory education context” (p.765). Although this present piece of research takes place in a university setting, studying English on the IFY is compulsory so it was felt that Trowler's (2015) stance did not quite work as an underpinning framework for this particular project. It was felt that something more in between the models proposed by Fredricks et al. (2004) and Trowler (2015) was needed. Like Fredricks et al. (2004), the focus was school engagement, but Wang and Hofkens (2020) discussed the importance of the social context of education and how the situation can “provide students with opportunities for positive and productive interactions with their teachers and peers” (p.421).

Furthermore, research suggests that it is more likely for learners who feel capable in their social interactions and/or enjoy interacting socially will seek help and support in academic activities (Patrick et al., 2007; Wang et al., 2019). Given that this current study involves mobile device use, a tool often associated with social interaction, it was felt including a bespoke social aspect in the underpinning framework was a necessity. Drawing on previous research into student engagement (Fredricks et al., 2004; Reeve & Tseng, 2011), Redmond et al. (2018) developed five elements of student engagement as an Online Engagement Framework for Higher Education (Figure 3.1, with further detail in Table 3.1). In addition to Fredricks et al.'s (2004) three core concepts, Redmond et al. (2018) added social engagement and collaborative engagement.

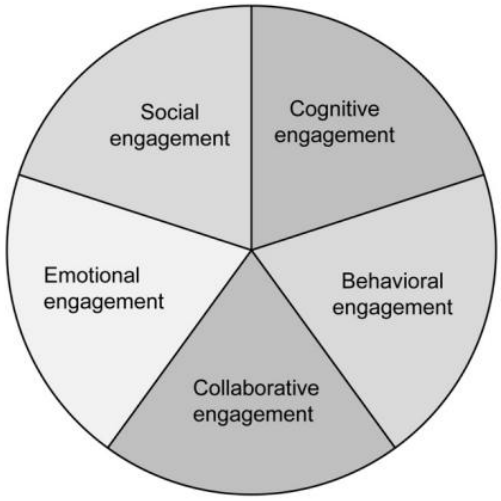


Figure 3.1 Online Engagement Framework overview (Redmond et al., 2018, p.189, reproduced here under a Creative Commons – Attribution International 4.0 (CC-BY) License).

Online Engagement Element	Indicators
Social engagement	Building community Creating a sense of belonging Developing relationships Establishing trust
Cognitive engagement	Thinking critically Activating metacognition Integrating ideas Justifying decisions Developing deep discipline understandings Distributing expertise
Behavioural engagement	Developing academic skills Identifying opportunities and challenges Developing multidisciplinary skills Developing agency Upholding online norms Supporting and encouraging peers
Emotional engagement	Managing expectations Articulating assumptions Recognising motivations Committing to learning
Collaborative engagement	Learning with peers Relating to faculty members Connecting to institutional opportunities

Table 3.1 Online Engagement Framework for Higher Education (redrawn from Redmond et al., 2018, p.190).

The addition of social engagement and collaborative engagement to the three proposed by Fredricks et al. (2004) is well-suited to this research with a key focus being on students' use of mobile devices in the classroom, so it was selected as the underpinning framework. The digital element of Redmond et al.'s (2018) framework, the focus on higher education and the inclusion of a social aspect struck the required balance between the previously considered models of Fredricks et al. (2004) and Trowler (2015). However, it was also decided upon because the collaborative aspect is in line with Kearsley and Shneiderman's (1998) 'engagement theory', based on a perspective that "students must be meaningfully engaged in learning activities through interaction with others and worthwhile tasks" (p.20). Through their experiences of collaborative e-Learning, Kearsley and Shneiderman (1998) asserted "technology can facilitate engagement in ways which are difficult to achieve otherwise" (p.20).

Therefore, adopting Redmond et al.'s (2018) Online Engagement Framework for Higher Education is justified for this study because it provides one of the most holistic views of student engagement and translates this view into clear, practical elements that can be applied and explored in real teaching and learning contexts. The five elements – social, cognitive, behavioural, emotional, and collaborative engagement – offer a wider view of engagement than models that focus only on observable behaviours or levels of interaction. This broader perspective is particularly useful for the student population at the focus of this study, which comprises international students navigating both the transition into higher education and the wider adjustment to life in the UK, alongside variation in prior academic preparation, English language proficiency, and confidence with both English language and academic practices. By recognising emotional and relational aspects of learning alongside academic and participatory ones, the framework allows for a more nuanced understanding of how mobile device use can influence engagement in ways that students themselves find meaningful.

Although Redmond et al.'s (2018) Online Engagement Framework for Higher Education was originally developed to support online engagement, later research shows that it can also be used as a reflective tool to guide teaching practice and course redesign across different delivery modes. For example, Redmond et al. (2022) demonstrated that the framework helps educators reflect more deeply on how engagement is supported and use these insights to redesign learning activities. This is directly relevant to this thesis, which is concerned with how engagement is experienced and supported by students, rather than simply whether mobile devices are present in the classroom. Importantly, while this study is based in a predominantly face-to-face setting, teaching is delivered in a moderately hybrid format. The framework is well suited to this context because its engagement elements can be enacted through in-class activities, such as group work, discussion, and creating a supportive learning environment, as well as through digital practices, including peer interaction using mobile devices and shared digital resources.

Research that has applied and extended the framework further supports its selection. For instance, Fanshawe et al. (2025) used the framework to review and redesign online learning environments and reported improvements in student engagement, illustrating its practical value as a design tool. Furthermore, in developing a new approach to engagement, Toma and Berge (2024) built on the framework's multidimensional view of engagement when proposing a community engagement model, demonstrating its influence on subsequent engagement research. Taken together, this body of work supports the use of Redmond et al.'s (2018) Online Engagement Framework for Higher Education as an appropriate analytical framework for this study. It offers a broad, practical, and adaptable way to explore students' perceptions of how mobile device use shapes different aspects of learning engagement in a classroom that is primarily face-to-face but supported by digital technologies.

3.2 Social Engagement

Krause (2005) argued building opportunities for social engagement into lessons is of equal importance as the lesson content and intellectual tasks. Throughout

the literature, social engagement is often used with, or defined as, socio-emotional interaction or social interaction (Sinha et al., 2015). The concept can be defined as involving respectful and responsive exchanges between students, who have demonstrated a team effort in working on a task, as opposed to approaching it individually (Linnenbrink-Garcia et al., 2011; Sinha et al., 2015). After observing high school students tasked with group activities in science classes, Rogat and Adams-Wiggins (2014), noted that insufficient opportunities for group members to contribute regularly, compromises the quality of the task because full potential of the shared activity cannot be reached. They argued if social engagement if of high quality, it can allow all group members to participate equally to the task in question, rather than merely reacting to responses of one or two members in the group, thereby enhancing cognitive engagement. In addition, such interactions can support behavioural engagement by encouraging the involvement of each team member (Sinha et al., 2015). In contrast, when social interaction is of low quality, it can impact negatively on group activities and even foster inequalities within the group (Salomon & Globerson, 1989). Social interaction is even more important when learners are required to work with their peers on assessments, such as group projects or presentations (Redmond et al., 2018; Sinha et al., 2015). Engaging in a social manner has a strong connection to collaborative learning, contributing to group dynamics and the idea of a shared sense-making of the task (Van Den Bossche et al., 2006).

According to Redmond et al. (2018), social engagement in online settings can be seen through actions that foster community, for example, interactions on platforms where open communication is possible and the development of relationships with classmates and teachers. In a study by Salhab and Daher (2023) focussing on mobile learning engagement of educational technology learners, it was suggested that using the Moodle app improves social-mobile interaction due to its interactive content, helps promote the building of a community and in the development of relationships, creating a sense of belonging to the group as well as providing opportunities for students to be competitive through gamification apps, such as Kahoot!. Chen et al. (2010)

noted the importance of “social and informal interaction with faculty and other students… both online and face-to-face” (p.1229). Building rapport is an important part of social engagement because it helps enhance cohesion within the group and with fostering a sense of belonging within a learning community (Redmond et al., 2018; Wright et al., 2013). In a study focussing on learners’ preferences for rapport-building traits and practices of their teachers in online environments, Wright et al. (2013) defined rapport-building in such environments as “a close and interactive relationship that is built upon trust, shared control and engagement in activities that are aimed as advancing the skills, abilities and knowledge of a clearly defined group and its individual members” (p.38). The findings suggested that the participants, who were mostly studying an educational technology course at a university in America, indicated a strong preference for behaviour-based traits, such as dependability, trustworthiness and organisation, over pedagogical-traits, such as time dedicated to a task. Traits that could be conveyed within a technology-based learning environment ranked highly with social presence emerging as the key element of building rapport in online learning environments.

There is much overlap in literature pertaining to social engagement and social presence, with the latter being one of the three integral parts of Garrison et al.'s (1999) original Community of Inquiry framework. The three ‘original’ presences have been expanded by numerous researchers, as Kozan and Caskurlu (2018) discussed in a review of research conducted on the refinement of the framework, noting that the various contributions are based on the different perspectives of the researchers. However, at its core are teaching presence, cognitive presence and social presence, believed to be key in achieving a meaningful learning experience. According to Fabro and Garrison (1998), social presence is vital for establishing a learning community. A central element is the ability of individuals to be portrayed as real people, expressing emotions, communicate and form relationships (Garrison et al., 1999). To facilitate this, Feng et al. (2017) recommend that teachers help students orientate themselves with the online environment so that they feel comfortable using it. For example, teachers could encourage students to create online

profiles in the learning environment, send/reply to messages, encourage participation and set group tasks (Stephens & Roberts, 2017). These suggestions reinforce Lowell and Ashby's (2018) research highlighting the importance of teacher input in building communities between students, reinforcing that support and guidance are an important part of teaching presence and integral to the development of social presence and cognitive presence. Through social presence, cognitive presence can be reinforced as trust is established and collaboration between students develops (Garrison et al., 1999).

3.3 Cognitive Engagement

Unsurprisingly, the aforementioned overlap in the literature pertaining to social engagement and social presence is replicated by cognitive engagement and cognitive presence, again with reference to Garrison et al's. (1999) Community of Inquiry framework. A vital requirement in higher education is the ability to think critically and, according to Garrison et al. (1999), cognitive presence is a key factor. Four stages of cognitive presence were identified by Garrison et al. (1999): triggering event, exploration, integration and resolution. A triggering event is when students recognise there is a question to be answered. In order to solve the task, individuals may explore various sources and/or discuss ideas with other group members through social exploration. Then, students integrate the different ideas and information to complete the activity. Finally, at the resolution stage, students can apply new knowledge to new situations, enabling them to think more critically about the topic (Garrison et al., 1999). Newman (1996) found that asynchronous communication in a collaborative context, supported by technology could play a crucial part in the facilitation of cognitive presence in higher education. In order for cognitive presence to develop, Feng et al. (2017) noted the importance of the role of the teacher in establishing a suitable learning environment with materials/tasks designed to encourage students to interact, think critically, and ask/answer questions.

Similarly, cognitive engagement can be defined as the “active process of learning” (Redmond et al., 2018, p.191) where students “comprehend complex

ideas and master difficult skills" (Fredricks et al., 2004, p.60). Bowen (2005) referred to cognitive engagement as students "paying attention" to their studies and being "engaged" with what they are doing (p.5). The term is often linked with the idea of being motivated to learn (Fredricks et al., 2004; Redmond et al., 2018) and aligns with what Pittaway and Moss (2014) referred to as intellectual engagement. Fredricks et al. (2004) discussed cognition in terms of surface cognition and deep cognition with students who display traits of surface cognition, likely being more interested in completing the task, rather than learning from it. Redmond et al. (2018) offered examples of surface cognition in an online environment, including contributions where agreements with others are made without further explanation or not justifying answers. In contrast, students who demonstrate deep cognitive engagement likely have a "preference towards challenge, as well as a desire to go beyond basic requirements", perhaps justifying their answers and supporting their ideas (p.192). Students who demonstrate high cognitive engagement often "use metacognitive strategies to plan, monitor and evaluate their cognition when accomplishing tasks" (Fredricks et al., 2004, p.60). In other words, they show self-awareness with regards to their strengths and weaknesses and understanding in what is needed to address the gaps in their knowledge. In the previously mentioned study by Salhab and Daher (2023) focussing on mobile learning engagement of educational technology learners, the findings suggested that "m-learning supports the transformation of student cognitive engagement" (p.209). In particular, the participants interviewed by Salhab and Daher (2023) indicated that "m-learning makes them more attentive and focused on tasks", with the researchers making the connection between cognitive engagement and students' enhanced attentivity to concepts because many of the puzzle and game apps are designed to make learning fun (p.209). In addition, Salhab and Daher (2023) reported students feeling "immersed" while participating in mobile-learning activities, suggesting they are cognitively engaged as well as demonstrating "cognitive curiosity", using their devices to search for information. Furthermore, Salhab and Daher (2023) found mobile learning can "improve meta-cognitive strategies such as problem-solving, evaluation, and the monitoring of students' thinking" with many participants

indicating that their “technical and academic skills for searching” had improved (p.209).

Similar results were reported in two more studies. Firstly, in Lim's (2017) study of whether integrating the mobile app, Socrative, into lessons can improve student engagement, it was noted that “students’ overall academic performance had improved, particularly in the test and exam components” (p.411). Secondly, in an investigation into whether student performance in the Game-based Student Response Systems (GSRS), Kahoot!, could be linked to academic performance, Nicolaidou (2018) reported a moderate to strong correlation across four courses, leading the researcher to conclude that learners who score highly in games played on their smart phones during lessons perform well on their courses. With students reporting Kahoot!’s positive impact on their engagement, Nicolaidou (2018) suggested using mobile devices as student response systems in educational games to improve the academic performance and engagement of students.

3.4 Behavioural Engagement

Fredricks et al. (2004) defined behavioural engagement as “doing the work and following the rules” (p.65). Through their study, they discussed three strands. Firstly, they discussed behaviours such as abiding by rules, partaking in discussions, asking questions and generally paying attention. The second strand involved actively participating in academic activities and the third, participating in non-academic activities within the educational setting. Fredricks et al. (2004) added that learners who are behaviourally engaged are active participants in the process of learning, support their classmates and complete what has been asked of them. In addition, they often encourage their peers to behave in the same way, thus generally helping to decrease potential disruption from others. Young (2010) stated learners who show high levels of behavioural engagement “are characterised by positive conduct, class participation, involvement in the learning task, high effort and persistence, positive attitudes and self-regulation of their learning” (p.2).

Salhab and Daher (2023) found that participating in mobile-learning activities improved students' behavioural engagement, including encouraging them to put more effort into their work and keep their focus. It was also reported that m-learning encourages students to attend class on a regular basis and participate in tasks, as well as allowing students who miss class to keep involved. These examples were described as positive conduct by the researchers alongside instances of students being respectful of their classmates' thoughts and ideas. In the previously mentioned study by Lim (2017) into whether student engagement in higher education could be improved though using the mobile app, Socrative, in class, it was concluded that the incorporation of the app encouraged student engagement and participation. Lim (2017) reported that the majority of students agreed their focus in class had improved but, although Lim (2017) found a correlation between students' attendance and exam results, the inclusion of the mobile app did not alter learners' attendance behaviour: "students who attended the class felt engaged and able to score better but students who are frequent absentee[s] did not become motivated to attend the class" (p.411). On asking learners how the use of a student response and engagement system impacted their participation, Brown et al. (2014) reported that 72.3% of participants agreed or strongly agreed that systems led to an increase in their participation. In addition, it was suggested that students would be more likely to answer questions if they were able to do so anonymously. Moreover, the students did not express a strong desire to answer questions, which would not be graded. As a result of the study, Brown et al. (2014) concluded that "some students may be shy, unwilling, or unable to answer openly, but they are more willing to respond anonymously via student response systems, which will increase the overall engagement and learning of students" (p.83).

3.5 Emotional Engagement

According to Fredricks et al. (2004), emotional engagement relates to "interests, values and emotions" (p.65). Redmond et al. (2018) defined the concept as 'students' emotional reaction to learning… [relating] to their feelings or attitudes towards learning" (p.195). It can include reactions to classmates

and teachers, the subject or learning activities and the educational establishment or environment (Fredricks et al., 2004). Redmond et al. (2018) highlight that “attitude, enthusiasm, interest, anxiety or enjoyment in the learning process” can indicate students’ emotional engagement, with “positive emotional engagement” being displayed by those who likely “value learning or the acquisition of knowledge and skills and appreciate success” (p.195). Cleveland-Innes and Campbell (2012) identified emotion as an important factor when learners are adjusting to online environments, and Sinha et al. (2015) highlighted that both positive and negative emotions can play a part in activating engagement. In their research into emotional engagement and gamified online learning, Özhan and Kocadere (2020) noted “an individual who enjoys being in an environment feels happy and pays attention to the given tasks and is therefore affectively engaged in the setting [and] works more proactively and intensively for an aim determined by themselves” (p.2025), supporting Shernoff and Hoogstra's (2001) observation that interest and enjoyment play a part in the engagement and motivation of students. From their research, Özhan and Kocadere (2020) noted that emotional engagement can trigger motivation, “which is among the most important predictors of success” (p.2027).

Kim et al. (2022) emphasised the importance of motivating learners and discussed conveying emotion through emoji symbols as a way of keeping students’ attention in online environments. Kim et al. (2021) argued that such interactions between learners and instructors can enhance student experience. The results from a study by Kim et al. (2022) of undergraduate students from American universities suggested that a teacher’s use of emojis “could lead students to perceive… [them] as authentic and friendly, making students more intrinsically motivated and more inclined to pay attention” (p.1). Crombie's (2020) research highlighted a need for teacher engagement with emojis because “by learning to speak Emoji in the same contextual manner as our students, tutors can harness them as relevant, useful and purposeful additions to the student-student and student-tutor communications” (p.38). Likewise, Kim et al. (2022) suggested that emojis can help “convey nuanced emotional states

that not only replace words with icons but also enhance conversations and messages by modifying tone" (p.2). George et al. (2023) examined "emoji as an emerging international language bridging cultural and generational divides" and found "emoji usage transcends country and culture, having expanded beyond Asia and Western nations to Africa, South America and the Middle East" (p.183). The participants in George et al.'s (2023) study highlighted "emojis ability to convey emotion and nuance non-verbally across language barriers" with "over 80% of users" believing "emoji effectively communicate thoughts and feelings internationally" (p.183).

Most of the educational technology students interviewed by Salhab and Daher (2023) expressed positive emotions while participating in mobile learning, with learners acknowledging feelings of enjoyment and excitement. Students also reported feeling connected to their teachers who "play a crucial role in boosting students' enthusiasm and supporting them emotionally" (p.210). The study also indicated that students felt "more confident and less shy" during the m-learning tasks as well as more motivated, due to the "interactivity, accessibility to a wide range of information sources, and ease of use".

As mentioned, references to Garrison et al.'s (1999) Community of Inquiry framework can be found in literature pertaining to social and cognitive engagement. Kozan and Caskurlu (2018) discussed how the framework has been refined by other researchers with some adding to the three original parts (social presence, cognitive presence and teaching presence). One such amendment is the suggestion of adding emotional presence (Cleveland-Innes & Campbell, 2012). Whereas Garrison et al. (1999) felt emotional experiences came under the bracket of social presence, Cleveland-Innes and Campbell (2012) argued emotional presence is not merely a response to social presence but the key foundation to the online experience, thus deserving its own category. Cleveland-Innes and Campbell (2012) defined emotional presence as "the outward expression of emotion, affect, and feeling by individuals and among individuals in a community of inquiry, as they relate to and interact with the learning technology, course content, students, and the instructor" (p.283). With similarities in the literature between emotional engagement and emotional

presence, the two concepts could certainly be considered to be intertwined. Lim (2017) reported positive attitudes from students and teacher regarding the use of the mobile app, Socrative, with students conveying their bonding with the instructor had improved. This finding would certainly serve as an example of emotional engagement and emotional presence.

3.6 Collaborative Engagement

Järvelä et al. (2016) noted the importance of collaborative learning in education and welcomed the addition of collaborative engagement to the three original strands because "it is in collaborative settings [where] engagement becomes a more complex phenomenon than in individual learning settings" (p.40). Similarly, Redmond et al. (2018) discussed how collaborative engagement has connections to "the development of different relationships and networks that support learning, including collaboration with peers, instructors, industry, and the educational institution" (p.194). Studies focussing on group learning indicate individual learners' perceptions can be positive, which can result in heightened engagement and motivation in team tasks, and, in contrast, perceptions can be negative, potentially leading to demotivation and withdrawal (Järvelä et al., 2016; Van Den Bossche et al., 2006). Moreover, the quality of collaborative activities is enhanced by members' interactions where respect, responsiveness and cohesion are evident (Engle & Conant, 2002).

Further reiterating that engagement is a multifaceted construct with overlapping strands, Garrison et al. (1999) noted "collaboration is seen as an essential aspect of cognitive development since cognition cannot be separated from the social context" (p.92). Moreover, according to Järvelä et al. (2016) interaction encompasses emotional and cognitive aspects of engagement, which are deep-rooted in collaborative learning, noting that it goes beyond behavioural engagement because it "involves collaborative and responsive interaction between group members" (p.40).

In Lim's (2017) study of whether integrating the mobile app, Socrative, into lessons can improve student engagement, it was noted that, although the

students' academic performance had improved, particularly in examination areas, no positive influence could be observed for project work. Reflecting on the findings, Lim (2017) recommended Socrative for "instructors who are looking to integrate a quick feedback or active learning element to their classroom to better engage their audience" while acknowledging that "the nature of group projects requires more team work and peer discussions, hence the needs of not only the interactive teaching, but the implementation of peer discussion and project management tools" (p.411). When investigating student engagement using mobile devices in lectures, Reilly et al. (2014) applied "a student-centred collaborative learning pedagogy into the lecture environment through a mobile real-time collaborative notetaking application called GroupNotes" with the goal of improving and encouraging interaction from students during the lecture (p.335). The findings implied that learners are more engaged with collaborative notetaking as opposed to taking notes individually and preferred sharing individual workspaces rather than common workspaces. This led Reilly et al. (2014) to conclude that the "design for multiple individual workspaces with each being explicitly owned by a student but allowing for collaborative work in the same workspace provides a positive addition to student's individual learning outcomes" (p.339).

3.7 Summary

This chapter discussed literature relating to student engagement and outlined the theoretical framework chosen for underpinning this project. The five strands of Redmond et al.'s (2018) Online Engagement Framework are embedded throughout this thesis. The helpful guidelines provided stepping-stones to deeper research into each strand, and the topic in general when reviewing the literature, as well as helping in the formation of the research questions. The examples provided by the authors also helped in the construction of the structured interview questions, particularly in relation to what could be considered instances of each type of engagement. The framework was used again in the deductive thematic analysis and discussion of findings, guiding the process and ensuring answering the research questions remained on track throughout. The following chapter will elaborate on the research design.

Chapter 4: Research Design

This section begins by discussing the philosophical assumptions and research paradigm for the present study, given the aims and research questions. It goes on to consider case study as the selected methodology. It proceeds to include a discussion around the implications of being an insider-researcher, then the process involved in choosing the research design, before going on to discuss the research population and sampling techniques. Next, details of the data collection instruments are included, followed by outlines of the pilot study and the data analysis procedure. The chapter will conclude with discussions regarding quality issues relating to the project, as well as ethics and data storage.

4.1 Research Paradigms

Often thought of as the philosophical motivation for conducting the research, the term ‘paradigm’ can be defined as "a loose collection of logically related assumptions, concepts, or propositions that orient thinking and research" (Bogdan & Biklen, 1998, p.2). Across the literature, it is often described using the term ‘worldview’ and it is not uncommon for the concept to be discussed in terms of ontological and epistemological positions (Cohen et al., 2000; Creswell & Creswell, 2017; Kivunja & Kuyini, 2017; Mackenzie & Knipe, 2006). Ontology is focussed on the “nature of reality” (Creswell & Creswell, 2017 p.22), considering the assumptions one makes in order to believe if something is real or makes sense, or in other words, “what constitutes reality” (Scotland, 2012, p.9). Epistemology, on the other hand, centres on the nature of knowledge and forms it takes. Considering the epistemology of a study raises questions around the extent to whether knowledge can be acquired or if it needs to be experienced on a personal level, essentially, “how we come to know something; how we know the truth or reality” (Kivunja & Kuyini, 2017, p.27).

As decisions relating to research can be influenced by such views, beliefs and assumptions, it is important to be aware of the paradigm chosen by the researcher, and for the researcher to adopt the most fitting paradigm, given the focus of the study and its research questions. It is widely accepted that there are four dominant research paradigms applied in educational research: postpositivism, constructivism, transformative and pragmatism (Creswell & Creswell, 2017). This project follows a constructivist paradigm, the logic being that in contrast, a (post)positivist paradigm often aligns with quantitative research methods of collecting and analysing data; a transformative or critical worldview "situates its research in social justice issues and seeks to address the political, social and economic issues, which lead to social oppression, conflict, struggle, and power structures" (Kivunja & Kuyini, 2017, p.35); and the pragmatic worldview is often used in mixed-methods research where multiple approaches are used to knowledge-build and solve problems (Teddlie & Tashakkori, 2003). Constructivism (social constructivism or interpretivism) is generally associated with qualitative research because the core of this paradigm is to understand human experience (Guba & Lincoln, 1994) with the emphasis on understanding the individual and how they interpret the world around them (Kivunja & Kuyini, 2017). The paradigm is sometimes known as interpretivist and also constructivist because a key concept is that reality is socially constructed. Participants' interpretation of the situation must be relied upon as much as possible with broad and general questioning recommended, enabling participants to construct the meaning of a situation (Bogdan & Biklen, 1998; Clark, 2018; Creswell & Creswell, 2017). Whereas post-positivism often starts with a theory, the intent of a constructivist researcher is to interpret "the meanings others have about the world" (Creswell & Creswell, 2017, p.8).

Furthermore, Guba and Lincoln (1994) described paradigms as "basic belief systems based on ontological, epistemological and methodological assumptions" (p.107). In terms of ontology, two strongly contrasting perceptions of reality are realism and relativism with other viewpoints falling in between. Realism is the ontological viewpoint that supports the positivist paradigm because truth or facts are established through measuring objectively

via scientific experimentation (Bilgrami, 2002; Crossan, 2003). In contrast, relativism centres on subjective meaning as opposed to 'the' truth and that there are multiple constructions of reality, evolving from experiences (Clark, 2018; Crossan, 2003). Relativism is the ontological viewpoint that supports the constructivist paradigm because 'truth' changes based on the experiences and contexts of individuals (Flaming, 2004).

Therefore, whereas a positivist paradigm would generally be underpinned by a quantitative methodological approach, for example, verifying theories via experiments, a constructivist paradigm naturally falls into the qualitative category (Guba & Lincoln, 1994). Qualitative studies strive to explore a phenomenon based on the people experiencing it and, in the case of this project, a qualitative approach is necessary to answer the research question. The core purpose of this research is concerned with exploring students' experiences and perceptions of their learning engagement using mobile devices in compulsory English lessons on the IFY programme. Therefore, it should be noted that with an ontological leaning to relativism, constructivism describes the epistemological worldview of this qualitative research.

4.2 Insider-Researcher

Being a teacher on the programme of focus and being the person conducting the research places me in the category of 'insider-researcher', meaning that I was known to the participants (Smyth & Holian, 2008). According to Fleming (2018), there are clear advantages of being an insider-researcher in a higher education context. These may include knowing the context and setting, having greater flexibility to arrange and conduct interviews, having control over where the interviews take place and providing familiarity for the students. Insider-researchers are often viewed as trustworthy and credible by participants and have been found to have a strong rapport (Mercer, 2007). However, there are potential disadvantages to being an insider-researcher, prompting Mercer (2007) to liken the role to "wielding a double-edged sword" (p.12). When the researcher is known to the participants, there is the possibility preconceptions have already formed about the researcher and/or the study, which could affect

the way questions are answered (Hockey, 1993). Although some participants may speak more openly to a person they know and trust, the opposite could also be true, with participants feeling the need to hold-back certain information so not to be judged (Shah, 2004) or treated differently in the future. Drever (1995) noted "people's willingness to talk to you, and what they say to you, is influenced by who they think you are" (p.31). Being a teacher in the department, and indeed the teacher for some of the participants, could inevitably raise concerns regarding power relationships. As a practitioner, my primary concern was to make sure the students felt comfortable with the situation, especially those in my groups, and to ensure that students from different groups understood that there was a slight chance I could be their teacher in the future, for example, if groups changed the following semester. Thinking as a researcher, it was important to consider disadvantages of being an insider-researcher and look at how to mitigate the potential issues. Dever et al.'s (2021) Model of Mitigation for Insider-Research was used as a guide throughout the project. Table 4.1 shows how the suggestions in the model have been implemented throughout this research project.

Suggestions from Model of Mitigation	This Research Project
1. Different information sources	Screening questionnaire, interviews, informal chats with teachers (to find out which apps they were using in class)
2. Reflections	Self-critique and reflexivity through journal writing
3. Debrief	Talking to colleagues, ex-IFY students and supervisor about the research project
4. Distance	Refraining from speaking to participants about my views on the topic so not to contaminate the data
5. Confidentiality	Keeping students' participation private so they cannot be identified. Anonymise records
6. Interview Technique	Using a disclaimer at the start of interviews for 'familiar' students, asking them to answer as if it is the first time we have spoken about the topic so important information is not missed out
7. Social Network	Speaking to others who have conducted insider-research, building a support network of colleagues and ex-IFY students and finding time to relax
8. Voluntary	Ensuring students know participation is voluntary and they can withdraw any time. Explaining the participant information pack
9. Objectivity	Having a life outside the research project and taking breaks between periods of writing up
10. Communication	Keeping open communication with the participants

Table 4.1 Adapted from Dever et al.'s (2021) Model of Mitigation for Insider-Research.

4.3 Methodology

Given the research goals and philosophical stance, case study research was chosen for the methodology. Thomas (2021) noted that a case study design is suitable for looking at one "thing", focusing on it in detail, with the interest being in "the uniqueness of the thing and the thing in its completeness" (p.4). The case in this project is the international students on their foundation year and their perceptions of using mobile devices in compulsory English lessons with regard to their learning engagement. The idea of "uniqueness of the thing", discussed by Thomas (2021) with regard to case study design, links with the research of Bennett et al.'s (2023) work with international students, stressing the importance of addressing "the heterogeneity and multiplicity of identities and lived experiences of international students – both as individuals and as a population group" (p.13). The international students in this study are the point of interest because the value is in their unique views and experiences, regarding learning engagement and mobile device use in compulsory English lessons, as individuals and as a collective. This idea of uniqueness and individuality (Thomas, 2021) is a common thread across literature pertaining to case study design. Simons (2009) referred to a case study as "an in-depth exploration from multiple perspectives of the complexity and uniqueness of a particular project… in a real-life context" (p.21). Likewise, Stake (1995) noted cases are of interest "both for their uniqueness and commonality" (p.1). In addition, Merriam (1998) acknowledged that "the key philosophical assumption upon which all types of qualitative research are based is the view that reality is constructed by individuals interacting with their social worlds" (p.6).

Case studies offer much flexibility but the variations in methods can pose challenges when trying to establish what exactly to do. Notes in the literature can be found highlighting the potential confusion for novice researchers with regard to what exactly constitutes a case study (Merriam, 1998; Thomas, 2021; Yazan, 2015; Yin, 2003), perhaps due to differences in approaches regarding design and implementation. For example, Yazan (2015) observed Yin "demonstrates positivistic leanings in his perspective on case study" (p.136).

An example of this is Yin's (2002) reference to “quality control” when advising maximising the “four conditions related to design quality: construct validity, internal validity, external validity and reliability” (p.19). Although Yin (2002) argued there is “strong and essential common ground” between quantitative and qualitative research (p.15), following case study procedures written by authors with different epistemological outlooks to one’s own could be a source of confusion for novice researchers. Aspects of Yin's (2003) defining characteristics of a case study do fit the present research project in that it is considered a suitable methodology in instances where the researcher has little control over the situation being studied (which for this project is how students perceive their own learning engagement) and for when “how” or “why” questions are being asked (the research question in this study focuses on how students perceive their learning engagement when using mobile devices for learning purposes in English lessons). However, commonalities with the present study are more apparent for the novice scholar where case study researchers have written specifically about qualitative research and/or who have leanings towards constructivism (Merriam, 1998; Stake, 1995).

Other examples of criteria regarding what constitutes a case can be found across the literature. A condition noted by several researchers is that the study must be standalone with clear boundaries. A case has been likened to “a frame that offers a boundary to your research” (Thomas, 2021, p.19) and “a specific, a complex, functioning thing” (Stake, 1995, p.2) with Merriam (1998) maintaining that if the topic under investigation “is not intrinsically bounded, it is not a case” with the recommendation of asking “how finite the data collection would be” (p.27). The case in this research is the twenty-two students from the IFY programme and their perceptions of their learning engagement when using mobile devices in English lessons during their time on the foundation year. Asking students to frame their answers in the context of their experiences during their foundation year provides a time boundary for the study (Stake, 1995, p.2). In addition, this research specifically focusses on the twenty-two students, providing a “limit to the number of people involved who could be interviewed” (Merriam, 1998, p.27).

Of Merriam's (1998) three types of qualitative case study - particularistic, descriptive and heuristic - the present study has most commonality with descriptive because the outcome is an in-depth description of what is being investigated with the inclusion of quotations from participants. Descriptive case studies, according to Merriam (1998), provide a rich description of what is under investigation and, rather than numerically reporting data and also "use prose and literary techniques to describe, elicit images, and analyze situations", for example, using quotations (Wilson, 1979, p.448). Stake (1995) categorised qualitative case studies as holistic, empirical, interpretive and emphatic, with the present study likely falling more into the interpretive category as the researcher uses their intuition to interpret the data, strongly aligning with constructivism.

4.4 Case Setting

The International Foundation Year programme is designed to support international students as they prepare for study in UK higher education. The ethos of the programme places strong emphasis on inclusion, support, and active student involvement in learning. Rather than viewing students as passive learners, the programme recognises them as active participants who bring valuable prior experiences, perspectives, and language resources to the classroom. Teaching approaches within the programme aim to foster less hierarchical relationships between students and academic staff, with tutors acting as facilitators who guide learning rather than as sole authorities. This approach is particularly evident within the English and Study Skills module, which is compulsory for all students and plays a central role in supporting their academic transition. The module focuses on developing academic literacy, critical reading and writing, independent learning strategies, and confidence in using English for academic purposes, while also providing a structured space for dialogue, reflection, and collaborative learning. In doing so, it reflects a constructivist approach to learning, where understanding is developed through interaction, discussion, and shared exploration of ideas (Bruner, 1996; Vygotsky, 1978). The emphasis on student voice and supported participation

within the module also aligns with principles of critical pedagogy, which seek to reduce traditional power differences between teachers and learners and validate students' experiences as part of the learning process (Freire, 1970). This is particularly important within the International Foundation Year context, as students are often adjusting not only to new academic expectations but also to life and study in the UK. By embedding the English and Study Skills module at the core of the programme, the International Foundation Year seeks to support confidence-building, engagement, and the development of academic identity as students transition into higher education.

It was felt the most useful source for the present study for defining the case study by its characteristics was Thomas' (2021) "typology", which encourages the researcher to consider the subject, approach, purpose and process (p.124). Thomas' (2021) framework provides examples of options available for each category and using said framework, this current project could be considered a "local – instrumental – interpretative – single – snapshot" case (Figure 4.1).

Subject	Purpose	Approach	Process	
Outlier	Intrinsic	Testing a theory		Nested
Key	Instrumental	Building a theory	Single	Parallel
Local	Evaluative	Drawing a picture		Sequential
	Explanatory	Descriptive	Multiple	Retrospective
	Exploratory	Interpretative		Snapshot
				Diachronic

Figure 4.1 Based on Thomas' (2021) Case Study "Typology".

With regard to the subject, Thomas' (2021) definition of a "local knowledge case" is where the researcher has existing knowledge of the case in question and wants to better understand some aspect of it. The researcher of the present study teaches on the IFY programme and wants to better understand how students feel about using mobile devices in their compulsory English classes in relation to their learning engagement. Moving on to the purpose, the present case fits the definition of "instrumental" because the purpose is to try to understand with a view to "making things better". In other words, the researcher wants to understand students' perceptions of using mobile devices in the classroom with a view to improving engagement. In terms of the

approach, the present study fits the definition of “interpretative” because data will be collected in the form of interviews and interpretations will be made from that data. Regarding the process, the current study is a “single case snapshot”. The twenty-two students on the IFY programme, who volunteered to participate in the study, are the single case, with the snapshot of time being their experiences on the programme up until the point of interview. Using Thomas' (2021) framework was immensely helpful in understanding the different types of case studies, making an informed decision regarding what type of case study to choose, based on where the project fitted best in comparison to the other options.

4.5 Sampling (or Selecting)

Merriam (1998) discussed probability and nonprobability as the two basic types of sampling, explaining that probability, with its most common form being random sampling, is usually most associated with quantitative research, particularly as a central focus is statistical generalisation. Therefore, not usually concerned with statistical generalisation, “nonprobability sampling is the method of choice for most qualitative” studies, with the most common form being purposive or purposeful sampling (p.61). However, Thomas (2021) suggested “sampling” is actually the wrong word for what is needed in a case study because “a sample has to be a portion that shows the quality of the whole”, which is not the point of a case study (p.68). The point of a case study is to look at a selection and have no expectation that, from that selection, generalisations can be made about the wider population. Therefore, Thomas (2021) prefers the terms “choice” or “selection”, noting “if it does not accurately show the quality of the whole to you as a researcher – it is at best a convenience, purposive or pilot sample” (p.68).

Purposive sampling involves selecting certain cases “based on a specific purpose rather than randomly” (Teddlie & Tashakkori, 2003, p.713), which does describe how the participants in this study were selected. This type of sampling can be used when the researcher aims to “achieve representativeness or comparability” while also acknowledging that there may be “contrasting cases”

(Teddlie & Yu, 2007, p.81). Taking Thomas' (2021) point on the terminology into consideration, the process will be thought of in this study as “purposive selecting” but “sampling” may be used for continuity, particularly where other researchers have used that word.

For purposive sampling, Wilson (2013) suggested including a link to a screening questionnaire in the recruitment message. After explaining the project at the end of an English lesson, students on the IFY, across September and January cohorts in academic years 2023-24 and 2024-25 were asked if they would be willing to answer a short electronic questionnaire, using their mobile devices. At the same time, a weblink and QR code to the screening questionnaire were posted to the English Microsoft Teams site alongside a message asking for volunteers (Appendix 2). The questionnaire was, chiefly, to determine mobile device usage for learning purposes in University English lessons and gauge willingness to participate in a follow-up interview. Interviewing students who did not use mobile devices in this way would not help with answering the research question, so it was important to be selective based on a minimum criteria. This aligns with Patton's (1990) belief that “the logic and power of purposive sampling lies in selecting information-rich cases for study in depth. Information-rich cases are those from which one can learn a great deal about issues of central importance to the research, thus purposeful sampling” (p.169).

Creswell (2014) highlighted the importance of determining the sample size needed when selecting participants to interview. On investigating how many qualitative interviews is enough, Baker and Edwards (2012) gathered opinions and reflections from established academics and early career researchers. The findings revealed that the number can depend upon “epistemological, methodological and practical issues”, for example, “available time” (p.3). Moreover, as this study forms part of the researcher’s PhD submission, the advice from Smith and Osborn (2007) should be considered: “The danger for the newcomer is that if the sample size is too large they become overwhelmed by the vast amount of data generated by a qualitative study and are not able to produce a sufficiently penetrating analysis” (p.57). Taking this into

consideration, it was thought that between 20 and 25 interviews with students should provide enough data to answer the research question, but this would obviously depend on students' willingness to partake and on whether those students who volunteered also used mobile devices for learning purposes. In practice, at approximately three-quarters of the way into the analysis, data continued to reinforce established themes, indicating a potential nearing of saturation and confirming that the sample size was appropriate.

4.6 Methods

Two research methods were used in the study – a questionnaire followed by interviews. It was felt this combination would be the most effective to ensure the study included suitable participants in order to gather rich and meaningful data. Yin (2002) advised a cautious approach to planning a case study because not having "routinized" procedures for data collection can result in a somewhat demanding process. It can be beneficial to spend time on developing a protocol, screening nominations and running a pilot study (p.58). This advice was adhered to as a screening questionnaire was designed, the interview protocol developed and pilot study implemented.

4.7 Screening Questionnaire

When concerning human participants, a valid sample should be an accurate representation of a specific and target population, and, for instances such as this, screening criteria ought to be implemented (Arndt et al., 2022; Berinsky et al., 2012). According to Arndt et al. (2022), there are two main categories of screeners: selection screeners and accuracy screeners. Selection screeners are used to select participants who genuinely align with the characteristics of the relevant target population and accuracy screeners are deployed to check whether respondents are giving honest and carefully considered responses to questions. In this current project, a screening questionnaire is needed to "improve selection" (Arndt et al., 2022, p.120), to ensure the participants who are invited to interviews will likely fit the criteria for answering the research

question. Therefore, a selection screener was needed to assist in determining who should be invited to participate in an interview.

In order to answer the research question, participants needed to meet certain criteria to participate in the study. It was felt the fastest and easiest way to find out this information would be through asking students on the IFY programme to consider completing a short electronic questionnaire, which could be accessed on their mobile device via a QR code. As well as being easier to distribute and likely better for the environment, it was felt an electronic format could be more secure for storing data and it would be more efficient to keep all the responses in one area. For security reasons, it was important to use survey software recommended by Lancaster University so Digital Services at the University was consulted to find out what was available. Students at Lancaster University can create a licensed account with Qualtrics, which is accessible via the secure University portal and is username and password protected. Being able to "create professional surveys without any experience", "eliminate manual data collection" and "reach more people faster and easier" sounded appealing and the website proved accessible and easy to use (Qualtrics, 2024).

Dillman et al. (2014) noted the importance of a consistent visual layout when designing online surveys so it was particularly useful that Qualtrics includes templates for the novice designer to use as a guide. "Unlike paper questionnaires, for which, once printed, the overall design and layout does not change, a web survey may appear differently on the respondent's computer screen depending on the type of computer and browser used as well as individual configurations and settings" (Christian et al., 2009, p.394). For example, Gehlbach and Artino (2018) noted asking respondents to read from top to bottom and left to right can create confusion so single rows or columns would be preferable, but these can look different depending on the screen. Furthermore, Christian et al. (2009) advised that, as many people complete surveys on smartphones, columns would be preferable to better accommodate the device's vertical orientation. Qualtrics aims to ensure its software is "functional and consistent across the most popular modern web browsers", including mobile devices (Qualtrics, 2024) so the questionnaire format

automatically adjusts to the user's device, alleviating concerns regarding device and browser compatibility.

After learning how to use the Qualtrics software, the proposed questions were drafted on paper. As an insider-researcher, it felt prudent to ask colleagues to check the questions for researcher bias as well as wording with regard appropriacy of language level. Only students on their foundation year on the IFY programme would be asked to consider completing a questionnaire. The vast majority of students would be studying the compulsory English (ESS) module but it was important to check in case any were not. For example, if a student was resitting the foundation year but had passed English, they would not need to take that module again. Therefore, as it was possible for a student to be on the IFY programme but not studying English, it was felt this question needed to be asked. In addition, as the research question pertained to perceptions of mobile device use in lessons, it was important to make sure potential participants used a mobile device for learning purposes in lessons at the University. To abide by research ethics, participants needed to be at least 18 years of age so this question also needed to be asked, as did if the student would be willing to take part in an interview.

The most important questions should be placed at the beginning of the survey (Gehlbach & Artino, 2018). To abide by the research ethics for the project, the most important detail to establish pertained to whether the potential participant was at least 18 years of age so this was the first question on the survey. Dillman et al. (2014) noted the first question usually determines whether or not the potential participant continues with the survey. Students under 18 years of age would not be able to participate in an interview so there was no need for them to proceed with the questionnaire. Doing so would be a waste of their time and would also involve collecting unnecessary data from them. Gehlbach and Artino (2018) noted "although branching items present modest logistical challenges for paper-and-pencil surveys, they can be easily created through most web-based survey programs (e.g. Qualtrics or SurveyMonkey) to provide a seamless user experience" (p.364). Indeed, when designing the survey in Qualtrics, a command was easily added to end the questionnaire at that point if

a respondent answered “No” to the question “Are you 18+ years old?”. Likewise, the same command was added after each of the next four questions (shown in Table 4.2) because a “No” response indicated the potential participant would unlikely fit the criteria for answering the research question.

1. Are 18+ years old?	Yes/No
2. Are you studying the ESS module?	Yes/No
3. Do you bring a mobile device to university?	Yes/No
4. Do you use your mobile device for learning purposes in lessons?	Yes/No
5. Would you be willing to participate in an interview with me to discuss your experiences and views of using mobile devices in your English lessons with regard to your learning engagement?	Yes/No

Table 4.2 First five questions as “branching items” to end survey with a “No” response.

Demographic questions help show who answered the survey, highlight differences between respondents and promote fairness (Ziegenfuss et al., 2021). The next part of the questionnaire (Table 4.3) gives participants the option to answer demographic questions, for example, about their age, gender, nationality and chosen subject pathway to help with ensuring the sample of interviewees reflects the diversity of the IFY. It was important that demographic information was only collected from students who indicated their willingness to participate in an interview so the following set of questions were commanded to only appear with a “Yes” response to the previous five.

If Yes:	
What is your first name?	
Which ESS group are you in?	
What is your age group?	18-24 / 25-29 / 30+
What is your gender identity?	
What is your nationality?	
After the IFY, which subject do you wish to study for your undergraduate degree?	

Table 4.3 The six demographic questions, proceeding the five “Yes” responses.

According to Gehlbach and Artino (2018), when designing checklist surveys, it is important to align the question format with the question being asked to ensure the necessary data is obtained. For example, sometimes it may be better to include free-response questions instead of closed-ended questions. This style was chosen for four of the five questions. Such a specific response was not needed for the age group and, following data protection guidelines, asking students to provide their exact age would be requesting unnecessary personal information as well as being considered a potentially intrusive question. The first name of the student and English group number were needed to enable the researcher to contact the participant regarding an interview. Surnames were not requested because this information was deemed unnecessary, in line with data protection guidelines and advice given by SurveyMonkey (2024) to only include what is required. It was felt a free-response item would be most suitable for the question “After the IFY, which subject do you wish to study for your undergraduate degree?” because there would be too many options to list, which would be time-consuming for the participant and, with the various combinations of joint honours, there was the risk of accidentally missing out a particular pathway, resulting in the respondent typing their response into an ‘other’ category. With regard to the questions pertaining to gender identity and nationality, it was felt a free-response item for each would be most appropriate so students could decide what, if anything,

they wanted to type in. SurveyMonkey (2024) reminded question designers to "be mindful of your audience… and keep phrasing respectful in demographic questions… [relating to] personal identity".

Once the questionnaire was created in Qualtrics and a weblink and QR code generated, access and completion with varying answer combinations was tested on several devices, including a desktop computer, laptop, smartphone and tablet. In addition, three students, who had previously completed the IFY programme and progressed onto their undergraduate degrees were asked if they would consider testing the questionnaire with various responses. Feedback suggested the students felt the questionnaire worked as intended and the questions made sense.

4.8 Semi-structured Interview Questions

Interviews are one of the commonly used sources of evidence for case studies (Marshall & Rossman, 2014; Thomas, 2021; Yin, 2003) because they "provide an opportunity for participants to share their feelings, prejudices, opinions, desires, and attitudes towards different phenomena they experience" (Dunwoodie et al., 2023, p.864). Therefore, it was decided that interviews would be a suitable data collection method for this current study because extracting the perceptions of the participants was key in answering the research questions. According to Creswell (2024), "qualitative researchers collect data themselves", for example, by interviewing participants, and "do not tend to use or rely on questionnaires or instruments developed by other researchers" (p.15). After consulting the literature, outlined in the Literature Review section (Chapter 2), Creswell's observation proved true as instruments and interview questions used in existing studies did not appear directly relevant to this current study. Instead, according to Creswell (2024), they [the researcher] "may use an instrument, but it is one designed by the researcher using open-ended questions" (p.15). When the aim of the research question is to obtain the perspectives of others, Byrne (2004) suggested semi-structured interview questions because this type of interview is not restricted by set questions, promoting a conversational flow. However, including some questions assists

with alleviating issues associated with having no prepared questions at all (Lambert, 2019), such as a lack of continuity between what the participants were asked, potentially posing difficulties when making comparisons. The semi-structured questions were designed to reflect the five components of Redmond et al.'s (2018) Online Engagement Framework, which underpins this current study. The examples listed in Table 4.4 were consulted. Being mindful as an insider-researcher, fellow teachers and examiners were asked to check the wording for researcher bias as well as to ensure language was accessible for students. After establishing, for example, if students thought that using mobile devices in lessons helped (or did not help) with learning with their peers, open-ended questions would follow to suit the response (e.g. ‘Can you tell me about your experiences of using mobile devices for group work tasks?’) with the intention that participants would have the opportunity to discuss anything they felt had not been covered at the end of the interview.

Online Engagement Element	Indicators
Social engagement	Building community Creating a sense of belonging Developing relationships Establishing trust
Cognitive engagement	Thinking critically Activating metacognition Integrating ideas Justifying decisions Developing deep discipline understandings Distributing expertise
Behavioural engagement	Developing academic skills Identifying opportunities and challenges Developing multidisciplinary skills Developing agency Upholding online norms Supporting and encouraging peers
Emotional engagement	Managing expectations Articulating assumptions Recognising motivations Committing to learning
Collaborative engagement	Learning with peers Relating to faculty members Connecting to institutional opportunities

Table 4.4 Online Engagement Framework for Higher Education (redrawn from Redmond et al., 2018, p.190).

According to Dikko (2016), when conducting interviews, the researcher needs to ensure the participants understand what is being asked at the same time as extracting the data needed for answering the research questions. As this can be particularly difficult for a novice researcher, “piloting for an interview is an integral part and beneficial in the process of conducting qualitative research” (Aung et al., 2021, p.601). With this in mind, the previously mentioned three ex-IFY students, who had helped test the screening questionnaire were contacted again to see if they would be willing to test out the protocol, including the recording equipment, the researcher’s interview technique and assess whether the questions being asked made sense to them. The opportunity to run a pre-test before the pilot study and gain feedback from these three students was invaluable, particularly in terms of practising interview technique

and thinking about how to include, and word, follow-up questions to encourage the students to expand their answers.

As a result of the students' feedback, it was decided it could be better to give the structured questions to the participants on the same day as the interview. Sending the interview questions with the participant information sheet and consent form (for the students to check), a week earlier, had incurred a lot of unintentional extra work for two of the students because they had studiously prepared long, detailed answers to each of the listed questions. Although their efforts were very much appreciated, creating additional work in preparation for the interview was not the intention. One of the students also mentioned that knowing the questions so far in advance could make students feel nervous and there could be the temptation to look up answers. It should be noted that no data was collected from these three students and they understood they were helping in the preparatory stages of the project. The participant information sheets and consent forms were checked by the students for usability, but not completed, recordings made to test the digital recorder were deleted instantly, in the presence of the students and notes by the researcher disposed of in a secure confidential waste bin in a locked office at the University. Adapted from the works of Redmond et al. (2018) and Salhab and Daher (2023), and with feedback regarding meaning and wording from colleagues and the three ex-IFY students, the following questions in Table 4.5 were decided on for the structured part of the semi-structured interview questions.

General
○ What sort of mobile device(s) do you bring to university?
○ Do you like using your mobile device for learning? Why/why not?
○ Do you use your mobile device in your English lessons?
○ How often do you use it? (E.g. every/most/some/occasional lessons)
○ What sorts of things do you use it for in English classes?
○ What does the term 'learning engagement' mean to you?
○ Do you think using your mobile device in English classes impacts your learning engagement? Why/why not/how?
Social Engagement
From your experience, do you think using a mobile device in English classes…
○ can help build a sense of community within the group?
○ can help develop a sense of belonging?
○ can help develop relationships?
Cognitive Engagement
From your experience, do you think using a mobile device in English classes…
○ can impact your attention?
○ can impact your learning?
○ can impact your interest / curiosity?
Behavioural Engagement
From your experience, do you think using a mobile device in English classes…
○ can impact your behaviour?
○ can impact your participation?
○ can impact your attendance?
Emotional Engagement
From your experience, do you think using a mobile device in English classes…
○ can impact the way you feel?
○ can impact your motivation?
Collaborative Engagement
From your experience, do you think using a mobile device in English classes…
○ can help you learn with your peers?
○ can help you relate to your teachers and/or other staff?
○ can help you connect with opportunities in the wider university?

Table 4.5 Interview questions adapted from the work of Redmond et al. (2018) and Salhab and Daher (2023).

In total, twenty-two students agreed to participate in the study and Table 4.6 shows their age range, gender, nationality and undergraduate subject pathway.

Name	Age	Gender	Nationality	Subject
Student 1	18-24	M	Saudi Arabia	Business
Student 2	18-24	M	Kuwait	Computer Science
Student 3	18-24	M	Kuwait	Engineering
Student 4	18-24	M	Saudi Arabia	Engineering
Student 5	18-24	M	Pakistan	Business
Student 6	18-24	F	Saudi Arabia	Business
Student 7	18-24	M	Bangladesh	Business
Student 8	18-24	M	Pakistan	Computer Science
Student 9	18-24	M	Kuwait	Business
Student 10	18-24	M	Pakistan	Business
Student 11	18-24	F	Bangladesh	Business
Student 12	18-24	M	Pakistan	Computer Science
Student 13	18-24	M	Pakistan	Computer Science
Student 14	18-24	M	Pakistan	Computer Science
Student 15	18-24	M	Pakistan	Computer Science
Student 16	18-24	F	Pakistan	Computer Science
Student 17	18-24	M	Egypt	Computer Science
Student 18	18-24	M	Bangladesh	Engineering
Student 19	18-24	M	Bangladesh	Engineering
Student 20	18-24	M	Nigeria	Computer Science
Student 21	18-24	M	Libya	Engineering
Student 22	18-24	M	Libya	Business

Table 4.6 Interview participants demographic information

Before each interview, students were asked to read the participant information sheet (Appendix 3) and read and sign the consent form (Appendix 4). Students were also provided with a copy of the structured interview questions and given time to read through these before the interview commenced. They were also given time to ask questions about the project and efforts were made to ensure their comfort. Being an insider-researcher, and in line with Dever et al.'s (2021) Model of Mitigation for Insider-Research, it was important to dedicate the necessary time to this to ensure students knew the study was voluntary and that they could withdraw or stop the interview at any time. Before each

interview, students were asked to answer as if it was the first time they had been asked the question even if similar discussions had previously taken place in different settings, such as during a lesson. This was to ensure important information was not omitted from the interview due to researcher-participant familiarity, important for insider-research (Chavez, 2008; Dever et al., 2021). Students were asked if they consented to the interview being recorded with a digital recorder, with an explanation of the reason. Additional notes were taken, with more notes being made on occasions when students expressed their preference for the interview not to be recorded. Although at times challenging, due to the conversational nature of semi-structured interviews, a conscious effort was made not to speak too much as the interviewer, especially about personal views on the topics in question. This was to keep the focus on the participants' views and to avoid contaminating the data (Chavez, 2008; Dever et al., 2021; Mercer, 2007). To account for participants' varying levels of English language proficiency, the wording of the interview questions was adjusted to ensure clarity and accessibility, and interview delivery was slowed deliberately to allow participants additional processing time and support understanding (Kvale & Brinkmann, 2009; Temple & Young, 2004).

The interviews took place in an informal face-to-face setting at the University because students discussing how engaged they feel in class is quite personal in nature, and trust "is an essential element within the relationship between researcher and researched" (BERA, 2018, p.5). An hour was allocated for each interview, but the researcher was flexible with timings and adapted for each interviewee, with the longest interview lasting 56 minutes and the shortest 32 minutes. As soon as possible after each interview, the conversation was transcribed manually by the researcher and, to protect the anonymity of the participants, any details which could identify them and/or other students, were omitted. At this point, as an insider-researcher, the opportunity was also taken to reflect (Dever et al., 2021; Greene, 2014) on the interview technique, for example to check for researcher bias, the asking of leading questions or use of difficult terminology, to learn from any mistakes before the next interview. Confidentiality is particularly important in insider-research to prevent others from knowing who has participated because even knowing who has participated

in a study, regardless of what was said, could result in negative consequences for the participants (Dever et al., 2021; Mercer, 2007) so the files were saved to the researcher's secure OneDrive account at Lancaster University and immediately deleted from the digital recorder. Especially as students were not conducting interviews in their native language, it was important to check meanings with the participants for clarification. This needed to be managed sensitively so not to damage confidence to speaking skills. The advice from a student in the pilot study regarding a post-interview meet up proved very helpful in this regard because a one-to-one chat over a coffee to check responses felt less formal than sending a lengthy transcript by email and changes could be made, and saved, there and then in the presence of the student. As an insider-researcher, it was fortunate indeed to have a supportive network of discreet ex-students and colleagues to call upon when constructive feedback was needed or just to debrief on the progress of the study (Dever et al., 2021).

4.9 Pilot Study

A pilot study helps the researcher to ascertain how well the instrument will work in the real study and allows the researcher to uncover potential errors, which can be rectified early in the research process (Aung et al., 2021; Dikko, 2016). At the time ethical approval for the project was granted, the IFY September 2023/24 cohort had recently finished and many students had left the UK to return home for the summer. However, six students completed the pilot screening questionnaire with four agreeing to take part in an interview. Yin (2002) advocated a pilot case study, noting that "it will help you to refine your data collection plans with respect to both the content of the data and the procedures to be followed" (p.79). The pilot study proved useful on many levels.

Firstly, it was incorrectly assumed that the researcher would receive an alert each time the electronic questionnaire, created using Qualtrics, was completed. This did not appear to be the case and after thinking nobody had accessed the questionnaire, it was discovered two people had completed it. Only a short time had elapsed so the students were contacted to arrange an interview in a

timely manner. However, after looking at the different settings on Qualtrics and establishing a weekly update would be sent, obsessive daily checking quickly became a chore. To mitigate this in the main study, including a cut-off date for completion of the questionnaire was considered as well as including a phrase to inform students that, if they had indicated they would be willing to participate in an interview, they would be contacted within ten days.

Secondly, it was useful to run a pilot to allow the researcher to develop and improve the interview technique so that the questions felt more conversational than scripted.

Thirdly, although participants' permission was sought to record the interview, the researcher had not thoroughly thought about what would happen if a participant did not want to be recorded. If it meant the interview would not go ahead, then the participants should be told the interviews would be recorded beforehand so not to waste their time. However, it was decided that the interviews would go ahead regardless and the researcher would make more detailed notes than usual, which leads onto the next point.

Fourthly, in an instance such as this, the difficulty of asking questions and maintaining the flow of conversation at the same time as making detailed notes regarding what was asked and what was said, was not anticipated. This aspect needed urgent consideration before implementation of the main study. A third person as a note-taker was considered but it was felt this could be stressful for the participant and asking this third person to be on standby for all the interviews was not viable. On reflection, employing a couple of different strategies would make a difference. Leaving space between questions for writing notes/follow-up questions would allow for better organisation and save time. In addition, reading the notes back to the participant after each question would improve accuracy and allow more thinking time.

Finally, it quickly became apparent that emailing participants a copy of the interview transcript to read and confirm accuracy was not going to work for the main study. Only one of the four students in the pilot study replied. When

asked about this, students said they had forgotten or had not realised they needed to reply. To ensure research validity, member-checking is an important part of the process (Creswell, 2020) so the poor reply rate in the pilot study was concerning. On asking students how they thought the researcher could improve this step for the main study, one student suggested a short post-interview meeting (over coffee) to read through the transcript together.

4.10 Data Analysis

Braun and Clarke's (2022) six phases of reflexive thematic analysis (RTA) were used as a guide to analyse and interpret the information from the interviews. Reflexivity entails critical reflection of the researcher's data interpretation. As RTA is concerned with "the researcher's reflective and thoughtful engagement with their data and their reflexive and thoughtful engagement with the analytic process" (Braun & Clarke, 2019, p.594), it aligns with the values entrenched in a qualitative research paradigm and that of insider-research (Dever et al., 2021; Greene, 2014; Mercer, 2007). Therefore, it was deemed a suitable method of data analysis for the qualitative study outlined in this paper. As Redmond et al.'s (2018) Online Engagement Framework for Higher Education is instrumental in the underpinning of this project, it was felt a deductive thematic approach would allow the incorporation of the five types of engagement as a pre-existing structure. However, it was also acknowledged that an inductive thematic approach could complement an interpretative case study, allowing themes to emerge more organically from the data as opposed to trying to fit the students' perceptions into pre-existing categories. Therefore, it was decided that a deductive-inductive hybrid approach to thematic analysis would be most fitting for this project. The combination allows the study to benefit from "an open and inductive approach to theme generation and yet at the same time… the theoretical rigor offered by the deductive application of themes derived from an existing framework" (Proudfoot, 2023, p.309). The deductive part would be employed in the first instance with the use of the five categories of engagement becoming the main themes to which interview data would be allocated. The inductive element would be used to check these themes and in the creation of

any additional main themes as well as in the creation of subthemes within each category. Each phase of Braun and Clarke's (2022) guidelines was adhered to.

Phase 1: Familiarising yourself with the data set: To "become deeply and intimately familiar with the content of [the] data set" (Braun & Clarke, 2022, p.35), the audio recordings were listened to several times as they were transcribed. After the transcripts were checked by the participants, the final versions were scrutinised while brief notes were made on each document.

Phase 2: Coding: To "identify segments of data that appear potentially interesting, relevant or meaningful for [the] research question" (Braun & Clarke, 2022), code labels were applied to the data set. A deductive thematic analysis was used in the first instance, meaning that the initial codes were generated from the data using a pre-existing theory (Braun & Clarke, 2006). In this analysis, the pre-existing theory was the Online Engagement Framework for Higher Education (Redmond et al., 2018), which was also used in the formation of the research questions and in constructing the interview questions. Then, an inductive thematic approach was implemented to consider if the codes truly fitted the framework and if further codes needed to be generated.

Phase 3: Generating initial themes: To start "identifying shared patterned meaning across the data set… clusters of codes that seem to share a core idea or concept, which might provide a meaningful answer to [the] research question" (Braun & Clarke, 2022) were compiled. Once themes and potential patterns were identified, the interpretations were viewed alongside the research questions. As Redmond et al.'s (2018) Online Engagement Framework formed the basis for the structured interview questions, some interpretations were more easily identifiable, in terms of the five components, than others. However, it was important to implement an inductive approach here to ensure data was not 'shoehorned' into existing sections and to allow the emergence of any new themes and sub-themes, not covered in the framework, particularly from the unstructured part of the interviews.

Phase 4: Developing and reviewing themes: Themes were checked for sensemaking in relation to the coded extracts on the transcripts and the data set as a whole. At this point, some themes were merged and others split into new themes to ensure the most important themes across the data set, in relation to the research questions, were highlighted. The following key questions (Braun & Clarke, 2012, p.65) were applied when reviewing potential themes:

- Is this a theme (it could be just a code)?
- If it is a theme, what is the quality of this theme (does it tell me something useful about the data set and my research question)?
- What are the boundaries of this theme (what does it include and exclude)?
- Are there enough (meaningful) data to support this theme (is the theme thin or thick)?
- Are the data too diverse and wide ranging (does the theme lack coherence)?

Phase 5: Refining, defining and naming themes: This is considered the stage where 'fine-tuning' of the analysis occurs. Themes were revisited to ensure clear boundaries were in place and a strong core was present. As recommended by Braun and Clarke (2022), a brief synopsis for each theme was written and appropriate names considered (p.36).

Phase 6: Writing up: Although listed as the last phase, writing occurs from the beginning of the process and is integral throughout. The last phase "can be seen as the completion and final inspection of the report that the researcher would most likely have begun writing before even undertaking their thematic analysis, for example, a thesis" (Byrne, 2022, p.1409).

4.11 Quality Issues

An aim of research is to produce knowledge that is reliable and valid, and being able to demonstrate that research is trustworthy is of particular importance in

the education sector, where practitioners often “intervene in people’s lives” (Merriam, 1998, p.198). However, across the literature, there are differences in opinion with regard to whether qualitative research should be discussed in terms of ‘validity and reliability’ (Collingridge & Gantt, 2019; Cypress, 2017; FitzPatrick, 2019; Leung, 2015) or ‘trustworthiness’ (Adler, 2022; Lincoln & Guba, 1985) with further debates as to what constitutes trustworthiness, for example credibility, transferability, dependability and confirmability (Lincoln & Guba, 1985) or transparency (Adler, 2022). The debate stems from the belief by some that validity and reliability are considered to align better with quantitative research paradigms, traditionally positioned as “the holy trinity ... worshipped with respect by all true believers in science” (Kvale, 1996, p.229). This affiliation with more positivist paradigms does not mean there is not a place for the terms validity and reliability in qualitative research, more that the meanings are interpreted differently to quantitative studies. For example, the “concept of reliability differs from the traditional quantitative understanding in that the focus is not on obtaining exactly the same results time and again, but rather on achieving consistent similarity in the quality of the results” (Collingridge & Gantt, 2019, p.440). Rose and Johnson (2020) advised scholars to consider “the overall trustworthiness of qualitative research by more directly addressing issues associated with reliability and/or validity, as aligned with larger issues of ontological, epistemological, and paradigmatic affiliation” (p432). Likewise Cohen et al. (2017) advised scholars to focus on “discussions of validity within the research paradigm that is being used” (p.439). Therefore, it was deemed that reading around the issue of quality, specifically in relation to case studies, would be beneficial.

Thomas (2021) is of the opinion that the quality of a case study is more dependent on the conception, construction and conduct of the study, rather than the reliability and validity, noting the importance of the original idea for the case, the way the case is chosen, the description of the case context, the care taken in choosing appropriate methods, and the arguments deployed in drawing conclusions. Both Guba and Lincoln (1994) and Merriam (1998) discussed quality in case studies in terms of determining confidence, with the former

believing questions can be asked to assess whether questions were constructed in a reliable and valid way, and the latter noting the "applied nature of educational inquiry… makes it imperative that researchers and others have confidence in the conduct of the investigation and in the results" (p.199). Although authors like Thomas (2021) suggest that validity and reliability should not be a primary concern for case study designs, noting scholars often feel they are "bashing…a square peg…into the round hole of case study research", it is acknowledged that "a treatise on methodology is felt to be naked" without such discussion (p.69). Therefore, adhering to the advice of locating research aligning to one's own worldviews (Cohen et al., 2017; Rose & Johnson, 2020), it was decided the three issues (internal validity, reliability and external validity) relating to research quality, as outlined by Merriam (1998), ought to be used as a structure for discussion regarding quality issues of this project.

4.11.1 Internal Validity

In qualitative research, validity means "selecting an appropriate method for a given question and applying that method in a coherent, justifiable, and rigorous manner" (Collingridge & Gantt, 2019, p.430). It is "based on determining whether the findings are accurate from the standpoint of the researcher, the participant, or the readers of an account" (Creswell, 2020, p.200). Merriam (1998) recommends six strategies for enhancing internal validity:

1. Triangulation means "viewing from several points is better than viewing from one" (Thomas, 2021, p.72). Alharahsheh and Pius (2020) noted that interpretivism "assumes that reality is subjective and can differ considering different individuals" (p.42) and, for this current project, these "interpretations of reality are accessed directly through interviews…" strengthening the internal validity (Merriam, 1998, p.201). Moreover, establishing the project themes through the perceptions of multiple participants, adheres to Creswell's (2020) definition of triangulation and aligns with the values of being an insider-researcher (Dever et al., 2021; Greene, 2014; Mercer, 2007).

2. Member checking is advocated by several researchers (Creswell, 2020; Merriam, 1998; Thomas, 2021) and essentially means giving participants opportunities to scrutinise and comment on how their words have been interpreted. In this project, after the interviews, typed notes were shared with each participant to ensure the representation of a true account and changes were made in their presence. In addition, the themes were shared to check participants felt the findings were fair. As an insider-researcher, this type of open communication with participants is important for transparency (Dever et al., 2021).

3. Long-term observation is recommended by Merriam (1998) in the context of field-observations but essentially refers to "gathering data over a period of time in order to increase the validity of the findings" (p.204). Adapting the recommendation for this current study, data was gathered across three IFY cohorts, starting at different points in time, to increase the chances that the participants would be from different groups and taught by different teachers to mitigate the chance of all the participants being from the same group.

4. Peer-examination, as Merriam (1998) noted is asking colleagues to make comments with regard to the findings. At various stages, not just in relation to the findings, "a peer debriefer" was sought to review "and ask questions about the qualitative study so that the account will resonate with people other than the researcher" (Creswell, 2020, p.201). Furthermore, debriefing with colleagues allows insider-researchers to consider the study critically and to identify any feelings that may impair judgement (Dever et al., 2021; Greene, 2014).

5. Participatory or collaborative modes of research refers to involving others in the research process, a concept also aligning with the values of insider-research (Dever et al., 2021; Greene, 2014). Previous and current IFY students were consulted regarding the protocol of the data

collection instruments and to assess if they felt the findings were fair. In addition, colleagues were asked for advice regarding the wording of the interview questions, with a particular focus on language level, and to ascertain the range of mobile apps being used in the department for teaching.

6. Researcher's biases relates to "clarifying the researcher's assumptions, worldview and theoretical orientation" (Merriam, 1998, p.205). Throughout this project, the theoretical underpinnings have been stated to explain how they have influenced the research design, research questions, methodology, tools for data collection and in the data analysis.

Returning to the idea of assessing the trustworthiness of research, it could be said that what is considered as internal validity is not dissimilar to the concept of credibility (Lincoln & Guba, 1985) in that "it focuses on establishing a match between the constructed realities of respondents and those realities represented by the researcher(s)" (Sinkovics et al., 2008, p.699).

4.11.2 Reliability

Merriam (1998) defined reliability as "the extent to which research findings can be replicated" (p.205) but warns the term "in the traditional sense seems to be somewhat of a misfit when applied to qualitative research" (p.206), which, unlike studies of a quantitative nature, is not concerned with repeating studies to yield the same results. Thomas (2021) is of the same thinking, noting that for case studies "there can be no assumption from the outset that, if the inquiry were to be repeated by different people at a different time, similar findings would result" (p.69). Therefore, rather than concentrating on replication, Guba and Lincoln (1994) advised focusing on ensuring outsiders would agree that the results are dependable and consistent, from the data that was collected. Therefore, if the umbrella of trustworthiness is preferred, Lincoln and Guba (1985) would prefer the term dependability. Merriam (1998) noted three

techniques for ensuring results are dependable. Firstly, the position of the researcher should be clarified, including the assumptions and theory underpinning the study, the relationship between the researcher and participants, details of the group and the context in which the study is taking place. Secondly, already discussed under internal validity, triangulation also strengthens the reliability of the study. Thirdly, the audit trail must be authenticatable, with the researcher providing details regarding the collection of data and how decisions throughout the project were made. Furthermore, Gibbs (2007) advised checking transcripts to ensure they do not contain errors and ensuring consistency in the coding process. Creswell (2020) recommended "continually comparing data with the codes and writing memos about the codes and their definitions" (p.202). All of these recommendations were adhered to throughout this project.

4.11.3 External Validity

Out of Merriam's (1998) three categories for discussing quality issues, it is perhaps external validity which epitomises Thomas' (2021) reference of trying to fit the square peg of validity into the round hole of case study research. This is because external validity is also known as generalisation and refers to "the extent to which the findings of one study can be applied to other situations" (Merriam, 1998, p.207). Thomas (2021) noted "from generalisation comes induction – that is, X happens regularly in certain conditions, so we can infer that X will happen again in those conditions" (p.74), which is not what case study research is about. The concept of abduction is perhaps more fitting for case study research, which entails using judgement to best explain the collected data. Abduction facilitates a heuristic approach or, in other words, "ways to analyse complexity that may not provide watertight guarantees of success in providing for explanation or prediction, but are unpretentious in their assumptions of fallibility and provisionality" (Thomas, 2021, p.76). Returning to Lincoln and Guba's (1985) preference for discussing trustworthiness and what constitutes it, the term transferability is often considered parallel to the idea of generalisation. Essentially, it is concerned with the extent to which the study

can be transferred to another setting or context. Merriam (1998) asserted one way to ensure this is through "rich thick description" (p.211). Providing a detailed description of the case enables the reader to identify any aspects, which may align with their study, allowing them to make decisions regarding which parts to transfer to their context. It also helps with forging a path for the reader to follow the study, assess the findings and make their own conclusions. The intention of this study is not to provide generalisations. Instead, it is proposed the findings make a contribution to the literature on IFY students' perceptions of engagement with regard to mobile device usage in compulsory English lessons, and that fellow practitioners and researchers may identify with certain elements of this research and transfer what is deemed relevant to their own contexts.

4.12 Ethics and Data Protection

4.12.1 Ethics

The importance of conducting research in an ethical manner is entrenched as a general consensus across the literature (Creswell, 2020; Guba & Lincoln, 1994; Merriam, 1998; Thomas, 2021). Therefore, the British Educational Research Association (BERA) guidelines were closely adhered to throughout the research project because "ethical decision-making … [is] an actively deliberative, ongoing and iterative process of assessing and reassessing the situation and issues as they arise" (BERA, 2018, p. 2). According to BERA (2018), "educational research should be conducted within an ethic of respect for: the person; knowledge; democratic values; the quality of educational research; and academic freedom" (p. 5). Furthermore, Creswell (2014) stressed the "utmost importance" of precision and credibility in interpretive research (p. 283), while Guba and Lincoln (1994) warned of potential ethical issues such as integrity and sensitivity in qualitative studies. To address apprehensions such as these, an application for ethical approval was submitted to, and granted by, Lancaster University – the institution where the researcher is studying for a PhD (Appendix 5) and University of Salford – the institution where the researcher works and the site of the research project (Appendix 6).

Beyond the formal process of gaining ethical approval, a number of ethical issues were identified and addressed in relation to my position as an insider researcher. As I was also a member of the teaching team on the International Foundation Year programme, particular ethical considerations arose in relation to recruiting participants from a course I taught on. These included potential power imbalances, perceived pressure to participate, and concerns around participants' capacity to speak openly and honestly about a programme in which I was directly involved. In response, the study adopted a mitigation-focused approach to ethics, informed by Dever et al.'s (2021) Model of Mitigation for Insider-Research, which emphasises identifying ethical risks associated with insider research and actively implementing strategies to minimise their impact.

The key ethical issues in the context of this project therefore pertained not only to informed consent, participants' right to withdraw, and the protection of participant identity, but also to the management of power relations and trust within the researcher–participant relationship. Recruitment was conducted at programme level rather than through direct invitation, and participation took place outside scheduled teaching activities in order to reduce any perception of obligation or coercion. These steps were taken to support voluntary participation and mitigate the influence of my dual role as teacher and researcher.

"It is normally expected that participants' voluntary informed consent to be involved in a study will be obtained at the start of a study" (BERA, 2018, p. 9); therefore, participants were asked to read a Participant Information Sheet (PIS) and provide informed consent prior to the commencement of interviews. Although the research topic was considered low risk and unlikely to cause distress, interviews would be paused or stopped by the interviewer if distress did appear to occur, and participants were reminded that they could stop the interview at any time for any reason. The PIS made it explicit that participants could "withdraw at any point without needing to provide an explanation" (BERA, 2018, p. 9). This emphasis on voluntary participation and the right to withdraw is particularly significant in the context of insider research and aligns with Dever

et al.'s (2021) Model of Mitigation for Insider-Research, which highlights the importance of transparency and participant autonomy when researching within one's own professional setting.

4.12.2 Data Protection

BERA (2018) stated the importance of compliance with the Data Protection Act (1998) and the General Data Protection Regulation (GPDR), regarding legal requirements with regards to the storage and use of personal information (p.24). This is also a point of policy at both Lancaster University and University of Salford; therefore, data was stored safely on the researcher's password protected OneDrive account at Lancaster University and participants were allocated codes instead of names on file names and transcripts. Once recordings were transcribed, and transcripts checked with the participants, they were deleted at the earliest opportunity to help protect anonymity, which was particularly important in cases where participants gave information, which could identify them or other students. Password protected University email accounts were used for follow-up, for example, sending transcripts for individuals to check for accuracy, on occasions when in-person meetings to do this were not possible. These steps also align with the values of insider-research with regard to confidentiality (Dever et al., 2021; Mercer, 2007).

4.13 Summary

This chapter has discussed the worldview of the researcher, providing insight into the reasons for the chosen research design. It has also provided information regarding the research population, sampling techniques and instruments for data collection. The outline for the pilot study was detailed, as was the procedure for data analysis. The section ended with discussions regarding issues surrounding quality in relation to this project, followed by ethics and data storage. A discussion of the study's findings will be covered in the following chapter.

Chapter 5: Findings and Discussion

The aim of this research project was to understand how students perceive their learning engagement when using mobile devices in compulsory English lessons on the IFY programme. The purpose of this chapter is to present the themes that were identified as part of the thematic analysis process and to interpret the study's findings in the context of the reviewed literature, the setting and the people. Firstly, a deductive thematic analysis was employed using the underpinning engagement framework so the five types of engagement used throughout this study provided an initial core of five main themes. After data from the interviews had been assigned to these categories, an inductive thematic analysis was employed to form subthemes within those categories and in the formation of other main themes. This deductive-inductive hybrid approach resulted in eight main themes in total: Social Engagement, Cognitive Engagement, Behavioural Engagement, Emotional Engagement, Collaborative Engagement, Mobile Devices, Technological Accessibility Issues and External Challenges. These can be seen, along with the subthemes in the Thematic Map (Figure 5.1) below.

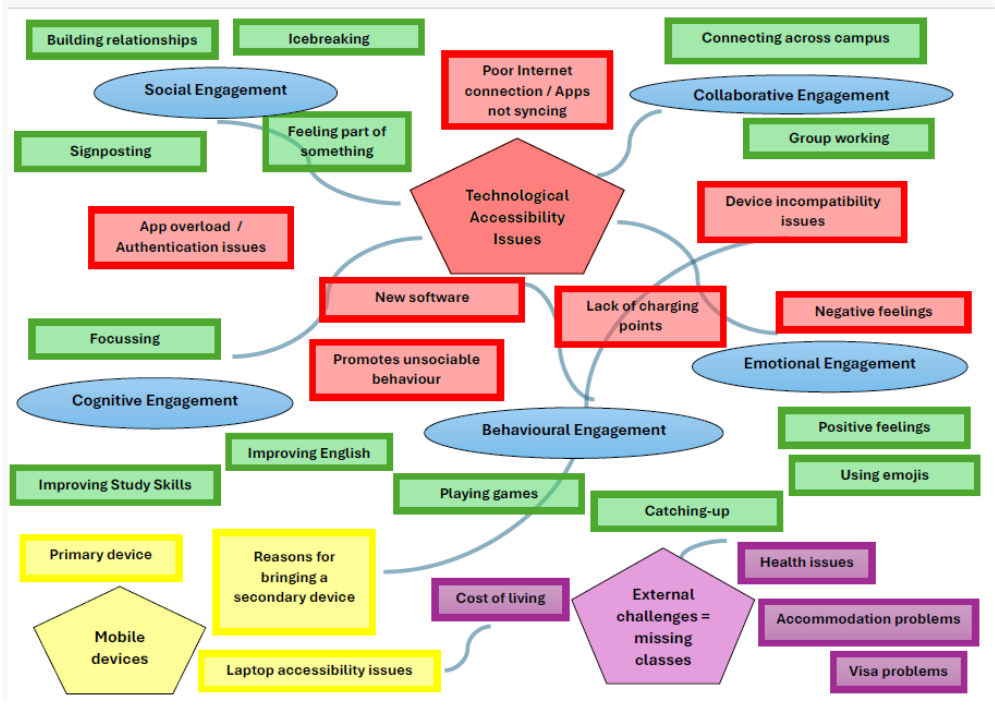


Figure 5.1 Thematic Map

During the analysis, it became apparent that some of the subthemes overlapped and the theme of Technological Accessibility Issues was embedded in all the other main themes. Each theme will be discussed in turn, starting with Mobile Devices.

5.1 Mobile Devices

The theme of Mobile Devices pertains to the types of devices used by the students on their English programme. Within this theme, three subthemes emerged: primary device; reasons for bringing a secondary device to English lessons and laptop accessibility issues. When asked which mobile device they brought to English lessons, 100% of participants reported bringing a smartphone as their primary device. Everybody expressed this was because they always have it with them. Over a decade ago, Brown et al. (2014) endeavoured to find out if students brought mobile devices (with the capabilities to participate in audience response activities) to lectures. The finding from this present study mirrors Brown et al.'s (2014) finding that everybody brought a personal device capable of facilitating the given activities. Returning to the present study, more than half (54%) of participants also reported bringing a secondary device to class (36% of participants reported bringing a laptop and 18%, a tablet). When asked about the reasons for bringing a secondary device to class, two students noted that it would be with them anyway to "work on my assignment [on my laptop] between lessons" (Student 1) and to "watch movies on my iPad at lunch" (Student 9). Student 15's reason was device incompatibility issues because "some things don't work on my phone so it's good to have another option". Whereas, two other students felt a secondary device improved accessibility of specific tasks: "It's easier to work on my laptop for some jobs because the screen is bigger [than the phone]" (Student 4) and "The phone is better for some things, like quick searches and games, but the laptop is better for others, like typing a lot for an essay or creating presentation slides" (Student 20).

The results regarding the popularity of smartphones show how the devices have become part of everyday life for many people. The results also show how

quickly technology changes, compared with Witecki and Nonnecke's (2015) study of engagement and mobile devices in lectures a decade ago. Although the study was of unstructured mobile device use, it was reported that 64.8% of respondents brought a smartphone to the last lecture and 86.2% brought a smartphone or a cell phone to class at least once per week. In terms of year group, the findings from the current research with foundation year students are similar to some of the results from a more recent study by Limniou (2021) who found the majority of first year undergraduate psychology students brought both a smartphone and laptop to lectures. Again, the study was not focussing on structured mobile device use and the differences between lectures and lessons should be considered, particularly as Limniou (2021) reported significant differences across the years of study with second years bringing mostly laptops and half of the third years bringing only laptops with a key reason being for typing lecture notes. Although not a specific question asked in the interviews of the current study, 23% of participants (five students) mentioned that they did not have access to their own laptop/computer at the accommodation they were staying at while at University. Two of these students mentioned specifically that this was due to financial reasons: “I can’t afford a computer so I love that I can use my phone” (Student 11) and “I do not have money for a laptop computer” (Student 14).

5.2 Social Engagement

The theme of Social Engagement relates to social interactions made by the students. In general, students spoke positively with regard to how mobile device use in their English lessons impacted their social engagement but some negative points were also discussed. Four sub-categories emerged from the interview data: icebreaking, building relationships, feeling part of something and signposting. Each will be discussed in turn.

The first subtheme, icebreaking, refers to activities students engaged with on Teams before the course started. Five students spoke specifically about this and all comments were positive. There was very favourable feedback regarding how Teams sites were set up for each group before the face-to-face

sessions started and how teachers used the space to introduce themselves and the ways they encouraged students to do the same. Three of the students (1, 10 and 15) mentioned these activities helped them feel less nervous because they could get to know their teachers and fellow students. For example, Student 10 noted:

> "It was nice at the beginning [when] we introduced ourselves on there [Teams]. We met students who would be our friends and the teachers before the course started so that made me feel at ease. I could find out about other students and I met somebody from my country."

The findings show that facilitating such connections inspired some students to meet up in person before the face-to-face lessons started, with Students 1, 2 and 20 making reference to "connect[ing] on Teams and say[ing] Hi before the lesson" (Student 2). The specific references to teachers writing introductory messages and asking students to do the same, for example "like at the beginning before we started, the teacher wrote [a] welcome [message] on Teams and asked us to say hello" (Student 1) are examples of the implementation of teaching presence to encourage social presence of students in line with Garrison et al.'s (1999) Community of Inquiry Framework. The positivity surrounding teacher input on the Teams app expands on Baek and Lee's (2018) study of students' perceptions and engagement in mobile-assisted blended learning in English speaking classes using the social networking app, Kakaotalk and their finding that teacher interactions via mobile devices were perceived very positively by participants.

Icebreakers have been noted as vital tools for enhancing the engagement and motivation of students (Liang, 2024) and for many years, teachers have been using icebreaker activities in traditional classroom settings as a means to connect students and staff at the beginning of new programmes of study and to make students feel more at ease. In an online environment, it is recommended that teachers help students orientate themselves with the online environment so that they feel comfortable using it, for example through sending/replying to messages and encouraging participation (Feng et al., 2017; Stephens &

Roberts, 2017). The findings from this study suggested that for face-to-face programmes enhanced by technology, using Teams on mobile devices, for icebreaking purposes has a positive impact on students' social engagement. In particular, the findings show that such pre-course activities are appreciated by IFY learners who, having recently arrived in a new country, may be experiencing aspects of culture shock. Common indicators of culture shock are disorientation, isolation and feelings of loneliness (Almukdad & Karadag, 2024; Ayub et al., 2024; Mittelmeier et al., 2023; Mulyadi et al., 2024). It can be seen from the findings that several students talk about meeting up with their classmates in person, with some referring to the people they first interacted with in the Teams icebreaking activities as friends. Making a connection with a student from the same native country was also spoken about favourably (Student 10) with the learner reporting feeling at ease after getting to know his classmates through the icebreaking tasks on Teams. This positive feedback suggests facilitating pre-course icebreakers on Teams may alleviate some of the initial stresses of culture shock concerning disorientation and isolation by enabling ways for students to meet and connect.

The second sub-category is building relationships, which pertains to the process of creating and nurturing connections with others to form bonds of trust and respect with other students and staff members. Nine students made comments relating to this theme – six positive and three negative. Three of the positive comments (from Students 4, 6 and 9) mentioned how Teams can help students to make and sustain friendships, for example:

> "In English, it is good because we have Teams and we know each other. In some other classes, students come into the room and sit on their own and look at their phones and nobody speaks. In English, the teacher gives us tasks on Teams and we have to find out about each other and write comments to each other like about places we'd like to visit while in UK or music we like. I think this is good because we have friends in the classroom" (Student 6).

Teams was discussed in a positive light with two students (4 and 9) seeing the facility to send a message to teachers, administrative staff and classmates as an advantage. In particular, students liked the informality of this function and how it could be used by teachers and fellow learners to check on an absent student, with Student 9 expressing it shows people notice if he does not attend:

> "My friends, they message me on Teams if I don't come or if I am late, they say: 'where are you?'. This is nice because they care if I am not there and the teacher, she writes to me on [Teams] Chat if I don't come to class to ask if I am alright" (Student 9).

It has been noted in the literature that the Teams application has been found to improve communication between learners and teachers as well as encourage community building (McVey et al., 2019) with the comments from students in this study supporting those findings. Furthermore, on starting a new programme in a different country, it is not uncommon for students to experience "academic shock", which can include difficulties in forming student-teacher relationships, working with other students and study skills (Edwards & Ran, 2006) and the findings from this study suggest that incorporating the Teams application into the English programme can help alleviate some of these issues. For example, Student 6 felt that using Teams helped students get to know each other in English lessons compared with some other classes where students do not socially engage in face-to-face meetings. This also supports the findings of Lowell and Ashby (2018) whose research shows the importance of teacher input in building communities between students, reinforcing that support and guidance are an important part of teaching presence as is the ability of the teacher to create/develop relationships with learners. The use of the Teams application on mobile devices has greatly facilitated this implementation, allowing students and teachers to connect inside and outside of lessons. The findings suggest that using the Teams application via mobile devices during lessons encourages less-vocal learners to socially engage with the group, with three learners (4, 11 and 14) speaking positively about being able to type their questions, comments and answers into the Teams app, instead of having to speak. For example, Student 11 said:

> "I am not very sociable and by the time I have thought what to say, the moment has gone. I just don't feel like it sometimes. Typing it [comments] helps me connect because I can prepare my answer. I can also send a message to the teacher on Teams. I never know what to say in the lesson."

Student 14 liked the informality and convenience of Teams compared to email:

> "I can send [my teacher] small messages on Chat and she writes back to me. I like the emojis. She uses happy faces and the gold stars when we do well. I would not ask the question without the Chat because it would not be right for email when it is a small question about a word or grammar or something like that and in class, others are there."

Redmond et al. (2018) noted social engagement can be seen through actions that foster community, for example, interactions on platforms where open communication is possible and the development of relationships with classmates and teachers. Therefore, providing a variety of ways for students to express themselves during lessons promotes a more inclusive learning environment and encourages students to socially engage in the most comfortable manner for them, whether that be verbally or through posting on Teams.

Despite the generally positive discussions surrounding how mobile device use in English lessons can facilitate the development of relationships, there were instances where students spoke about how mobile devices can hinder relationship building. Three participants, who wanted to maximise opportunities to practise their English-speaking skills inside and outside of lesson times, discussed difficulties when other students are engaged in tasks on their mobile devices. Student 21 felt opportunities to verbally interact before lessons were being wasted:

> "So, I walked into the room before the lesson started and there are like four or five people already in there, all looking at their phones. Nobody

> looks up. Nobody says hello. Come on guys. You're here to improve your English."

Students 8 and 10 talked about the negative impact of 'unauthorised' device use during lessons: "Pair work isn't good if the person you're working with doesn't want to do the work. If he is more interested in looking at his phone, it is awkward for me because I'm here to learn" (Student 8) and "It can be hard to talk to someone if he is texting. I don't want to disturb him" (Student 10). These comments reinforce findings from Kuznekoff and Titsworth (2013) and Witecki and Nonnecke (2015) suggesting unstructured mobile device use in learning situations can be a distraction for students. In addition, they also support Mendoza et al.'s (2018) findings that mobile device use in lectures can have a negative impact on attention with the researchers recommending to "draw awareness as to how one person's cell phone use may have a negative effect on other students' concentration as well" (Mendoza et al., 2018, p.59). Although that study pertained to lectures at University, rather than lessons, the principle is relevant for any learning situation and Student 8's comment about pair work certainly echoes the sentiment, with the mobile device in this instance creating a barrier for relationship development and learning.

The third subtheme, feeling part of something, is about experiencing a sense of belonging and connection to the group, programme and/or institution. Comments from four students contributed to this theme – three positive and one negative. Students 2, 3 and 8 talked about how being allocated a group makes them feel part of something and having a Teams site for the group's sole use was perceived as a positive in fostering a feeling of belonging, reporting that they felt they could be themselves. For example:

> "I like that I am part of a network. It feels part of me, like the home [button] on the computer, you know. I go to the Group 4 [Teams] site, and I see the others, my friends and I can be me, myself because they know me" (Student 8).

Salhab and Daher (2023) reported a similar finding in their investigation of mobile learning engagement of educational technology learners using the Moodle app. It is evident that how the Teams app was used for each group played a part in strengthening group rapport, facilitating feelings of inclusion, with Student 8 likening it to being part of a network with his group's Teams site being like the home button. The link between rapport-building and positive social engagement through fostering a sense of belonging in technological learning environments is widely discussed (Redmond et al., 2018; Wright et al., 2013) with this finding supporting the connection as well as the proposal of the Teams app as an appropriate platform to build a community (Allison & Hudson, 2020; Al-Shboul, 2024; Henderson et al., 2020; McVey et al., 2019; Oliemat et al., 2024). With Andrade and Evans (2009) noting that worries about life as a student are intensified for international learners, providing social engagement opportunities and trying to foster a sense of community accessible on mobile devices could alleviate some of the issues associated with culture shock, such as identity confusion and social isolation (Mittelmeier et al., 2023; Mulyadi et al., 2024). However, if students cannot access the group's Teams site, it can cause feelings of exclusion as detailed by Student 5:

> "I was logged into Teams but I couldn't see any messages from my group or my teachers. I couldn't see what they [my classmates] could see. They were sending messages to each other. I logged in with my [personal] email, not the University."

Experiences such as this could exacerbate aspects of culture shock, leading to increased anxiety. This example fits into Blasco's (2015) definition of study shock when a student encounters difficulties fully processing new knowledge due to prior experiences. The student had used Teams before and, as a result, logged in with their personal credentials instead of their University account. As far as they were concerned, they had logged into Teams but could not understand why they were unable to see their group's site. Referred to as learning shock by Gu and Maley (2008), such experiences can lead to increased psychological and emotional stress for international learners,

particularly when there are differences in the learning environment, procedures and expectations.

The final sub-category under social engagement to arise from the interviews was signposting. This relates to knowing who to contact and/or find relevant information to proceed to the next steps. Comments from five students contributed to this theme – three positive and two negative. Three students (1,16 and 19) liked seeing the names and pictures of staff in the department on Teams so they knew they were sending a message to the correct person. This supports the concept that social presence is important for establishing a learning community as one of the key elements of the Community of Inquiry framework is the ability of individuals to be portrayed as a real people (Garrison et al., 1999). Student 1 expressed unfamiliarity with English names so found this function particularly helpful: "I'm not so familiar with English names and the spelling so I like how Teams has the names of the people so you know who it is and you can press the name and send a message". As several studies relating to culture shock noted that language barriers can be the most difficult challenge for international students (Bamford, 2008; Eze & Inegbedion, 2015; Foley, 2010), steps such as providing full contact details for key people in the department may help to alleviate some of the stresses and help to break down some of the barriers associated with language difficulties and academic performance (Andrade & Evans, 2009; Eze & Inegbedion, 2015; Gutiérrez & Rogoff, 2009), such as knowing who to contact for help. Student 16 spoke favourably about being able to contact teachers, administrators and the programme leader on Teams through video call or using the chat function to send a message. These findings suggest that social engagement is made easier for students when Teams groups are set up in a way that gives them the full contact details of key people and direct links to contact those people in different formats – verbal or written. Furthermore, Students 16 and 19 spoke favourably about the group post page on Teams, particularly for providing key information and updates about matters such as timetables and room changes. Although using Teams in this way can facilitate social engagement and make signposting of contacts and information easier, alleviating some of the worries

associated with culture shock, not having Teams access can be a source of stress and anxiety. Research concerning challenges often encountered by international students raises awareness of societal labelling, which can position these learners as outsiders or 'Others' (Bennett et al., 2023; Liu & Qian, 2023). The negative effects of not having access to Teams are apparent in the comments by Students 12 and 18:

> "If you can't get it [Teams], you're missing information, like an outsider. On the first day, the guys seemed to know each other and know the room had changed. They told me [to] get the Teams app but I couldn't log in with my username and password" (Student 12)

and

> "I missed classes because I couldn't access email or Teams. I used my father's laptop back home [in Bangladesh) and he needs it for work and the code went to my old phone number and I couldn't log in. I didn't see the timetable or know my group" (Student 18).

The findings from this study show that perceptions of students on their international foundation year are generally positive with regard the impact mobile device use has on their social engagement in compulsory English lessons. Students felt mobile device use had a positive impact on easing them into their course, allowing them to find information easily, connect with classmates and teachers, develop relationships and aid with building a community. Negative impacts on social engagement occurred when students could not access their group's Teams site, making them feel excluded as well as when mobile devices were used in an antisocial manner, hampering opportunities for conversation and 'unauthorised' in class use, disrupting other students.

5.3 Cognitive Engagement

The theme of Cognitive Engagement relates to actively using thinking skills and the effort made in understanding and processing information related to learning

tasks. On the whole, students spoke favourably with regard to how mobile device use in their English lessons impacted their cognitive engagement but some disadvantages of using the devices also came to light. This theme consists of three subthemes: focussing, improving study skills and improving English.

The first subtheme, focussing, pertains to students' abilities to concentrate on learning tasks when using their mobile devices. Comments from nine students contributed to this theme – six positive and three negative. Two students (3 and 13) specifically mentioned their devices helped with their "attention" with another two students (8 and 20) feeling their mobile phones helped them to "concentrate". "It [my phone] helps me concentrate. I can change the screen size and the volume. My phone is my life and I go to my world when I read from it. I am involved in it" (Student 8) and "It [using my mobile device for learning] makes me concentrate. I have everything on it I need so I don't lose my attention like going to find a book in the library because I already have it on my phone" (Student 20). These discussions around how using mobile devices for learning in the classroom can help keep attention and focus fit Bowen's (2005) definition of cognitive engagement as learners "paying attention" to their studies and being "engaged" with the task in hand (p.5).

In addition, four students (3, 4, 8 and 22) found using their mobile devices in class improved accessibility and they liked being able to alter features, such as text size, to suit their individual requirements, which in turn improved cognitive engagement. For example, Student 22 mentioned:

> "Reading the book on my phone keeps my focus because I can make the screen bigger when I need to. The print in books is tiny sometimes so it's better on the phone because if you find it hard to read the print, it makes you tired and give up".

Similarly, Student 3 felt using their device in class helped to maintain their focus because it helped them keep up with difficult parts of the lesson:

> “My phone is good for my attention. My listening is very bad and sometimes I don’t understand what [the] teacher says. My phone helps me. I look up any words and I understand. When you don’t understand, you are lost”.

This is an example of a student using “metacognitive strategies to plan, monitor and evaluate their cognition when evaluating tasks” (Fredricks et al., 2004, p.60) because Student 3 is showing self-awareness with regard to their strengths and weaknesses and demonstrating an understanding of what needs to be done to address the gaps in knowledge. Moreover, there was reference to mobile device use during lessons encouraging a more inclusive learning environment, providing students with alternative ways to communicate, with Student 4 noting their preference for typing over speaking:

> “Sometimes, I worry when I don’t answer in class, I mean speaking, the teacher thinks it’s because I’m not listening or I don’t know the answer. I like it when we type answers into the chat or make a post. I answer faster that way. I don’t know why. I can think fast and type fast but I can’t speak fast.”

This could be particularly beneficial for helping to alleviate anxiety for international students with one of the most common issues reported across the literature being language (Bamford, 2008; Eze & Inegbedion, 2015; Foley, 2010). The importance of Garrison et al.'s (1999) three presences - social, teacher, and cognitive - can be seen in the comment from Student 13: “I pay attention with my phone. It keeps me engaged because I have to do something with it like click the link or make a comment. Others can see I haven’t made a comment because the time is now.” The teaching presence is apparent in the setting of the task, the cognitive presence is the task itself but it is the social presence, which is the key engagement driver here. Student 13 feels they have to contribute to the task because their classmates (and teacher) will know if they have not typed anything. This also supports Sinha et al.'s (2015) theory that as well as enhancing cognitive engagement, such social interactions can

support behavioural engagement by encouraging the involvement of each student.

During the interviews, three participants (6, 7 and 17) talked about how mobile devices can also cause them to lose concentration. Student 7 admitted to being distracted in class by text messages: “Sometimes, ma’am, I am distracted by my phone because I see I have a text and, honestly, I need to know [what it says]. It could be the boss or my family”. Although not referring to lesson time, Students 6 and 17 discussed how other people’s devices cause them to lose focus and concentration if they are used in an antisocial manner:

> “Other people’s phones disturb me if they are playing videos or shouting….It’s like before lessons when we are waiting in the classroom. I am reading or sending an email – really concentrating - then someone comes in and puts a video on or phones their friend on speaker. It’s like they don’t care or maybe don’t realise where they are and their surroundings. It’s distracting. I have to leave what I am doing” (Student 6).

Reinforcing the point of Cheng (2022) and Fitra and Raudhatul (2024) that mobile device use has permeated into virtually all aspects of life, Student 17 noted this issue of antisocial mobile device use is not only at university, commenting that it is a distraction that happens in general society: “If someone doesn’t have it on silent and it rings or when they get messages all the time or play music. It is distracting. It’s everywhere – on the bus, the train, at football”.

The second subtheme of Cognitive Engagement, improving study skills, relates to students’ efforts to enhance ways of organising, gaining and retaining information with regard to their studies. Contributions from eleven students were captured in this theme and they were all positive in nature. The findings indicate that device use for learning resulted in better organisation with four students (7, 16, 19 and 22) speaking favourably about being able to locate their notes and subject materials easily, particularly when using Teams. For example: “The teacher uploads the materials to [our] Teams site. When I

revise, I go back and find what I need" (Student 22) and "Everything is organised on my phone. Everything is in folders for each subject. I can find my work when I need it and it is always with me" (Student 16). These comments align with the recommendations of Ally et al. (2014) regarding using online file sharing services to keep files organised. Similar findings have been reported across the literature, suggesting that the ease of resource accessibility on mobile devices is indeed viewed in a very positive light (Al-Furaih & Al-Awidi, 2021; Sarrab, 2012; Zulfakar & Zabidi, 2020).

Two students (3 and 13) also felt their engagement was improved by having access to their coursebook as an eBook, with Student 13 believing the convenience of having his book on his phone encourages reading: "We can read our [English] book on the phone. It actually makes me read it because it's there." (Student 13). Students 3 and 13 liked not having to carry physical copies of books in their bags, with Student 3 speaking favourably about the benefits of always having his eBook with him:

> "If I don't have my book with me [in other subjects], I share with my friend. It's hard to see. But for English, the book, it's on the phone or computer so, if I forget [it], it's okay. I read on my phone. Me, personally, I prefer [the] book on my phone. I get confused about which to bring and the day but [it] doesn't matter when I read [it] on my phone. I have it always with me and it's not heavy in my bag. I like [that I can] make the size bigger in [the] book and zoom in when [it is] a little hard to see".

Several researchers have also reported the use of eBooks in a positive light with Lohr (2014) noting the majority of students preferred them to paper copies, Jeong et al. (2018) linking their usage to increased motivation and Karakoç Öztürk (2021) reporting portability as a key advantage, all of which echo the findings from this study. A lack of knowledge with regard to using eBooks in educational settings was listed as a challenge in Tlili et al.'s (2024) research, which is of notable contrast to this study where the students who spoke about the course eBook seemed to know how to use it.

During the interviews, Student 8 spoke about using their mobile devices to develop academic skills: “I watch the videos from the library on my phone. It shows the referencing and how to do it.” The impact culture shock can have on academic performance and wellbeing is widely discussed in the literature (Mulyadi et al., 2024; Quan et al., 2013) and the findings from this study suggest that mobile device usage for developing academic skills is viewed positively. Four students (2, 6, 10 and 21) discussed using their devices in class for generating ideas and for researching topics they were interested in. Student 21 expressed their phone allows them to work efficiently during lessons: “I prefer working on my own and researching what I don’t know. My phone allows me to work efficiently in class” and Student 6 spoke about their teacher allowing students to use their mobile device to create a paraphrasing task on a topic of interest, enabling them to find information on the subject they would be studying at undergraduate level:

> “There was a task last week and the teacher said we could use the article in the book or find an article on the internet we were interested in and we had to paraphrase it. The article in the book looked boring but she let me use the one I found on marketing and fashion. Yes, it’s what I am interested in and I want to do marketing next year so it was more interesting for me. I looked up words I didn’t know about marketing.”

Encouraging students to find their own material to paraphrase aligns with Feng et al.'s (2017) view that, in order for cognitive presence to develop, teachers should set tasks designed to encourage students to think critically. In addition, it is important that students feel motivated to learn (Fredricks et al., 2004; Redmond et al., 2018) and it is likely that students who display deep cognitive engagement will have an interest in what they are doing (Redmond et al., 2018).

The third sub-category to emerge relating to cognitive engagement is improving English. This pertains to how learners’ use their mobile devices to enhance their English with regard to different skills in grammar and vocabulary, reading, writing, listening and speaking. Twenty-one comments from students

contributed to this theme, and they were all positive. The findings show that students perceive mobile device use has a positive impact on their cognitive engagement with regard helping to improve their English skills.

With regard to grammar and vocabulary, Students 6, 7 and 20 liked the interactive puzzles and games to test their knowledge, the ability to check or translate new words, the convenience of being able to return to the exercises after the lesson and the feeling of making progress with their learning. Student 20 mentioned: “I learn a lot on my phone. The teacher gives us exercises to test our grammar and vocabulary with a scan [QR] code. I like this because I can know my progress. I can go back to this after lessons when I am on the train.” Moreover, Student 6 said: “We play games. It helps us learn. I think it’s called Kahoot!. [It is] to test what we know about vocabulary and there is a task where we scan the QR code on the screen with the camera on our phone and it takes you to matching words with what they mean or synonyms. It makes me think”. The positivity surrounding Kahoot! supports the findings from studies by Plump and LaRosa (2017), Nicolaidou (2018) and Wang and Tahir (2020), who noted positive impacts of using Kahoot! in the classroom including student engagement, academic performance and classroom dynamics. It also supports the findings of Salhab and Daher (2023) who found the built-in fun aspect of many games and puzzle apps can improve students’ focus and stimulate “cognitive curiosity” as they become “immersed” in what they are doing (p.209). Students 6 and 11 also spoke positively about using their mobile devices to access translation and dictionary sites, for example: “I use it as a dictionary and to translate between English and Arabic” (Student 6) with Student 11 noting looking up words helps him to progress:

> “Other times, when I don’t use phone, I feel worried because I don’t know what to do to move forward but my phone helps me move on. I can translate words I don’t know so I can learn new ones. When I don’t understand, I can look up the word on my phone. I make good progress this way. I use the dictionary – the one you told us about. The app is on my phone”.

Other researchers also reported positive attitudes from students using mobile devices as dictionaries to improve vocabulary (Dashtestani, 2013; Levy & Steel, 2015; Mohamad et al., 2017) so this finding is in line with those studies.

Following on from that, and in relation to the skill of reading, three students (8, 13 and 20) felt encouraged to look up unfamiliar words when reading eBooks on their mobile devices because of the ease of access to online translation tools or dictionaries.

> "When I read on my phone, I look up words I don't know or translate them. I don't always do this with a book, book because it means putting it down and getting my phone and looking back at the book at how to spell the word. It's faster on the phone" (Student 20).

Student 13 spoke favourably about the English coursebook, Language Hub Upper Intermediate by Macmillan Education, and liked the student app with the electronic copy of the book, noting the convenience encourages him to read: "We can read our [English] book on the phone. It actually makes me read it because it's there." Likewise, Student 8 felt there is always something to read on a mobile device and liked being able to see images to aid understanding:

> "When you have your phone, there is always something to read. I try to read the news in English and on my phone, I can find words I don't know and learn what they mean. It is free and I can do this any time. In class, [if] my friend says a word I don't know, I ask what it is and I don't understand, I use translate. Last week, in class, the reading was about a hedgehog. I have never seen before and I could see the picture on Google".

This point about using images to aid understanding is noted as a positive of reading electronically in other studies (Dahlan et al., 2024; McKnight et al., 2016).

Four students (1, 3, 5 and 9), who did not feel confident about writing in English liked that they could type during lessons instead of writing by hand. For

example, Student 3 noted: “I prefer writing on Teams than [on] paper. I know what to write better instead of spending a long time thinking about the grammar or the word then crossing [it] out. Also, my handwriting is very bad so I prefer typing”. Being part of a Teams site with students at a similar level provided a safe space to express ideas and not worry about making mistakes: “It is okay for me to write on here [the group’s Teams site] because we are all the same level and they [other students] won’t laugh at my grammar or if I ask a question” (Student 9), and:

> “On Teams, there is a space for our group and we can write on there, make comments and ask questions. There are not so many students in the class so it improves our confidence to write on there. When there are a lot of people, I don’t like to write because I worry about my grammar. My classmates write to me there” (Student 1).

Similarly, typing answers into the interactive vocabulary sites provided greater privacy than writing on paper: “When we write on paper, everyone next to me can see if I write the wrong answer. Sometimes, I don’t want to get it wrong so I don’t write anything. On my phone, nobody can see if I get the answer wrong and I can keep trying different answers [on the vocabulary task accessed via a QR code]” (Student 5).

On the other hand, three students (4, 10 and 11) who felt comfortable writing in English but did not feel confident in speaking in class liked that they could express their ideas by typing on the Teams site. Student 10 mentioned:

> “My English is not good so it is hard for me in speaking. I like Teams because I can write my answer. I am too nervous to say [it] but writing is okay. What I am saying is it helps me be involved and I can reply to my classmates.”

As language barriers for international students are discussed widely in literature pertaining to academic performance (Andrade & Evans, 2009; Eze & Inegbedion, 2015; Gutiérrez & Rogoff, 2009), the use of mobile devices in English lessons allowed for a more inclusive learning environment where

students could engage with the lesson content and express themselves through different formats. This idea of inclusion ties in with Brown et al.'s (2014) findings when asking learners how the use of a student response and engagement system impacted their participation. Brown et al. (2014) concluded that some learners do not answer openly in the classroom, for a variety of reasons, but appeared more willing to answer anonymously through a student response system, thereby increasing student engagement. These findings highlight the importance of the role of the teacher in creating a suitable learning environment where students feel comfortable and are encouraged to interact, think critically and ask/answer questions, allowing their cognitive presence to develop (Feng et al., 2017; Garrison et al., 1999).

During the interviews, three students (1, 3 and 12) reported using their mobile devices to prepare for the listening exam, speaking favourably about the activities created on the LearningApps site. For example, Student 1 discussed:

> "Fill the gap is the listening exam. We listen. We make notes. We fill the gap on our phones. The exam [is] very difficult… It is good to practise on the phone with the QR code. It tells you [if you give] the wrong answer and you get another go, as many times as you need. You learn from it. With writing it [on a paper-based version], when you are wrong, you are wrong and that's it. No chance to go again and learn."

Moreover, Student 12 said: "We listen and type the answer on our phones. The QR code goes to it. I do it again after class, sometimes three or four times. There is also one for learning the new vocabulary." The students considered it a positive that, when answering, multiple attempts could be made and the exercise could be revisited multiple times. This supports the findings of Fitra and Raudhatul (2024) who observed improvements in learners' reading and listening skills after using the app, crediting the interactivity and repeated practice functionality. In addition, Student 3 talked about used their mobile devices when listening in class to look up words they heard but did not know the meaning: "My listening is very bad and sometimes I don't understand what [the] teacher says. My phone helps me. I look up any words and I understand.

When you don't understand, you are lost". Using their phone helped Student 3 keep up with what was going on, perhaps alleviating some of the pressures associated with language problems and culture shock, which can negatively impact academic performance (Andrade & Evans, 2009; 2002; Eze & Inegbedion, 2015; Gutiérrez & Rogoff, 2009).

Regarding speaking skills, four students (6, 16, 17 and 19) reported using their mobile devices in lessons to check the pronunciation of words on the interactive dictionary sites. For example, "It definitely [using a mobile device] improves my English. It makes me better at spelling and pronunciation. The teacher showed us the dictionary app with the pronunciation in English and American [English]. I use it all the time now" (Student 17). Listening to the pronunciation gave students confidence to say the word as noted by Students 16 and 19: "It [using my mobile device] makes me more confident to answer in class because I can check what I am going to say" (Student 16) and "I like the dictionary with the sound. When the teacher says look up words we don't know, we can hear how to say the word then we know the right way to say it" (Student 19). Similarly, Student 6 felt being able to look up word meanings in lessons gave them confidence to answer verbally because they felt more confident that their answers were correct:

> "I participate more when I feel confident because nobody wants to look like they don't know the answer, do they? It's good because the teacher gives us words to see if we know them and we can ask each other and if nobody knows, we can look them up on our phones and we have to explain to somebody else the meaning. I think this is a good way. If you know, you know but if you don't, you don't feel stupid because you can find out and nobody ever knows all of them".

These advantages of using interactive dictionary sites were also listed by Mohamad et al. (2017) with the usefulness of the audio features for listening to word pronunciation being one of the main perceived benefits.

The findings from this study show that perceptions of students on their international foundation year are generally positive with regard the impact mobile device use has on their cognitive engagement in compulsory English lessons with regard to improving study skills and English language skills. Students' perceptions with regard to cognitive engagement in terms of focussing and concentration were mixed. Although some students spoke favourably about mobile device use in lessons helping to stimulate engagement and maintain attention, others noted the disruptive impact 'unauthorised' or antisocial use of devices can have on the thought process, not just at university but in society in general.

5.4 Behavioural Engagement

The theme of Behavioural Engagement relates to students' participation in learning tasks and their interactions with the learning environment. In general, participants spoke favourably with regard to how mobile device use in their English lessons impacted their behavioural engagement, although some negative aspects were also discussed. Three sub-categories immerged from the interviews: playing games, catching up and promoting unsociable behaviour. Each will be discussed in turn.

The incorporation of interactive puzzles and games on mobile devices in the lessons was considered a positive with regard to behavioural engagement with seven students (1, 5, 6, 7, 17, 20 and 22) commenting specifically on this. When playing individually, students liked the anonymity of submitting their answers (Students 5 and 17), multiple answer attempts and/or being able to revisit the exercises (Students 5 and 20). Whereas Student 5 liked the anonymity associated with some of the interactive puzzles, other students (1, 7 and 22) liked the competitive nature of playing in groups and/or against other students. Student 17 liked both: "I like doing the puzzles on the phone because they are fun and help me improve my English. I can work on my own and I like the games we play as a class – the Kahoot!". Fredricks et al. (2004) defined behavioural engagement as "doing the work and following the rules" (p.65), adding that students who are behaviourally engaged are active

participants in the process of learning. Students 6, 17 and 20 specifically mentioned that playing games on their devices in English helped them to learn, with Student 20 feeling “more engaged with…learning” (than more traditional methods) and not as “bored”, wanting to learn the words “again and again until [they] know them”. Students reported that they found the interactive puzzles and games challenging (Students 6 and 22) and “a lot of fun” (Students 1 and 17). These examples of students’ perceptions of how their behavioural engagement is impacted by mobile device use for learning in the classroom fit Young's (2010) definition of learners with high levels of behavioural engagement who “are characterised by positive conduct, class participation, involvement in the learning task, high effort and persistence, positive attitudes and self-regulation of their learning” (p.2). Student 7 expressed “I like the games. It makes me do it because others can see if I don’t”, which highlights the importance of social presence in learning environments (Garrison et al., 1999), or in this case, the prospect of not having social presence in their peer group, if the task is not completed, and the prospect of being seen as acting differently to their peers, behaving badly or in a disruptive manner (Fredricks et al., 2004).

The second sub-category pertaining to behavioural engagement is catching up. This relates to the options available to students and the efforts they made to catch up on work from lessons when they had arrived late, missed classes or not understood a topic. When asked about whether using mobile devices in lessons impacted their attendance, all twenty-two students felt using mobile devices in class did not impact their attendance (in terms of whether they felt more or less likely to attend a class if mobile devices were used) because the compulsory nature of the English lessons on the IFY meant they felt obliged to attend, regardless of lesson content or device use, to ensure they were marked present for their visa requirements. Despite this, eight students spoke about catching up with lesson content when they did miss class and all comments were positive with regard to how using their mobile device helps them. However, the reasons for missing classes were far from positive and this became a theme of its own. External challenges faced by international

students will be discussed later in the chapter. When students did miss, or arrive late for, classes, they felt being able to access lesson content and contact teachers easily on their mobile devices made it easy to catch up. This was also the feeling for students who wanted to revisit work they had not fully understood in lessons and for revision purposes. All eight students (9, 11, 12, 14, 15, 16, 18 and 19) specifically mentioned benefits of being able to access classwork on their mobile device. Students liked that they could access vocabulary and listening tasks on their phones, which could be completed at night (Student 19), after work (Students 15 and 16) or on the train (Student 9), making it “easy to catch up” (Student 15). Being able to contact the teacher on Teams Chat to ask questions to clarify understanding (Student 16) or inform the teacher of lateness (Student 11) were also noted as positives.

The third sub-category relating to behavioural engagement is unsociable behaviour. Impacting social and cognitive engagement, and already discussed in the previous sections, five students (4, 6, 10, 17 and 21) discussed how unwanted noise from mobile devices can be distracting. Participants felt that this was more of a general annoyance in society, rather than exclusively at university and something that tended to be worse in the period before the start of lessons when students were waiting in the classroom, rather than during the lesson itself. In addition, students felt that unsociable behaviour with regard mobile devices, in the company of others, could hinder the development of relationships, with some people preferring to engage with their device rather than in conversation with others.

The findings from this study show that perceptions of students on their international foundation year are generally positive with regard the impact mobile device use has on their behavioural engagement, especially in regard to playing games and catching up, but unsociable behaviour regarding mobile phone use was also noted.

5.5 Emotional Engagement

The theme of Emotional Engagement relates to feelings of personal investment, commitment and connection to learning tasks as well as relationships with peers and teachers. Regarding how mobile device use in English lessons impacted emotional engagement, feedback from participants was mainly positive but there were some negative aspects discussed. Two sub-categories emerged from the interviews: feelings (positive and negative) and emojis. Each will be discussed in turn.

All twenty-two participants expressed positive attitudes to using their mobile devices in English lessons. Students reported feeling motivated, interested, in control of learning, relaxed, confident and generally happy when device usage was incorporated into learning in classes. These positive emotions support the findings of Khrisat and Mahmoud (2013), whose results showed generally positive results regarding students' attitudes to using mobile phones in the foundation year classroom. Furthermore, the findings support studies by Fernandez (2018), who reported students were generally motivated by using mobiles for learning, and Baek and Lee (2018), who reported the majority of students showed positive perceptions with regards learning via their mobile devices. Although looking at a specific mobile app, Socrative, Lim (2017) also reported positive attitudes from students and teacher regarding in lesson use.

On the other hand, seven participants (4, 5, 8, 12, 18, 20 and 21) from this present study also discussed some negative emotions associated with mobile device usage in class. These mainly pertained to issues surrounding technological inaccessibility, namely if something did not work how it should. Three students (4, 8 and 21) experienced issues accessing materials on Blackboard on their mobile phones, for example:

> "It says on Blackboard that we have to use a laptop but everybody wants to use their phone… I want to do the work and I try but I can't access on my phone. Honestly, it's stressful. I look like a bad student not doing it" (Student 8).

Whereas four students (5, 12, 18 and 20) reported issues signing into the Microsoft products, namely Teams, One Drive and Outlook, with Student 12 noting: “the [authentication] code takes too long [to arrive] or doesn’t arrive”.

The seven students discussed feelings of frustration, irritation, wasted time and stress. Such challenges were also reported in investigations of using Kahoot! in the classroom (Wang & Tahir, 2020) and eBooks (Jeong et al., 2018; Karakoç Öztürk, 2021; Lohr, 2014). As discussed with regard to the other engagement types, technological inaccessibility can hamper engagement on any level and not being able to engage socially and cognitively can lead to negative feelings. As previously mentioned, when students (5, 12 and 18) could not access their group’s Teams site, they reported missing important information as well as opportunities to bond with classmates, resulting in feelings of exclusion. For international students, who may be experiencing culture shock, technological inaccessibility could exacerbate existing challenges and create academic barriers. Edwards and Ran (2006) noted problems for international learners, such as student-teacher relationships, working with other students and study skills, and whereas participants in the current study spoke of how mobile apps like Teams can develop these areas, others mentioned how not having access to the mobile platforms can hinder development and engagement, potentially adding to the psychological and emotional stress often arising from culture shock (Gu & Maley, 2008; Mulyadi et al., 2024).

The other sub-category relating to emotional engagement is emojis. Throughout the interviews, four students (1, 9, 14 and 15) made reference to emoji use. In particular, the use of emojis by teachers was seen as a positive with students associating it with friendliness, which put nervous students at ease. For example:

> “Teacher introduced her[self] and we could see her picture. She was smiling. She sounded friendly and [used] lots [of] emojis - flowers and stars. This made me feel very happy and relaxed because I was so very nervous, I can’t tell you how very nervous. Students said hello as well so

that made me feel not so nervous because I could see [their] pictures" (Student 15).

In addition, teachers using emojis to convey when students had done well was appreciated. Student 14 mentioned: "I can send [my teacher] small messages on Chat and she writes back to me. I like the emojis. She uses happy faces and the gold stars when we do well". These comments support the results from a study by Kim et al. (2022), suggesting that a teacher's use of emojis "could lead students to perceive… [them] as authentic and friendly, making students more intrinsically motivated and more inclined to pay attention" (p.1), as well as Crombie's (2020) research, highlighting a need for teacher engagement with emojis because "by learning to speak Emoji in the same contextual manner as our students, tutors can harness them as relevant, useful and purposeful additions to the student-student and student-tutor communications" (p.38). Furthermore, participants in the present study also noted that students could use emojis to express themselves instead of using words. For example, "Sometimes, I don't know how to write it but I click thumb up or the faces – happy, sad – so my friend knows" (Student 9). Again, this supports findings from Kim et al. (2022), who suggested that emojis can help "convey nuanced emotional states that not only replace words with icons but also enhance conversations and messages by modifying tone" (p.2). Likewise, the participants in George et al.'s (2023) study highlighted "emojis ability to convey emotion and nuance non-verbally across language barriers" (p.183).

The findings from this study show that perceptions of students on their international foundation year are generally favourable with regard the impact mobile device use has on their emotional engagement, and emoji use is shown to have a positive impact. However, negative feelings can occur, particularly with regard to technological inaccessibility, also impacting negatively on the other engagement types.

5.6 Collaborative Engagement

The theme of Collaborative Engagement pertains to learners working together in pairs or groups to share learning objectives, complete tasks or discuss ideas. It also relates to how students connect and collaborate beyond their English classes and with the wider University. With regard to how mobile device use in English lessons impacted collaborative engagement, comments from students were generally positive but there were some negatives. Two sub-categories immerged from the interviews: group working and connecting across campus.

Six participants (1, 3, 9, 16, 17 and 20) spoke about how they used their mobile devices to work with classmates. Playing games with other learners and meeting up on video calls was considered a positive. For example, “It’s easy to work in the group and write to our friends on the app. We can post videos for everyone. In the games, we play against each other. It’s a lot of fun actually” (Student 1) and “We do homework together on Teams call and I see her screen. It’s nice. We can chat and do the work. She helps me when I don’t understand” (Student 16). Moreover, students liked apps like Teams and One Note Class Notebook where they could collaborate in real time. Student 9 mentioned: “It’s easier to have it all in one place and we all see on our phones. Only one [person] has to type and it changes for everyone. Everyone can see. Another [person] types something more and we all see what he did”. However, it was noted by two students (3 and 17) that the technology did not always work how it should, somewhat hampering the collaboration of the group. Students 3 and 17 mentioned issues with apps syncing (namely Teams and One Note) and wondered if the problems were due to the internet connection in the classrooms. These mixed feelings regarding collaborative engagement support previous studies of group learning, indicating that individual learners’ perceptions can be positive, which can result in heightened engagement and motivation in team tasks, and, in contrast, perceptions can be negative, potentially leading to demotivation and withdrawal (Järvelä et al., 2016; Van Den Bossche et al., 2006). Although students spoke favourably about the apps where they could collaborate, inside and outside of class, engaging with the

task and their peers, not being able to collaborate on tasks because of technology issues was a possibility.

Four participants (Students 2, 7, 13 and 19) spoke about using their mobile devices to connect with the wider University including for digital support, student services (Ask Us), the library and with teachers. Students 2 and 13 liked the online chat feature, preferring to type their question rather than speak to a person. “On my phone, I can chat [type] with Ask Us for appointment about visa. It’s better than [speaking on] the phone because my English isn’t good. I can plan what to say” (Student 2). Using technology to collaborate in this way matches Redmond et al.'s (2018) thoughts on collaborative engagement, providing opportunities in “the development of different relationships and networks that support learning, including collaboration with peers, instructors, industry, and the educational institution” (p.194).

The findings from this study show that perceptions of students on their international foundation year are generally favourable with regard the impact mobile device use has on their collaborative engagement. This supports previous research into technology-supported collaborative learning, which suggests interactive capabilities of new technologies, such as sociability tools, provide students with opportunities for deep engagement and interaction (Janssen et al., 2011; Järvelä et al., 2016). However, the “extent to which collaboration is productive… depends on high-quality engagement in interactive activities” (Järvelä et al., 2016, p.40) and if the technology does not work, as in the case of Students 3 and 17, engaging in the interactive activities becomes very difficult, leading to frustration and demotivation.

5.7 Technological Accessibility Issues

Embedded in all of the aforementioned themes, therefore requiring a theme of its own, is Technological Accessibility Issues. Throughout the interviews, fourteen comments captured the impact technology can have on accessibility when it does not work how it was intended to work, thereby negatively impacting all types of engagement – social, cognitive, behavioural, emotional

and collaborative. The theme was split into five sub-categories: lack of charging points, apps not syncing, device incompatibility, app overload and authentication and new software.

Although students liked using their mobile devices for learning in English lessons, two students (2 and 9) were concerned about the device battery running out with the main issue being a lack of charging facilities in classrooms. For example, “A problem is the battery though. English is in the afternoon and my battery is always low. There is nowhere to charge and if I don’t bring my charger pack, I worry my phone will die” (Student 2). These concerns regarding battery life were also raised by students in Ha's (2020) study of Socrative and Brown et al.'s (2014) investigation of students’ willingness and ability to use response and engagement technology on their mobile devices. With regard to Brown et al.'s (2014) study, it is interesting that the same problem persists over a decade later.

As noted with reference to group working, poor internet connections resulted in apps not syncing as quickly as they should. Two students (3 and 17) mentioned how this can impact negatively on collaboration attempts in class. “The teacher puts us into groups and we use our phones to write. We can add links and videos and the other groups can see it and write what they think. Sometimes, is a problem with the connection in the classroom so there’s a delay and we can’t see it. I think it depends on the building. So, I use my 4G. It is faster but uses my data” (Student 3) and

> “I liked the Class Notebook the teacher showed us at the start. My group could type in answers at the same time, but I think it crashed or something. It wouldn’t load up anymore and the comments didn’t appear. I could see them on my friend’s phone, but they did not appear on mine. Maybe it’s the Wi-Fi. It seems better when I do it from home” (Student 17).

Problems relating to poor internet speeds and poor connectivity were also listed as challenges by participants in Ha's (2020) study of Socrative and Nicolaidou's

(2018) research into Kahoot!. Participants in both studies reported these issues had negatively affected their activities as it had with the students in this present study. It is interesting that the same problem was reported in studies taking place in three different countries across different years.

Four students (4, 5, 8 and 21) mentioned device incompatibility problems with particular reference to Blackboard. Learners discussed frustrations at being told to use a laptop for Blackboard tasks because of incompatibilities with mobile devices. Student 8 noted: "It says on Blackboard that we have to use a laptop but everybody wants to use their phone, like when we are waiting for the next lesson. I have a break of three hours on Monday. I could do it [then]. I don't bring my laptop with me. The library is busy. I want to do the work and I try but I can't access on my phone. Honestly, it's stressful. I look like a bad student not doing it". Students who did not own a computer found this particularly frustrating in the one online class per week for English (where Blackboard tasks were set centrally as opposed to by their class teacher) especially if they had no on campus classes that day:

> "One thing that really irritates me… nothing works on Blackboard [on my phone]. The teacher shows us but I cannot access it on my phone. I don't think it's because it's Android because I can't open the same work on my iPad and that's Apple. The teacher uses Teams in the lessons because there are always problems on Blackboard. On a Wednesday, we have to use Blackboard and it never works. It's not only me. I don't have a laptop so what do I do? Am I supposed to come in on a day I don't need [to] to find a computer in the library?" (Student 21).

The main irritation for Student 4 centred around not being able to access exam practice on their phone and feeling they had wasted opportunities to study. The general feeling from the four students with regard to Blackboard was captured by Student 5: "Some things work. Some things don't". Students reported feeling irritated, frustrated, stressed and described the Blackboard mobile app as hard to use.

Two students (14 and 18) felt overwhelmed by the number of different sites and apps for English as well as the multiple site structure within Teams and Blackboard with both students noting different approaches across other subjects on the IFY. Student 14 joined the programme in Week 7 and found it particularly difficult:

> "There is too much in different places – email, Teams for one thing, Teams for something else, Blackboard site for this, for that, Hub site, library. Sometimes, I don't know where to look or what I'm looking for" (Student 14).

Another problem related to issues logging into mobile apps during lessons with two students (2 and 20) reporting the Microsoft verification code taking a long time to arrive or not arriving at all. In these instances, learners reported missing the tasks and not being able to fully participate in the activities: "Why do we have to sign in every time we use Teams or One Drive? It's like every lesson and more than once. We come out and go back and need to sign in again. It sends a code, but it takes time to arrive. Why does it not remember? I miss what I am supposed to do because I have to sign in again and again. It drives me crazy!" (Student 20).

Two students (11 and 12) noted that technology in lessons was not common in their countries and had little or no experience of the applications used at the University before starting the IFY: "It was hard at first because we don't have at my school. We don't have Teams and Blackboard. The classrooms are very empty [basic] with no technology. The teacher writes on a board." (Student 11) and "I haven't used this interface [Teams] before and I am finding what everything does. I like it but it is all new to me. Everything is new to me" (Student 12). Tlili et al.'s (2024) finding that the varying development and adoption of eBook usage by countries can pose challenges in terms knowledge gaps in their usage did not appear to be true for this current study. However, extending the concept to varying development and differences in technology usage in general by different countries supports the experiences detailed by the students above. Therefore, it could be said that Tlili et al.'s (2024) finding may

not be limited to eBooks given similar attitudes in this study with regard to Teams and Blackboard.

Technological accessibility issues reported in this study share similarities with other research. As noted in the literature review, challenges of using eBooks in the classroom included issues with technology and/or device compatibility problems (Jeong et al., 2018; Karakoç Öztürk, 2021; Lohr, 2014). Furthermore, in their research into Kahoot!, Wang and Tahir (2020) reported technical problems, often associated with poor internet connections, as a challenge. Much research into Microsoft Teams relates to students' experiences during lockdown (Nguyen & Duong, 2021; Sobaih et al., 2021; Wea & Kuki, 2021; Yen & Nhi, 2021) when the software was new to many people. However, for students on the IFY, like Students 11 and 12, who have never used the University software before, the challenges that come with working with unfamiliar technology are the same, for example, feeling lost and overwhelmed. Technology is often implemented for improvement but when it does not work how it was intended, it can cause problems and for an international student, who could already be feeling lost and overwhelmed because of culture shock, those problems can become amplified. These differences in classroom environments between countries and different software usage could potentially fit with what Blasco (2015) referred to "study shock" and the incompatibilities between previous and current learning. Although referred to as "learning shock" by Gu and Maley (2008), the principle is the same in that learning in an unfamiliar environment can cause international learners psychological and emotional stress.

5.8 External Challenges

The theme of External Challenges immerged from discussions about behavioural engagement and catching up on work. It relates to the reasons for student lateness or missed classes. Eleven comments were captured and four subthemes were created: accommodation, visas, health and cost of living in the UK.

Two students (12 and 18) reported missing lessons because they could not find suitable accommodation near to the University. Student 18 mentioned:

> "I could not get a place [to live] here. I am staying with my friend in XXXXXX. There is always a problem with the train. Sometimes I am very late or miss the class completely. I can do the work. I can see it on my phone, on Teams, but I don't get marked here [present – on the register]" (Student 18).

Student 12 discussed living in temporary accommodation: "I'm staying in a hotel and sometimes I have to move my things and can't attend the lesson. The apartment wasn't a good place. I have found another but it isn't ready yet. I'm trying to keep up with everything. I only have my phone, not a computer yet, but I can play the listening and do the vocabulary" (Student 12). The comment from Student 18 about not being marked on the register relates to visa requirements as attendance on the IFY is monitored by the Home Office Compliance team.

Two other students (9 and 14) specifically mentioned problems with visas as a reason for not attending lessons and discussed the implications of not having a visa in place for the start of the programme. Having access to materials via mobile devices to catch up was considered a positive, for example, "I missed classes last week because I had to go to London… for a small problem with my visa… but I did the vocabulary on my phone on the train" (Student 9). However, there was a sense of feeling overwhelmed when a high number of lessons were missed. For example:

> "I did not come until February, near the end [Week 7]. I did not have my visa. I applied but it did not come [in time for the start of the programme]. I lost my accommodation because I wasn't here. I've missed too many classes. I do not have money for a laptop computer but I can see the lessons [materials] on my phone but how will I catch up six weeks?" (Student 14).

Another reason for missing part or entire classes was health issues, as discussed by two students (11 and 16). "Sometimes I don't feel well to come to English or if I come, I don't feel well in class. My phone helps me see what I missed and if I am going to be late, I can message my teacher on Teams to tell her. It stops my stress because the teacher knows I am late and I won't feel shame when I arrive when the class has started" (Student 16) and "Because of my mental health, I miss classes but my teacher helps me catch up by [uploading] the work on Teams and saying I can ask her if I need help or don't understand" (Student 11).

Five participants (Students 11, 14, 15, 16 and 19) discussed problems regarding the cost of living in the UK, with three (Students 15, 16 and 19) describing their only option was to juggle university with employment. For example: "When the manager offers me work, I have to go there. If I say no because I have school [university], next time, she asks somebody else and not me. I want to come to school. I want to learn but I need to work. I did not know it would be like this. I like Teams because I can see what I missed but I have an email from XXXX [Admin Team member] about attendance" (Student 16).

All the students felt having access to lesson materials on Teams made it easy to catch up with English but some expressed concerns that completing work this way did not count towards their attendance in terms of visa requirements. For the most part, these comments from the participants fit the description of what Eze and Inegbedion (2015) refer to as "adjustment barriers" (p.61), which is when challenges faced by international students negatively impact their daily living, such as a lack of family support and settling into a new place, potentially hampering their academic performance.

The findings captured in this project highlight the value of the data collection method used in this piece of qualitative research. Much of the literature relating to mobile device use at university with regard to student engagement is quantitative in nature, with a heavy reliance on Likert scale-based questionnaires and thereby limiting opportunities for qualitative insights. The

semi-structured interviews in this study enabled participants to discuss the questions in more detail, give further explanations and contribute additional information – some of which, as Ha (2020) mentioned (on reflection that some of the responses to their open-ended survey questions could have made valuable question items) would never have been considered by the researcher when designing the data collection tool. The findings in this study serve as an expansion to the key literature relating to this topic, providing extensive qualitative perspectives to what is predominantly a quantitative-rich body of knowledge.

5.9 Summary

This chapter interpreted the findings and discussed them through the themes of the study in the context of the literature, the setting and the people involved. The results have provided a better understanding of how students perceive their learning engagement when using mobile devices in compulsory English lessons on the IFY programme. Conclusions will be drawn through the context of the research questions in the following chapter.

Chapter 6: Conclusion

This conclusion chapter presents an overview of the findings and their significance by revisiting the research questions and their answers. Following that, the limitations of the research are discussed as well as considerations for future research. Then, the chapter moves on to discuss the theoretical implications. Finally, the practical implications, which emerged from the findings are presented along with recommendations and the research value.

6.1 Summary of Findings

This case study was primarily concerned with exploring IFY students' perceptions of their learning engagement when using mobile devices in their compulsory English lessons. Specifically, by exploring students' views on their own learning engagement when using mobile devices, and the interconnected platforms that function both within and beyond mobile technologies, this study aimed to address the problem of a lack of qualitative research pertaining to mobile device use and engagement on the university foundation year. In doing so, the study intersects five scholarly conversations: Higher Education Pedagogy (Biggs, 1996; Biggs & Tang, 2011), International Students (Andrade, 2006; Lomer & Mittelmeier, 2023), English for Academic Purposes (Hyland, 2006; Hyland & Hamp-Lyons, 2002; Lea & Street, 1998), Foundation Year provision (Black, 2022; Leech et al., 2016; Wood & Lithauer, 2005), and Technology Enhanced Learning (Beetham & Sharpe, 2019; Kirkwood & Price, 2014; Selwyn, 2017). In the English department, teachers' attempts to engage learners include designing activities for mobile device use in these classes and, on a practitioner level, this study endeavoured to provide teachers with a better understanding of students' views on this subject, with the findings feeding into a bigger picture of improving student engagement and the learning experience in the department. Therefore, the study will not only help practitioners when considering mobile device integration into their lessons, but it will provide a qualitative perspective to a vastly underrepresented area of research in higher education.

To achieve these objectives, the study set out to address the following research questions:

RQ.1 – What mobile devices do students on an international foundation year programme use for their compulsory English lessons?

RQ.2 - What are students' perceptions of learning engagement when using mobile devices in compulsory English lessons on an international foundation year programme?

RQ.3 – What challenges do students on an international foundation year programme face with regard to using mobile devices for learning engagement in compulsory English lessons?

The purpose of RQ.1 was to verify what types of mobile devices students brought to their compulsory English lessons. This was to determine whether the devices used by the participants in this study was consistent with the literature as well as to help inform practitioners with regard planning for BYOD activities and considerations for device compatibility when creating resources. The study found that these students fit the popular belief across the literature that mobile device use has permeated into virtually all aspects of life (Cheng, 2022; Fitra & Raudhatul, 2024) with every participant reporting that they always have their smartphone with them, therefore they always bring it to their English lessons. Furthermore, the study found that over half of the participants also brought a secondary device to class and this was most likely to be a laptop. Reasons for bringing a secondary device to class were mainly due to having it with them anyway for entertainment or specific purposes where its use was preferable to the smartphone, for example, with regards to accessibility or compatibility. However, almost a quarter of participants reported not having access to a laptop/computer at their University accommodation. With one of the English sessions being a synchronous online self-study session, with the intention that students could work from home that morning, the research found that smartphone and tablet compatibility issues with some of the mandatory tasks on the Blackboard site were especially problematic for students who did

not have access to a laptop or computer outside of University. Overall, these findings highlight important Technology Enhanced Learning considerations by showing that BYOD practices rest on assumptions about mobile device availability and platform compatibility. They also extend research on International Foundation Year provision by demonstrating how hybrid programme components can unintentionally disadvantage students with limited access to laptops outside the university. When viewed through an international student lens, the data further suggests that difficulties accessing university systems are not merely technical but can shape students' sense of inclusion during their wider transition to study and life in the UK.

Student responses to RQ.2 indicated that, on the whole, students' perceptions of their learning engagement when using mobile devices in compulsory English lessons on an IFY programme are mainly positive. In general, students discussed aspects of social engagement with regard to start of course icebreakers, building relationships, feeling part of something and signposting in a favourable light with the overall feelings being that mobile device use on the English programme made it easier to connect with people associated with the course and important information. However, when students do not have access to the University systems, implemented with the intention of making life easier and connecting people, the opposite is true with students reporting feelings of anxiety and exclusion. In other words, the very technology that can aid social engagement by bringing people together can serve as a barrier for students who cannot access its facilities. Participants spoke favourably about aspects of cognitive engagement with regard to improving study skills and English skills, feeling that using their mobile devices for English lessons improved their organisation and gave them opportunities to access materials easily, which encouraged them to study. Although some students reported using their mobile devices for English lessons improved their focus and attention, others discussed how other people's devices cause them to lose focus and concentration if they are used in an antisocial manner. However, it was noted this issue of antisocial mobile device usage happens across society, not only at University, again reinforcing observations in the literature of mobile devices

permeating all aspects of life (Cheng, 2022; Fitra & Raudhatul, 2024). The same problem came to light in discussions around behavioural engagement with students feeling unsociable behaviour with regard mobile devices could hamper the development of relationships, with some people preferring to engage with their device rather than with people. The study showed positive impacts on behavioural engagement with regard to using mobile devices in English lessons for playing educational games and interacting with puzzles, with students particularly liking the elements of fun, competition and repetition as well as the ease of using their mobile devices to catch-up on missed work. With regard to emotional engagement, students expressed positive feelings connected with using their mobile device in their English lessons, such as feeling motivated, interested, in control of learning, relaxed, confident and generally happy when device usage was incorporated into learning in classes. In particular, the use of emojis by teachers was seen as a positive with students associating it with friendliness, as was being able to use emojis instead of words to convey feelings. Negative feelings with regard to emotional engagement mainly pertained to issues surrounding technological inaccessibility, namely if something did not work how it should. This led to feelings of frustration, irritation, wasted time and stress. In terms of collaborative engagement, students spoke positively about using their mobile devices to connect with the wider University including for digital support, student services (Ask Us), the library and with teachers. They liked playing games with their classmates, being able to meet up on video calls and collaborate on documents. However, it was noted that the technology did not always work how it should, for example apps not syncing, somewhat hampering collaboration efforts. Considered together, these findings reflect the importance of pedagogical design in shaping whether mobile devices support or hinder engagement in the classroom. Students' accounts indicate that structured activities and clear expectations enable devices to enhance participation, while unregulated use can disrupt attention and interaction. At the same time, the findings add to ongoing Technology Enhanced Learning debates by illustrating the dual role of mobile technologies as both enablers of access and potential sources of exclusion when systems do not work how intended. Situated within

the context of compulsory English and Study Skills lessons, the results also align with EAP perspectives, as mobile use is closely associated with organisation, access to learning materials, and the development of study practices. These issues are particularly significant for international students, for whom engagement is intertwined with feelings of belonging, confidence and adjustment to UK higher education.

The purpose of RQ.3 was to explore the challenges faced by participants regarding using mobile devices for learning on their English programme. Although some students mentioned the devices could be distracting, this was mainly in reference to outside of lesson time. The main challenge faced during English lessons pertained to technological accessibility issues. These included concerns around the devices running out of power due to a lack of charging facilities in classrooms and insufficient internet connectivity, resulting in apps not syncing in a timely manner. Some learners reported device compatibility issues, with reference to using smartphones or tablets when accessing learning materials on the Blackboard app as well as problems with the Microsoft verification code being slow to arrive or not arriving at all, locking students out of apps they were trying to use. The number of sites and apps used for English, as well as other subjects across the IFY caused feelings of overwhelm for some students, particularly for those who joined the programme late and were trying to catch up with what they had missed. Although students found their mobile devices useful for catching up, a key concern to come out of the data was with reference to the reasons students gave for missing lessons, either arriving late or missing classes completely. Participants talked about challenges with accommodation, health, visas and the unexpected cost of living. Although some of these issues could be experienced by any student starting university, for example, problems with health, others are undoubtedly amplified for students moving to a new country to study, namely finding suitable accommodation and the unexpected cost of living. Moreover, problems with visas are exclusively a potential problem for international learners. These findings support the discussions around “adjustment barriers” in the literature (Ayub et al., 2024; Eze & Inegbedion, 2015; Mehdizadeh & Scott, 2005), which

highlight these unexpected challenges can negatively impact academic performance. The above-mentioned challenges show that how students engage with mobile devices is influenced by practical factors such as internet access, available technology, and how systems are designed. From a Technology Enhanced Learning perspective, this shows that technology does not merely work on its own but depends on how systems and resources are set up. The findings also add to research on Foundation and International Foundation Year programmes by showing that hybrid teaching needs careful consideration so not to cause or increase access problems for students who mainly use mobile devices or who have unstable living situations. Moreover, the prominence of issues such as accommodation, visas, and cost of living connects directly with international student research on adjustment barriers, illustrating how pressures beyond the classroom can influence attendance and participation. Overall, these findings show that teaching and institutional decisions play an important role in striving to reduce these challenges, rather than making them worse.

The collective findings from the three research questions show that students' perceptions of mobile device use and learning engagement in the compulsory English and Study Skills classroom are produced through the interaction of multiple factors, rather than through technology use alone. RQ.1 shows what devices students bring to class and highlights how access and compatibility issues affect their ability to take part. RQ.2 shows that mobile devices can support engagement when they are used in well-designed activities but can also cause distraction or exclusion when students cannot access the technology or systems do not work properly. RQ.3 explains these mixed experiences by identifying wider challenges, including technical issues and the pressures international students can face when adjusting to life in the UK. Overall, this thesis shows that improving engagement depends not just on mobile device use, but on how teaching practices, digital systems, and student support align with students' real-life circumstances across in-class and online learning.

6.2 Limitations

This study faced a number of limitations as do all research projects. Chapter 4 contains strategies applied to increase the research quality, particularly concerning internal validity, reliability and external validity. However, despite implementing these strategies, some limitations prevailed. To abide by research ethics, participants were required to give their consent to take part in the study. Therefore, it could be argued that the students who volunteered were already somewhat engaged with their studies because they completed a questionnaire and offered to take part in an interview. Similarly, perhaps it could be said that the students who volunteered had an interest in using mobile phones for learning because they completed the questionnaire using their device and agreed to participate in an interview to discuss mobile device use. While completely appreciating the necessity for ethical research guidelines, it is acknowledged that the views from every student across all three cohorts could not be sought and it is accepted that students with little interest in using mobile devices for learning would be unlikely to volunteer to participate in research on this subject. Furthermore, due to research ethics, it was decided only students over the age of 18 could participate in the study. This is because parental or guardian consent would not be feasible to acquire for students under the age of 18 who had not travelled to the UK with a parent or guardian. Although the majority of students on IFY are usually over 18, there were some 16 and 17 year olds who did not have the option to partake. In addition, the size of the IFY cohorts during the time of the study were much smaller than previous years. It is likely this had an impact on the sample size. Despite conducting the research across three cohorts, only twenty-two students volunteered to take part and it could be argued that this number is a relatively small sample. Perhaps related to this is the observation that only three of the participants were female, although this does reflect that the majority of students across the three cohorts during the research period were male. Similarly, the research could be criticised for being a single study case study at one institution by those who would like to make comparisons. It should also be noted that the interviews were conducted in English and although all participants had at least

adequate English skills to communicate, lower-level students may not have possessed the precision in vocabulary to express their thoughts exactly as they would in their native language.

6.3 Future Work

Based on the findings of this study, three areas have been identified for potential future research. The first would focus on teacher facilitation and training. Given the importance of teaching presence and how the success of technological integration into lessons often depends on the teacher, it could be useful to investigate how teacher confidence and training in using mobile devices affects learner engagement. The second would focus on subject-specific engagement. It could be useful to investigate whether structured mobile device use during lessons for other subjects on the IFY impacts engagement differently and whether some subjects are better suited to mobile learning than others. Finally, a longitudinal impact study could be designed to investigate how sustained, structured mobile device use affects student engagement over time. As learners become more accustomed to using mobile devices in the classroom, it would be interesting to identify any changes in engagement.

6.4 Theoretical Implications

The results from this study support the theories that engagement is indeed a multifaceted concept with the different elements often blending together (Fredricks et al., 2004; Redmond et al., 2018). For example, when the students discussed using their mobile devices to play games, this was primarily categorised as a subtheme of behavioural engagement. However, using devices to play games also appeared under several of the other engagement types too. It was referred to under cognitive engagement because students felt it helped improve their English skills. It was mentioned under emotional engagement because students associated playing games with positive emotions, referring to it as fun. Furthermore, the competitive aspect of some of the multiplayer games saw it also categorised under collaborative engagement.

Although the results from this study support Salhab and Daher's (2023) findings that using mobile devices for learning can help students who miss classes to keep involved, it does not support their findings that m-learning encourages students to attend classes on a regular basis. In fact the findings regarding attendance align more with Lim's (2017) results that the inclusion of the mobile app at the centre of the research did not alter learners' attendance patterns. In the case of this study, students did not feel attendance was a choice (due to it being a necessity for fulfilling their visa requirements), therefore they felt they must attend so it did not matter whether mobile devices were incorporated into the lesson or not.

Despite all students noting that attendance was mandatory, some students discussed using their mobile devices to catch up if they were late for class or missed lessons completely, supporting Salhab and Daher's (2023) findings. Furthermore, it also backs the concept that "technology can facilitate engagement in ways which are difficult to achieve otherwise" (Kearsley & Shneiderman, 1998, p.28). Although the students who missed lessons were not engaging behaviourally with the face-to-face lesson (consequently missing opportunities to engage with their peers socially, collaboratively, emotionally and cognitively in the classroom), the manner in which the Teams sites had been set up allowed these students to keep in touch and have some engagement with the lesson materials, their peers and their teachers, from their accommodation via their mobile devices. Without the technology, it would indeed be difficult for students who miss lessons to catch up in time for the next lesson.

Although it is not ideal for students to miss classes on what is considered a compulsory face-to-face programme, the findings from this study show the importance of thinking in terms of blended learning (Staker, 2011), even for face-to-face provision, so students who do miss classes can keep in touch and have accessible opportunities to catch up quickly. With this in mind, the overlap between the engagement frameworks (Fredricks et al., 2004; Redmond et al., 2018) and Garrison et al.'s (1999) Community of Inquiry framework, as noted earlier, is crucial when considering blended learning because of the inclusion of

teaching presence on the COI framework. If the teachers of the IFY groups had not encouraged social interactions (engagement or presence) between students or themselves (on the post page, via the chat function or the call feature) and not uploaded tasks and materials to promote cognitive engagement or presence, for students to work individually or collaboratively, the learners from the study who missed classes would not have been able to use their mobile devices to keep in touch and catch up on lesson content. As Redmond et al. (2018) drew on previous research, including that of Fredricks et al. (2004) resulting in the inclusion of additional engagement strands for the online framework, it is understandable why Cleveland-Innes and Campbell (2012) suggested the addition of Emotional Presence to the COI framework. The models attributed to both Fredricks et al. (2004) and Garrison et al. (1999) were developed at a different technological time. With the evolution of online technologies, to be socially engaged or to have a social presence is much more complex in meaning than it was twenty plus years ago. Whereas both research teams considered social engagement/presence in a broader sense, already incorporating elements of collaboration and/or emotion, the changes in times and technology reflect the need to evaluate and build-on what has gone before. As the COI framework is in itself a model of collaboration, with success based on the different elements working together, a Collaborative Presence to mirror the other overlaps between engagement and presence would not be needed. However, with many similarities between the engagement types and the presences, it could be beneficial for future research to develop a combined model for blended learning, which highlights the importance of teaching presence in engaging students, particularly for programmes which would traditionally be classed as face-to-face and fit Staker's (2011) face-to-face driver model, where technology is used to enhance learning.

6.5 Practical Implications and Recommendations

The findings not only showed the types of mobile devices IFY students are bringing to their compulsory English lessons but also the value of these devices as educational tools for improving engagement. However, it also brings to light some of the technological problems encountered by students trying to use their

devices for educational purposes, which in turn, highlights problems teachers are presented with when considering the incorporation of mobile device use in lessons. Not all of the problems encountered by the students are fixable at department level, for example, slow internet speeds and lack of charging points in classrooms, and these issues need to be passed on and investigated by the relevant team. Despite this, teachers do need to assess whether mobile device incorporation into their lessons is feasible if the internet might be slow and/or factor in contingency plans if a student has insufficient battery levels on their phone and no charging facilities. However, some of the other problems discussed by the students could be alleviated at departmental level. If mobile devices are to be incorporated into learning programmes, students need to be provided with course materials and learning activities that can be easily accessed and completed on their smartphones. A challenge for the department is, at present, this content needs to be tested on a range of devices with different operating systems to check compatibility, accessibility and the overall user experience. Designated digital content developers are employed at the University for centrally accessed information and resources, but this is not the case for materials produced at departmental level, often with teachers and content developers being one and the same. For teachers who do not possess the technological skills to digitise resources, the task is a difficult one. The results from this study suggest that learners want to use their mobile devices for learning purposes and doing so can help them engage with their studies, so it is important for universities to invest in their staff by providing training and support in digital resource creation. Even for teachers who possess the technological skills to create digital materials for their learners, the additional requirement of testing the compatibility of said materials across multiple devices could pose challenges not only in terms of time but also the accessibility to different devices to conduct the tests. Teachers need to collaborate with other teachers, not just from the same department but across departments and from other institutions. As technology changes so quickly, it is important to keep abreast of the capabilities of the mobile devices students are bringing to lessons and the way students are interacting, and would like to interact, with them for learning purposes. Therefore, involving learners in the process is key for the

ongoing reflection and maintenance of materials in use. Students are the primary users so their perceptions of their learning experience are invaluable in determining what works and what does not and how improvements can be made. For example, several students reported problems with the Blackboard app with regards to accessing materials on their mobile devices. It would be useful for the department to investigate this further to determine whether the problems are indeed as a result of device compatibility issues on Blackboard or whether the issues are in fact connected to the way Blackboard is being used, for instance, the resource formats being uploaded. However, university Digital IT teams are testing and integrating new technologies as they become available so it should not be assumed that because something did not work in a particular way before, this will always be the case. A recent training session at the University revealed that new AI tools will soon be available on Blackboard, including a document conversion and page design. This could potentially solve some of the resource compatibility issues reported by the students in this study.

Software is evolving all the time and, although it could be tempting to stay with what is known, it is important for educators to keep an open mind and evolve with it. Undoubtedly, Microsoft Teams made life easier during lockdown and the transition from fully online teaching back to face-to-face. However, with one of the issues raised by students being overwhelmed at the number of sites and apps they have to access for English and across the IFY programme, the department needs to evaluate what each site is used for and assess whether all are needed. Blackboard is being used by the department because it is the official virtual learning environment (VLE) for the University and it is likely what students will be using when they progress to their undergraduate degree. However, when teachers were asked if/how they were using mobile devices with their learners in lessons, Blackboard was not mentioned. For whatever reason, if Blackboard is not being used regularly or promoted in class by teachers, students may encounter difficulties due to unfamiliarity when they are expected to use it. The importance of teaching presence has already been noted along with positive comments from students regarding how their teachers integrated Microsoft Teams into their programme and encouraged its use

among students, and the results suggest Microsoft Teams is certainly being used more like a VLE than Blackboard. Although reducing the number of apps and sites used could be less complicated for students, it could be counterproductive for the English department to choose Teams over Blackboard, only for students to progress onto their undergraduate degree the following year and have little experience of using the University's official VLE. Furthermore, it ought to be remembered that this case study is a snapshot in time when Microsoft Teams seemed, for whatever reasons, a better fit than Blackboard. The themes from the discussions show the value is in what the software enables learners to do on their mobile devices, for example, to be part of a community, to keep in touch and to engage with learning. The results show these students on the IFY want to use their mobile devices for learning and as technology evolves so quickly, it is important to keep evaluating the options regarding the most suitable software, to incorporate the positives and learn from, and improve on, the negatives. It is also of paramount importance to continue to obtain input from students when making decisions regarding teaching and learning because it is their learning experience and they are primary users of the technology being used.

Given the study's results, and until compatibility issues are resolved, the department also needs to consider the logistics of timetabling online elements on the IFY programme. Students discussed not having access to computers at their accommodation and experiencing compatibility issues with accessing materials on mobile devices. At present, students need to connect synchronously to the lesson to have their attendance marked then work on materials on the Blackboard site. Due to the difficulties reported by students, the department needs to assess if attendance for visa requirements can be taken in a different way with more flexibility for task completion. Perhaps attendance could be recorded by the completion of activities by a certain time, moving to a more asynchronous system, especially given the reports of compatibility issues. If attendance does need to be taken at a specific time, students should be given access to designated computers on campus where

they can log in and complete work there if they do not have the facilities at their accommodation.

Although this research suggests students want to use their mobile devices for learning, it ought to be remembered that not every student will feel this way or will have access to such devices, especially on arrival in the UK. This study highlighted the challenges faced by international students outside of university, before and during their programme, potentially negatively impacting their engagement opportunities with their peers, teachers, course and institution. It is particularly important that university departments reach out to students in a range of formats, especially to those students who have not started at the beginning of the programme with the main cohort. This is to ensure the support offered to international students with regard to areas such as finance, health, accommodation, visas and counselling are available – and students know it is there – at the earliest opportunity, in the hope of minimising the culture shock they may be experiencing in other aspects of their lives. Students in this study indicated that using their mobile devices helped them to catch up and engage with content when they arrived late or missed classes. Some of the reasons for missing classes were discussed in the context of culture shock and these need to be investigated further with a view to looking at how learners in these situations could be better supported. For example, students who are not attending classes regularly or who missed induction may be unaware of the support available to them across the wider University. Maybe rolling induction sessions could be incorporated throughout the first semester and/or bespoke study packs created for the purposes of catching up on key information/topics. Either way, it would be useful to work with students in these situations and ask what they think would help to ease the transition for future students.

Reviewing the literature surrounding mobile device use in universities shows how quickly technology changes and it is important as researchers and practitioners to keep updated as it evolves. Having the opportunity to explore students' views and experiences on how mobile device use for learning in English lessons on an IFY programme provides a qualitative perspective to a vastly underrepresented area of research in higher education. The findings

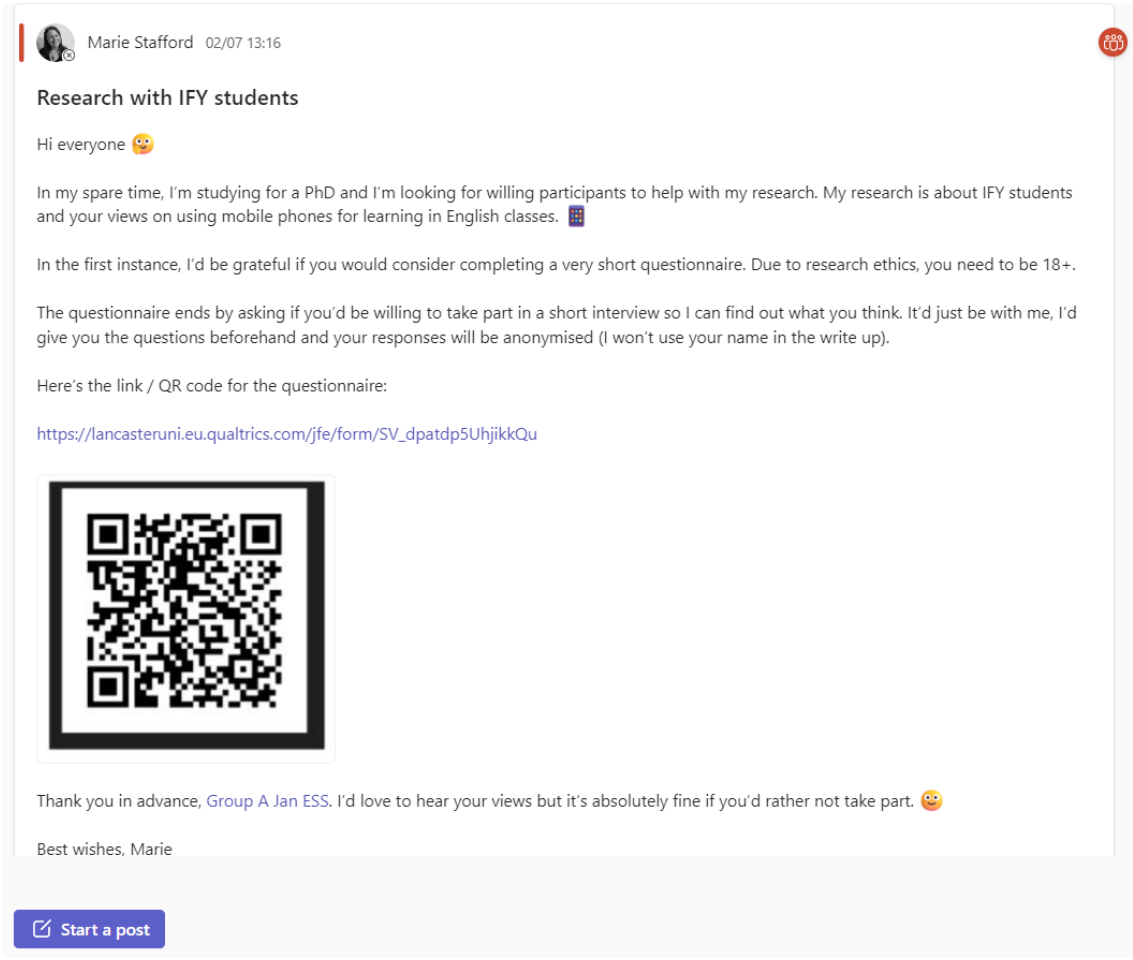
contribute to the existing body of literature how students are engaging with their mobile devices for learning purposes in compulsory English classes as well as the challenges they face while doing this, both from a technological point of view and also as international students, both inside and outside the classroom. Mobile device use has indeed permeated into all aspects of life, with students in this study always having their smartphones with them. However, the study shows that unlike other sectors, higher education is not presently immersed to the same extent. Although, with the rapid development of technology and as society becomes more digital, it will likely soon become an expectation that students will use mobile devices to completely manage multiple aspects of university life, including learning inside and outside the classroom.

While this study is based in a specific setting—a compulsory English and Study Skills module on an International Foundation Year—the findings are relevant beyond this particular course and group of students. The analysis draws attention to a set of connected factors that influence engagement with mobile technologies, including access to suitable devices, whether learning platforms work properly, how easy it is for students to log in, the reliability of internet access, and assumptions about students' living and study situations. As a result, the findings are likely to be relevant to many higher education contexts where learning takes place across linked digital systems, whether teaching is mainly face-to-face, online, or a combination of both. For educators working with diverse groups of learners, the study highlights the value of looking beyond simple questions about whether mobile devices should be used, and instead considers how teaching design, institutional systems, and student support work together to encourage or limit engagement. In this way, the contribution of the thesis lies not only in its focus on IFY students, but also in the broader insights it offers into the teaching, technological, and institutional conditions that shape engagement with learning technologies across higher education.

Appendix One: Summary of Key Literature

Study	Focus	Data Collection	Main Findings
Baek and Lee (2018)	Undergraduate students' perceptions and engagement in mobile-assisted blended learning in English speaking classes using Kakaotalk.	Questionnaire (Likert scale + open questions), classroom observations of participation in activities. 112 participants.	High engagement overall, especially in listening and writing.
Brown et al. (2014)	Undergraduate hospitality students' willingness and ability to use response and engagement technology (BYOD) in the classroom.	Questionnaire - both quantitative and qualitative questions, distributed to 413 participants.	100% had a device capable of BYOD response systems. Students willing and able to use. Increased engagement and participation with response systems, especially if responses were anonymous.
Ha (2020)	Undergraduate students' perspectives on Socrative. Focusing on participation, collaboration, and engagement in Problem Based Learning activities.	Web-based background survey, end-of-semester questionnaire (Likert scale + open-ended), classroom observation. 82 participants.	Socrative increased engagement, participation and motivation, especially for groupwork. Enabled sharing opinions, immediate feedback, active learning. No significant differences by gender/discipline except females reported higher interactivity.
Lim (2017)	Undergraduate students on a computing course. Designed and implemented a mobile-based interactive teaching model using Socrative in a Malaysian university, with in-class and off-class components.	Online survey (Likert scale), academic results, attendance records, instructor teaching evaluation scores. 45 participants.	Students responded positively to Socrative. Improved engagement, focus, satisfaction, academic performance in quizzes/exams. Students preferred online quizzes and instant feedback. Project work engagement did not improve.
Nicolaidou (2018)	Evaluated Kahoot in four undergraduate courses, measuring students' perceptions, game performance, and academic performance.	Questionnaire (Likert scale), Kahoot platform statistics (game performance), course exam grades. 137 participants.	Positive impact on engagement/learning. Strong/moderate correlation between game performance and academic performance.
Reilly et al. (2014)	Tested GroupNotes, a collaborative mobile note-taking app, with undergraduate students, in lectures to compare individual vs collaborative notetaking and workspace sharing.	Experimental sessions (4 lectures), video recording, post-session questionnaires (Likert scale), group preference tracking. 32 participants.	Collaborative notetaking (especially sharing individual workspaces) led to higher engagement/satisfaction than individual or common workspace sharing.
Witecki and Nonnecke (2015)	Undergraduate students on mobile device use during lectures and its relationship to course engagement.	Student Course Engagement Questionnaire (Likert scale). 972 participants.	Smartphone use most strongly correlated with lower engagement across all factors. Unstructured smartphone use during lectures reduced engagement.

Appendix Two: Recruitment Message



Appendix Three: Participant Information Sheet

Lancaster University

Participant information sheet

Students' perceptions of learning engagement when using mobile devices in compulsory English lessons on an International Foundation Year programme

For further information about how Lancaster University processes personal data for research purposes and your data rights please visit our webpage: www.lancaster.ac.uk/research/data-protection

I am a PhD student at Lancaster University and I would like to invite you to take part in a research study about students' perceptions of learning engagement when using mobile devices in compulsory English lessons on an International Foundation Year programme.

Please take time to read the following information carefully before you decide whether or not you wish to take part.

What is the study about?
This study aims to explore how International Foundation Year students feel about using mobile devices in their English lessons with regards to their learning engagement.

Why have I been invited?
I have approached you because you are a student on the International Foundation Year programme and one of your modules is English and Study Skills (ESS). I am interested in your views about using mobile devices in the classroom for learning purposes and if/how you believe using mobile devices for learning impacts your engagement during lessons. I would be very grateful if you would agree to take part in this study.

What will I be asked to do if I take part?
If you decide you are happy to participate in the study, I will ask you to take part in a semi-structured interview. You will be asked a number of questions about your experiences and thoughts of using mobile devices in your English lessons with regards to your learning engagement . 'Semi-structured' means that everyone will be asked the same core questions, but based on your responses and particular experience I may ask you some further questions about your own experiences. The interview will therefore take the form of a structured conversation. You will be provided with a copy of the core questions at the time of the interview. I expect that the interview would take around 30-60 minutes of your time.

What are the possible benefits from taking part?
Taking part in this study will allow you to share your experiences and views of using mobile devices for learning purposes in the classroom. As the interview will be conducted in English, it is a good opportunity to practise your speaking and listening skills as well as experience what it is like to participate in an academic research project.

Do I have to take part?
No. It's completely up to you to decide whether or not you take part. Your participation is voluntary. If you decide not to take part in this study, this will not affect your studies and the way you are assessed on your course.

What if I change my mind?
If you change your mind, you are free to withdraw at any time during your participation in this study. This is not a problem. If you want to withdraw, please let me know, and I will extract any ideas or information you contributed to the study and destroy them. While you have the right to withdraw at any time, I can only reliably identify and delete your own data up to four weeks after your participation, after which it will have been anonymised and pooled with other responses.

What are the possible disadvantages and risks of taking part?
Other than giving up 30-80 minutes of your time for the interview, it is unlikely that there will be any major disadvantages to taking part.

Will my data be identifiable?
After the interview, only I, the researcher conducting this study will have access to the ideas you share with me. I will keep all personal information about you (e.g. your name and other information about you that can identify you) confidential, that is I will not share it with others. I will remove any personal information from the written record of your contribution. All reasonable steps will be taken to protect the anonymity of the participants involved in this project.

How will we use the information you have shared with us and what will happen to the results of the research study?
I will use the information you have shared with me only in the following ways:
I will use it for research purposes only. This will include my PhD thesis and other publications, for example journal articles. I may also present the results of my study at academic conferences and sharing good practice events.

When writing up the findings from this study, I would like to reproduce some of the views and ideas you shared with me. I will only use anonymised quotes (e.g. from my interview with you), so that although I will use your exact words, all reasonable steps will be taken to protect your anonymity in our publications.

How my data will be stored
Your data will be stored in encrypted files (that is no-one other than me, the researcher will be able to access them) and on password-protected computers. I will store hard copies of any data securely in locked cabinets in my office. I will keep data that can identify you separately from non-personal information (e.g. your views on a specific topic).In accordance with University guidelines, I will keep the data securely for a minimum of ten years.

What if I have a question or concern?
If you have any queries or if you are unhappy with anything that happens concerning your participation in the study, please contact myself:

Marie Stafford

Department of Educational Research,

County South, Lancaster University, Lancaster, LA1 4YL, United Kingdom

Tel: [redacted]

Email: [redacted]

Who else can I contact?

If you are concerned about an aspect of the study or if you have a complaint, you can contact my supervisor:

Dr. Katy Jordan

Department of Educational Research,

County South, Lancaster University, Lancaster, LA1 4YL, United Kingdom

Tel: [redacted]

Email: [redacted]

If you have any concerns or complaints that you wish to discuss with a person who is not directly involved in the research, you can also contact the Head of Department.

Dr. Jan McArthur

Department of Educational Research,

County South, Lancaster University, Lancaster, LA1 4YL, United Kingdom

Tel: [redacted]

Email: [redacted]

This study has been reviewed and approved by the Faculty of Arts and Social Sciences and Lancaster Management School's Research Ethics Committee.

Appendix Four: Consent Form

Lancaster University

Consent form

Students' perceptions of learning engagement when using mobile devices in compulsory English lessons on an International Foundation Year programme

Marie Stafford
m.stafford2@lancaster.ac.uk

Please tick each box in the table below

Statement	Tick box
1. I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time during my participation in this study and within 4 weeks after I took part in the study, without giving any reason. If I withdraw within 4 weeks of taking part in the study my data will be removed.	☐
3. I understand that any information given by me may be used in future reports, academic articles, publications or presentations by the researcher(s), but my personal information will not be included and all reasonable steps will be taken to protect the anonymity of the participants involved in this project.	☐
4. I understand that my name/ will not appear in any reports, articles or presentation without my consent.	☐
5. I understand that any interviews will be audio-recorded and transcribed and that data will be protected on encrypted devices and kept secure.	☐
6. I understand that data will be kept according to University guidelines for a minimum of 10 years after the end of the study.	☐
7. I agree to take part in the above study.	☐

Participant's details

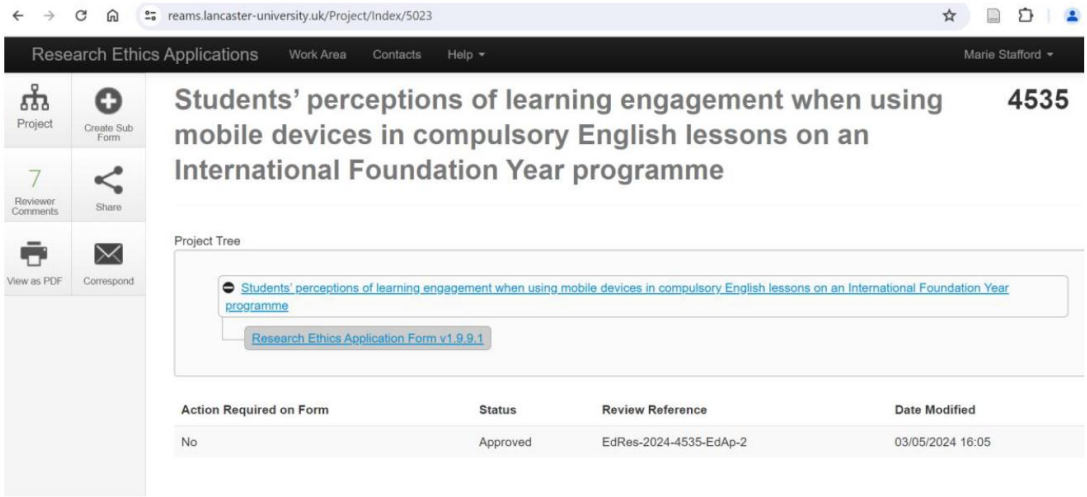
Participant's name_____

Participant's Signature_____

Date_____

Version 30-11-22

Appendix Five: Ethical Approval from Lancaster University



[External] REAMS (Applicant Info) Ethics approval from Research Ethics Committee EdRes-2024-4535-EdAp-2

D donotreply@infonetica.net
To: Stafford, Marie (Postgraduate Researcher)
Cc: Jordan, Katy
Sat 04/05/2024 13:57

This email originated outside the University. Check before clicking links or attachments.

Dear Marie Stafford,

Please note that this is an automated e-mail (Please do not reply to this e-mail).

Name: Marie Stafford

Supervisor: Katy Jordan

Department: Educational Research

Ed Res **REC Reference:** EdRes-2024-4535-EdAp-2

Title: Students' perceptions of learning engagement when using mobile devices in compulsory English lessons on an International Foundation Year programme

Thank you for submitting your ethics application in REAMS. The application was recommended for approval by the Ed Res Research Ethics Committee, and on behalf of the Committee, I can confirm that approval has been granted for this application.

Appendix Six: Ethical Approval from University of Salford

University of Salford MANCHESTER
The Crescent,
Salford, M5 4WT,
United Kingdom
0161 295 5000
www.salford.ac.uk

3 June 2024

Dear Marie Stafford

Study Title: Students' perceptions of learning engagement when using mobile devices in compulsory English lessons on an International Foundation Year programme
Reference: 0814
Panel Decision: Favourable Opinion

We are pleased to inform you that your ethics application has been reviewed and received a Favourable Opinion and your research project may commence. Please ensure you follow all relevant guidance as laid out in the **Research Code of Practice**.

This letter covers your project as described in your application (reference above). Should you need to make a change to your project, you will be required to obtain an Amendment to modify the project and this includes extensions to periods of approval. Amendments are submitted as sub-forms attached to the original application.

Please be aware that, for the purposes of audit, your Ethics Administrator may contact you to ascertain the status of your research.

If you have queries about any aspect of this ethics review, please contact your ethics administrator.

Kind Regards,

[redacted]

Ethics Administration

For and on behalf of

Chair: [redacted]
Panel: Professional Services
Cc:

List of Abbreviations

AI	Artificial Intelligence
BERA	British Educational Research Association
BYOD	Bring your own device
COI	Community of Inquiry
EAP	English for Academic Purposes
EFL	English as a Foreign Language
ESL	English as a Second Language
ESS	English and Study Skills module
IELTS	International English Language Testing System
IFY	International Foundation Year
LEAP	Learning English for Academic Purposes
PSE	Pre-Sessional English
RTA	Reflexive Thematic Analysis
SCORM	Sharable Content Object Reference Model
VLE	Virtual Learning Environment

References

Adiyono, A., Hayat, E. W., Oktavia, E. D., & Prasetiyo, N. T. (2024). Learning interaction in the digital era: Technological innovations and education management strategies to enhance student engagement. *Journal of Research in Instructional*, *4*(1), 205–221. https://doi.org/10.30862/jri.v4i1.333

Adler, R. H. (2022). Trustworthiness in qualitative research. *Journal of Human Lactation*, *38*(4), 598–602. https://doi.org/10.1177/08903344221116620

Afreen, R. (2014). Bring your own device (BYOD) in higher education: Opportunities and challenges. *International Journal of Emerging Trends & Technology in Computer Science*, *3*(1), 233–236. https://www.researchgate.net/publication/261136229_Bring_Your_Own_Device_BYOD_in_Higher_Education_Opportunities_and_Challenges

Al-Furaih, S. A. A., & Al-Awidi, H. M. (2021). Fear of missing out (FoMO) among undergraduate students in relation to attention distraction and learning disengagement in lectures. *Education and Information Technologies*, *26*(2), 2355–2373. https://doi.org/10.1007/s10639-020-10361-7

Alharahsheh, H. H., & Pius, A. (2020). A review of key paradigms: Positivism vs interpretivism. *Global Academic Journal of Humanities and Social Sciences*, *2*(3), 39–43. https://www.gajrc.com/media/articles/GAJHSS_23_39-43.pdf

Allison, N., & Hudson, J. (2020). Integrating and sustaining directed and self-directed learning through MS Teams and OneNote: Using Microsoft Teams and OneNote to facilitate communication, assignments, and portfolio management. Presentation at *BALEAP TEL SIG Webinar*, 03 Jun 2020, online. https://eprints.gla.ac.uk/217383/

Ally, M., Grimus, M., & Ebner, M. (2014). Preparing teachers for a mobile world, to improve access to education. *PROSPECTS*, *44*(1), 43–59. https://doi.org/10.1007/s11125-014-9293-2

Almekhlafi, A. G. (2021). The effect of E-books on preservice student teachers' achievement and perceptions in the United Arab Emirates. *Education and Information Technologies*, *26*(1), 1001–1021. https://doi.org/10.1007/s10639-020-10298-x

Almukdad, M., & Karadag, E. (2024). Culture shock among international students in Turkey: An analysis of the effects of self-efficacy, life satisfaction and socio-cultural adaptation on culture shock. *BMC Psychology*, *12*(1), 154. https://doi.org/10.1186/s40359-024-01641-9

Al-Shboul, M. (2024). The effect of using Microsoft Teams on the achievement and self-learning skills among undergraduate students in the School of Educational Sciences at the University of Jordan. *International Journal of Interactive Mobile Technologies*, *18*(6). https://doi.org/10.3991/ijim.v18i06.48271

Andrade, M. S. (2006). International students in English-speaking universities: Adjustment factors. *Journal of Research in International Education, 5*(2), 131–154. https://doi.org/10.1177/1475240906065589

Andrade, M., & Evans, N. (2009). *International students: Strengthening a critical resource*. R&L Education. https://books.google.com/books?hl=en&lr=&id=HTDv-uqqNUEC&oi=fnd&pg=PP5

Anshari, M., Almunawar, M. N., Shahrill, M., Wicaksono, D. K., & Huda, M. (2017). Smartphones usage in the classrooms: Learning aid or interference? *Education and Information Technologies*, *22*(6), 3063–3079. https://doi.org/10.1007/s10639-017-9572-7

Arndt, A. D., Ford, J. B., Babin, B. J., & Luong, V. (2022). Collecting samples from online services: How to use screeners to improve data quality. *International Journal of Research in Marketing*, *39*(1), 117–133. https://doi.org/10.1016/j.ijresmar.2021.05.001

Ashique, A., & Subramanian, R. (2024). Current status of research on mobile banking: An analysis of literature. *Vision*, *28*(1), 7–18. https://doi.org/10.1177/09722629211073268

Aung, K. T., Razak, R. A., & Nazry, N. N. M. (2021). Establishing validity and reliability of semi-structured interview questionnaire in developing risk communication module: A pilot study. *Edunesia: Jurnal Ilmiah Pendidikan*, *2*(3), Article 3. https://doi.org/10.51276/edu.v2i3.177

Ayandibu, A. O. (2025). A comparative analysis of interactive tools in higher education's teaching and learning: The strengths and weaknesses of Mentimeter, Google forms, Socrative, and Kahoot for playful learning. *International Journal of Research in Business and Social Science*, *14*(5), 411–419. https://www.ssbfnet.com/ojs/index.php/ijrbs/article/view/2642

Ayub, M., Mehmood, H., & Nazir, A. (2024). The impact of culture shock and psychological adjustment on mental well-being in international students. *Pakistan Journal of Humanities and Social Sciences*, *12*(2), 1327–1335. https://doi.org/10.52131/pjhss.2024.v12i2.2120

Baek, J., & Lee, C. H. (2018). University students' perceptions and engagement in mobile assisted blended learning in English speaking classes. *Multimedia-Assisted Language Learning*, *21*(4), 11–36. https://doi.org/10.15702/mall.2018.21.4.11

Baker, S. E., & Edwards, R. (2012). *How many qualitative interviews is enough*. National Centre for Research Methods. http://eprints.ncrm.ac.uk/2273/4/how_many_interviews.pdf

Bamford, J. (2008). Strategies for the improvement of international students' academic and cultural experiences of studying in the UK. *The Enhancing Series Case Studies: International Learning Experience: The Higher Education Academy*, *11*, 25–28. https://www.academia.edu/6481826/Strategies_for_the_Improvement_of_Intern

ational_Students_Academic_and_Cultural_Experiences_of_Studying_in_the_UK

Bartram, B. (2008). Supporting international students in higher education: Constructions, cultures and clashes. *Teaching in Higher Education*, *13*(6), 657–668. https://doi.org/10.1080/13562510802452384

Bass, M., & Hessenauer, P. (2023). Can mobile device use in the classroom facilitate student engagement in higher education? In K. Arai (Ed.), *Proceedings of the International Conference on Artificial Intelligence and Computer Engineering* (pp. 831–840). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-37717-4_53

Beetham, H., & Sharpe, R. (Eds.). (2019). *Rethinking pedagogy for a digital age: Principles and practices of design* (2nd ed.). Routledge. https://doi.org/10.4324/9781351252805

Bennett, S., Ichikawa, A., Lin, Y., Pannirselvam, M., & Uerpairojkit, T. (2023). Working towards inclusive definitions of international students: Reflecting, refiguring and reconceptualising as international students and researchers. In Mittelmeier, J., Lomer, S. & Unkule, K. (Eds.) *Research with International Students*. Routledge, pp.11-20.

BERA. (2018). *Ethical guidelines for educational research* (4th ed.). https://www.bera.ac.uk/publication/ethical-guidelines-for-educational-research-2018-online

Berinsky, A. J., Huber, G. A., & Lenz, G. S. (2012). Evaluating online labor markets for experimental research: Amazon.com's Mechanical Turk. *Political Analysis*, *20*(3), 351–368. https://doi.org/10.1093/pan/mpr057

Biggs, J. B. (1996). Enhancing teaching through constructive alignment. *Higher Education, 32*, 347–364. https://doi.org/10.1007/BF00138871

Biggs, J., & Tang, C. (2011). *Teaching for quality learning at university* (4th ed.). McGraw-Hill Education. http://ebookcentral.proquest.com/lib/lancaster/detail.action?docID=798265

Bilgrami, A. (2002). Realism and relativism. *Philosophical Issues*, *12*, 1–25. https://www.jstor.org/stable/3050540

Black, A. M. (2022). Vocational and mature student success in higher education foundation programmes. *The Journal of Continuing Higher Education, 70*(2), 105–121. https://doi.org/10.1080/07377363.2021.1923306

Blasco, M. (2015). Making the tacit explicit: Rethinking culturally inclusive pedagogy in international student academic adaptation. *Pedagogy, Culture & Society*, *23*(1), 85–106. https://doi.org/10.1080/14681366.2014.922120

Bligh, B., Lee, K., Crook, C., Cutajar, M., Delia, C. S., Lei, Y., Lower, M., Marín, V. I., Miles, R., & Moffitt, P. (2022). Beyond 'pivoting': Capitalising on new knowledge and experience: in technology and educational 'pivoting' in the wake of the Covid-19 pandemic: A collected commentary. *Studies in Technology Enhanced Learning, 2*(2). https://doi.org/10.21428/8c225f6e.e946d39b

Bogdan, R. C., & Biklen, S. K. (1998). *Qualitative research in education: An introduction to theory and methods*. Allyn and Bacon.

Bovill, C. (2020). Co-creation in learning and teaching: The case for a whole-class approach in higher education. *Higher Education, 79*(6), 1023–1037. https://doi.org/10.1007/s10734-019-00453-w

Bowen, S. (2005). Engaged learning: Are we all on the same page. *Peer Review*, *7*(2), 4–7. https://www.researchgate.net/publication/283361890_Engaged_learning_Are_we_all_on_the_same_page

Boulton, C. A., Hughes, E., Kent, C., Smith, J. R., & Williams, H. T. P. (2019). Student engagement and wellbeing over time at a higher education institution. *PLOS ONE*, *14*(11), e0225770. https://doi.org/10.1371/journal.pone.0225770

Bourdieu, P., & Passeron, J.-C. (1990). *Reproduction in education, society and culture* (Vol. 4). Sage.

Bowen, S. (2005). Engaged learning: Are we all on the same page? *Peer Review*, *7*(2), 4–7. https://www.researchgate.net/publication/283361890_Engaged_learning_Are_we_all_on_the_same_page

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Braun, V., & Clarke, V. (2012). Thematic analysis. In *APA handbook of research methods in psychology, Vol 2: Research designs: Quantitative, qualitative, neuropsychological, and biological* (pp. 57–71). American Psychological Association. https://doi.org/10.1037/13620-004

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, *11*(4), 589–597. https://doi.org/10.1080/2159676X.2019.1628806

Braun, V., & Clarke, V. (2022). *Thematic analysis: A practical guide* (1st ed.). Sage.

Brown, E. A., Thomas, N. J., & Thomas, L. Y. (2014). Students' willingness to use response and engagement technology in the classroom. *Journal of Hospitality, Leisure, Sport & Tourism Education*, *15*, 80–85. https://doi.org/10.1016/j.jhlste.2014.06.002

Bruner, J. (1996). *The culture of education*. Harvard University Press.

Byrne, B. (2004). Qualitative interviewing. In C. Seale (Ed.), *Researching society and culture* (2nd ed., pp. 179–192). Sage.

Byrne, D. (2022). A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality & Quantity*, *56*(3), 1391–1412. https://doi.org/10.1007/s11135-021-01182-y

Chavez, C. (2008). Conceptualizing from the inside: Advantages, complications, and demands on insider positionality. *The Qualitative Report*, *13*(3), 474–494. https://doi.org/10.46743/2160-3715/2008.1589

Chen, P.-S. D., Lambert, A. D., & Guidry, K. R. (2010). Engaging online learners: The impact of web-based learning technology on college student engagement. *Computers & Education*, *54*(4), 1222–1232. https://doi.org/10.1016/j.compedu.2009.11.008

Cheng, G. (2022). Using the community of inquiry framework to support and analyse BYOD implementation in the blended EFL classroom. *The Internet and Higher Education*, *54*, 100854. https://doi.org/10.1016/j.iheduc.2022.100854

Cheng, G., Guan, Y., & Chau, J. (2016). An empirical study towards understanding user acceptance of bring your own device (BYOD) in higher education. *Australasian Journal of Educational Technology*, *32*(4), Article 4. https://doi.org/10.14742/ajet.2792

Christian, L. M., Parsons, N. L., & Dillman, D. A. (2009). Designing scalar questions for web surveys. *Sociological Methods & Research*, *37*(3), 393–425. https://doi.org/10.1177/0049124108330004

Clark, K. R. (2018). Learning theories: Constructivism. *Radiologic Technology*, *90*(2), 180–182. http://www.radiologictechnology.org/content/90/2/180

Cleveland-Innes, M., & Campbell, P. (2012). Emotional presence, learning, and the online learning environment. *International Review of Research in Open and Distributed Learning*, *13*(4), 269–292. https://doi.org/10.19173/irrodl.v13i4.1234

Cohen, L., Manion, L., & Morrison, K. (2000). *Research methods in education* (5th ed.). Routledge. https://doi.org/10.4324/9780203224342

Cohen, L., Manion, L., & Morrison, K. (2017). *Research methods in education* (8th ed.). Routledge. https://doi.org/10.4324/9781315456539

Collingridge, D. S., & Gantt, E. E. (2019). Republished: The quality of qualitative research. *American Journal of Medical Quality*, *34*(5), 439–445. https://doi.org/10.1177/1062860619873187

Creswell, J. W. (2014). *A concise introduction to mixed methods research*. Sage. https://books.google.com/books?hl=en&lr=&id=51UXBAAAQBAJ&oi=fnd&pg=PR1

Creswell, J. W. (2020). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Pearson Higher Ed.

Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage.

Creswell, J. W. (with Poth, C. N.). (2024). *Qualitative inquiry and research design: Choosing among five approaches* (5th ed.). Sage.

Crombie, P. (2020). Faces, hearts and thumbs: Exploring the use of emoji in online teacher-student communications in higher education. *Journal of Academic Language and Learning*, *14*(1), Article 1. https://journal.aall.org.au/index.php/jall/article/view/620

Crompton, H. (2013). A historical overview of mobile learning: Toward learner-centered education. In Z. L. Berge & L. Y. Muilenburg (Eds.), *Handbook of mobile learning* (pp. 3–14). Routledge. https://www.taylorfrancis.com/chapters/edit/10.4324/9780203118764-2/historical-overview-learning-helen-crompton

Crompton, H., & Burke, D. (2018). The use of mobile learning in higher education: A systematic review. *Computers & Education*, *123*, 53–64. https://doi.org/10.1016/j.compedu.2018.04.007

Crossan, F. (2003). Research philosophy: Towards an understanding. *Nurse Researcher*, *11*(1), 46. https://doi.org/10.7748/nr2003.10.11.1.46.c5914

Cypress, B. S. (2017). Rigor or reliability and validity in qualitative research: Perspectives, strategies, reconceptualization, and recommendations. *Dimensions of Critical Care Nursing*, *36*(4), 253. https://doi.org/10.1097/DCC.0000000000000253

Dahlan, M. M., Sabri, S., Mohtaram, S., Kamarudin, N. S., & Ahmad, F. S. Z. (2024). Empowering learning: The impact of interactive ebooks. *Educational Administration: Theory and Practice*, *30*(5), Article 5. https://doi.org/10.53555/kuey.v30i5.5079

Dashtestani, R. (2013). EFL teachers' and students' perspectives on the use of electronic dictionaries for learning English. *CALL-EJ*, *14*(2), 51–65. https://callej.org/index.php/journal/article/view/210

Dever, N., Barnes, L., & Long, W. R. (2021). Model of mitigation: Strategies to utilise unique insider research opportunities. *International Journal of Emerging Trends in Social Sciences*, 10(2), 75–84. https://doi.org/10.20448/2001.102.75.84

Dikko, M. (2016). Establishing construct validity and reliability: Pilot testing of a qualitative interview for research in takaful (Islamic insurance). *The Qualitative Report*, *21*(3), 521–528. https://doi.org/10.46743/2160-3715/2016.2243

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). *Internet, phone, mail, and mixed-mode surveys: The tailored design method*. John Wiley & Sons. https://books.google.com/books?hl=en&lr=&id=fhQNBAAAQBAJ&oi=fnd&pg=PR11

Drever, E. (1995). *Using semi-structured interviews in small-scale research: A teacher's guide*. Scottish Council for Research in Education.

Dunwoodie, K., Macaulay, L., & Newman, A. (2023). Qualitative interviewing in the field of work and organisational psychology: Benefits, challenges and guidelines for researchers and reviewers. *Applied Psychology*, *72*(2), 863–889. https://doi.org/10.1111/apps.12414

Duthoit, J. D. (2024). LearningApps. WordWall. *The French Review*, *98*(1), 162–163. https://doi.org/10.1353/tfr.2024.a937866

Edwards, V., & Ran, A. (2006). Meeting the needs of Chinese students in British higher education. In: Coverdale-Jones, T. & Rastall, P. (Eds.) Internationalising the University: The Chinese context (pp.185-205). Springer. https://doi.org/10.1057/9780230235007_11

Engle, R. A., & Conant, F. R. (2002). Guiding principles for fostering productive disciplinary engagement: Explaining an emergent argument in a community of learners classroom. *Cognition and Instruction*, *20*(4), 399–483. https://doi.org/10.1207/S1532690XCI2004_1

Esawe, A. T., Esawe, K. T., & Esawe, N. T. (2024). Evaluating schoolteachers' acceptance of m-learning during Covid-19 using the technology acceptance model: The moderating role of gender and age. *SN Social Sciences*, *4*(2), 43. https://doi.org/10.1007/s43545-024-00830-y

Eze, S. C., & Inegbedion, H. (2015). Key factors influencing academic performance of international students in UK universities: A preliminary investigation. *British Journal of Education*, *3*(5), 55–68. https://doi.org/10.37745/bje.vol3.no5.P55-68.2013

Fabro, K., & Garrison, D. (1998). Computer conferencing and higher-order learning. *Indian Journal of Open Learning*, *7*(1), 41–54. https://www.researchgate.net/publication/234665042_Computer_Conferencing_and_Higher-Order_Learning

Fanshawe, M., Brown, A., & Redmond, P. (2025). Using an online engagement framework to redesign the learning environment for higher education students: A design experiment approach. *Online Learning, 29*(2), 269–297. https://doi.org/10.24059/olj.v29i2.4447

Feng, X., Xie, J., & Liu, Y. (2017). Using the community of inquiry framework to scaffold online tutoring. *International Review of Research in Open and Distributed Learning*, *18*(2), 162–188. https://doi.org/10.19173/irrodl.v18i2.2362

Ferdig, R. E., Cavanaugh, C., & Freidhoff, J. R. (2015). Research into K-12 online and blended learning. In R. E. Ferdig, C. Cavanaugh, & J. R. Freidhoff (Eds.), *Online, blended, and distance education in schools* (pp. 52–58). Routledge. https://www.taylorfrancis.com/chapters/edit/10.4324/9781003446194-7/research-12-online-blended-learning-richard-ferdig-cathy-cavanaugh-joseph-freidhoff

Fernandez, S. (2018). University student's perspectives on using cell phones in classrooms—Are they dialing up disaster? *The Turkish Online Journal of Educational Technology*, *17*(1). https://tojet.net/articles/v17i1/17124.pdf

Fitra, R., & Raudhatul, H. (2024). College students' perception in the use of LearningApps.org in studying English. *International Conference on Language and Language Teaching*, 035–041. https://www.incollt.unipasby.ac.id/proceedings/index.php/incollt/article/view/93

FitzPatrick, B. (2019). Validity in qualitative health education research. *Currents in Pharmacy Teaching and Learning*, *11*(2), 211–217. https://doi.org/10.1016/j.cptl.2018.11.014

Flaming, D. (2004). Nursing theories as nursing ontologies. *Nursing Philosophy*, *5*(3), 224–229. https://doi.org/10.1111/j.1466-769X.2004.00191.x

Fleming, J. (2018). Recognizing and resolving the challenges of being an insider researcher in work-integrated learning. *International Journal of Work-Integrated Learning*, *19*(3), 311–320. https://files.eric.ed.gov/fulltext/EJ1196753.pdf

Foley, O. (2010). An investigation into the barriers faced by international students in their use of a small Irish academic library (PhD Thesis, Aberystwyth University). https://pure.aber.ac.uk/ws/portalfiles/portal/28093217/O._F._Dissertation.pdf

Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, *74*(1), 59–109. https://doi.org/10.3102/00346543074001059

Freire, P. (1970). *Pedagogy of the oppressed*. Bloomsbury Academic.

Gardner, S., & Nesi, H. (2013). A classification of genre families in university student writing. *Applied Linguistics, 34*(1), 25–52. https://doi.org/10.1093/applin/ams024

Garrison, D. R., Anderson, T., & Archer, W. (1999). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, *2*(2), 87–105. https://doi.org/10.1016/S1096-7516(00)00016-6

Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The Internet and Higher Education*, *7*(2), 95–105. https://doi.org/10.1016/S1096-7516(00)00016-6

Gehlbach, H., & Artino, A. R. J. (2018). The survey checklist (manifesto). *Academic Medicine*, *93*(3), 360. http://doi.org/10.1097/ACM.0000000000002083

George, D. A. S., George, A. S. H., & Baskar, D. T. (2023). Emoji unite: Examining the rise of emoji as an international language bridging cultural and generational divides. *Partners Universal International Innovation Journal*, *1*(4), Article 4. https://doi.org/10.5281/zenodo.8280356

Gibbs, G. R. (2007). Thematic coding and categorizing. In *Analyzing qualitative data* (pp. 38–56). Sage. https://study.sagepub.com/sites/default/files/analyzing-qualitative-da.pdf

Greene, M. J. (2014). On the inside looking in: Methodological insights and challenges in conducting qualitative insider research. *The Qualitative Report*, *19*(29), 1–13. https://doi.org/10.46743/2160-3715/2014.1106

Griffiths, D. S., Winstanley, D., & Gabriel, Y. (2005). Learning shock: The trauma of return to formal learning. *Management Learning*, *36*(3), 275–297. https://doi.org/10.1177/1350507605055347

Gu, Q., & Maley, A. (2008). Changing places: A study of Chinese students in the UK. *Language and Intercultural Communication*, *8*(4), 224–245. https://doi.org/10.1080/14708470802303025

Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105–163). Sage.

Gutiérrez, K. D., & Rogoff, B. (2009). Cultural ways of learning. In B. Schwarz, T. Dreyfus, & R. Hershkowitz (Eds.), *Knowledge, values and educational policy* (pp. 68–80). Routledge.

Ha, M.-J. (2020). Implementing mobile-phone-based student response system in a large undergraduate course. *Computer Assisted Language Learning-Electronic Journal (CALL-EJ)*, *21*(3), 122–139. https://callej.org/index.php/journal/article/view/315

Healey, M., Flint, A., & Harrington, K. (2016). Students as partners: Reflections on a conceptual model. *Teaching & Learning Inquiry, 4*(2), 1–13. https://doi.org/10.20343/teachlearninqu.4.2.3

Henderson, D., Woodcock, H., Mehta, J., Khan, N., Shivji, V., Richardson, C., Aya, H., Ziser, S., Pollara, G., & Burns, A. (2020). Keep calm and carry on learning: Using Microsoft Teams to deliver a medical education programme during the COVID-19 pandemic. *Future Healthcare Journal*, *7*(3), e67–e70. https://doi.org/10.7861/fhj.2020-0071

Heng, T. T. (2018). Different is not deficient: Contradicting stereotypes of Chinese international students in U.S. higher education. *Studies in Higher Education, 43*(1), 22–36. https://doi.org/10.1080/03075079.2016.1152466

Hill, D. L., & Fielden, K. (2017, December 18). Using Mentimeter to promote student engagement and inclusion [Conference or Workshop Item]. Pedagogy in Practice seminar, Fusehill Street, Carlisle, UK. University of Cumbria. https://www.cumbria.ac.uk/about/events/university-events/carlisle---fusehill-street/pedagogy-in-practice-seminar.php

Hockey, J. (1993). Research methods—researching peers and familiar settings. *Research Papers in Education*, *8*(2), 199–225. https://doi.org/10.1080/0267152930080205

Horbatiuk, R. M., Dudka, U. T., Kabak, V. V., & Rebukha, L. Z. (2024). Interactive learning in economic education: Integrating LearningApps.org tasks into Moodle. *CTE Workshop Proceedings*, *11*, 340–355. https://doi.org/10.55056/cte.691

House of Lords Select Committee on Communications and Digital. (2023). Digital exclusion: A new era of digital exclusion? *UK Parliament*. https://publications.parliament.uk/pa/ld5803/ldselect/ldcomm/219/219.pdf

Hyland, K., & Hamp-Lyons, L. (2002). EAP: Issues and directions. *Journal of English for Academic Purposes, 1*(1), 1–12. https://doi.org/10.1016/S1475-1585(02)00002-4

Hyland, K. (2006). *English for academic purposes: An advanced resource book*. Routledge.

Janssen, J., Erkens, G., & Kirschner, P. A. (2011). Group awareness tools: It's what you do with it that matters. *Computers in Human Behavior*, *27*(3), 1046–1058. https://doi.org/10.1016/j.chb.2010.06.002

Järvelä, S., Järvenoja, H., Malmberg, J., Isohätälä, J., & Sobocinski, M. (2016). How do types of interaction and phases of self-regulated learning set a stage for collaborative engagement? *Learning and Instruction*, *43*, 39–51. https://doi.org/10.1016/j.learninstruc.2016.01.005

Jeong, Y., Im, H., & Kim, J. (2018). Analysis of educational effectiveness of digital textbooks for elementary students. *Journal of the Korean Association of Information Education*, *22*(1), 141–149. https://doi.org/10.14352/jkaie.2018.22.1.141

Jones, J., & Fleischer, S. (2012). Staying on course: Factors affecting first year international students' decisions to persist or withdraw from degrees in a post 1992 UK university. *Practice and Evidence of the Scholarship of Teaching and Learning in Higher Education*, *7*(1), 21–46. https://research.brighton.ac.uk/en/publications/staying-on-course-factors-affecting-first-year-international-stud

Jones, J., Fleischer, S., McNair, A., & Masika, R. (2020). The International Foundation Year and first year transition: Building capital, evolving habitus, developing belonging, preparing for success. *Teaching in Higher Education*, *25*(1), 36–51. https://doi.org/10.1080/13562517.2018.1541879

Kahu, E. R. (2013). Framing student engagement in higher education. *Studies in Higher Education*, *38*(5), 758–773. https://doi.org/10.1080/03075079.2011.598505

Karakoç Öztürk, B. (2021). Digital reading and the concept of ebook: Metaphorical analysis of preservice teachers' perceptions regarding the concept of ebook. *Sage Open*, *11*(2), 21582440211016841. https://doi.org/10.1177/21582440211016841

Katz, J. E. (Ed.). (2017). *Magic in the air: Mobile communication and the transformation of social life*. Routledge. https://doi.org/10.4324/9780203786741

Kearsley, G., & Shneiderman, B. (1998). Engagement theory: A framework for technology-based teaching and learning. *Educational Technology*, *38*(5), 20–23. https://www.jstor.org/stable/pdf/44428478.pdf

Khrisat, A. A., & Mahmoud, S. S. (2013). Integrating mobile phones into the EFL Foundation Year classroom in King Abdulaziz University/KSA: Effects on

achievement in general English and students' attitudes. *English Language Teaching*, *6*(8), 162–174. https://doi.org/10.5539/elt.v6n8p162

Kim, M., Knotts, T. L., & Albers, N. D. (2021). The role of motivation in online professional learning strategies. *Administrative Issues Journal: Connecting Education, Practice, and Research*, *11*(1), 36–53. https://dc.swosu.edu/cgi/viewcontent.cgi?article=1317&context=aij

Kim, M., Knotts, T. L., Albers, N. D., & James, K. E. (2022). Emoji use as a catalyst for relationship building and sustaining attention in online classes: An empirical study. *Education Sciences*, *12*(12), Article 12. https://doi.org/10.3390/educsci12120874

Kirkwood, A., & Price, L. (2006). Adaptation for a changing environment: Developing learning and teaching with information and communication technologies. *Teaching in Higher Education, 11*(2), 231–243. https://oro.open.ac.uk/6216/1/Adaptation_for_a_changing_environmentPDF.pdf

Kirkwood, A., & Price, L. (2014). Technology-enhanced learning and teaching in higher education: What is 'enhanced' and how do we know? A Critical Literature Review. *Learning, Media and Technology, 39*(1), 6–36. https://doi.org/10.1080/17439884.2013.770404

Kivunja, C., & Kuyini, A. B. (2017). Understanding and applying research paradigms in educational contexts. *International Journal of Higher Education*, *6*(5), 26. https://doi.org/10.5430/ijhe.v6n5p26

Kozan, K., & Caskurlu, S. (2018). On the Nth presence for the community of inquiry framework. *Computers & Education*, *122*, 104–118. https://doi.org/10.1016/j.compedu.2018.03.010

Krause, K.-L. (2005). Understanding and promoting student engagement in university learning communities. *Paper Presented as Keynote Address: Engaged, Inert or Otherwise Occupied*, 21–22. https://www.liberty.edu/center-for-academic-development/wp-content/uploads/sites/99/2019/10/Stud_eng.pdf

Kuforiji, P., & Williams, B. (2017). Teachers' perceptions and use of e-readers. *Perspectives in Learning*, *16*(1), 3. https://csuepress.columbusstate.edu/pil/vol16/iss1/3/

Kuh, G. D. (2009). What student affairs professionals need to know about student engagement. *Journal of College Student Development*, *50*(6), 683–706. https://doi.org/10.1353/csd.0.0099

Kuznekoff, J. H., & Titsworth, S. (2013). The impact of mobile phone usage on student learning. *Communication Education*, *62*(3), 233–252. https://doi.org/10.1080/03634523.2013.767917

Kvale, S. (1996). *InterViews: An introduction to qualitative research interviewing*. Sage.

Lambert, M. (2019). *Practical research methods in education: An early researcher's critical guide*. Routledge.

Lea, M. R. (2004). Academic literacies: A pedagogy for course design. *Studies in Higher Education, 29*(6), 739–756. https://doi.org/10.1080/0307507042000287230

Lea, M. R., & Street, B. V. (1998). Student writing in higher education: An academic literacies approach. *Studies in Higher Education, 23*(2), 157–172. https://doi.org/10.1080/03075079812331380364

Lee, J. J. (2010). International students' experiences and attitudes at a US host institution: Self-reports and future recommendations. *Journal of Research in International Education*, *9*(1), 66–84. https://doi.org/10.1177/1475240909356382

Leech, S., Marshall, C. A., & Wren, G. (2016). Understanding foundation year provision. In C. A. Marshall, S. J. Nolan, & D. P. Newton (Eds.), *Widening participation, higher education and non-traditional students: Supporting transitions through foundation programmes* (pp. 19–40). Palgrave Macmillan UK. https://doi.org/10.1057/978-1-349-94969-4_2

Leung, L. (2015). Validity, reliability, and generalizability in qualitative... *Journal of Family Medicine and Primary Care*. https://journals.lww.com/jfmpc/fulltext/2015/04030/validity,_reliability,_and_generalizability_in.8.aspx

Levy, M., & Steel, C. (2015). Language learner perspectives on the functionality and use of electronic language dictionaries. *ReCALL*, *27*(2), 177–196. https://doi.org/10.1017/S095834401400038X

Liang, X. (2024). Using icebreaker questions to improve Chinese students' engagement in transnational education – An action research. *European Journal of Education*, *59*(2), e12621. https://doi.org/10.1111/ejed.12621

Lim, W. N. (2017). Improving student engagement in higher education through mobile-based interactive teaching model using Socrative. *2017 IEEE Global Engineering Education Conference (EDUCON)*, 404–412. https://ieeexplore.ieee.org/abstract/document/7942879/

Limniou, M. (2021). The effect of digital device usage on student academic performance: A case study. *Education Sciences*, *11*(3), 121. https://doi.org/10.3390/educsci11030121

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newberry Park.

Linnenbrink-Garcia, L., Rogat, T. K., & Koskey, K. L. (2011). Affect and engagement during small group instruction. *Contemporary Educational Psychology*, *36*(1), 13–24. https://doi.org/10.1016/j.cedpsych.2010.09.001

Liu, Y., & Qian, Y. (2023). Causes, mechanisms and consequences of othering international students in higher education. In Mittelmeier, J., Lomer, S. & Unkule, K. (Eds.) *Research with International Students*. Routledge, pp.54-63.

Lohr, M. (2014). EBooks as PDF files, in ePub format or as interactive iBooks? Digital books in physics lessons of secondary education. *ERIC*. https://eric.ed.gov/?id=ED557240

Lomer, S., Hayat Taha, S., & Hayes, A. (2023). *Deficit narratives in research on international students*. In J. Mittelmeier, S. Lomer, & K. Unkule (Eds.), *Research with international students* (Chapter 7). Routledge, pp. 74-84; https://doi.org/10.4324/9781003290803-10

Lomer, S., & Mittelmeier, J. (2023). Mapping the research on pedagogies with international students in the UK: A systematic literature review. *Teaching in Higher Education, 28*(6), 1243–1263. https://doi.org/10.1080/13562517.2021.1872532

Lowell, V. L., & Ashby, I. V. (2018). Supporting the development of collaboration and feedback skills in instructional designers. *Journal of Computing in Higher Education*, *30*(1), 72–92. https://doi.org/10.1007/s12528-018-9170-8

Mackenzie, N., & Knipe, S. (2006). Research dilemmas: Paradigms, methods and methodology. *Issues in Educational Research*, *16*(2), 193–205. https://www.iier.org.au/iier16/mackenzie.html

Macmillan Education. (2025). Language Hub—Macmillan English—Course. https://www.macmillanenglish.com/catalogue/courses/adults-and-young-adults/language-hub/course-information

Madiseh, F. R., Abri, A. A., & Sobhanifar, H. (2023). Integrating Mentimeter to boost students' motivation, autonomy, and achievement. *Computer-Assisted Language Learning Electronic Journal*, *24*(3), Article 3. https://callej.org/index.php/journal/article/view/47

Marshall, C., & Rossman, G. B. (2014). *Designing qualitative research*. SAGE Publications.

Martin, L., & Tapp, D. (2019). Teaching with Teams: An introduction to teaching an undergraduate law module using Microsoft Teams. *Innovative Practice in Higher Education Journal*, *3*(3), 58–66. https://journals.staffs.ac.uk/index.php/ipihe/article/view/64

McKnight, K., O'Malley, K., Ruzic, R., Horsley, M. K., Franey, J. J., & Bassett, K. (2016). Teaching in a digital age: How educators use technology to improve student learning. *Journal of Research on Technology in Education*, *48*(3), 194–211. https://doi.org/10.1080/15391523.2016.1175856

McVey, M., Edmond, A., & Montgomery, D. (2019). Supporting students to develop their digital literacies using Microsoft Teams. https://eprints.gla.ac.uk/206468/

Mehdizadeh, N., & Scott, G. (2005). Adjustment problems of Iranian international students in Scotland. *International Education Journal*, *6*(4), 484–493. http://ehlt.flinders.edu.au/education/iej/articles/v6n4/mehdizadeh/paper.pdf

Mendoza, J. S., Pody, B. C., Lee, S., Kim, M., & McDonough, I. M. (2018). The effect of cellphones on attention and learning: The influences of time, distraction, and nomophobia. *Computers in Human Behavior*, *86*, 52–60. https://doi.org/10.1016/j.chb.2018.04.027

Mercer, J. (2007). The challenges of insider research in educational institutions: Wielding a double-edged sword and resolving delicate dilemmas. *Oxford Review of Education*, *33*(1), 1–17. https://doi.org/10.1080/03054980601094651

Merchant, G. (2012). Mobile practices in everyday life: Popular digital technologies and schooling revisited. *British Journal of Educational Technology*, *43*(5), 770–782. https://doi.org/10.1111/j.1467-8535.2012.01352.x

Merriam, S. B. (1998). *Qualitative research and case study applications in education*. Jossey-Bass Publishers.

Mittelmeier, J., Lomer, S., & Unkule, K. (Eds.). (2023). *Research with international students: Critical conceptual and methodological considerations*. Routledge. https://doi.org/10.4324/9781003290803

Mohamad, M., Rashid, N., & Wan, M. W. M. (2017). The advantages and disadvantages of e-dictionaries to enhance vocabulary learning of ESL learners. *Asian Conference on Education & International Development 2017*

Official Conference Proceedings. http://papers.iafor.org/wp-content/uploads/papers/aceid2017/ACEID2017_34731.pdf

Mulyadi, E., Permatasari, D., Soares, D., Syarifudin, M., Pinto, T. da S., & Sarmento, J. (2024). Culture shock: Challenges of international students. *International Journal of Health Engineering and Technology (IJHET)*, *3*(1). https://doi.org/10.55227/ijhet.v3i1.208

Naciri, A., Baba, M. A., Achbani, A., & Kharbach, A. (2020). Mobile learning in higher education: Unavoidable alternative during COVID-19. *Aquademia*, *4*(1), ep20016. https://doi.org/10.29333/aquademia/8227

Nemoto, T., & Beglar, D. (2014). Likert scale questionnaires. *JALT 2013 Conference Proceedings*, 1–8. https://jalt-publications.org/sites/default/files/pdf-article/jalt2013_001.pdf

Newman, C. (1996). Student-maintained portfolios and peer mentoring as a means of empowering and motivating students: Unexpected outcomes. https://eric.ed.gov/?id=ED404346

Nguyen, H. U. N., & Duong, L. N. T. (2021). The challenges of e-learning through Microsoft Teams for EFL students at Van Lang University in COVID-19. *AsiaCALL Online Journal*, *12*(4), 18–29. https://www.asiacall.info/acoj/index.php/journal/article/view/60

Nicolaidou, I. (2018). Turn your classroom into a gameshow with a game-based student response system. *European Conference on Games Based Learning*, 487–XXII. https://search.proquest.com/openview/93c7d7cf869bbe7aea66e6f145ed9a1f/1?pq-origsite=gscholar&cbl=396495

Northumbria University. (2024). International Foundation, Northumbria University. Northumbria Pathways. https://pathway.northumbria.ac.uk/courses/international-foundation/

Nygaard, C. (Ed.). (2016). *Technology-enhanced learning in higher education*. Libri Publishing Limited.

O'Byrne, W. I., & Pytash, K. E. (2015). Hybrid and blended learning: Modifying pedagogy across path, pace, time, and place. *Journal of Adolescent & Adult Literacy*, *59*(2), 137–140. https://doi.org/10.1002/jaal.463

Ofcom. (2025). Telecommunications market data update. https://www.ofcom.org.uk/phones-and-broadband/telecoms-infrastructure/telecommunications-market-data-update

Oliemat, A., Khasawneh, S., Alkhazaleh, M., Abu-Alruz, J., & Hamadneh, N. (2024). Microsoft Teams as an online education system in higher education: The case for Jordan. *International Journal of Education and Practice*, *12*(3), 851–863. https://doi.org/10.18488/61.V12I3.3761

Osborne, M. (2003). Increasing or widening participation in higher education? A European overview. *European Journal of Education, 38*(1), 5–24. https://doi.org/10.1111/1467-3435.00125

Özhan, Ş. Ç., & Kocadere, S. A. (2020). The effects of flow, emotional engagement, and motivation on success in a gamified online learning environment. *Journal of Educational Computing Research*, *57*(8), 2006–2031. https://doi.org/10.1177/0735633118823159

Pan, W., Guo, S., Alikonis, C., & Bai, H. (2008). Do intervention programs assist students to succeed in college? A multilevel longitudinal study. *College Student Journal*, *42*(1), 90–99. https://go.gale.com/ps/i.do?p=AONE&sw=w&issn=01463934&v=2.1&it=r&id=GALE%7CA177412561&sid=googleScholar&linkaccess=abs&userGroupName=anon%7Ebb234240&aty=open-web-entry

Patrick, H., Ryan, A. M., & Kaplan, A. (2007). Early adolescents' perceptions of the classroom social environment, motivational beliefs, and engagement. *Journal of*

Educational Psychology, *99*(1), 83–98. https://doi.org/10.1037/0022-0663.99.1.83

Patton, M. Q. (1990). *Qualitative evaluation and research methods*. SAGE Publications, inc. https://psycnet.apa.org/record/1990-97369-000

Piaget, J. (1972). *The psychology of the child*. Basic Books.

Pittaway, S. M., & Moss, T. (2014). 'Initially, we were just names on a computer screen': Designing engagement in online teacher education. *Australian Journal of Teacher Education (Online)*, *39*(7), 140–156. https://doi.org/10.14221/ajte.2014v39n7.10

Plump, C. M., & LaRosa, J. (2017). Using Kahoot! in the classroom to create engagement and active learning: A game-based technology solution for eLearning novices. *Management Teaching Review*, *2*(2), 151–158. https://doi.org/10.1177/2379298116689783

Powell, T. (2021). LearningApps.org. *Die Unterrichtspraxis*, *54*(2), 339–340. https://www.proquest.com/docview/2606198915/abstract/238CB6BF08D442F3PQ/1

Proudfoot, K. (2023). Inductive/deductive hybrid thematic analysis in mixed methods research. *Journal of Mixed Methods Research*, *17*(3), 308–326. https://doi.org/10.1177/15586898221126816

Ptasznik, B., Wolfer, S., & Lew, R. (2024). A learners' dictionary versus ChatGPT in receptive and productive lexical tasks. *International Journal of Lexicography*, *37*(3), 322–336. https://doi.org/10.1093/ijl/ecae011

Qualtrics. (2024). Online survey software. Qualtrics. https://www.qualtrics.com/en-gb/strategy/research/survey-software/

Quan, R., Smailes, J., & Fraser, W. (2013). The transition experiences of direct entrants from overseas higher education partners into UK universities.

Teaching in Higher Education, *18*(4), 414–426. https://doi.org/10.1080/13562517.2012.752729

Redmond, P., Foote, S. M., Brown, A., Mixson-Brookshire, D., Abawi, L.-A., & Henderson, R. (2022). Adopting a framework to support the process of critical reflection and understanding of online engagement. *Journal of Computing in Higher Education, 34*(1), 109–131. https://doi.org/10.1007/s12528-021-09281-3

Redmond, P., Heffernan, A., Abawi, L., Brown, A., & Henderson, R. (2018). An online engagement framework for higher education. *Online Learning*, *22*(1). https://doi.org/10.24059/olj.v22i1.1175

Reeve, J., & Tseng, C.-M. (2011). Agency as a fourth aspect of students' engagement during learning activities. *Contemporary Educational Psychology*, *36*(4), 257–267. https://doi.org/10.1016/j.cedpsych.2011.05.002

Reilly, M., Shen, H., Calder, P., & Duh, H. (2014). Towards a collaborative classroom through shared workspaces on mobile devices. *Proceedings of the 28th International BCS Human Computer Interaction Conference (HCI 2014)*, 335–340. https://www.scienceopen.com/hosted-document?doi=10.14236/ewic/HCI2014.54

Reschly, A. L., & Christenson, S. L. (Eds.). (2022). *Handbook of research on student engagement*. Springer International Publishing. https://doi.org/10.1007/978-3-031-07853-8

Rogat, T. K., & Adams-Wiggins, K. R. (2014). Other-regulation in collaborative groups: Implications for regulation quality. *Instructional Science*, *42*(6), 879–904. https://doi.org/10.1007/s11251-014-9322-9

Rose, J., & Johnson, C. W. (2020). Contextualizing reliability and validity in qualitative research: Toward more rigorous and trustworthy qualitative social science in leisure research. *Journal of Leisure Research*, *51*(4), 432–451. https://doi.org/10.1080/00222216.2020.1722042

Salhab, R., & Daher, W. (2023). University students' engagement in mobile learning. *European Journal of Investigation in Health, Psychology and Education*, *13*(1), 202–216. https://doi.org/10.3390/ejihpe13010016

Salomon, G., & Globerson, T. (1989). When teams do not function the way they ought to. *International Journal of Educational Research*, *13*(1), 89–99. https://doi.org/10.1016/0883-0355(89)90018-9

Sari, A. B. P. (2021). The impacts of Mentimeter-based activities on EFL students' engagement in Indonesia. *LLT Journal: A Journal on Language and Language Teaching*, *24*(1), Article 1. https://doi.org/10.24071/llt.v24i1.3025

Sarrab, M. (2012). Mobile learning (M-learning) and educational environments. *International Journal of Distributed and Parallel Systems*, *3*(4), 31–38. https://doi.org/10.5121/ijdps.2012.3404

Schnitzler, K., Holzberger, D., & Seidel, T. (2021). All better than being disengaged: Student engagement patterns and their relations to academic self-concept and achievement. *European Journal of Psychology of Education*, *36*(3), 627–652. https://doi.org/10.1007/s10212-020-00500-6

Scotland, J. (2012). Exploring the philosophical underpinnings of research: Relating ontology and epistemology to the methodology and methods of the scientific, interpretive, and critical research paradigms. *English Language Teaching*, *5*(9), 9–16. https://doi.org/10.5539/elt.v5n9p9

Selwyn, N. (2016). *Education and technology: Key issues and debates* (2nd ed.). Bloomsbury Academic.

Shah, S. (2004). The researcher/interviewer in intercultural context: A social intruder! *British Educational Research Journal*, *30*(4), 549–575. https://doi.org/10.1080/0141192042000237239

Shernoff, D. J., & Hoogstra, L. (2001). Continuing motivation beyond the high school classroom. *New Directions for Child and Adolescent Development*, *2001*(93), 73–88. https://doi.org/10.1002/cd.26

Siddiq, F., Scherer, R., & Tondeur, J. (2016). Teachers' emphasis on developing students' digital information and communication skills (TEDDICS): A new construct in 21st century education. *Computers & Education*, *92*, 1–14. https://doi.org/10.1016/j.compedu.2015.10.006

Simeoni, R. J. (2009). Student retention trends within a health foundation year and implications for orientation, engagement and retention strategies. *12th Pacific Rim First Year in Higher Education Conference. Townsville, Australia*. https://unistars.org/past_papers/papers09/content/pdf/2B.pdf

Simons, H. (2009). *Case study research in practice*. Sage.

Sinha, S., Rogat, T. K., Adams-Wiggins, K. R., & Hmelo-Silver, C. E. (2015). Collaborative group engagement in a computer-supported inquiry learning environment. *International Journal of Computer-Supported Collaborative Learning*, *10*(3), 273–307. https://doi.org/10.1007/s11412-015-9218-y

Sinkovics, R. R., Penz, E., & Ghauri, P. N. (2008). Enhancing the trustworthiness of qualitative research in international business. *Management International Review*, *48*(6), 689–714. https://doi.org/10.1007/s11575-008-0103-z

Skinner, E. A., & Raine, K. E. (2022). Unlocking the positive synergy between engagement and motivation. In A. L. Reschly & S. L. Christenson (Eds.), *Handbook of research on student engagement* (pp. 25–56). Springer International Publishing. https://doi.org/10.1007/978-3-031-07853-8_2

Smith, J. A., & Osborn, M. (2007). Pain as an assault on the self: An interpretative phenomenological analysis of the psychological impact of chronic benign low back pain. *Psychology & Health*, *22*(5), 517–534. https://doi.org/10.1080/14768320600941756

Smyth, A., & Holian, R. (2008). Credibility issues in research from within organisations. In P. Sikes & A. Potts (Eds.), *Researching education from the inside* (pp. 33–48). Routledge.

Sobaih, A. E. E., Salem, A. E., Hasanein, A. M., & Elnasr, A. E. A. (2021). Responses to Covid-19 in higher education: Students' learning experience using Microsoft Teams versus social network sites. *Sustainability*, *13*(18), 10036. https://doi.org/10.3390/su131810036

Song, Y., & Wen, Y. (2018). Integrating various apps on BYOD (Bring Your Own Device) into seamless inquiry-based learning to enhance primary students' science learning. *Journal of Science Education and Technology*, *27*(2), 165–176. https://doi.org/10.1007/s10956-017-9715-z

Stake, R. E. (1995). *The art of case study research*. Sage Publications.

Staker, H. (2011). The rise of K-12 blended learning: Profiles of emerging models. *Innosight Institute*. https://eric.ed.gov/?id=ed535181

Stepanyuk, A., Mironets, L., Olendr, T., Tsidylo, I., & Kormer, M. (2020). Integrated use of the LearningApps.org resource and information devices in the process of biology school course studying. *Proceedings of the 1st Symposium on Advances in Educational Technology*, 452–465. https://doi.org/10.5220/0010932800003364

Stephens, G. E., & Roberts, K. L. (2017). Facilitating collaboration in online groups. *Journal of Educators Online*, *14*(1), n1. https://eric.ed.gov/?id=EJ1133614

Suliman, M. A. E., Zhang, W., & Sleiman, K. A. A. (2024). Factors affecting students' intention to use m-learning: Extending the technology acceptance model (TAM). *Innovations in Education and Teaching International*, *61*(6), 1184–1199. https://doi.org/10.1080/14703297.2023.2239203

SurveyMonkey. (2024). Gathering demographic information from surveys. SurveyMonkey. https://uk.surveymonkey.com/mp/gathering-demographic-information-from-surveys/

Tarazi, A., & Ortega-Martín, J. L. (2023). Enhancing EFL students' engagement in online synchronous classes: The role of the Mentimeter platform. *Frontiers in Psychology*, *14*. https://doi.org/10.3389/fpsyg.2023.1127520

Teddlie, C., & Tashakkori, A. (2003). Major issues and controversies in the use of mixed methods in the social and behavioral sciences. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 13–50). Sage.

Teddlie, C., & Yu, F. (2007). Mixed methods sampling: A typology with examples. *Journal of Mixed Methods Research*, *1*(1), 77–100. https://doi.org/10.1177/1558689806292430

Temple, B., & Young, A. (2004). Qualitative research and translation dilemmas. *Qualitative Research, 4*(2), 161–178. https://doi.org/10.1177/1468794104044430

Teoh, S. H., Boon Zik Hong, J., Md Shamsudin, N., Singh, P., & Hartono, R. (2025). Students' engagement in a hybrid classroom: A comparison between face-to-face and virtual environments. *Cogent Education*, *12*(1), 2451497. https://doi.org/10.1080/2331186X.2025.2451497

Thomas, G. (2021). *How to do your case study* (3rd ed.). SAGE Publications Ltd.

Tlili, A., Zhao, J., Yang, K., Wang, Y., Bozkurt, A., Huang, R., Bonk, C. J., & Ashraf, M. A. (2024). Going beyond books to using e-books in education: A systematic literature review of empirical studies. *Interactive Learning Environments*. https://www.tandfonline.com/doi/abs/10.1080/10494820.2022.2141786

Toma, R., & Berge, M. (2024). What drives student engagement? A community engagement framework for online education. *International Journal of Advanced Corporate Learning, 17*(3), 94–107. https://doi.org/10.3991/ijac.v17i3.45729

Traxler, J. (2005). Defining mobile learning. *IADIS International Conference Mobile Learning*, *261*, 266. https://www.academia.edu/download/48311578/Defining_mobile_learning20160825-18088-1t8r01w.pdf

Traxler, J., & Kukulska-Hulme, A. (Eds.). (2005). *Mobile learning: A handbook for educators and trainers*. Routledge. https://doi.org/10.4324/9780203003428

Trowler, P., & Trowler, V. (2010). Student engagement evidence summary. https://eprints.lancs.ac.uk/id/eprint/61680/1/Deliverable_2._Evidence_Summary._Nov_2010.pdf

Trowler, V. (2010). Student engagement literature review.

Trowler, V. (2015). Negotiating contestations and 'chaotic conceptions': Engaging 'non-traditional' students in higher education. *Higher Education Quarterly*, *69*(3), 295–310. https://doi.org/10.1111/hequ.12071

Trowler, V., Allan, R. L., Bryk, J., & Din, R. R. (2022). Pathways to student engagement: Beyond triggers and mechanisms at the engagement interface. *Higher Education*, *84*(4), 761–777. https://doi.org/10.1007/s10734-021-00798-1

Twum, R. (2017). Utilization of smartphones in science teaching and learning in selected universities in Ghana. *Journal of Education and Practice*, *8*(7), 216–228. https://eric.ed.gov/?id=EJ1137622

UCAS. (2023, January 27). The individuality of student choice. UCAS. https://www.ucas.com/connect/blogs/individuality-student-choice

University of London. (2024). International Foundation Programme, University of London. https://www.london.ac.uk/study/courses/undergraduate/international-foundation-programme

University of Salford. (2024). International Foundation Year, University of Salford. https://www.salford.ac.uk/courses/foundation-year/international-foundation-year

University of Sheffield. (2024). International Foundation Year, University of Sheffield IC. https://usic.sheffield.ac.uk/programmes/international-foundation-year

University of Sussex. (2024). International Foundation Year entry requirements, University of Sussex ISC. https://isc.sussex.ac.uk/how-to-apply/entry-requirements/international-foundation-year

Vahedi, Z., Zannella, L., & Want, S. C. (2021). Students' use of information and communication technologies in the classroom: Uses, restriction, and integration. *Active Learning in Higher Education*, *22*(3), 215–228. https://doi.org/10.1177/1469787419861926

Van Den Bossche, P., Gijselaers, W. H., Segers, M., & Kirschner, P. A. (2006). Social and cognitive factors driving teamwork in collaborative learning environments: Team learning beliefs and behaviors. *Small Group Research*, *37*(5), 490–521. https://doi.org/10.1177/1046496406292938

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

Wang, A. I., & Tahir, R. (2020). The effect of using Kahoot! for learning – A literature review. *Computers & Education*, *149*, 103818. https://doi.org/10.1016/j.compedu.2020.103818

Wang, M., & Eccles, J. S. (2012). Social support matters: Longitudinal effects of social support on three dimensions of school engagement from middle to high school. *Child Development*, *83*(3), 877–895. https://doi.org/10.1111/j.1467-8624.2012.01745.x

Wang, M.-T., Fredricks, J., Ye, F., Hofkens, T., & Linn, J. S. (2019). Conceptualization and assessment of adolescents' engagement and disengagement in school: A multidimensional school engagement scale. *European Journal of Psychological Assessment*, *35*(4), 592–606. https://doi.org/10.1027/1015-5759/a000431

Wang, M.-T., & Hofkens, T. L. (2020). Beyond classroom academics: A school-wide and multi-contextual perspective on student engagement in school. *Adolescent Research Review*, *5*(4), 419–433. https://doi.org/10.1007/s40894-019-00115-z

Warren, D. (2002). Curriculum design in a context of widening participation in higher education. *Arts and Humanities in Higher Education, 1*(1), 85–99. https://doi.org/10.1177/1474022202001001007

Watkins, D. A., & Biggs, J. B. (1996). *The Chinese learner: Cultural, psychological, and contextual influences*. Comparative Education Research Centre, Faculty of Education, University of Hong Kong; The Australian Council for Educational Research, Ltd.

Wea, K. N., & Kuki, A. D. (2021). Students' perceptions of using Microsoft Teams application in online learning during the Covid-19 pandemic. *Journal of Physics: Conference Series*, *1842*(1), 012016. https://iopscience.iop.org/article/10.1088/1742-6596/1842/1/012016/meta

Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge University Press. https://doi.org/10.1017/CBO9780511803932

Wilson, C. (2013). *Credible checklists and quality questionnaires: A user-centered design method* (1st ed.). Morgan Kaufmann.

Wilson, S. (1979). Explorations of the usefulness of case study evaluations. *Evaluation Quarterly*, *3*(3), 446–459. https://doi.org/10.1177/0193841X7900300307

Witecki, G., & Nonnecke, B. (2015). Engagement in digital lecture halls: A study of student course engagement and mobile device use during lecture. *Journal of Information Technology Education: Research*, *14*, 73–90. https://doi.org/10.28945/2103

Wood, L. A., & Lithauer, P. (2005). The 'added value' of a foundation programme. *South African Journal of Higher Education, 19*(5), 1002–1019. https://doi.org/10.4314/sajhe.v19i5.25541

Wright, R., Jones, G., & D'Alba, A. (2013). Student preferences for rapport-building traits of online instructors. *2013 Research Exchange Conference*, 37. https://brenda-quintanilla.com/wp-content/uploads/2013/01/unt-research-exchange-conference-2013-proceedings-final1.pdf#page=37

Xie, K., Heddy, B. C., & Vongkulluksn, V. W. (2019). Examining engagement in context using experience-sampling method with mobile technology.

Contemporary Educational Psychology, *59*, 101788. https://doi.org/10.1016/j.cedpsych.2019.101788

Yazan, B. (2015). Three approaches to case study methods in education: Yin, Merriam, and Stake. *The Qualitative Report*, *20*(2), 134–152. https://doi.org/10.46743/2160-3715/2015.2102

Yen, T. V. M., & Nhi, N. T. U. (2021). The practice of online English teaching and learning with Microsoft Teams: From students' view. *AsiaCALL Online Journal*, *12*(2), 51–57. https://asiacall.info/acoj/index.php/journal/article/view/41

Yin, R. K. (2002). *Case study research: Design and methods* (Vol. 5). Sage Publications.

Yin, R. K. (2003). Designing case studies. *Qualitative Research Methods*, *5*(14), 359–386.

Young, M. R. (2010). The art and science of fostering engaged learning. *Academy of Educational Leadership Journal*, *14*, 1–18. https://www.proquest.com/docview/808150126/abstract/EE4B68CD382E43CDPQ/1

Zhang, D., Hennessy, S., & Pérez-Paredes, P. (2025). An investigation of Chinese EFL learners' acceptance of mobile dictionaries in English language learning. *Computer Assisted Language Learning*, *38*(3), 317–341. https://doi.org/10.1080/09588221.2023.2189915

Ziegenfuss, J. Y., Easterday, C. A., Dinh, J. M., JaKa, M. M., Kottke, T. E., & Canterbury, M. (2021). Impact of demographic survey questions on response rate and measurement: A randomized experiment. *Survey Practice*, *14*(1). https://doi.org/10.29115/SP-2021-0010

Zulfakar, A. N., & Zabidi, N. A. (2020). Perceptions and attitudes of the use of mobile phones in English language learning. *Jurnal Wacana Sarjana*, *4*(3), 1–11. http://spaj.ukm.my/jws/index.php/jws/article/view/326