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SPECIAL ISSUE ON

Engaged Learning and Innovative Teaching in Higher Education

The key economic issues of the next few decades, such as a plateauing of human capital, a reversion to sole cognitive skills, overeducation, AI and robotics, as well as longer lifespans and working careers, call for a reassessment of the goals and function of higher education. The ramifications for the higher education systems are significantly impacted by these challenges. For instance, it is predicted that the returns on education will increase; more people will pursue higher education at an older age; the emphasis is more on employment; older students shall be more motivated than younger ones typically on reskilling, upskilling, transition, and renewal of their skills; and more people will earn competence and skills in addition to pursuing education that culminates to qualification certificates. There have been extensive discussions about the future of higher education over the past years, as evidenced by the publication of numerous research reports, including Education for Life and Work: Developing Transferrable Knowledge and Skills in the 21st Century by National Research Council; New Skills Now: Inclusion in the Digital Economy, and It's Learning, Just Not As We Know It: How to Accelerate Skills Acquisition in the Age of Intelligent Technologies 2018, by Accenture; 21 Jobs of the Future: A Guide to Getting and Staying Employed Over the Next Ten Years 2017 and 21 More Jobs of the Future: A Guide to Getting and Staying Employed through 2029 (2018), by Cognizant; The Future of Education and Skills: Education 2030 (2018) and Trends Shaping Education 2019 by the Organization for Economic Cooperation and Development (OECD); World Development Report 2019: The Changing Nature of Work, from the World Bank; The Future of Jobs Report 2018 and Dialogue Series on New Economic and Social Frontiers Shaping the New Economy in the Fourth Industrial Revolution 2019 by the World Economic Forum, and so on.

In light of the aforementioned, innovation in higher education is required to ensure that students find higher education meaningful and relevant in order to be motivated to learn. This demand applies not only to classroom pedagogy, but also to curriculum and programme development up to the level of the institution.

As a result of discussions about the future of higher education, a number of initiatives in higher education have been launched to address the challenges, including Stanford's Open Loop University initiative, Georgia Tech's Commission on Creating the Next in Education, Harvard University's 60-year curriculum, and others. They share a common goal of developing and implementing innovative programmes and curricula at the institutional level, with a focus not only on young adults but also on lifelong education; as long as the individual finds higher education relevant and valuable, they are welcome to return to the institution to reskill, upskill, transition, or renew their skills.

In this Special Issue on Engaged Learning and Innovative Teaching in Higher Education, eight research reports are published after undergoing double-blind peer review. There is no overlap in this collection of research on various engaging learning pedagogies and/or the use of technology in higher education. Most of them revisit and further investigate innovative pedagogies and technology practises for a deeper understanding of the more effective teaching and learning process in higher education. Some of

them demonstrate that, neither technology nor pedagogy is to fault for a lack of comprehension of the learning processes; rather, it is the challenges and barriers encountered in practice that merit further investigation.

Higher education places a substantial emphasis on practicums, which are intended to provide authentic, real-world learning opportunities. It makes learning relevant and meaningful and engages students. The study entitled, "Student-Teachers' Practicum Experiences in Hong Kong and Macao during the COVID-19 Pandemic," investigates two groups of pre-service teachers in Hong Kong and Macao to identify the critical features of practicum practices during the COVID-19 pandemic. During the pandemic, the implementation of practicum practice was mainly distance learning in nature. The study identified various pedagogical foci in the practicum, the different assessment tasks being developed, consequences of parental involvement, evaluations of the exercise, as well as challenges faced by student-teachers during the practicum.

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Through the use of games, learning content is presented in ways that are interesting, entertaining, or captivating. Positive emotional states can be induced by playing games, which improves learning. When a player's attention is totally absorbed by the game and enjoyable activities, the player frequently experiences a state of flow in which one entirely loses all sense of time and place. Students fully engage in educational games with immediate rewards and constructive competition. Students remain motivated to learn while playing. The study entitled, "Creativity and digital game-based learning: A game selection framework for new DGBL teachers," proposes a three-stage filtration system for the selection of digital game-based learning-friendly games with a demonstration of creative pedagogical ideas in adapting the Nintendo Switch digital game Animal Crossing: New Horizons (ACNH) in the design of digital game-based learning environment.

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Human species is sociable and human brains evolved for social interaction. Including activities where students connect with each other to make learning easy because education is linked with how humans learn. Asynchronous online discussion in a learning management system engages students by generating social learning experiences through structured curriculum-related conversations where they may collaborate and hear others' thoughts. The study entitled, "Intuited the usefulness of an asynchronous online discussion in a course management system among university students in Hong Kong," aims to explore the factors affecting the use of the asynchronous online discussion technology as in practice. It is found that students do not engage much in the activity. It was revealed that while students did not perceive the discussion useful for their learning, their perceptions were mediated by way of its practicing, students' learning strategies as well as socially desirable behaviour where socially desirable behaviour mediated the effectiveness of educational technology in enhancing learning experiences.

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A research degree's objective is to facilitate the transition from a student to an independent researcher. The supervision process is a crucial component of a successful PhD programme. The supervisor and PhD student collaborate on this process. All research degrees depend on the relationship between the student and the supervisor. A PhD student's engagement will depend on how well he/she comprehends and upholds the supervisor-student relationship. The study entitled, "Navigating a supervision model in TESOL research training: Narrative insights from Asian international PhD students," explores the complex process of supervision that leads to successful research training globally. The study discussed the adequate supervision of prospective international PhD students and proposed a humanistic model for the supervision of Asian international PhD students.

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By fostering students' motivation, autonomy, self-regulation, metacognition, and critical thinking abilities, self-directed learning keeps students engaged. Learners can gain a deeper understanding of the problem, the content, and the context by taking charge of their education. The study entitled,

"There's more than one way to personalize (online): Exploring informal, self-directed learners' autonomy preferences when learning with technology," explored learners' approaches to online self-directed learning and proposed a theoretical framework to explain differences in learning approaches. The findings depict four autonomy preferences: (1) learning in an efficient way; (2) in a structured way; (3) in a way that ensures depth of knowledge; or (4) in an experimental way. The study offered recommendations for how instructors might support learners with each preference.

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The use of multimedia in the classroom can improve learning and student engagement. It can aid in the presentation of knowledge in many formats, appeal to various learning styles, and foster creativity and curiosity. Video essays in particular can be a potent and fascinating tool for students to communicate their grasp of a certain subject or idea. Students can make a multimedia presentation that demonstrates their knowledge and creativity by integrating video content with voiceover narration. The study entitled "Students' perceptions of using video essays as assessment tools," explored the learning experience of undergraduate students on the usage of video essays for tools for assessment.

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Engaging students is one of the main challenges of online learning. It incorporates complex aspects like instructor presence, feedback, support, time invested, subject competence, information and communication skills and knowledge, technology acceptance, and use that determine the kinds of teacher-student interactions that affect student engagement. Additional elements, such as curriculum quality, design, complexity, level of required collaboration, and technological utilisation, may be taken into consideration (Hollister et al., 2022). The study entitled, "Teaching practical journalism modules online: a blessing or a nightmare to teachers?," explored effective teaching strategies to improve practical participation in online learning environment, supplemented by social media communication means after class.

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When learning is followed by immediate feedback, it pushes learners to reflect, engage, and change their behaviour right away. Learning becomes active rather than passive when feedback is provided immediately rather than over time. Through reviewing, summarising, clarifying, providing feedback, diagnosing erroneous knowledge, identifying knowledge gaps, and taking into account deviations from the ideal, using technology to enable students to also provide feedback in peer assessment increases students' critical engagement in learning. The study entitled, "Gongyeh App: EFL students' voices from Hong Kong," examines the experiences of university EFL students preparing and evaluating oral presentations via the Gongyeh App, an online presentation assessment platform devised by an EMI university in Hong Kong. It discussed pragmatic and useful learning support for students overcoming the challenges of giving feedback on oral presentations.

To provide high-quality and relevant higher education that engages students, it is essential to have a constant dialogue about the role of higher education in addressing global issues through innovative curriculum design, instructional pedagogies, assessment and feedback, and technology. This special guest issue of the *Journal of Communication and Education* is intended to serve as a forum for the engaged learning and innovative teaching in higher education. This platform should not be an one time event, but rather a constant and regular forum for the academic community to share research findings and best practises.

Will W. K. Ma
Anna Wing-bo Tso
Editors

Reference

Hollister, B., Nair, P., Hill-Lindsay, S., & Chukoskie, L. (2022). Engagement in online learning: Student attitudes and behavior during COVID-19. Frontiers in Education, *7*. DOI:10.3389/feduc.2022.851019

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Creativity and Digital Game-based Learning: A Game Selection Framework for New DGBL Teachers (feat. Animal Crossing: New Horizons)

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Abstract: During the global COVID-19 pandemic, there was a significant increase in the popularity of digital games around the world. However, the adoption of digital games in education has mostly remained stagnant due to significant barriers faced by new teachers of digital game-based learning (DGBL). These barriers include the lack of easy-to-grasp resources on digital game selection and creative pedagogical ideas to integrate digital games into their lessons. To address this issue, this paper proposes a three-stage filtration system for the selection of DGBL-friendly games to fill the niche. The system consists of three filters: game acceptance, game design, and game support. These filters serve as stages for efficient identification, screening, and inclusion processes respectively. To demonstrate the effectiveness of the proposed framework, the Nintendo Switch game *Animal Crossing: New Horizons* (ACNH) is used as a case study. Virtual interviews with experienced (student) players of ACNH are conducted and excerpts from these interviews are documented. Additionally, ample creative ideas for adapting the digital game are provided. By implementing this three-stage filtration system and using ACNH as a case study, this paper aims to provide valuable insights and practical examples for educators to overcome the barriers they face when incorporating digital games into their teaching practices.

Keywords: digital game-based learning, DGBL, creativity, animal crossing, game selection

1. Introduction

During the global COVID-19 pandemic, the world has turned to digital gaming as the source of joy, fun, relaxation, decompression, as well as a means of escape from reality. According to reports by Entertainment Software Association (2020; 2022), there are about 227 million video gamers in 2021 in the U.S. (up 11% from the pre-pandemic 2019). Among them, 74% of parents play video games with their children weekly (up from 57% in 2019), 80% of Americans believe video games have educational benefits for their children (up from 74% in 2019), and 68% agree that video games offer opportunities for their children to improve their creative skills. This overwhelming level of digital game acceptance is strong evidence of the immense potential for digital game-based learning (DGBL) to become mainstream in education.

The term digital game-based learning (DGBL) is notably defined by Prensky (2001, pp. 145-146) as “any marriage of educational content and computer games" or “any learning game on a computer or online”. Special purpose game and off-the-shelf commercial game are the two main types of digital games in DGBL. The former is purposefully created with an aim to educate its players about a particular subject matter, while the latter is developed mainly for entertaining purposes (All et al., 2016). In the case where the scope is focused on pedagogical processes leading to the achievement of intended

learning outcomes rather than the game content and design or gaming, a few scholars have suggested that the term digital game-based teaching (DGBT) be distinguished from DGBL (Pivec & Pivec, 2010). However, DGBL remains as the dominant term adopted in literature even when teaching and pedagogies are discussed. It is worth noting that DGBL is conceptually different from gamification, which is commonly defined as the "use of game design elements in non-game contexts" (Deterding et al., 2011, p. 10) to perform tasks that one would ordinarily not attempt (McGonigal, 2011). Since the scope of this paper examines how a digital game can be used for teaching and learning, DGBL is a more suitable term to use in this context.

DGBL began to surface between 1980s and 1990s with educational theorists arguing the possibility of implementing digital games in classroom settings. For example, Malone (1980) and Bowman Jr. (1982) argue that fun digital games can enhance student involvement, extrinsic and intrinsic motivation, and as a result, the effectiveness of learning. Subrahmanyam and Greenfield (1994) suggest that video games might be useful in developing spatial abilities. Heinich (1996) provides a lesson plan on using computer-based simulation games in class. However, formal DGBL research only took shape in 2000s and Prensky (2001) is commonly credited as the researcher who popularised DGBL. Interests in the approach has grown exponentially in the last two decades, and there is now a significant body of DGBL literature which focuses on measuring motivation (e.g., Erhel & Jamet, 2013; Papastergiou, 2009), learning effectiveness (e.g., All et al., 2016; Erhel & Jamet, 2013; Hou & Li, 2014), problem-solving (e.g., Kiili, 2007; Kim et al., 2009), engagement (e.g., Connolly et al., 2012), and assessing educational values in digital-game design (e.g., Hong et al., 2009), to list a few.

From an academic perspective, there is a wealth of literature on DGBL and related publications have been on an upward trajectory since early 2000s. This means there should be adequate academic resources to satisfy teachers' enquiries. However, despite DBGL receiving a high degree of academic attention, the adoption of digital game-based activities in education is still far from becoming mainstream (Blume, 2020). Strangely, the academic community does not seem to be interested in finding the root cause, as very few studies have attempted to look into the issue, let alone providing a practical solution. Becker and Jacobsen (2005)'s quantitative study is a rare attempt that has provided useful insights of the situation, shedding light on difficulties faced by new DGBL teachers, in particular. The researchers analysed 109 e-survey responses from K-12 teachers in Canada and found a number of the major barriers faced by teachers in implementing DGBL. Some barriers include:

a) the lack of understanding in gaming or ways to integrate games into lessons (i.e., both hardware and software),

b) the lack of knowledge in game selection (both in terms of learners' interest and suitability for teaching and learning),

c) high cost (e.g., time and effort) in teaching preparation, and

d) low return (i.e., DBGL is not schools' priority) in learning outcomes.

In addition, the researchers also noted the lack of solutions to the identified problems, so much to the point that "anything that can be done in the way of support in this arena, including online resources and repositories that are easy to find and navigate, is likely to have a positive impact" (Becker and Jacobsen, 2005, p.8). In other words, in order to help DGBL teachers overcome these barriers, there is a need to first overcome another major problem – the lack of helpful resources tailored to the needs of new DGBL teachers.

Current assessment frameworks/models for evaluating educational values of digital games in literature, while important in research, are less appliable in practice. Firstly, they are fundamentally built upon empirical quantitative data commonly collected from expert game designers (Hébert & Jenson, 2019) and scholars who are familiar with a particular game (e.g., All et al., 2016), but rarely do these relevant studies gather comments from experienced (student) players of the games, or aim at guiding new DGBL teachers. Understandably then the product is expert-oriented rather than practitioner-oriented.

Secondly, these frameworks/models generally have a high barrier to entry for practitioners: they are complex and research-oriented in design, thus requiring a heavy investment of time and effort from the teachers' side.

There are at least three debatable assumptions embedded in the methodological approach of these studies: 1) the assumption that experts know more about gaming than gamers/teachers; 2) the assumption that experts know what gamers/teachers need; 3) the assumption that new DGBL teachers have adequate understanding of multiple games to accurately perform their game evaluation using experts' models.

Assumptions 1 and 2 are false when experienced gamers are considered because in this highly market-driven paradigm of modern game design, game developers should continuously seek gamers' critical comments and reviews to improve their designs in subsequent online update patches. Assumptions 2 and 3 are also false when new DGBL teachers (especially teachers with little gaming experience) are considered. The return-on-investment of time and effort to familiarise with both the game to be analysed and the complex assessment criteria within existing frameworks is simply too low for most new DGBL teachers to attempt. As Becker (2007, p. 479) points out, teachers rarely "have the time to locate, review and synthesise findings from scholarly publications and then create lesson plans from scratch using what for many of them is an unfamiliar technology". Even if some teachers can afford to conduct analyses, the results often remain as abstract concepts which cannot be easily translated to useful information for game selection nor lesson planning.

As seen from the above discussion, there is clearly a research gap to fill in terms of providing new DGBL practitioners with an appliable, low cost-high return, low barrier-to-entry game selection framework. Success in accomplishing this endeavour would provide educators with a go-to resource to initiate their DGBL projects, ensuring that the benefits derived from their investment of time and effort are significantly proportional. Therefore, this paper aims to provide valuable insights and practical examples for educators to overcome the barriers they face when incorporating digital games into their teaching practices.

In the following sections, I first draw evidence from relevant literature to review some variables that will likely affect new DGBL teachers in the process of digital game selection. I then propose a cost-effective framework for selecting a DGBL-friendly digital game, placing special emphasis on helping teachers who are new to digital gaming. To illustrate the application of this framework, the Nintendo Switch game *Animal Crossing: New Horizons* (ACNH) is utilized as a case study. Furthermore, this study offers valuable and creative examples to enhance educators' understanding of the framework and facilitate the development of engaging teaching materials.

2. Variables Affecting New DGBL Teachers' Game Selection

Drawing findings from relevant DGBL literature, I contextualise some variables that will likely affect new DGBL teachers in the process of digital game selection.

2.1 Game Acceptance

Game selection is one of the first steps of DGBL, and for new DGBL teachers, identifying suitable DGBL-friendly games for teaching can be a major obstacle. To quickly narrow down a search to a manageable number and minimise time spent on trialling random games, it can be highly efficient to consider a game's level of acceptance as it is identified in studies as a main prerequisite for effective digital game-based learning (see Davis, 1989; Hou & Li, 2014; Hsu & Lu, 2004).

Two objective considerations of game acceptance are the game's popularity and recognition.

2.1.1 Popularity

Popularity has been the indisputable reason justifying research on pop culture (including digital games) in the field of cultural studies (Pennycook, 2007). In the context of digital game, it is commonly measured by the number of players participating in a game and may be represented in the forms of aggregate review scores (e.g., from Metacritic) (Tyack et al., 2018). Popularity is a 'from below' phenomenon driven by digital gamers rather than game publishers. This provides strong evidence of usability from the gaming community (Livingston et al., 2010). Popularity also has a positive correlation with the longevity of the game (Choudhury et al., 2018), which should be an important consideration for teachers who are looking to invest time and energy developing DGBL activities.

2.1.2 Recognition

As opposed to popularity, recognition is a 'from above' concept that refers to a formal achievement of a digital game and is generally recognised in the forms of game awards honoured by established bodies in the video game industry. Given that teachers often have limited time to trial various digital games and may be less informed about the latest development in digital games, it can be time-saving to use lists of award-winning games as the point of departure in the search for a suitable digital game.

Because both popularity and recognition are highly accessible information on the internet and that popular and recognised games can better sustain players/learners' long-term interest, selecting a potentially DGBL-friendly digital game from a list of popular and widely recognised games can save teachers valuable time. It is worth noting that both popularity and recognition are not viewed from a teacher's perspective because they are not teacher-centred concepts. Instead, they are concepts 'from below' and 'from above' respectively', allowing teachers to approach the discussion 'from around' or 'from the sides'.

2.2 Game Design

Game design has been the focus of numerous studies on educational (digital/video) games (see for Dondlinger, 2007; Hong et al., 2009; Ibrahim et al., 2012; McGann et al., 2019; Wei & Li, 2010, for reviews of related literature) and has shown to be correlated with students' level of game acceptance in digital (simulation) games (Chang et al., 2009). Game design is particularly crucial to the success/failure of a DGBL lesson because a poorly designed game can add cognitive load to players, which can lower motivation and learning effectiveness (Ibrahim et al., 2012).

Many existing frameworks of game design have, understandably, emphasized factors or elements within the digital game itself. Prensky (2001, p. 119) posits that all digital games should include six structural elements: rules, goals and objectives, conflict/competition/challenge/opposition, interaction, and representation or story. Hunicke et al.'s (2004) Mechanics, Dynamics, and Aesthetics (MDA) framework proposes a taxonomy that includes sensation, fantasy, narrative, challenge, fellowship, discovery, expression, and submission. And more recently, Pawar et al. (2020) suggest three emerging factors, namely, emotional design, musical score, and game mechanics design. However, while these frameworks are important at the time they were proposed and useful in their own right, they are not developed with the notion of internet connectivity (i.e., online gaming) in mind. In fact, because internet communications have improved dramatically over the last two decades, many modern digital games have placed significant emphasis on maximising the benefits of internet connectivity. Five relevant variables are discussed in this section: freedom of creativity, the mechanism of sharing, target audience, the mechanism of collecting, and the ownership of virtual time and game pace.

2.2.1 Freedom of Creativity

Arguably one of the most crucial and significant changes in game design in the last two decades is the transition from 'designed' creativity (i.e., all digital game elements that are created and permitted by game designers) to 'designable' creativity (i.e., taking all the digital game elements that are created and

given by the game designers to freely create a game and thus a virtual world that an individual player wants). Examples of popular games of this type are often simulation games such as the Sims series (Electronic Arts Inc., n.d.), Transport Tycoon (Sawyer, n.d.) and the Super Mario Maker series (Nintendo, n.d.), but also include any games of which their computer codes can be modified by players themselves.

The ownership of creative freedom is crucial to any DGBL teachers who intend to create their unique digital e-learning environment, because it grants players/learners the power to establish their identity/individuality, which can be a strong motivator of learning. Cuenca and Martín Cáceres (2010, p. 1344) argue that freedom of creativity in digital games, from a Social Science perspective, can "help to construct the personal and collective identity of individuals, through the characters with whom they interact and the actions that these take", essentially allowing players/learners to be their ideal virtual-selves.

2.2.2 The Mechanism of Sharing

When choosing a multiplayer online game for DGBL, teachers should place strong emphasis on the mechanism of sharing. The mechanism of sharing can be realised in many forms of virtual interaction in digital games, such as in the exchange of text messages, sound effects, facial and body expressions, and virtual items (e.g., in-game collectibles, and custom-designed virtual items). Research has shown that digital games with these means of social interactivity can have positive benefits to players/learners' psychological and social well-being (Halbrook et al., 2019). In addition, the availability of item sharing via the internet provides flexibility for DGBL teachers to share customed in-game materials with players/learners.

2.2.3 Target Audience

When selecting a DGBL-friendly game, teachers will likely consider its suitability based on the target audience's age and needs, which determine the subject/topics taught, the content of lessons, types of in-class activity, ethics, and any ethical issues with the use of the game in teaching.

2.2.4 The Mechanism of Collecting

Everyone loves collecting. It is suggested that "[a]t a fundamental level, gathering or collecting objects of all kinds is part of human psychology" (Dillon, 2019, p. 255). There is a large body of literature on the psychology of collecting, theorizing the many reasons why humans love to collect items. According to Dillon (2019, p. 256), the consensus among social scientists and historians is that collecting is commonly motivated by "interest, identity, and the provision of personal satisfaction or pleasure." All these motivations can be satisfied if the mechanism of collecting is implemented. The mechanism of collecting is also closely related to a reward system, which shapes players/learners' behaviour through positive reinforcement by offering rewards after the completion of tasks (see reinforcement in Skinner, 1947), and is key to players/learners' engagement (Johnson et al., 2016).

2.2.5 Ownership of Virtual Time and Game Pace

It is important for players/learners to have ownership of virtual time and game pace in order to facilitate learning. The former allows one to control the 'time' construed in a digital game, while the latter gives freedom to attempt tasks at one's own pace without time limit. Alessi and Trollip (2001, p. 21) argue that time and pace affect the ease of perception, and "information presented too quickly or too slowly will increase the difficulty of both attention and perception". Ibrahim et al. (2012, p. 30) echo that both playful and educational game content should be adjusted to fit players' preferred pace, as this would give players "the opportunity to construct a personal profile, and encourage him or her to master the game and complete all steps of the newly customised environment". Essentially, students should be given adequate control of virtual time and game pace to attempt and return to a task at a later time.

2.3 Game Support

Game support is the support to a digital game either provided by the official channel or external/third parties. It is an area which, to my knowledge, has been largely ignored in the current literature but is a critical consideration for all DGBL teachers because it concerns the long-term usability of digital games for DGBL. These three aspects are longevity, social connectivity/interactivity, and community support.

2.3.1 Longevity

Longevity of a digital game involves the duration of which the game can last before its official game support ends, and consequently losing its online-playing functionality. According to Owen Mahoney, CEO of video game maker Nexon, longevity positively correlates to the popularity of the game and "is probably the single most important idea in video games" (Choudhury et al., 2018). It is important for teachers to take longevity into consideration to avoid creating teaching and learning resources for a game that is reaching the end of its playable lifecycle. Teachers should also prepare a 'Plan B' for the digital game they pick (see section 3.3.3), so that certain aspects of teaching can also be retained even if the game servers are permanently shut down. In general, popular games have a longer playable lifespan, such as EverQuest (since 1999), Ultima Online (since 1997), and Final Fantasy 11 (since 2002) (Gerencser, 2021).

2.3.2 Social Connectivity/Interactivity

Social connectivity/interactivity in the current context of digital games refers to the capability for players to communicate/interact with one another in-game via internet connection. Through social connectivity/interactivity, players/learners can provide help to one another, "create, expand or animate their social network" and promote participation, teamwork, as well as the digital game itself using the communication channels provided by the game (Bouvier et al., 2014, p. 500). As a result, the game's popularity can be maintained, which directly contributes to its longevity. DGBL teachers can also utilise these channels to provide teaching and learning instructions, facilitate in-game activities, share (multimedia) resources, bond with students, and build rapport.

2.3.3 Community Support

Community support refers to both technical and educational support offered not by official channels, but unofficially by communities made up of fans and supporters of digital games. Gaming communities generally support players by sharing homemade in-game modification tools (or mods in short, see Tyack et al., 2018) such as skins, opensource programming codes, modding guides and tutorials, as well as walkthroughs and hacks produced or discovered by gamers. Through these communities, creativity is refined, formed, reformed, implemented in-game, and shared beyond-game (i.e., via the internet).

The reason that community support can be a crucial aspect of the game selection process for DGBL teachers is twofold. First, many useful resources are already created by gaming communities and are readily available on various online platforms, thus teachers need not spend extra time and effort on reinventing the wheel. Second, unofficial support and tools help to extend the lifespan of a game, particularly when a game company decides to end its official support or discontinue the game. For example, The OpenTTD (2021) project is an unofficial extension of Transport Tycoon (Sawyer, n.d.) which has been supported by its community since 2005. Therefore, community support is a significant, long-term developmental aspect that DGBL teachers should seriously consider.

2.4 A Three-stage Filtration System for the Selection of DGBL-friendly Games: A Proposal

Based on the needs and variables discussed in the previous sections, I now propose a three-stage filtration system as a framework for the selection of DGBL-friendly games (see Figure 1). The word 'filtration' is meant both metaphorically and literally as the process of DGBL game selection uses three 'filters' to remove the less suitable digital games, leaving only the most DGBL-friendly ones as a result.

Inspired by Page et al.'s (2020) PRISMA (Preferred Reporting Items for Systematic reviews and Meta-Analyses) statement and its three-stage design (i.e., identification, screening, and included), this filtration system also consists of three stages: *Stage 1 filter* uses **game acceptance** as an identification strategy for teachers to search for their choices from a large pool of available digital games; *Stage 2 filter* provides teachers with several key considerations for screening in terms of **game design** which may directly affect the planning of lessons and activities; *Stage 3 filter* looks at the aspect of **game support** to determine if a digital game should be included based on its suitability for a sustainable development of teaching materials.

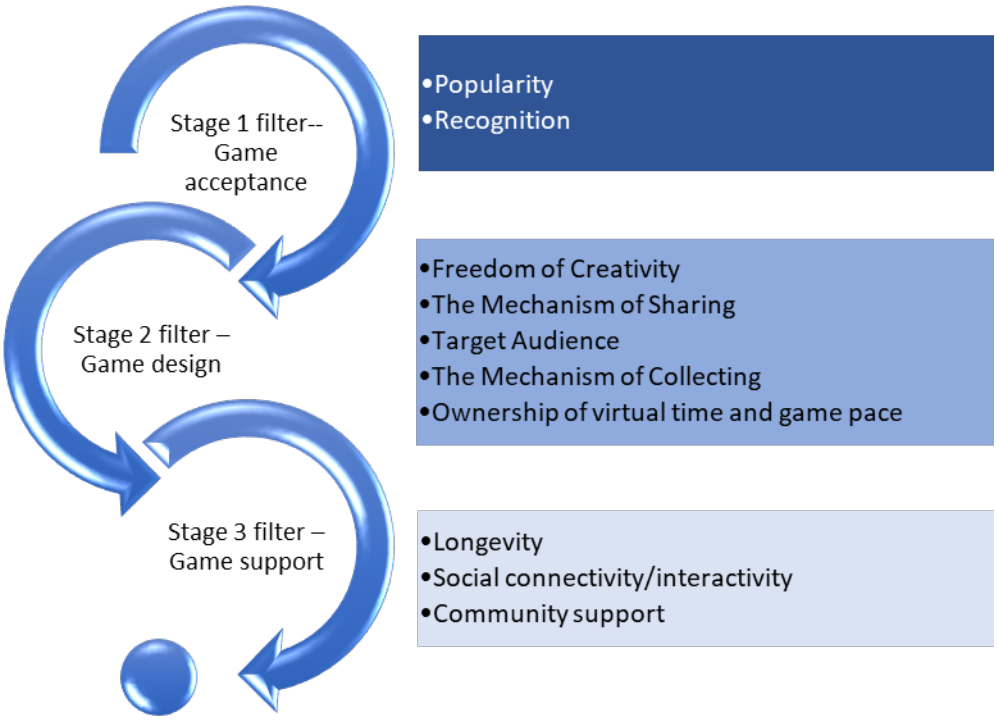

Figure 1. Three-stage filtration system for the selection of DGBL-friendly games

Each filter is comprised of relevant constructs that can facilitate game evaluation and selection. Stage 1 filter (game acceptance) consists of two constructs: popularity and recognition. Stage 2 filter (game design) is formed by five constructs: freedom of creativity, the mechanism of sharing, target audience, the mechanism of collecting, and the ownership of virtual time and game pace. Stage 3 (game support) comprises three constructs: longevity, social connectivity/interactivity, and community support. A digital game should at least meet the standards of some constructs before it can pass a specific stage to the next.

It is noteworthy that variables from different stages may be interrelated rather than mutually exclusive. For example, freedom of creativity in game design (Stage 2 filter) affects social connectivity/interactivity in game support (Stage 3 filter). The overall Stage 2 filter on game design also influences Stage 1 on game acceptance, while community support from Stage 3 filter is an instantiation/extension of popularity (Stage 1 filter). However, for the purpose of game selection, the linear progression in this proposed framework shall not affect the quality of the final result.

3. Animal Crossing: New Horizons (ACNH): A Demonstration of the Proposed Framework

In this section, a demonstration of implementing the three-stage filtration system for the selection of DGBL-friendly games is discussed. As a demonstration of how the proposed framework can be applied, each step is explained in detail using ACNH. ACNH is the fifth game in the main Animal Crossing (AC) series. Available on Nintendo Switch, it is a life-simulated game in which a player controls an avatar/character who purchased a getaway package from Tom Nook, the founder and owner of Nook Inc, and moved to a deserted island (Nintendo, 2020). This game allows the players to customize the island offline and interact with other players on the internet. This game is chosen because the "virtual togetherness" (Animal Crossing: New DH, 2020) that ACNH offers is making significant positive impact on humanities amidst COVID-19, and interest is growing in academia (Leporati, 2020). For instance, existing papers have looked at ACNH's economic success (Mateer & O'Roark, 2020), game design (Stephens & Exton, 2021), impact on well-being (Barr & Copeland-Stewart, 2021; Johannes et al., 2021; Pearce et al., 2021), general psychological behaviour (Vuong et al., 2021; Zhu, 2020), and public identity (Comerford, 2020b) during the coronavirus pandemic. A special issue devoted to the Animal Crossing series can be found in *Loading…* (2020), the Journal of the Canadian Game Studies Association.

In addition, to address the absence of player/learners' voice in existing literature, excerpts from virtual interviews (conducted on January 20, 2022 during COVID-19 lockdown) with two experienced ACNH student gamers/YouTubers via Instagram chat are included to supplement the discussion wherever appropriate. At the time of conducting the interviews and this writing (February 2022), female interviewee one (hereafter the ACNH-character pseudonym 'Kiki') completed her postgraduate degree in the United Kingdom in 2021, and female interviewee two (hereafter the ACNH-character pseudonym 'Ruby') is in her third year of undergraduate study in Hong Kong. Kiki and Ruby have played multiple games in the Animal Crossing series since 2007.

3.1 Stage 1 Filter – Game Acceptance

3.1.1 Popularity

> The internet — the previous titles of AC were launched at a time when the streaming/gaming/'let's play' culture was not in the mainstream yet; ACNH being the first AC franchise published during Web 2.0 has been greatly boosted by the technologies and culture of the recent decade. (Ruby, year 3 undergraduate student, Hong Kong)

ACNH, Nintendo's second ever bestselling game on Switch as of 31 September 2021 (34.85 million copies worldwide) (Nintendo, 2021), is published during the COVID-19 pandemic on 20 March 2020 and has been a global phenomenon ever since.

ACNH has shown to be widely popular among celebrities, singers, rappers, and politicians, including Hollywood actress Maisie Williams, Blink 182's lead vocalist Mark Hoppus, U.S. politician Alexandria Ocasio-Cortez (AOC), and U.S. President Joe Biden (Lane, 2021a). Celebrities also appear as avatars on *Animal Talking*, a live-streamed ACNH talk show on Twitch and YouTube (Whitta, 2006), to connect with the ACNH fan-base as well as to promote their work. Well-known guests on the show include English musician Sting, American rapper T-Pain, actresses Felicia Day and Brie Larson, actors Danny Trejo and Greg Grunberg, and singer Selena Gomez (see Figure 2). It is also the most tweeted game on Twitter in 2020 (Chadha, 2021). This shows that ACNH has the potential to capture the attention of the audience from a broad spectrum.

Figure 2. Selena Gomez as ACNH avatar on Animal Talking talk show

3.1.2 Recognition

ACNH has won some of the most prestigious awards in the gaming industry since its launch, including the Famitsu Dengeki Game Awards 2020's Best Game in China and Game of the Year (Stenbuck, 2021); the Game Awards 2020's Best Family Game (Stedman, 2020); Japan Game Awards 2020's Minister of Economy, Trade, and Industry Award, Award of Excellence, and Grand Award (Robinson, 2020); the Golden Joystick Awards 2020's Nintendo Game of the Year (Tyrer, 2020); the British Academy Games Awards 2021's Game Beyond Entertainment, Multiplayer (BAFTA, 2021); along with numerous nominations.

Since both popularity and recognition are satisfied, ACNH can safely pass the Stage 1 filter on game acceptance.

3.2 Stage 2 Filter – Game Design

3.2.1 Freedom of Creativity

> ACNH provides a creative outlet as in allowing players to decorate their own islands, houses, characters and even villagers to our heart's content. (Ruby, year 3 undergraduate student, Hong Kong)
>
> It gives a sense of satisfaction because we can enjoy the fruit of your time and efforts. (Kiki, Master's degree holder, United Kingdom)

Within the premises of a game such as ACNH, players can change their avatars' names, hairstyles, facial appearances, clothes, facial and body expressions through a given set of options, or freely design their very own face-paintings and clothes to express their identity/individuality. Identity/individuality can also be construed through placing a wide range of furniture items collected in-game on the island as well as residents' home. Certain furniture items permit customisation, allowing players to add their very own designs to the items.

Using terminology from Law's (2020) digital creativity multimodal analysis (DCMA), all given features and items can be considered as endo-references as a player's creativity is construed using what

are originated from within the game, whereas items that are custom-designed by a player can be considered as exo-references as they are not originated from within the game but rather beyond the game. Through combinations of endo- and exo-references, a practically unlimited patterns of creativity are both formed and reformed, unleashing unbounded creativity potential for its players, which is an essential element that sustains a learner's motivation.

An abundance of creativity can be found on social media and video sharing platforms such as YouTube. For a list of ACNH-inspired productions exhibiting high-level digital literacy, cinematographic knowledge, and story-telling skills, see Evil Imp (2020), Densle (2011), Chiinya Channel (2020), and Gugee Crossing (2020) (Figure 3).

Figure 3. Digital storytelling of the Momotarō ("Peach Boy") Japanese folklore by Gugee Crossing (2020) on YouTube

An extension of these skills can be found in the world of music, where re-creativity is realised through utilising ACNH to produce cover versions of popular songs, MTVs and soundtracks. Examples include KPop cover songs and MTVs by Maedong (2020), blending music performance with augmented ACNH animation by Minimel (2020), and an "endless life jam" of an ACNH theme song by String Player Gamer (2020) with 48 musicians.

Industries are fully aware of the vast ACNH fan-base and creativity potential and have been actively capitalizing these business opportunities, such as in film (Ramos, 2021; Terry, 2020), fashion [e.g., Loewe, Prada, and GmbH (Taylor, 2020; Yotka, 2020), UNIQLO (2021), and Puma (2021)], electronics [e.g., LG (2021)], toys [e.g., Build-A-Bear (1999), and Hasbro (Holt, 2021)], and homeware [e.g., IKEA Taiwan (2020)].

Experienced teachers and expert educators should be able to find useful ideas from these examples to adapt in their teaching.

3.2.2 The Mechanism of Sharing

For a game such as ACNH, the mechanism of sharing plays an integral part of the design. Players can create custom designs for a variety of items via the design app on their NookPhone, a virtual smartphone in the game. These items include face-paintings, wall and floor tiles, hats, caps, clothing, umbrellas, small flags, uchiwa fans, and photo stands. Custom designs can then be published on the ACNH Custom Designs Portal/game server and shared with anyone on the internet via unique 14-digit Design IDs, or Creator IDs if players wish to share their published designs by batch (see Figure 4). In

the game's first year, over 12 million custom designs created by ACNH players have been uploaded to the ACNH servers and shared on the internet (Nintendo, 2021).

Figure 4. Sample custom designs of umbrellas as 3D wooden boxes using optical illustration; creator ID included (Gugee Crossing, 2021)

Museums are among the quickest to recognise the mechanism of sharing in ACNH and the opportunity for promoting #MuseumAtHome in the versatile game during the COVID-19 lockdowns in 2020. They have created downloadable virtual arts and hold virtual exhibitions [e.g., San Antonio Museum of Art (2020); The Metropolitan Museum of Art (2020)], many of which are in collaboration with universities [e.g., Ashmolean Museum Oxford (n.d.) and University of Oxford; Mayborn Museum (2020) and Baylor University; The Magnes Collection of Jewish Art and Life (2021) and University of California, Berkeley; Bell Museum (2020) and University of Minnesota; J. Paul Getty Museum (n.d.) and University of Edinburgh (Cromar, 2020)]. These initiatives allow the appreciation and education of arts as well as the ownership of virtual arts from a distance (Crow, 2020).

3.2.3 Target Audience

Generally, choosing a game with ESRB Rating of "Everyone" (Entertainment Software Rating Board, 2022) such as ACNH should suffice, as the rating indicates that the game content is mostly suitable for all ages. However, it may be advisable to look for examples from existing work and projects that target a similar audience type.

For the case of museums using ACNH, the collaborations with universities are well-planned rather than coincidental, targeting specifically millennials/Gen Z (Khan, 2020), who are currently entering or have entered universities (Povah & Vaukins, 2017). According to Animal Crossing series producer Hisashi Nogami,

> What would the public imagine if they were asked what kind of game Animal Crossing is? I think there is probably an image of 'a game where you can live leisurely with cute animals' and 'a game for young girls'. However, looking at the gender and age data of Animal Crossing users, it is clear that the ratio of males and females is half and there are many users in their 20s and 30s. (see Craddock, 2020)

Because this age range overlaps with the age of university students in most countries and that ACNH has a global reputation, it is not difficult to understand why universities are using this game for various

social and educational activities to target their audience. For a list of creative examples, see the Harvard Law School, (2020); the University of Lincoln Students Union (n.d.); Kent State University (n.d.); Purdue University (2020); Cornell University (2021); Hannan University (2021), The University of Hong Kong (2020a, 2020b; Law, 2021) and notably, the Digital Humanities Award-winning talk series Animal Crossing: New Digital Humanities (Digital Humanities Awards, 2021), hosted by Dombrowski from Standard's Digital Humanities (Stanford University, 2021) and Grumbach from Arizona State University.

Like many other digital games, ACNH is also poplarised via YouTube, which accounts for 77% of the U.S. internet users between 15 and 35 years of age (i.e., about the same age range that has the highest number of ACNH players) as of 3rd quarter 2020 according to Statista (2022). ACNH YouTubers around the world stream their ACNH gameplay and walkthrough on YouTube and Twitch for followers to watch. Several well-known ACNH YouTubers at the time of this writing include iHasCupquake (2010) with 6.99M subscribers, ZackScottGames (2010) with 4.94M subscribers, Austin John Plays (2007) with 1.9M subscribers. The work by these gaming YouTubers in turn attracts even more followers to play the game.

3.2.4 The Mechanism of Collecting

> It has different goals that aren't too difficult to achieve that motivates you to keep playing: collecting furniture, collecting creatures, paying mortgage, decorating my house to earn 'happy home' rankings, win villagers' hearts. (Kiki, Master's degree holder, United Kingdom)

ACNH is an exemplar of a well-designed digital game which satisfies players' need for collecting. The Nintendo Switch game has a total of 80 different bugs, 80 fishes, and 40 deep-sea creatures for players to catch. Once caught, critters will be registered in a virtual NookPhone app known as Critterpedia. Critterpedia is similar to an encyclopedia, offering information on critters' names, active seasons and hours of day, as well as locations of which critters can be caught (Fandom, n.d.). Apart from collecting virtual critters, players can also dig up fossils on the island ground, and buy rare artwork from Jolly Redd the fox salesman who sells replicas as well as genuine ones. Taking these fossils and artwork to Blathers, the director of museum on the island, and the knowledgeable owl will assess the fossils and artwork for the players. Fish, insects, fossils, and artwork can be donated to the museum, where players can visit any time of the day and learn information about them. ACNH also celebrates the International Museum Day annually by holding a Stamp Rally event in which players can visit Stamp Stations located in various galleries to collect stamps on a Stamp Card (Lane, 2021b). Completion of the rally earns Art Plaque item rewards.

In addition to collecting critters, fossils and artwork, players can also collect stamps on the Nook Miles app by performing various highly achievable tasks on the island. Successfully collecting these stamps will automatically reward players with Nook Miles, a mileage system that allows players to redeem items such as furniture and fashion items, as well as air tickets or boat trips to mystery islands. In short, the mechanism of collecting is a cyclic path. It begins with actions, then specific actions (of collecting) fulfil tasks, which translate to (the collection of) stamps and rewards, and the rewards can be used to redeem other collectibles or opportunities for more actions. From these examples, it is clear that the mechanism of collecting in ACNH is educational and thoroughly planned.

Apart from the endo-referenced creativity of the in-game museum and mechanism of collecting, exo-referenced creativity is also possible beyond-game in the real world. In a joint promotion with Nintendo, the Yokohama Hakkeijima Sea Paradise (2021) recreates the ACNH International Museum Day Stamp Rally for museum visitors to collect ACNH's character stamps, while also recreating a virtual version of the museum and souvenirs for Switch gamers to visit and download (Lane, 2021c). This is a convincing demonstration of how creative, educational ideas can cross the boundaries of virtuality and reality to be applied in both the virtual and the real world.

3.2.5 Ownership of Virtual Time & Game Pace

Despite all the incentives of performing the highly achievable tasks in ACNH, it is not obligatory for players to accomplish any of them to enjoy the game. There is no competition in the design of this game, so there is no failure. While time in ACNH's world is in sync with time in the real world, players have full control of the virtual time and game pace. This is made possible because players can time-travel back and forth to the past and future, and there is virtually no timed task that must be fulfilled before a player can proceed with the game. Players can freely interact with items or villagers on the island, time-travel to a date to enjoy a missed event, or completely ignore everything and simply spend the day sitting at the beach, listening to the sound of ocean waves. Therefore, if a DGBL activity is created in ACNH, learners will also enjoy full control of virtual time and game pace.

Overall, ACNH offers great freedom of creativity for players to establish identity/individuality, has unbounded creativity potential for development beyond-game. In terms of target audience, ACNH is suitable for all ages, implements flexible mechanism of sharing and collecting for tasks in-game and beyond-game, and permits ownership of virtual time and game pace. Therefore, ACNH can safely pass the Stage 2 filter on game design.

3.3 Stage 3 Filter – Game Support

3.3.1 Longevity

Given that ACNH has only been published two years ago and is highly popular worldwide (see sections 4.3.2 and 4.3.3), it may be a safe choice for teachers to build their lessons around this game while the materials may still be reusable many years later.

3.3.2 Social Connectivity/Interactivity

Swartout and van Lent (2003, p. 34) describes that a good digital game should be "highly interactive, deliberately generating tension between the degree of control the story imposes and the player's freedom of interaction." ACNH is one such game, because the story does not impose much control on the players, players enjoy great degree of freedom of interaction in-game and beyond-game. There are four game modes that allow multiple players to play the game at the same time, namely, multiplayer, party play, local play, and online play, allowing a maximum number of eight players to play on the same island at once (Stow, 2021).

Additionally, players can also make use of the Nook Link app, a mobile app that connects the virtual world and real life, to send text messages or voice chat with another player without exchanging phone numbers while playing ACNH together (Spear, 2021). Via these modes of communication, social connectivity/interactions between (internet) friends and family members are made possible. Nicolas Vignolles, head of the association of French video game publisher association SELL, praises ACNH as "an ideal game for parent-child interaction" (France 24, 2021) while Aya Kyogoku, a Nintendo game manager/producer/director of every Animal Crossing game since 2003, considers ACNH "a communication game" that she hopes "people will play with family and friends, having fun across generations" (McDonald, 2020). ACNH producer Hisashi Nogami also hopes that "a lot of the Animal Crossing fans will use this as an escape, so they can enjoy themselves during this difficult time" (Webster, 2020). From these examples, it is evident that ACNH is well-designed for social connectivity/interactivity.

3.3.3 Community Support

In the case of ACNH, Nintendo has even embedded the concept of community support into the game mechanics through its ACNH Custom Designs Portal, allowing custom designs to be searched, downloaded, created in-game by players and then shared via social media platforms such as Twitter, YouTube, and Instagram. There are also numerous ACNH communities beyond-game [e.g., Nook's

Island (n.d.), Animal Crossing World (n.d.), subreddit NoFeeAC (Tait, 2020)] and can be easily found using internet search engines. Therefore, ACNH has a very strong community support and can safely pass the Stage 3 filter on game support, which means that ACNH qualifies as a DGBL-friendly game after successfully passing through the three-stage filtration system for the selection of DGBL-friendly games.

4. Pros and cons of Using ACNH: A Selected Digital Game for DGBL

> ACNH is a way to hang out, connect with and even make friends from all over the world amid lockdowns and social distancing. (Ruby, year 3 undergraduate student, Hong Kong)

> ACNH is a way to kill time when we are stuck at home during the pandemic, it is a source of peace and positive emotions to the players when the social atmosphere was gloomy and suffocating. (Kiki, Master's degree holder, United Kingdom)

ACNH as a selected digital game for DGBL has important benefits for both educators and learners. For example, it can be considered "gameful" – a term coined by game designer and researcher Jane McGonigal (2011) for a digital game that can "create platforms and experiences that empower players to have the spirit of the gamer in real life" such that the game can be life-changing, reality-changing, game-changing, and world-changing. Chris Comerford (2020a), principal researcher of the Animal Crossing Research Project and lecturer at the University of Wollongong, describes the game as,

> a platform for routine substitution and social connectivity in a disconnected physical world. A combination of the game's elements, including its comforting aesthetic, participatory community, financial mechanics, and goal-setting, promotes the player's construction of their sense of self and provides crucial stability.

Similarly, news editor Imad Khan (2020) from the New York Times, calls ACNH "the Game for the Coronavirus Moment", as "Animal Crossing offers a haven and can give players a feeling of empowerment and community, particularly at a moment when many are being told to stay at home". His colleague and pop culture reporter Kyle Buchanan (2020), sees ACNH as the "perfect way to spend quarantine" because the "new Switch video game offers a candy-colored substitute for real life".

In a study conducted by the Oxford Internet Institute on video gaming and wellbeing, a total of 2,756 players of ACNH reported feeling significantly happier than those who do not play the game (Kleinman, 2020; University of Oxford, 2020). The evidence shows that ACNH indeed has significant positive impact on its players around the world, has a gameful design, and has been rated as DGBL-friendly after passing through the three-stage filtration system.

In terms of educational implications of ACNH, the student gamers/YouTubers agree that DGBL teachers of various subjects can find benefits in the game.

> Biology: The nature. Introduction to animals belonging to different phylum through Critterpedia. ACNH allows us to know more about the flora and fauna in the natural world. As city dwellers, we seldom have access to the information. There wasn't a Chinese version for the games before ACNH, and that's how we learned the English of 'cicada', e.g. (Ruby, year 3 undergraduate student, Hong Kong)

> Culture and history: The reflection of different cultures from the design of villagers and their interior decorations. For example, Genji with Japanese-style interior; Pekoe with Chinese-style interior; Klaus with Greek-style interior. The world heritage through Gulliver's series. Festivities and celebrations from different parts of the world. (Kiki, Master's degree holder, United Kingdom)

> Visual arts: Redd's paintings and sculptures could be useful in introducing students to the famous and classical pieces of art. (Kiki, Master's degree holder, United Kingdom)

However, new DGBL teachers may face several difficulties when utilising ACNH in DGBL, including long preparation time, cost of Nintendo Switch and ACNH game, maximum number of players allowed per island, and distraction from learning.

> It can be very time-consuming to prepare the necessary set-up. The game itself wasn't intended for teaching, although it could be a useful tool to assist teaching. It would require a lot of time to farm objects/items in the game. The console and the game are not something that families can easily afford, which can be a discrimination/barrier for learning. (Kiki, Master's degree holder, United Kingdom)

> The game cannot host more than 8 players at a time on an island, which means for classes of a bigger size, compromises will have to be made, e.g., they will have to split into groups. It may be hard for students to concentrate/not be distracted by other more exciting game features. (Ruby, year 3 undergraduate student, Hong Kong)

Nevertheless, through careful planning, ACNH would still be a very good option to support DGBL.

> If the game is utilised within its capability, the game would be useful in arousing students' interests in learning, increasing interactivity, as well as reinforcing and consolidating points that have been introduced. As long as it isn't too heavily relied on transmitting knowledge as normal classes are supposed to, the game would be a great addition to teaching. (Kiki, Master's degree holder, United Kingdom)

5. Conclusion

DGBL has the potential to become an important pedagogical approach for a variety of subjects and fields. However, new teachers have not received adequate easy-to-grasp information or practical suggestions from the existing academic literature. This current paper has thus proposed a three-stage filtration system as an appliable, low cost-high return, low barrier-to-entry game selection framework to assist teachers with their DGBL teaching. The system consists of three filters: game acceptance, game design, and game support as stages for identification, screening, and inclusion processes respectively. Drawing evidence from relevant literature, I have explained the meaning of constructs in each filter. I have also demonstrated the implementation of the three-stage filtration system for the selection of DGBL-friendly games via ACNH. Simultaneously, ample examples have been provided to showcase creative ways of utilizing ACNH, with the hope of generating new ideas for DGBL teachers. To ensure extensive coverage of views and opinions from a broad spectrum of stakeholders., I have incorporated academic research, game reviews, and excerpts from virtual interviews conducted with experienced ACNH student gamers/YouTubers.

This paper contributes to real-world applications in a number of ways. Firstly, the proposed three-stage filtration system for the selection of DGBL-friendly games is relatively simple to understand and apply, requiring no prior knowledge in any theoretical concepts in education or experience in gaming to begin the game search. Secondly, the cost of time and effort is low as this framework filters out less desirable digital games quickly in each stage, saving teachers valuable time from unnecessary searching. Thirdly, this paper provides a range of creative examples and ideas showing how a well-selected DGBL-friendly game could be integrated into lessons. Limited by the space and mode of this paper, I cannot convey, even the slightest of, how extraordinary these examples are through texts. Readers are strongly advised to experience the possibilities and potential through the web addresses in the reference list below.

Lastly, a limitation of this framework is the lack of empirical verification of how constructs are connected. Currently, the constructs in each stage filter are considered equal in weight. This is highly unlikely in reality, however. Future empirical research may apply statistical techniques (e.g., partial

least squares structural equation modeling, see Law and Fong, 2020) to measure the relationships and strengths between constructs and obtain a clearer picture. Researchers may also consider comparing the DGBL-friendliness of two or more digital games quantitatively in future work.

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Intuited the Usefulness of an Asynchronous Online Discussion in a Course Management System among University Students in Hong Kong

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Abstract: An asynchronous online discussion in a course management system is widely adopted in higher education. Despite adopting its pedagogical strengths, students did not engage much in the activity. This study employed the technology acceptance model as a theoretical framework to probe the effectiveness of the adoption in enhancing students' learning experiences. Two research questions about how students intuited an asynchronous online discussion in a course management system were formed based on a hypothesis that students did not believe it was useful in their learning. Data were collected from semi-structured interviews among university students in Hong Kong. This study found that while informants did not perceive the discussion useful for their learning, their perceptions were mediated by way of its practicing, students' learning strategies and socially desirable behaviour. One significant contribution of this study is to unveil that socially desirable behaviour could mediate the effectiveness of educational technology in enhancing learning experiences. This study called forth educators to consider the social context in which students are situated when adopting a pedagogy. This study's findings can have significant implications for education policymakers to launch appropriate education reforms to enhance teaching effectiveness. It also constitutes a theoretical implication for the technology acceptance model.

Keywords: asynchronous online discussion, course management system, technology acceptance model, usefulness, higher education

1. Introduction

A collaborative approach is one of the educational beliefs put forward to enhance students' learning experiences. Meanwhile, discussion can be understood as an "effort of a group of individuals who talk informally together in order to solve commonly recognized problems or to arrive at an understanding of values" (Walter & Scott, 1968, p. 186). Thus, a discussion is justified as one of the pedagogies in achieving collaborative learning (Dietz-Uhler & Lanter, 2012; Sawyer, 2004; So, 2009). In higher education, a discussion has been widely adopted. Nonetheless, owing to various constraints, an asynchronous online approach is a common way of conducting discussion, especially through a course management system (CMS) such as Canvas, Blackboard, Moodle and former WebCT. As an educational technology, adopting an asynchronous online discussion in CMS offers a computer-mediated platform "for learning, thinking and growing emotionally as well as cognitively" (Papert, 1980, pp. 17-18). An asynchronous online discussion in CMS is also consistent with the proclaiming that instruments such as computing technology can facilitate learners to construct knowledge collaboratively (Ackermann, 2001, p. 5; diSessa, 2000, p. 4).

Driven by the aforementioned belief, students have always been expected to learn, cooperate, and mutually construct knowledge through participating in an asynchronous online discussion in CMS (Oliver, 2001, pp. 49-50). Much research concerning an asynchronous online discussion as collaborative pedagogy has been done. The following literature reviews are just some of the major previous studies. For instance, to understand the way of employing technology in helping collaboration, Nachmias et al. (2000) researched 115 postgraduate students in Israel (p. 94). Regarding an asynchronous online discussion, the study pointed out that adopting this technology could increase students' participation and collaboration (Nachmias et al., 2000, p. 100).

Liu et al. (2014) studied the effectiveness of an asynchronous online discussion in helping students' reading skills. Through collected data from 110 primary school students in Taiwan, Liu et al. (2014) discovered that the adoption of an asynchronous online discussion enhanced students' performance in reading skills (pp. 231, 243). In addition, they further pointed out that time for learning and discussion was an issue in mediating students' performance (Liu et al., 2014, p. 244). It informed this study that, apart from adopting technology in achieving collaborative pedagogy, the way adopts the technology of the pedagogical activity is also one of the considerations as it could be a factor in mediating students' learning outcomes.

Interested in knowing the way technology helps students' learning, Nicholas and Ng (2009) looked into the interactions among 32 Australian secondary school students within an asynchronous online discussion in Moodle (pp. 305, 309). While students actively participated in the discussion, the study found that only a few students concretely learned from the activity (Nicholas & Ng, 2009, pp. 318, 320). In addition, the study failed to recognize cooperation among students in the discussion (Nicholas & Ng, 2009, p. 318). It is an important message to this study as students' participation in collaborative pedagogy, like an asynchronous online discussion, is not equivalent to their collaboration.

Other researchers also reached similar findings. For example, Moallem (2003) surveyed 24 postgraduate students targeted at understanding students' feedback on the design of an asynchronous online course in WebCT (p. 89). Concerning an activity of an asynchronous online discussion in the course, Moallem (2003) claimed that, in general, students' participation decreased over time (p. 93). In addition, students tended to participate more in discussions requiring tackling problems than collaboration (Moallem, 2003, pp. 94-95).

What is more, with a view of looking into the effectiveness of collaborative learning across three academic disciplines within and beyond Blackboard, Ng et al. (2012) launched research among 148 undergraduate students in Hong Kong (p. 420). The study pinpointed that, instead of using a discussion forum on Blackboard, students communicated more directly in a physical setting (Ng et al., 2012, p. 423). These findings further informed this study to question the effectiveness of collaborative knowledge construction within pedagogy and the capability of CMS as a technology in achieving collaborative learning.

The author agreed with the studies that showed asynchronous online discussions in CMS often produced unexpected outcomes. The author acted as a tutor at a university in Hong Kong for several years and was responsible for tutoring an undergraduate course on liberal studies. The course required students to participate in an asynchronous online discussion in CMS. One of the intentions of the activity was to enhance students' cooperative learning through mutual challenges. However, students' engagement in the activity was not keen. Many students just copied something from the Internet, while some just responded perfunctorily. Besides, few even made unintelligible contributions by typing "hello". While the above major literature outlined different concerns over adopting an asynchronous online discussion as collaborative pedagogy, they supported an argument from Swan (2005) that an understanding between students and asynchronous online learning is still inadequate (p. 19). Students had their pedagogical views. Since previous research rarely focused on students' interpretations and perceptions towards the pedagogy, this study was thus proposed to bridge this research gap. This study investigated a research problem of whether students perceived an asynchronous online discussion in CMS as useful for enhancing their learning performance. A technology acceptance model (TAM) was

acquired as a theoretical framework of this study because it was helpful, applicable and related to how an individual perceived and accepted a technology. This study furnishes academia with the necessary literature on perceptions towards pedagogy from students' perspectives. The importance of this study lies in the prospect of enhancing students' learning experience after educators reflect on the efficacy of their pedagogical approach. Though this study was conducted in the Hong Kong context, it is relevant to the international educational communities since an asynchronous online discussion is frequently adopted in higher education globally.

In the following, this article will first examine an asynchronous online discussion and TAM. This article will then introduce the research question and methodology of this study. After that, this article will overview general practices of implementing an asynchronous online discussion, and then present the findings and discussions. Before drawing a conclusion, the implications and limitations of this study will be proposed.

1.1 An Asynchronous Online Discussion

Beyond facilitating collaboration, an asynchronous online discussion also offers different pedagogical strengths, which include enhancing critical thinking, reflective thinking, and communication.

As Buraphadeja and Dawson (2008), Jacob (2012), and Schindler and Burkholder (2014) propounded, an asynchronous online discussion enhances students' critical thinking. Students can choose their convenient time and place to participate in the discussion as it does not operate in a real-time mode. Because of the nature of time-delaying, theoretically, students can afford much time to locate or review materials, organize information, and examine argumentations thoughtfully before posting a new message or responding to others. All these experiences help students to polish their competency in critical thinking.

Besides, as Beckmann and Mahanty (2016), Cruz and Anderson (2021), and Plešec Gasparič and Pečar (2016) averred, an asynchronous online discussion enhances students' reflective thinking. When participating in the discussion, students are likely to receive feedback from their classmates or professors. However, the feedback is not always positive or encouraging, with some comments beyond the students' expectations. Similarly, students can have various thoughts on the same topic. When those comments or different views are valid and constructive, students can review their original positions and re-examine whether they need to take a more comprehensive perspective on the issue. The experiences of different challenges render students to develop their competency in reflective thinking.

In addition, Al Tawil (2019), Calderon and Sood (2020), and Vess (2005) affirmed that an asynchronous online discussion enhances students' communication skills. There are prerequisites for participating in the discussion. It demands students' competency in language, reading, comprehending and writing. In other words, students have to know how to express themselves in writing properly and make sure others can correctly and fully interpret their meanings without much difficulty, and vice versa. Even when communicating with others online, students are also expected to demonstrate certain etiquette that includes courtesy and respect. Students' experiences in an asynchronous online discussion assist them in refining their communication skills.

In general, an asynchronous online discussion can be constructed and implemented in two different styles; educator-oriented and student-oriented. In an educator-oriented style, the educator is usually responsible for designing a topic or a task related to the teaching topic. Students are then instructed to participate in an asynchronous online discussion, either working individually or in group, to express their opinions towards the topic or tackle the task. Technically, this style assures academic quality, simplifies administration, and enables students to follow and meet all the instructions easily. Yeh and Lahman (2007) announced that proper adoption of the style could effectively enhance students' learning (p. 697). For a student-oriented style, students are told to take the initiative and share their views or difficulties over a topic. This style enriches students' learning motivation as they can enjoy greater autonomy in deciding the discussion topic. Skinner (2009) stated that intrinsic motivation was the key to driving students' participation in the discussion (p. 97). For both styles, students are expected

to participate in the discussion within a certain period. Regardless of the styles, intervention from educators varies, which partly depends on the educator's availability and pedagogical concern. On the one hand, intervention from the educator facilitates students' discussion and maximizes the learning outcome of the activity (Darabi et al., 2013, p. 239). On the other hand, the intervention discourages students from participating in the discussion since they may feel uncomfortable with the presence of their professor (Hew et al., 2010, p. 583). To address the concern, Hew (2015) advocated arranging student moderators to obfuscate hierarchical discrepancy.

While students' participation in an asynchronous online discussion can be affected by the existence of others, like their professors, their participation can also be shaped by how they perceive the technology. In this regard, TAM proposes a penetrative and straightforward explanation.

1.2 Technology Acceptance Model

To anticipate and describe one level in adopting information and communication technology, Davis (1986) proposed TAM under inspiration from the Theory of Reasoned Action. TAM focuses on two perspectives, namely, the perceived usefulness of technology and the perceived easiness of using technology (Davis, 1986, p. 24; Davis et al., 1989, p. 983). Perceived usefulness of technology generally refers to one anticipation of improving performance resulting from using the technology. In this study, improving performance was interpreted as enhancing learning experiences, motivations or outcomes resulting from using the technology. On the other hand, perceived easiness in using technology briefly pointed to an evaluation between the level of difficulty in using the technology and the expected mediated performance resulting from using the technology (Davis, 1986, p. 26; 1989, p. 320). Both the perceived usefulness of technology and the perceived easiness of using technology could anticipate and describe one in accepting information and communication technology.

Nonetheless, as Davis (1989) further explained, people tended to value the perceived usefulness of technology more than the perceived easiness of using technology (pp. 333-334). In other words, if a person believed that using certain information and communication technology could enhance his performance, he would likely adopt the technology even though learning how to handle it was difficult. In addition, both the perceived usefulness of technology and the perceived easiness of using technology could be influenced by other factors (Davis et al., 1989, p. 985). Scholars like Hassan and Geys (2016), Lu et al. (2005), Marangunić and Granić (2015), Money et al. (2011), Shittu et al. (2011), and Šumak et al. (2011) denoted that because of its simplicity, TAM was one of the most commonly adopted measures in anticipating and describing an acceptance of information and communication technology. There are many studies on TAM, such as El-Gayar et al. (2011), Huang et al. (2012), Jabeen et al. (2015), Joo et al. (2014), and Meso and Liegle (2005), conducted all over the world. Particularly, many types of research deployed TAM and conducted various studies on the degree of acceptance of different kinds of information and communication technologies in higher education in Hong Kong.

Many researchers employed TAM to investigate an asynchronous online discussion. For example, to understand the factors shaping students' utilization of an asynchronous online discussion, Aucamp and Swart (2015) interviewed 30 computer sciences students in a South African university (p. 126). By confirming the validity of the perceived easiness of using technology and the perceived usefulness of technology, Aucamp and Swart (2015) declared that TAM accounted for students' utilization of the discussion (p. 134). Since this study also focused on an asynchronous online discussion, Aucamp and Swart (2015) reinforced the adoption of TAM as a theoretical framework for this study.

To discover an effective interactive environment in an asynchronous online discussion between the professor and the students, Lee et al. (2011) collected 59 valid questionnaires from business students in a British university (pp. 1432, 1435). Through the lens of TAM, Lee et al. (2011) ascribed the ineffective interaction in the discussion to the students' low perceived usefulness of the technology (p. 1436). Meanwhile, Camarero et al. (2012) applied TAM to scrutinize students' usage of an asynchronous online discussion by analyzing data from 107 business students in a Spanish university for two academic years (pp. 573-574). Camarero et al. (2012) reported that students' perceived usefulness of technology did not directly shape students' usage of the discussion (p. 579). Camarero et

al. (2012) and Lee et al. (2011) informed this study that students' perception of an asynchronous online discussion and their participation in it could be mediated by elements other than the perceived easiness of using technology and the perceived usefulness of technology.

Nevertheless, the pedagogical strengths of an asynchronous online discussion, such as enhancing critical thinking, reflective thinking and communication, are likely to become unachievable utopian imaginations when students do not participate. However, TAM offers educators a reliable measure to quest for better understanding. Apart from receiving a few criticisms, TAM has been widely adopted as a simple and effective way to look into perceptions of and attitudes towards technology. Therefore, it was more appropriate and relevant to this study. TAM was particularly helpful in mining, extracting, distilling and condensing a better understanding on intuited the usefulness of an asynchronous online discussion in CMS in Hong Kong. For instance, students' perceptions of CMS could be mediated by the difficulties encountered from their previous experiences in using CMS. In addition, their perceptions towards CMS could be shaped by their perceived accomplishments and acquisitions obtained from earlier usages. Thus, TAM was adopted as a theoretical framework for this study.

2. Research Hypothesis, Research Question and Methodology

Based on the above portrayal, a research hypothesis was that students did not believe an asynchronous online discussion in a course management system was useful in their learning. Driven by the above denotations, this study formed two research questions. First, how do students perceive an asynchronous online discussion in CMS? Since students' acceptance of an asynchronous online discussion in CMS can shape their corresponding perceptions, it leads to the second research question: in what way did TAM explain the intuition?

This study translated students' intuited usefulness of an asynchronous online discussion in CMS as whether students intuited help for their knowledge construction in the courses after participating in an asynchronous online discussion in CMS. The captioned research questions empowered this study to investigate how students intuited the usefulness of an asynchronous online discussion in CMS and probed the rationales behind their perceptions.

This study concerned perception, which could be both subjective and personal. In other words, students constructed their different perceptions on their own. Impelled by the ontological position, the author believes that objective meaning does not exist. Therefore, instead of adopting the quantitative research approach, the qualitative research approach was more appropriate for this study as it allowed the author to interact, understand and interpret the uniqueness of different individuals directly. In other words, to better understand students' intuited usefulness of an asynchronous online discussion using CMS, the author had to directly contact, interpret, learn, interact and construct with students. Through conversations and interactions with students, the qualitative research approach provided in-depth understanding, which constructed more sociological imaginations over students' perceived easiness and usefulness in using CMS and their perceptions of and attitudes towards it. The author's ontological position also supported the employment of semi-structured interview as a data collection method in this study as it empowered the author to probe into and understand the way informants construct their intuited usefulness of an asynchronous online discussion from their dictions (Byrne, 2012, pp. 209, 215). An example of the directional questions asked in the interview was, how do you describe the collaboration with your classmates in CMS?

Concerning the background of the target interviewee, Ballantyne et al. (1999), Neumann (2001) and Smeby (1996) suggested that, compared with other academic disciplines, social sciences tended to utilize discussion frequently as part of the pedagogy. Concerning the required number of participants for the interview, Saunders and Townsend (2016) proclaimed that no consensus had been reached on this area. For instance, Marshall and Rossman (2016) suggested one informant is adequate. Creswell (2007) proposed three to five participants, while Saunders (2012) believed in four to twelve interviewees. Nonetheless, Adler and Adler (2012) pinpointed that a fixed answer is unavailable.

After considering all of the above, with ethical approval from the research committee in one of the universities in Hong Kong, the author targeted to approach social sciences students from the departmental common room to attend the semi-structured interview. When the author started showing up in the room, the author considered himself an outsider to the students. To obscure the heterogeneity, the author needed to create a trustworthy image (Robinson, 1994, p. 61). Before approaching the students, the author intentionally chose to silently present himself at a notable area and make himself conspicuous to all students in the room for more than a week. After that, the author began to randomly approach students who showed availability. In the end, four local full-time undergraduate social sciences students were recruited for the interview. They were born in Hong Kong and were native Chinese in the ages of early 20s. Three students were males, and one was female. No remuneration was offered to the interviewees. All students expressed their experiences participating in an asynchronous online discussion on Blackboard. All interviews were conducted in Cantonese, the mother tongue of all informants. The author secured informed consent from all interviewees. With their assent, all the interviews were audio-recorded while notes were taken simultaneously. The interviews lasted around one hour ten minutes to one hour twenty-four minutes. Interview data went through two phases of coding. Phase one sought to explore abstract ideas from the data, while phase two targeted to identify their connections (Saldaña, 2016, pp. 68-69). Since conversation analysis concerns social interactions, it was employed to analyze the data as it is consistent with this study's ontological and epistemological positions (Mondada, 2013, p. 33).

2.1 General Practices of Implementing an Asynchronous Online Discussion

As suggested, all interviewees participated in an asynchronous online discussion. Even though their experiences were generated from different modules, three general practices of implementing the discussion could be identified. First, the discussion was assigned as a supplementary learning activity with the lecture. Conventional lecturing inside the classroom still played a dominant role in pedagogy. Students were required to attend a lecture every week, where knowledge was disseminated unilaterally. To consolidate the learning experience, students were told to participate in an asynchronous online discussion before and/or after the lecture. Second, under most circumstances, students were compulsory to participate in the discussion since it was graded and denoted as a part of the module requirements. However, the discussion usually constituted a minor proportion of the assessment criteria. Third, the professor usually took an inactive role in the discussion. In usual practice, the professor assigned a topic and instructed students to participate in the discussion beyond the lesson. Although the professor and the teaching assistant may monitor the discussion backstage for assessment purposes, they did not always intervene in the discussion partly because they were fully engaged in other activities. Student moderators could not be found in the practice partly attributed to a belief that students could not exert dominance over their peer gradings. In other words, an asynchronous online discussion was constructed and implemented in an educator-orientated style with minimal intervention from the professor.

3. Findings and Discussions

All interviewees indicated that they found Blackboard easy to use. Thus, the issue of difficulty failed to shape students' intuition in an asynchronous online discussion in CMS. In line with the proclamation that people weigh the perceived usefulness of technology more important than the perceived easiness of using the technology, findings and discussions were focused on the former (Davis, 1989, pp. 333-334). Even though a student expected it initially, this study revealed that they did not perceive an asynchronous online discussion on Blackboard as useful for their knowledge construction. Students' intuited usefulness of an asynchronous online discussion was mediated by way of practicing the discussion, students' learning strategies and socially desirable behaviour. The following is a brief account with pseudonymous student names.

Among all students, Howard was the only one who indicated that he originally perceived an asynchronous online discussion in Blackboard as useful for interacting with his classmates and constructing more knowledge to improve his academic performance. He expressed that:

> My original expectation is that (through this activity) I can realize my shortcomings from other students and know how to improve. Even though the presentation is over and the result of this seminar is largely finalized, I think I can still learn something from reading these (comments) to improve my presentation skills. ……. But so far maybe my classmates are very nice. The comments that they left are rather positive, how good and how well it is. And that makes me unable to read the things that I am expecting. In this case, I pass those comments very quickly and have a glimpse only. ……. (F)rankly, the help is not that big. The comment is rather unidirectional. We have completely no response when students give us comments. No interaction exists, and actually, …. the learning effect is not that big and obvious. ……. If more interaction exists, it can actually serve the purpose of learning. But the discussion becomes rather unidirectional and formalization. When we regard it as homework, its effect cannot be unleashed. (Howard)

Howard intended to regard the discussion as a useful platform to highlight and rectify his academic performance. His wish vanished as he failed to experience a genuine and meaningful interaction with his classmates in constructing knowledge. Even though an asynchronous online discussion in CMS theoretically provided a technology and platform for facilitating collaboration, such collaboration did not occur. It confirmed the study from Nicholas and Ng (2009) that collaboration was difficult in a discussion. Apart from considering the emotional reactions of their classmates, reasons for having no real collaboration in knowledge construction among students could also be attributed to the way of practicing the discussion.

> Actually…… I think the effectiveness (of discussing with classmates in Blackboard) is not that big. Because it has a deadline, it requires you to complete (the activity) within a certain period. Maybe not everyone remembers to do it. Also, the scope of discussion is rather narrow. Because, after all (the discussion) focuses on learning within the university, which makes the discussion scope not wide enough. (Content of) discussion is more or less the same. ……. Actually, I think the effectiveness is also not big. Because, after all, it (the discussion) still focuses on the same topic. Our learnings can cover many areas, scopes and topics. If the discussion focuses only on a single topic, actually it cannot help learning for the whole course. (Dickson)

Because of the compressed teaching schedule and the lecturer's preference, the pedagogy of an asynchronous online discussion in CMS is always practiced similarly. Under this arrangement, as Dickson suggested, room for students to collaborate and interact with classmates is inadequate. Because of the constraints in time and coverage, he perceived an asynchronous online discussion in CMS was not useful for his knowledge construction. The finding was in line with Singh et al. (2010) and Vovides et al. (2007) on the incapability of CMS to accommodate collaboration. Practicing an asynchronous online discussion in CMS not only directly mediated students' perceptions but also partially affected the fruitfulness of the discussion, which, in return, shaped their views towards its intuited usefulness.

> This online platform, I think, is not particularly attractive. ……. In an online discussion, we may read some supplementary information that we may not consider in a lesson. And that contributes to so-called a bit more knowledge. But, ……. I don't think the so-called knowledge is so important that I have learned a lot after participating in the (asynchronous online) discussion. (Helen)

> If I have to read others, I can read papers from Google Scholars, which is better than reading the so-called opinions from those classmates. (John)

The above showed students perceived an asynchronous online discussion in CMS as not useful and reflected their disparaging attitudes towards it. The ironic assertions of "so-called knowledge" and "so-called opinions" narcissistically and effectively portrayed students' negative comments and positions towards collaboratively constructing knowledge with their classmates over an asynchronous online discussion in CMS. On the one hand, it was the result of the way of practicing an asynchronous online discussion which gave students inadequate time to consider, locate and construct knowledge

together in an asynchronous online discussion of CMS. It verified the proclaiming from Liu et al. (2014) that time of learning and discussion could affect students' performance. On the other hand, the barren content of the discussion not only enhanced students' perception of an asynchronous online discussion of CMS but also proved and consolidated the learning strategies that John has already coped with.

> I think the whole thing is meaningless. I think the basic assessment forms like PowerPoint and examinations already help the most in learning. An examination can (motivate you to) study. (Doing stuff) like the forum is, actually, copy this and copy that. Sometimes you read a paper, copy this, copy that and (your posting) is just copied (from others). It is trouble if you ask me to find some ideas and form scholarly viewpoints. ……. I don't think I learned any new knowledge on psychology after participating in the forum activity or typing something over there. ……. Of course, I think it is trouble and wastes a lot of time. (John)

The above expression proposed that the nature of John's learning strategies tended to be self-reliance. John was likely to opt for using his efforts in studying learning materials and locating information rather than cooperating with his classmates. Therefore, John perceived an asynchronous online discussion in CMS as time-wasting and not useful since he did not prefer collaborating and constructing knowledge with others. This finding confirmed a lemma from Kim (2005) that the usefulness of collaborative pedagogy failed to mediate students' learning strategies (pp. 16, 18). Students' learning strategies, however, link with their knowledge construction and are associated with their academic performance. John further elaborated on this point as follows:

> (T)his stuff (an asynchronous online discussion in CMS) is not that helpful. It is because most of the time, frankly speaking, even though the course required you to respond, basically, we express ourselves one by one. In theory, the course wants us to comment on others after someone responds. But most of the time, we just write something and upload it. We will not especially read what others have written. That is the main reason. Most of the time, the forum is not the only activity in the course that counts marks. You also have a mid-term; examination, and I do not want to waste so much time reading others' postings. I just write and directly upload to the (discussion) forum (in CMS). I do not want to waste my time reading others' postings. (John)

However, the richness and usefulness of discussion and effectiveness of knowledge construction were shaped by the amount of effort students were willing to spend on an asynchronous online discussion in CMS. After pragmatic calculation, John decided it was not worth spending so much time on the discussion. Instead, he chose to exercise more effort and targeted earning more marks from other assessment activities by using his adapted learning strategies. Nonetheless, John's attitudes and decisions mirrored a common phenomenon in Hong Kong. Chen and Wong (2015) and Wong (2017) declared that academic performance was vital for Hong Kong students as it affected whether they could earn a university qualification. Since having a university qualification is generally regarded as a socially desirable behaviour and has been translated as a way to pursue an easier life in Hong Kong, it explains why John wanted to keep his rewardable learning strategies. In other words, John did not perceive an asynchronous online discussion in CMS as useful because it could not help him earn the university qualification he had longed for.

As the students did not perceive an asynchronous online discussion in CMS as useful, they were inclined not to participate in it especially when their participation was not graded. However, as stated, most of the modules required students to participate in an asynchronous online discussion to fuilfill a part of the assessment criteria. Regardless of the students' perceptions of the discussion, they had no other option but to participate in it under the existing bureaucratic and hierarchical settings. Driven by pragmatic calculations, the students deployed their strategic participation in the discussion. From the above delineations, the students tended to exercise their minimal time and effort in participating in the discussion as they trivialized or failed to recognize its pedagogical implications. For instance, the students were unwilling to prepare for the discussion seriously. They wrote the messages in lackadaisical and slapdash manners or even just pasted materials from certain sources. Besides, some students targeted to satisfy the number of requirements for their participation in the discussion only. The importance of participating in the discussion was such a low priority to some students that they even

attained the requirement at the very last minute. In addition, the students chose not to read or simply ignore the messages posted by other classmates. Overall speaking, the students did not regard the discussion as a collaborative learning opportunity. Instead, students treated the discussion as trivial homework and their mindset of completing it with minimal effort was indubitably reflected from their deployed strategic participation in there. The deployment further embodied students' thirst for credentials. In this regard, based on the above denotations, this study unveiled that socially desirable behaviour was crucial in shaping students' intuited usefulness of an asynchronous online discussion in CMS.

In short, as most interviewees did not find an asynchronous online discussion in CMS useful for their learning, the author could not reject the research hypothesis of this study. The first research question was also addressed simultaneously. As aforementioned, interviewees did not find the discussion useful in advancing their academic performance and outcomes. The finding of this study contradicted a proclamation from Liu et al. (2014) and Nachmias et al. (2000) but was in line with those of Lee et al. (2011) and Nicholas and Ng (2009). To answer the second research question, TAM provided a feasible interpretation explaining the intuition and the associated behaviour. Since students did not perceive an asynchronous online discussion in CMS as helpful for improving their learning experience or academic outcomes, they tended not to regard the technology as useful. In conformity with TAM, students should disregard the discussion by unaccepting the technology of an asynchronous online discussion in CMS. Nevertheless, due to the curricular arrangement, students had no alternative but must participate in the pedagogical activity. Under pragmatic consideration, students tended to compromise with reality by taking a perfunctory approach and spending minimal effort to satisfy the basic requirements of the activity. That explained why the interviewees did not want to waste time and effort reading the "so-called knowledge" that constituted no perceived contribution to their academic outcomes. This finding was consistent with Camarero et al. (2012). On the one hand, it further verified the research hypothesis of this study. On the other hand, it also approved Aucamp and Swart (2015) that TAM is valid in interpreting intuition and the associated behaviour.

3.1 Implications

As aforementioned, socially desirable behaviour can mediate students perceiving collaborative pedagogy, such as an asynchronous online discussion. In a sense, the collaborative pedagogy of an asynchronous online discussion is not and should not, just a simple combination of technology and educational belief. In the end, education should be student-oriented. Thus, educators must consider the social context in which students are situated when practicing collaborative learning and incorporating particular educational technologies into pedagogical activities. For instance, educators can consider increasing the contribution of the compulsory asynchronous online discussion to a more reasonable proportion towards the whole assessment criteria. Besides, students who take the initiative in participating in voluntary and meaningful discussions should deserve bonus marks. Whenever possible, educators are recommended to take a more active role in monitoring and intervening in the activity. By doing so, on the one hand, educators can utilize the discussion as an alternative platform to disseminate knowledge instead of heavily relying on conventional lectures. On the other hand, students are likely to be more enthusiastic in participating in the discussion as they realize their active participation are likely to link with better academic outcome in the module. On top of the above mentioned, this study advocates further research on related areas like how socially desirable behaviour can be changed, any cultural and gender differences, how educators can better integrate the mindset into collaborative pedagogy and the like.

What is more, this study also constitutes an important implication for education policymakers. This study disclosed students' learning strategies and socially desirable behaviour could shape students' intuited usefulness of educational technologies such as an asynchronous online discussion in CMS. Nevertheless, educators may not be privileged to enjoy autonomy when adopting educational technologies. They may be constrained by many issues such as limited resources, institutional arrangement or even education policies of a place. For instance, when the utilization of educational technologies becomes one of the criteria for contract renewal, some educators may be inclined to incorporate educational technologies with their pedagogies regardless of their applicability. Eventually,

their decisions to adopt educational technologies may not be able to reflect the best interest of students' learning. Education policymakers are therefore recommended to carry out appropriate educational reforms to delegate more authority and resources to educators so that they can have adequate room and time to attain various educational goals for the sake of their students.

Theoretically, this study proposes further development of TAM. As mentioned earlier, TAM focuses its attention on technology by highlighting the perceived usefulness of technology and the perceived easiness of using technology (Davis, 1986, p. 24). This study illustrated that an asynchronous online discussion in CMS failed to help students enhance their learning experience or motivation. However, the students continued to participate in the asynchronous online discussion with minimal effort to meet course requirements. Instead of the perceived usefulness of technology, the pragmatic calculation of the students in using the technology was attributed to the result-oriented culture shared by the majority of Hong Kong students. It shows that the external environment can also shape one's perception of technology. As Bagozzi (2007) declared, diversity can exist between one's perception and the deed of a technology (p. 244). To better understand their relationship, therefore, this study suggests TAM to incorporate one's external environment into consideration when understanding how a person perceives a technology.

3.2 Limitations

One of the potential limitations of this study is on the practice of implementing an asynchronous online discussion. As mentioned, students' experience and their perception towards an asynchronous online discussion in this study were mainly implemented under minimal intervention from the professor and/or the teaching assistant. It is encouraged to conduct further research if socially desirable behaviour will apply and shape students' perception towards an asynchronous online discussion when it is implemented under different styles. Another potential limitation of this study is its sampling. Because of several impediments, the study only included social sciences students to attend the semi-structured interview, and they were all Chinese. Students with different training and cultural backgrounds may generate different discussions. Intuited the usefulness of an asynchronous online discussion in a course management system from other disciplines and ethnicities deserve further studies.

4. Conclusion

To conclude, findings from this study unveiled that employing an asynchronous online discussion technology may not necessarily accomplish pedagogical desires. Instead of merely focusing on whether an asynchronous online discussion is implemented under an educator-oriented style or a student-oriented style, more attention has to be drawn to how students perceive technology. To facilitate students having an atmosphere to construct knowledge collaboratively, educators should consider the social and cultural context in which students are situated. Otherwise, students are likely to deploy the technology with their interpretations. While more investigations on areas concerning socially desirable behaviour are needed, education policymakers should launch education reforms and allocate adequate resources and authority to educators to empower them to achieve distinctive educational targets.

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Navigating a Supervision Model in TESOL Research Training: Narrative Insights from Asian International PhD Students

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Abstract: Supervision is central to the doctoral research training experience, and the effectiveness of supervision has been prioritised for the empowerment of intellectuals and professionals in response to the ever-burgeoning development of the globalised world. Exploring supervision experiences to identify the factors that facilitate or hinder the harmony and smoothness of supervision contributes to adequate supervision. There is substantial empirical evidence concerning supervisors' experience of supervision. Nevertheless, international doctoral students' supervision experiences have not been adequately investigated, and little is known about the supervision experience of Asian PhD students undertaking TESOL training. Specifically focusing on a broad spectrum of challenges faced by such a cohort, this study provides a deeper understanding and insight into the complex process of supervision that leads to successful research training globally. The *Critical Incident Technique* (CIT) was adopted for investigating and analysing narratives on research training experiences in native English-speaking countries. Key findings were presented, followed by critical and detailed analysis and comments. Implications for the adequate supervision of prospective international PhD students were also discussed, laying the foundation for developing a humanistic model for the supervision of Asian international PhD students. With its contributions, the study will significantly interest language educators, researchers, doctoral students of TESOL education, and international and comparative education.

Keywords: doctoral supervision, supervisory relationship, TESOL, PhD, Asian international students

1. Introduction

In response to the ever-burgeoning development of the globalised world, in higher education, priority is given to enhancing the quality of doctoral training programs and supervision (Åkerlind & McAlpine, 2017; Nerad, 2012). Effective supervision is closely correlated with students' positive postgraduate experience and successful research training outcomes (Doyle et al., 2017; McGagh et al., 2016; Platow, 2012; Wisker, 2005); therefore, enhancing the quality of supervision has become a critical issue in

higher education. It has become essential to understand doctoral students' needs, preferences, and challenges at different stages of PhD research (Orellana et al., 2016). This understanding helps create adequate supervision, and the misalignment in expectations and preferences between the supervisor and students results in PhD students' dissatisfaction (Le et al., 2021; Holbrook et al., 2014). Since supervisors' appropriate approaches to supervising PhD students contribute to their students' satisfaction (Park, 2005; Chen & Le, 2021), a plethora of literature calls for developing supervision models that fit specific PhD students from international backgrounds, particularly in a specialized profession of teaching as well as an academic field for research, TESOL, the acronym for Teaching English to Speakers of Other Languages. Nowadays it is not only a global economic enterprise which involves millions of people all over the world, but also a common career and interest for many non-native speakers of English.

The roles of supervisors, supervisors' perception of their roles, and supervision styles have been addressed in available studies. There is also substantial empirical evidence highlighting the role of supervisors in the successful and timely contribution of doctoral training programs (e.g. McCallin & Nayar, 2012; Tomasz & Denicolo, 2013; Åkerlind & McAlpine, 2017). Although PhD originally denoted 'teaching' (Cahusac de Caux, 2019), supervision is not merely academic teaching (Connell, 1985) or limited to academic roles. Supervision differs from other forms of teaching in higher education in that supervision requires a blend of skills in handling pedagogy and personal relationships (Grant, 2003). This multi-dimensional process involves human and non-human factors (Delany, 2009) and a wide range of supervisor roles: administrative/management, educational and supportive. Both supervisors and supervisees (PhD students) encounter tremendous challenges at different stages of the training process (Woolderink et al., 2015), where their identities are negotiated, and personal transformations are experienced. While extensive literature mainly concerns supervisors' supervision experience (e.g. Stracke, 2010; Overall et al., 2011; Wang, 2013; Carter et al., 2020; Bogelund, 2015), international doctoral students' experiences of supervision have not been adequately investigated. Asia has witnessed the highest speed in economic development and technological advancement in the last few decades, and the significantly important position of English and TESOL has been integrated into the curricula of Asian countries. Concerning the shortage of literature in the field of PhD training in TESOL, little is known about the supervision experience of a cohort of Asian PhD students. This current study was conducted to provide a deeper understanding and insights into the complex supervision process and propose a supervision model in response to the needs of international doctoral students, mainly Asian PhD students.

2. Literature

2.1 Supervision: A Complicated, Dynamic Process

Being a PhD supervisor is increasingly challenging and complicated (Bogelund, 2015; Woolderink et al., 2015; Ismail et al., 2013) because supervising a PhD student primarily involves the productive relationship between supervisor, student, and thesis (Grant, 2003). Moxham et al. (2013) highlighted three constructs in a PhD journey: (1) the institutional position of the supervisor as an experienced successful researcher, an established authority in some area of her/his discipline, a source of feedback, encouragement, and networks, an evaluator of the student's work or an examiner; (2) the student positioned as not knowing, insecure, inexperienced, needy, and consumed by the project; and (3) the thesis as the privileged form of institutional formal, discipline, and original knowledge. In other words, supervision is not only merely concerned with the thesis, but more importantly, it involves human factors. Instead of academic issues, doctoral students' problems often occupy half of the supervision time (Phillips & Pugh, 2005). The supervision process is characterised by various transformational processes between these three 'active, changing, and changeable agencies' (Lusted, 1986, p.3); therefore, improving the quality of supervision requires both the product (the thesis) and the process (transformations of the PhD student) to be taken into account.

2.2 Supervisory Relationship: A Critical Issue to be Addressed

Supervisory relationship management is one of the significant issues in doctoral supervision that affects students' training experiences (Le et al., 2021; Lundgren & Osika, 2021; Bekessy & Wintle, 2006; Hockey, 1996; Dinham & Scott, 1999; Abiddin et al., 2011; Moxham et al., 2013). Poor relationships with the supervisor entail unsuccessful postgraduate experience (Bekessy & Wintle, 2006). Although much of the literature on doctoral supervision has documented the undeniably crucial role of the supervisory relationship in the successful supervision process, how to manage the supervisory relationship still needs to be adequately explored. Orellana et al. (2016) identify the factors that facilitate or hinder the harmony and effectiveness of the supervisor-student relationship, including the personal characteristics of the supervisor and students, the supervisor's roles, and supervision styles. It is essential to understand the roles of the supervisor involved in this complicated training process because it lays the first cornerstone for more understanding of how to handle communication and interaction between the supervisor and students.

Understanding the complicated nature of the relationship between supervisor and student is necessary for managing supervisory relationships. It has been argued that the supervisory relationship stems from power differences. Some advocate that the relationship between supervisor and students is hierarchical, and supervisors have more power than students (e.g. Gregory, 1995; Grant, 2003; Woolderink et al., 2015). The supervisor is assumed to be the agent of supervision, playing a dominant role in all supervisory matters. Others view this type of relationship as a pedagogical power relation where both supervisor and students are equally capable of exerting influence on each other (Stracke, 2010). More empirical evidence indicates that such a relationship is a power relation, but not in the meaning of the supervisor dominating the relationship; rather, students are equally empowered to change supervision practices (Cree, 2012).

2.3 Supervision Models

The most popular supervision models, which have been summarised by McCallin and Nayar (2012), include the traditional model (master-apprentice), the group supervision, the mixed model/the blended learning model, and the professional doctorate. Each of these models has its features and brings numerous benefits to different cohorts of research trainees. The traditional model offers minimal input from supervisors, so it suits self-directed students. The master-apprentice model focuses on the product of the research training or the successful completion of PhD degree. The group supervision model operates in the form of workshops organised by supervisors to offer academic and non-academic support to groups of students simultaneously. The students who attend the learning and research workshops can improve their writing skills, problem-solving skills, library skills, and research methods. Utilising the environment in supervising students, the blended model helps strengthen the supervisor-student relationship. For early researchers who are employed or seeking professional development in their workplace, the doctorate model suits them best because it not only enables the development of trainees' research capacities in the workplace context but also enlarges their research networks.

The traditional model, the master-apprentice approach, remains popular in many research contexts, but the model has significant drawbacks. Identifying some weaknesses of this model, Harrison and Grant (2015) then proposed some alternative models of supervision, among which the collaborative cohort or team supervision model contradicts the master-apprentice one. The proposed models focus on excellent supervisor-student relationships, so they prioritise the proper adoption of communication styles and management of relationships and interactions. Collaboration experienced during PhD research journey stimulates students and contributes to their positive PhD experience (Stracke, 2010). Khen (2014) also advocated collaborative and interactive approaches to supervision and argued that these practices could be implemented to facilitate the supervisory relationship and supervision process. Growing empirical data has supported the view that undertaking PhD studies in collaborative atmospheres sustains students' motivation and results in their success in the research training process. However, this approach, characterised by active learning, initiative or innovation, and autonomy, is appropriate for active, committed, and autonomous research students.

Particular types of supervision approaches or models that are culturally relevant to a specific cohort of students have been recently developed; the shared feature of these contemporary models is their Western origin, which adopts the Western view of the world. Supervisors, mainly English native supervisors, can be challenged to provide flexible and adequate supervision to international PhD students from various socio-cultural and educational backgrounds. Working and living in their native countries, these supervisors may not realise unpredictable non-academic challenges and personal issues faced by international students who migrate from different political and socio-cultural systems. They may be familiar with long-established Western models of supervision and, therefore, might fail to accommodate Asian PhD students doing PhD in TESOL in developed Western countries. Given that there is no "one-size-fits-all" model of supervision that adequately meets all the needs of doctoral students, this research aims to develop a supervision model to fulfil the needs of a specific cohort of students, namely, Asian PhD students in TESOL.

3. The Study

This current study aims to address the following questions:

1. How do Asian international students perceive their supervisors' roles in their research training journey?

2. How can an effective supervision model be established to facilitate the TESOL research training journey in Western English-speaking countries?

Guided by the above research questions, this study adopted an exploratory qualitative approach, which focuses on the voices of the participants (Babbie, 2011) and helps gather individualised, context-rich data about situations (Cohen et al., 2000). The CIT was proved adequate for studies exploring aspects of a process, including events, incidents, factors, and the experience of a specific situation or event (Butterfield et al., 2005). Instead of other available qualitative methods, the CIT was used in this current exploratory research to provide in-depth, rich accounts of experiences of doing PhD research in native English-speaking countries.

3.1 Participant Selection and Sampling Strategy

In the current study, purposive sampling methods were employed for participant selection. The sampling needed to ensure efficiency: data in the form of their first-hand knowledge and experience, good quality information, and cost-effectiveness (Babbie, 2011). The participants were graduates from training PhD programs in Education (TESOL) in native English-speaking countries, including but not limited to countries such as the United Kingdom (UK), the United States (US), Canada, Australia, and New Zealand. Participants were sourced from researchers' academic and alumni networks because these contacts allowed the researchers to receive a pool of rich and in-depth information about participants' PhD training experience. Among 20 PhD graduates who met the criteria of selection were contacted, 12 respondents agreed to take part in the research.

3.2 Data Collection

The critical incident technique was used to collect data. According to Flanagan (1954), data collection can be done in different ways: interviewing, questionnaires, and narrative form. This research intends to provide as much space as possible for participants to narrate their own stories. Guided questions were provided to facilitate participants' narration. They were instructed to write narratives, focusing on factors that helped and hindered the participants' supervision experience. The participants' demographic information, namely, gender, age, teaching experience, length of PhD candidature, country of origin, and country of destination, were also obtained.

Before the data were collected, information sheets and consent forms were distributed for the informants' approval. Participants were informed of the research, their access to the collected data, and the right to withdraw at any time and refuse to answer any questions they would not feel comfortable with. All the collected data is confidential and securely stored. Anonymity and confidentiality were guaranteed to ensure that every individual who participated in the study would not be affected by the research. All the categories/themes decided by the researchers will be sent to the participants for their confirmation. This member check enables the research to be ethically validated and increases the credibility of qualitative research

3.3 Data Analysis

After the raw data were collected, they were arranged with the application of Nvivo software to create the initially emerged themes. Then a list of initial themes was identified, reviewed, compared, and contrasted with the pre-determined themes. As themes are decided by relevance to the research question and significance to the participants (e.g. Braun & Clarke, 2006; Tee et al., 2019), the researchers selected the ones that are accurate presentations and depictions of participants' perceptions and experiences of the participants. After the researchers approved these themes, subordinate and superordinate themes that embody subordinate themes were developed and sent to some experts and participants for cross-checks. Rich and compelling text extracts relating to the research question and literature were chosen. The data analysis was done on a case-by-case basis and involved making meaning of data from low-level interpretation to a highly detailed, interpretative, and theoretical level (Pietkiewicz & Smith, 2012). To ensure the trustworthiness of research findings, as soon as the study came up with findings, they were returned to participants for verification. The findings were discussed and compared with the previous literature. Twelve text extracts were selected as illustrations that capture the participants' perceptions and experiences. All identifiable personal names of people, institutions, or places were deleted, and the participants' names were changed to protect their identities.

4. Findings and Discussions

4.1 Participants

Table 1 provides demographic information of the participants, with identifiable personal names replaced with pseudonyms. The names were organised in alphabetical order. As can be seen from the table, Australia was the most popular destination for Asian PhD students, with six out of 12 respondents undertaking their studies there. Most graduates had more than five years of TESOL teaching experience.

Table 1. Participants' demographic information.

Participant	Pseudonyms	Gender	Age Group	Years of Experience in TESOL	PhD Candidature (years)	Home Country	Host Country
1	Ben	Male	41-50	>10	5	Vietnam	USA
2	Delma	Female	41-50	>10	4	Philippines	New Zealand
3	Hoa	Female	31-40	>10	5	Vietnam	Australia
4	Hung	Male	22-30	5-10	4	Vietnam	Australia
5	Kenneth	Male	31-40	5-10	4,5	Philippines	UK
6	Kim	Female	41-50	>10	5	Korea	UK
7	Lynn	Female	31-40	5-10	4	Indonesia	New Zealand
8	Pema	Female	31-40	5-10	4,5	Bhutan	Australia
9	Siti	Female	31-40	5-10	4	Malaysia	Australia
10	Su	Female	31-40	<5	4	China	Australia
11	Tan	Male	31-40	5-10	5	Malaysia	Australia
12	Tina	Female	22-30	< 5	4	China	UK

4.2 Supervisors' Role in Students' Academic Journey

It has been accepted among most of the participants that their supervisors provided them with immense academic support at different stages of their PhD. For Hoa, her supervisor's feedback, guidance, and instructions encouraged her to achieve an excellent outcome: the thesis was assessed as "passed without change". She attributed her success to her supervisor's continuous support in all academic matters, from brainstorming ideas for the research proposal to writing the thesis.

> My satisfactory outcome derived mainly from my principal supervisor's continual support. He always gave me detailed and clear instructions, advised me on research-related matters, and monitored my research progress. I particularly appreciate his help with reading and reshuffling my thesis. He also gave feedback on my last draft to make it more engaging and coherent. After finishing my thesis, I adopted his style of writing, which I found compelling: using short, simple sentences instead of my previously lengthy, complex sentences. (Hoa)

Hoa's supervisor plays a significant part in her academic achievement, contributing to her successful research training experience. Hung, Hoa's officemate, also attributed his academic validation to his supervisors:

> I was lucky to be invited to co-author a journal article by my supervisors in my second year of candidature. It was then published in a Q2 journal six months after being submitted. This collaboration was an enriching experience for any international PhD student like me. I learned a lot through their support during the publication process, and I gained much experience on how to construct an article, how to respond to reviewers' comments, and which steps are involved in getting an article published. (Hung)

Hoa and Hung were provided with adequate supervision, including feedback, guidance and instructions during their PhD studies. Their positive experiences were reported to be impacted either by the successful completion of the thesis and the publication or, more importantly, the involvement and satisfactory performance of their supervisors' supervisory activities. Such Vietnamese students were happy with their supervisors and used compliments to talk about their supervision experience. They consider the meetings with supervisors an indispensable chance to address all the research-related matters, clear all the blocks of ideas, and provide feedback and guidance for drafts. Hoa further emphasised the significance of her supervisors' role: *"They played a critical role in my successful academic journey. Their pedagogical guidance, instructions and constructive feedback gave me a sense of relief and encouraged me to push beyond my limits"* (Hoa). To these Vietnamese students, their supervisors were a primary source of academic support.

Regarding the academic role of supervisors, not every PhD student undergoes a positive experience like Hung and Hoa. For example, Tina's overall negative academic supervision experience was a painful story to recall:

> My principal supervisor held a high position in the Faculty, so she always seemed busy. For nearly four years, I was lonely in my PhD journey due to the lack of her supervision. Sometimes, it took me two or three months to finish a chapter, and I sent her three weeks before the scheduled meeting. However, she only had 15 minutes before our appointment to look at it. I would often present the 30-page chapter, repeating and summarising the chapter before she commented. Her questions and comments indicated that she did not read at all or had only a quick scan of my chapter. They were so general and shallow and could 'fit' all the supervisees. She did not perform her role as a supervisor. I was suffering from her neglect. I sometimes joked with my close fellows that she adopted a 'pedagogy of indifference' in supervising me. (Tina)

Tina's use of 'pedagogy of indifference' might fuel different arguments concerning adequate supervision. This term is adopted by those supporting pedagogic practices of postgraduate supervision

marked by neglect, abandonment, and indifference. According to Johnson et al., this pedagogy can produce the "independent, autonomous scholar" (Johnson et al., 2000, p. 136) since a PhD student is "capable of independent scholarship from the beginning of their candidature" (Johnson et al., 2000, p. 141). However, the idea of autonomy and the independent scholar in 'pedagogy of indifference' is a purposeful pedagogical activity, which is different from a more distant supervision style on the part of Tina's supervisor. PhD supervisors must act in increasingly complex and demanding academic roles and balance freedom and neglect (Eley & Murray, 2009). Tina suffered from her supervisor's neglect, which did not come from a pedagogy of indifference but instead from her supervisor's inadequate supervision. Tina's negative experience influenced her academic success.

It has been gleaned from such an extract that Tina's negative experience is associated with the supervisor's role. For Tina, her principal supervisor's performance in her academic role as a supervisor needed to be sufficient and efficient. She expected her supervisor to exercise her authority in this academic relationship. This expectation might be similar among international students from Asian cultures who conduct their PhD studies in the host countries. A supervisor must provide the students with direct instruction, advice, and guidance on academic matters such as experimental procedures and the preparation of written thesis material to conform to the norms and expectations of the academic field. Defined as "the gatekeeper of the discipline" (Manathunga, 2007), a supervisor is expected to be an expert in a specific field; they should possess extensive knowledge and understanding of the topic area. They should also be capable of providing constructive feedback on the thesis standard by reading drafts. However, it is reasonable for the supervisor to require their students to be autonomous and proactive. Alienation to the new supervision system often results in international PhD students' assumption or expectation that a supervisor covers a wide range of roles and tasks in PhD training. Pema is not an exception when making the following claims:

> Being a PhD supervisor in the UK seems more straightforward than in my home country. My supervisors did not involve me much in my thesis. I had to find the topic that interested me, develop the research questions and design, and write the chapters. As they are native English speakers, I thought I would benefit from their language proficiency to make 'native-like' pieces of writing, yet, they recommended that I use professional editing services. (Pema)

The above quotation implies that Pema brought her expectations about what a supervisor and a PhD student should perform during supervision. Regarding the supervisor's role in the writing-up stage, Pema wished her supervisor to be a proofreader. This assumption might be different from her supervisor's perspective. Instead of performing the responsibilities of a professional editor, supervisors should facilitate their students' formulation of ideas and provide feedback on the thesis drafts. They should help students identify their writing strengths and weaknesses to improve their academic writing capacities and enhance their critical thinking to debate and embrace criticism (Wang & Li, 2011; Lee & Murray, 2015).

Supervisors in Western universities tend to assist the PhD students in addressing academic issues, leaving non-academic or personal matters for other relevant professional units, such as International Students' Office or Counselling Services, to handle and support (Chen & Le, 2021). The mismatch in defining the roles and obligations of supervisors and students often derives from cultural reasons. This discrepancy has been identified as a source of learning problems and academic and culture shocks faced by Asian students (Kutieleh et al., 2003). To disseminate the negative impact of this issue, supervisors need to clarify the roles, responsibilities, and expectations of the two parties involved in supervision.

> They said my thesis is like my 'child', so I had to understand it best and take care of it. They also emphasised from the beginning that PhD students have to be autonomous, proactive, and independent and that their roles are only academic partners, guides, instructors, and inspirers. (Kenneth)

The above extract illustrates that Kenneth was aware of his roles and his supervisors' roles thanks to the communication and clarifications made by his supervisors in the early stage.

4.3 Supervisors' Role in Students' Emotional Journey

4.3.1 A Source of Emotional Well-being

Cree's (2012) study stressed the importance of supervisory support and guidance for completing the research training process. In their research, Vehvilainen and Lofstrom (2016) indicated that international PhD students need more than academic support. In other words, they expressed an interest in being cared for in a warm and harmonious relationship. Whether or not supervisors should become a source of emotional support is debatable (e.g. Christie & Garrote, 2013). It has been maintained that supervisors provide insufficient emotional support to PhD students (Christie & Garrote, 2013). The current study revealed that emotional support is integral to a supervisor's duties; students' emotional well-being enables the participants to clear the block of academic progress. All the students preferred to be supervised by dedicated, caring and sympathetic supervisors who supported their students emotionally. They all valued the presence of their supervisors in challenging times such as isolation, homesickness, culture shocks, hospitalisation, and various cultural adaptations. These findings are consistent with the literature on the roles of supervisors (e.g. McCallin & Nayar, 2012; Orellana et al., 2016; Woolderink et al., 2015; Rugg & Petre, 2004; De Gruchy & Holness, 2007). One of the students, Su, acknowledged her supervisor's assistance with handling emotional challenges in her adaption stage:

> I am so grateful for all the encouragement and support from my supervisors. Without my co-supervisor's continual care and support for the first year, I would have been depressed to lead a lonely and isolated life. She took me to some second-hand shops where I could enjoy buying cookware and books. She also introduced me to the local communities where I could find church services and, later, my current partner. (Su)

For Su, the support she received from her supervisors was beneficial for her in the later stages of her academic journey, which *"... empowered my self-confidence and determination to continue with my studies during challenging times."* (Su)

PhD students' positive experience of supervision is correlated with their successful completion of the PhD training. Ben, a male student, found his supervisor's supervision effective and satisfactory because Ben's supervisors adopted a 'pedagogy of care.'

> I had a wonderful and successful PhD training research experience. My supervisors treated me like their son from the first to the last day in Australia. Not only the academic support, but the care and emotional support they dedicated to me gave me the feeling of being at home in that host country. I highly appreciated all the encouragement and support because it sustained my confidence and lessened my feelings of alienation when I was learning to settle in. One day I shared my health issue with my co-supervisor. She also showed her sympathy and encouraged me to keep going. She was the person who took me to the Office of Graduate Research and helped me capture the best and most relieving moment of my life: submitting the hard copies of the thesis. I treasure those memories forever. (Ben)

Ben's positive experience of supervision was credited to his supervisors' proper management of the supervisory relationship. His case delineates the idea supervision is an intellectual and socio-emotional relationship. Ben's preference for dedicated, friendly, and caring supervisors features other Asian international PhD students in this research study. They wish their supervisors would treat them like 'academic fathers and mothers who often care for their children. The findings also reinforce Cree's (2012) idea that supervision should involve care. As can be seen from the participants, TESOL PhD students do not struggle with academic issues such as English language proficiency because they are experienced proficient English teachers in their home countries. The biggest challenge is the emotional issues that sojourners face in the initial stages of adaptation when supervisors' support and care enable them to survive academically and psychologically. Most participants preferred the informal supervision style when finding that this approach worked for them. For instance, Tan asserted that:

> My early completion of the PhD is primarily credited to my supervisors' continuous support. They are devoted and caring. I will employ his style of supervision to supervise my future research students. Supervision should involve tremendous care and support; supervisors should always be handy, sympathetic, and committed. (Tan)

Delma had positive supervision experiences because her four-year PhD training was an academic journey of harmony, supervisory support, and guidance:

> The PhD training process is stressful, and we PhD students do not need more struggles. I was fortunate to be supervised by caring, approachable, and friendly supervisors. They were both open to my ideas and very receptive. I found it comfortable to express my points of view, attitudes, and emotions in front of them. My five-year journey was only sometimes smooth, but with my supervisors always there for support and help, I enjoyed it and achieved a lot. (Delma)

It has been documented that supervisors' academic capability and expertise were the most critical factors for students' successful doctoral experience (Shen et al., 2017). Motivating PhD candidates, investing time, and providing emotional guidance and support were essential tasks of adequate supervision (Woolderink et al., 2015). The findings suggest that successful training experiences depend not merely on academic factors but combined academic and non-academic support. A favourable supervisor was portrayed by the participants of this study as an instructor who is knowledgeable, committed, and exceptionally supportive and knows how to balance student autonomy and their intervention (Vehvilainen & Lofstrom, 2016). Adequate and smooth supervision requires a supervisor to perform three functions: administrative/management, educational, and supportive (Kadushin, 1992).

This study confirms the previous finding that critical feedback may bring emotional challenges to students (e.g. Caffarella & Barnett, 2000). Some students claimed that they were emotionally stressed because of their supervisors' comments and feedback:

> I was stressed when receiving feedback from my supervisors on the drafts. The theoretical framework I spent three months writing was weak and shallow—too many paragraphs needed to be revised or rewritten. I doubted if I could finish my study successfully. Feeling overwhelmed, I even burst into tears. (Siti)

> Different feelings, such as disappointment, self-doubt, and anxiety, came to me when hearing the feedback from my supervisors on the first draft of the proposal. Their comments were critical and straightforward. I thought I was dumb and not competent to undertake this training. (Kim)

As emotional well-being is critical for research productivity (Muniroh, 2019), international research trainees should receive as much pastoral and emotional support as possible to fit into the host institution and host country. Supervisors should not be outsiders during the process of PhD students seeking emotional support. Supervisors need to be a channel to connect students with the host university and society.

4.3.2 Disharmonious Relationships with Supervisors as a Source of Emotional Challenges

Many PhD graduates in our study reported that most of their emotional challenges are related to disharmony in their relationships with supervisors. Lynn, a Taiwanese PhD student, felt very reluctant to communicate with her principal supervisor because *"she was so demanding, strict and cared only about things related to the PhD thesis."* Lynn hoped to develop a harmonious relationship with her principal supervisor but found the gap between them bigger due to a critical incident before the confirmation. Her change of research questions and research design resulted in the reconsideration of supervision roles as well as the division of supervision proportion. Her principal supervisor became the co-supervisor, and this caused more tensions in their relationships. Throughout her journey, she experienced unsmooth supervision and a lack of support from this supervisor. Lynn felt *"stressed, lonely, and uneasy"* when facing the 'crisis' in her relationship with her supervisor: *"Almost all the*

discussions happened via emails. Some face-to-face meetings were short and addressed merely academic concerns. Even though we tried to fulfil our roles accordingly, I could feel tension, conflict, and disharmony in our relationship." (Lynn)

For Asian students, supervision is more than an academic journey but an emotional association (Van Laren et al., 2014). Coming from Confucian cultural backgrounds, many students in this study desired to maintain collective peace in supervisory relationships. They appraised the sense of harmony in working and interacting with supervisors. As handling supervisor-student relationships appropriately conduces to the general emotional well-being of Asian PhD students, establishing nurturing and protective partnerships has become vital.

4.4 Supervisors' Role in Students' Transformation

The findings showed that effective supervision impacts the successful completion of the degree (the product) and transforms the students (the process). Tan confessed that the research training process promoted his intercultural competence. He developed intercultural understanding, awareness, and sensitivity:

> In my situation, doing a PhD is an intercultural learning process; I became more culturally competent. I said so because I became more understanding and sensitive to the cultural differences between my supervisors and me; I was in the 'third place' culture in interacting and communicating with them. (Tan)

Intercultural competence is the outcome of the intercultural learning process. It is an increasingly vital aspect of the relationship between supervisor and student (Zheng et al., 2019). The above extract of the narrative highlighted the importance of considering supervision intercultural learning process, which enables the different learnings to happen and the relationships involved to be built, developed and maintained. This study indicated cultural dimension as one of the biggest challenges concerning the supervisor's role. Supervising international students is demanding and challenging because working with students of international backgrounds requires supervisors to be flexible and skilful in employing supervision styles. When the supervisor and the student 'meet on the bridge' (Singh, 2009, p. 187) and are aware of their roles and obligations, supervisors can succeed in such a mutual engagement and interaction. For instance, Tan said, *"My relationships were harmonious because we were clear and aware of tasks and roles of each party"* (Tan). This finding endorses the view that a supervisory relationship is a pedagogical power where both the supervisor and the student can change the relationship dynamic (Chen & Lee, 2021).

Other research trainees also substantiated their knowledge, skills, and psychology changes. All the participants attributed their transformations to their supervisors, who play the role of 'agent for change' (Giroux, 1988). The following narrative upholds the idea that supervision can shape the supervisee's identity as a socio-cultural process (Hopwood, 2010).

> After the PhD training, I knew what a good supervisor should be like. I will become a supervisor like him: supportive, caring, patient, approachable, and knowledgeable. I will provide additional support to my future students because, for sure, we will be in the same boat; we will undergo similar struggles. (Delma)

4.5 Concluding Remarks

The findings from this research also highlight the importance of the supervisor's support in both academic and non-academic aspects. This study supports the previous studies in defining three functions of effective supervision: administrative/management, educational, and supportive (Kadushin, 1992). According to Cree (2012), supervision should also involve a kind of care. This study emphasises care regarding supervision style. It is a fact that international PhD students are likely to encounter more complex problems in their everyday lives, so they tend to wish for supervisors to take an interest in them as a whole person (Vehvilainen & Lofstrom, 2016). Existing literature insists that supervision should be

best conceptualised at the individual, group, and community levels (Vehvilainen & Lofstrom, 2016). This study also suggests that supervisors and institutions should look for ways to better integrate their students into communities and promote intercultural interaction between international students and local communities, and other multicultural networks.

Analyses of the data provide some implications to promote effective supervision. Firstly, supervising international students is distinguished from supervising local students in such a way that PhD students need academic and non-academic support from their supervisors to make transformations. It is necessary to shift from the product-oriented view towards the process-oriented view that considers supervision a human development process. PhD students need support at different stages of their training, so supervisors can become sources of support or channels to get their students to access those support sources. The findings imply that PhD supervision should be more concerned with care, continuing guidance, and support. Loving, caring, and pastoral supervision enable students to grow academically and overcome emotional challenges. In this regard, meaningful social relationships should be created and nurtured based on mutual trust between international PhD students and supervisors in Western universities.

Supervisors play a significant part in their students' academic achievement and research training experience. Inadequate supervision can cause negative experiences and influence. Students in this study prefer dedicated friendly, and caring supervisors. In other words, they are happy with a model of supervision that involves care. Supervisors' support and care enable these Asian students to survive and thrive both academically and psychologically. Based on the findings, a favourable supervisor was portrayed as an instructor who can possess intercultural competence that helps them to handle intercultural communication and interaction with students from diverse cultures. A supervisor should adopt a 'pedagogy of care' style in supervising students. Being approachable is necessary because supervisors are initial contact people whom students can rely on and seek support and guidance from. As Asian students value harmony in their supervisory interaction and communication, understanding and skills in handling and building relationships with students should be included in a model of supervision.

5. A ‘Whole’ Approach to Supervising Students: I-CARE Model

The findings of this study support the argument that the quality of supervision and the role of supervisors are critical to the success of doctoral research training. Supervision is not limited to the academic training of a PhD degree but expands to a mentoring process of personal development. A humanistic model for supervision I-CARE model has been proposed to enhance the effectiveness of supervision, with a focus on improving the relationship and interaction between the supervisor and students. As the name might revoke its meaning, the I-CARE model fits students of Asian cultural backgrounds who prefer supervision with care, support, and guidance (Cree, 2012). The model necessarily includes five core dimensions, which highlight different qualities, tasks, and roles of supervisors:

The first dimension is ***I****ntercultural competence*. Supervision is a type of intercultural communication and interaction that features a dynamic, ongoing, ever-changing, and continuous process of building, developing, and maintaining relationships (Berlo, 1960). The professional development of supervisors' capacities to handle intercultural communication and interaction is indispensable in the landscape of international education in English-speaking countries. Emphasis should be placed on developing various aspects of intercultural competence: intercultural understanding, awareness, sensitivity, and interactional skills. This dimension also refers to supervisors' involvement in promoting intercultural interaction between international students and university staff, local communities, and other multicultural networks. Intercultural interaction enables international PhD students to gain their academic identity and empowers them to engage in research training and create personal transformations.

The second dimension is ***C****are*. International students wish their supervisors to treat them as whole people. Their preference for a supervision style- 'pedagogy of care'- calls for attention and support to be given to their academic and non-academic issues. The supervisor's care, encouragement, and support will help PhD students overcome emotional challenges in the early adaptation stage in the host society. Loving, caring, and supportive relationships between students and supervisors and between students and local communities are critical to students' research training success. Therefore, supervisors should be active in creating meaningful relationships and willing to assist in developing students' significant relationships in the host country.

The third dimension is ***A****pproachability*. Because of the solitary nature of the PhD journey, students may fall at risk of depression and anxiety. International PhD students are likely to encounter more complex problems in their everyday lives than local students. In some compelling circumstances, they will seek advice, assistance, or guidance from their supervisors. Supervisors should be approachable and available to support and guide their students.

The fourth dimension is ***R****apport*. It is defined as a state of harmony and is affected by three contextual factors: participant relations, role rights and obligations, and communicative activity (Spencer-Oatey, 2008). The research training journey is challenging and tense, which explains why harmonious relationships between supervisors are significant. Promoting rapport requires the supervisor's intercultural understanding and skills to handle cultural differences. For example, students from Confucian cultures may cling to their tradition of respect for their supervisors, and this culture-driven belief will impact how they interact and communicate with their supervisors to maintain harmony during the research training.

Lastly, the ***E****motional intelligenc*e dimension highlights the importance of the emotional well-being of international PhD students. Raising the standards and high quality of supervision should involve cultivating the emotional well-being of supervisors and students instead of merely focusing on pedagogical innovations. As emotional intelligence plays a large part in building relationships and doctoral students' successful completion (Wisker et al., 2003), supervisors should exhibit emotional intelligence and the ability to understand emotions (O'Connor et al., 2019) to nurture and enhance the emotional well-being of their students. The I-CARE model is illustrated in the following figure:

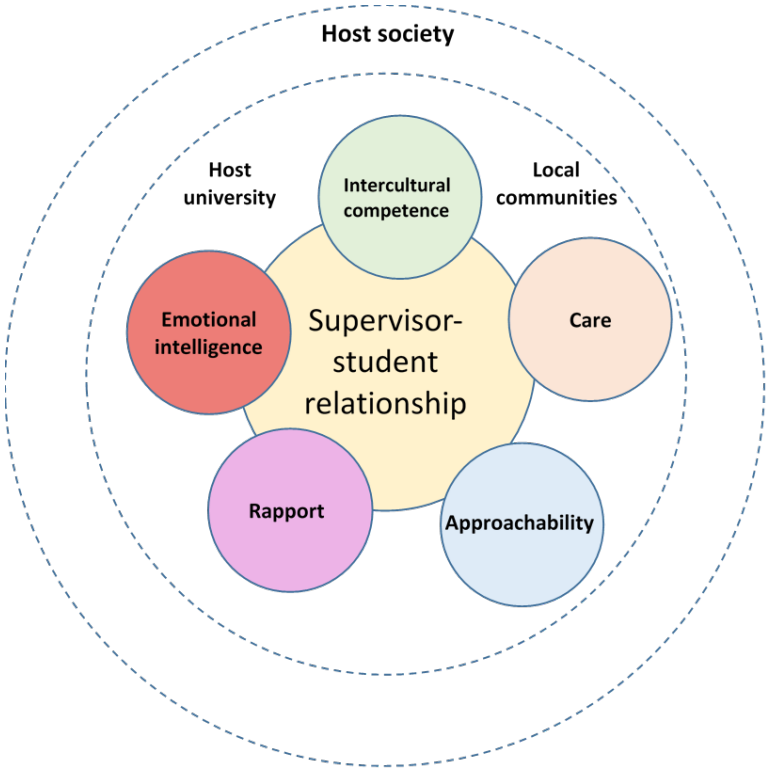

Figure 1. I-CARE model of supervision

The I-CARE supervision model implies supervisors' tasks and roles at different stages of PhD training. A supervisor is expected to fulfil the role of an ***I****nstructor* who provides instructions, academic guidance, and support to PhD students. The supervisor is responsible for providing clear and explicit instructions in academic matters such as thesis, ethics approval, and publications and handling supervisory relationships such as assigned roles and duties for each party. As a ***C****ounsellor* or ***C****ompanian*, the supervisor should provide academic/emotional support, advice, and care during students' difficult times. A supervisor also acts as an ***A****gent of change* who can contribute to students' transformation during and after the research training journey. A supervisor should be considered a ***R****esearch partner* because the success of the PhD journey does not rely on either the supervisor or the students. He or she contributes equally to the outcome of the training process and the harmony of the supervisory relationships. In addition, supervisors and students benefit from adequate supervision in terms of pedagogy, competence, and attitudes. Redefining the role of a supervisor as a research partner acknowledges the importance of reconceptualising the power relations between the supervisor and students. In other words, both parties are equally powerful and play vital parts in the training process. Significant, respectful, supportive, and beneficial relationships will result in positive outcomes of the training. Being an ***E****valuator* or ***E****xaminer,* a supervisor is expected to provide constructive feedback on students' thesis and research progress throughout stages so that both the strengths and weaknesses will be identified, highlighted, or addressed. Such evaluations and examinations should be made regularly rather than being delayed until the final stage, that is, the thesis submission stage. Focusing on the process rather than the product helps supervisors and students monitor and measure students' research progress.

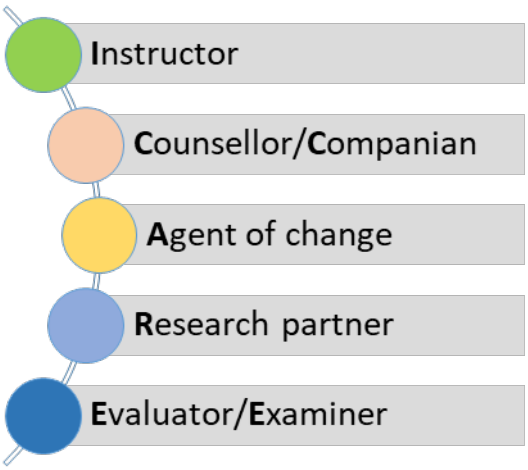

Figure 2. Roles of supervisor

The proposed I-CARE model is created on the process-oriented view, which puts more weight on the student's individual growth than their completion of the degree. The model is a pioneering move to enhance the adequate supervision of prospective international PhD students. It meets the needs of international students who face immense challenges in making pedagogical, socio-cultural, and psychological adaptations to the host society.

6. Conclusion

There is much empirical evidence of supervisors' contribution to the successful and timely completion of doctoral training programs. Previous studies are also at risk of being overgeneralised and not synthesised comprehensively. To overcome such criticism, this study has targeted the PhD process as a whole and dug into a specific cohort of PhD students. Supervision is challenging because it is concerned not only with the production of the thesis but also with the transformation process of students at different levels (Chen & Le, 2021). Often, a supervisor working in the socio-cultural context of his or her own country is metaphorically compared with "a fish living in the water that does not see the water" (Chen & Le, 2021); in other words, the supervisor will only realise their international students'

unpredictable challenges in the unfamiliar environment. This study seeks to improve the quality of supervision by focusing on understanding the complicated nature of this relationship and unfolding the factors that influence this supervisor-supervisee relationship. The findings reported by this research have inspired us to consider PhD research training from a broader perspective, a 'human development' approach extending beyond purely academic concerns. Research results call for a pedagogy of care capturing the success trajectory of Asian PhD students doing TESOL, in which students rely on their supervisors for academic success and emotional well-being. It is a fact that whether this cohort of international doctoral graduates remain in their country of study or return to their home countries, they are a talented workforce, and their contributions are beyond the wealth of an organization or a certain nation. TESOL could be transferred into cultural capital and social capital since, in Asian countries, a good command of English means a high social status and a privilege for better employment. This study helps supervisors to have a good understanding of international students from non-English speaking countries, Asian students in particular.

Maintaining good relationships with supervisors influences the research journey. Both academic and non-academic assistance from supervisors contributes to students' positive experiences. As "…resonant relationships are like emotional vitamins, sustaining us through tough times and nourishing us daily" (Goleman, 2007, p. 4), it is vital for PhD students and supervisors to embrace social connections and caring, meaningful relationships. Proper management of the relationship between supervisors and students in supervision has become rewarding. It is necessary to shift the traditional view of supervision, seeing the absolute power of supervisors in the supervisory process, into the process-oriented view that sees supervision as an ecosystem aiming at the student as a whole person.

Although this study emphasises significant relationships and communities as protective factors in enhancing the doctoral students' meaningful study experiences, their active engagement and interaction with supervisors, peers, co-nationals, academic staff and academics, local communities, and religious communities have not been explored to the full. The I-CARE model can be mistreated as a one-size-fits-all model to accommodate research trainees' needs. The proposal of the I-CARE model can be considered a reference framework for prospective PhD students pursuing TESOL studies in English-speaking countries. Future studies can explore how to develop the toolkits and practices based on the model. More extensive investigations should address the model's effectiveness and the factors that facilitate or hinder the model's implementation in supervision practices.

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Students' Perceptions of Using Video Essays as Assessment Tools

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Abstract: As visual literacy becomes increasingly important in the digital learning environment, Academics and university students alike must learn how to read the multimodal texts, extract meaning from them, and see how they work in order to become fully literate. Using video essays for tools for assessment, especially in a cross-disciplinary field like film studies, will be one of the future directions in engaged learning. With reference to current studies on the usage of video essays as assessment tools, this paper investigates the learning experiences of 40 university students who took a general education (GE) module titled Film Art. All 40 students were to create a video essay towards the end of the GE module. About 50% of the class had experiences creating video essays when taking other modules, and half of them had none. In this small-scale study, surveys and interviews were conducted to examine students' perceptions of video essay assignments. The author will also share her concerns and understandings about copyright issues most teachers and students may encounter when creating video essays.

Keywords: assessment, video essays, visual literacy, students' perception

1. Introduction: Video Essays as Creative Assessment

Digital technology has transformed the education landscape. The rise of the internet and digital tools has led to a revolution in education, making it more accessible, personalized, and engaging than ever before. Alongside opening up new opportunities for teaching, learning, curriculum, and pedagogy, one of the most significant impacts of digital technology on education is the use of video essays as assessment tools, which increases and diversifies representational possibilities (Eisner, 2008, p. 5). According to Leng (2021), the video essay was first officially recognized as an academic practice in 2014 in the U.S.A., when *[in]Translation*, a famous peer-reviewed academic journal of videographic film and media studies started accepting scholarly video essays as a new form of criticism alongside traditional written scholarship. Since 2014, the video essay has attracted more and more attention from scholars. In 2016, Van-den-Berg and Kiss celebrated the idea of using video essays as videographic criticism for academic research in their book *Film Studies in Motion: From Audiovisual Essay to Academic Research Video*. In the same year, Keathley and Mittell also published their book, *The Videographic Essay: Criticism in Sound and Image*, which embraces the video essay as an academic practice. Following the two books published in 2016, a significant numbers of articles including Grant (2016; 2017) and Morton (2017) also promote the use of academic essays as a form of creative assessment, which was supported by many Schools and Departments of Communication, Film and Media Studies in the tertiary education sector. In light of this, the British Universities and Colleges Film and Video Council published the *Introductory Guide to Video Essays* online in 2020. Today, the notion of using the video essay as an assessment method has also spread to the Arts and Humanities disciplines. For example, undergraduates of Film Studies at the University of British Columbia in Canada are now required to create video essays as homework.

Like a traditional written essay, a video essay usually contains an introduction, arguments, supporting evidence, and a conclusion. Yet, because the video essay is narrated through the eye of a camera, it is expected to show intellectual content and audiovisual aesthetics which cannot be told or shown fully in a written essay. Most video essays incorporate the voice over of the person who has written and created the essay. As the voice over speaks, a sequence of visual elements such as "shots, camera angles, colours, editing, spaces, character movements, etc." (Corral Rey, 2022, p. 656) is simultaneously shown in the video essay. As authentic and creative assessment, the video essay genre is particularly effective in handling visual poetics in the framework of such cultural vehicles as film, fine art, drama and theatre, dance and music. Now that the video essay has the power "to reveal something otherwise hidden in written text" (McWhirter, 2015, p. 373), many film scholars assert that the video essay is the most common, if not the best form of multimedia film criticism (Keathley, 2011).

2. Purpose of the Study

While the video essay genre has earned its academic status and become increasingly popular in the field of communication and creative humanities (Türkgeldi, 2021, p. 812), McWhirter (2015) has pointed out the inconvenient truth:

> Recent empirical data suggests that many professional film critics have never worked with the video essay, have seen few examples of it, and/or are confused by what exactly it constitutes (p. 369).

Indeed, concerns have been raised about using the video essay approach as formal assessment. Research has shown that some teachers are worried that they may not be equipped with the necessary knowledge to go beyond plain descriptive writing and carry out pedagogical activities that require the mastery of digital literacy skills (Huerta, Vidagañ, & Munilla, 2014), such as creating and editing video essays. What is at issue is: how are video essays perceived in academia? Are they considered a remedy for overcoming limitations of the written text, or are they viewed as a headache that increases hardship for both teachers and students?

With the aim of finding out local undergraduate students' perceptions of having video essays as formal assessment, in mid-April 2023, I conducted a survey and a focus group interview to collect the opinions of undergraduates who were taking a general education (GE) module titled *Film Art*. In the Film Art module, students were required to create an individual video essay assignment towards the end of the GE module. It is envisaged that at the time of the survey and the interview, students would share with the researcher their experiences and feelings of creating their own video essay for assessment.

3. Research Questions

In this survey study, there are two research questions:

1. To what extent do Hong Kong university students embrace the notion of using video essays as an assessment tool?

2. What major concerns and difficulties do university students have when creating video essays as assignments?

4. Research Methodology

In order to gain a better understanding of how undergraduate students perceive the use of video essays as assessment tools, the study invited all students taking ENG1400: Film Art, a General Education (GE) module to participate in the survey. Forty students, including twenty-three male students (57.5%) and seventeen female students (42.5%) from the School of Business, the School of Communication, and the School of Humanities and Social Science, took part in the study. In week 1, it was explained to all Film Art students that the module has no examinations, but each one of them was expected to hand in one 1,200-word essay in week 7, work on a in-class quiz in week 12, and create a 5-minute video essay by week 14, i.e. the last week of the semester. The following assignment brief was given to the class in week 4:

Major Assignment – Video Essay (30% of the module assessment)
Instructions to Students:
Create a 5-minute video essay. In the video clip, you need to compare the plots of two different films categorized under the same genre. Describe what is similar about the plots as well as what is different about them. Use your comparison and contrast skills to draw some generalizations about the genre. Upload your video essay on YouTube and submit the YouTube link via Moodle.

Together with four standard video essay samples and a recorded video essay creating workshop, a clear marking rubric of video essays on Film Art was shared with all students on Moodle in week 4 as well. Providing students with the marking rubric before they start working on their video essay assignments is important. According to educational studies, "procedural fairness" (Wallace, 2018, p.1053) is enhanced through rubrics, which "can function as a valuable communicative tool between educators and learners" (Anderson & Fujishima, 2021, p. 16). Copeland's study confirms that announcing the evaluation method and giving "detailed instructions on how the scores are reflected" before students begin the task (2021, p. 32) help maintain fairness in the assessment.

Table 1. The marking rubric of video essays

	Form and Argument (20%)	**Production values (20%)**	**Understanding of film language (60%)**
Outstanding	The video essay has a sophisticated argument and personal interpretation of the subject. It has a clear thesis and conclusions.	The video essay is skillfully assembled, purposefully using a range of appropriate techniques, including text, voice-over, visuals, editing, multiple frames, music and sound.	Blends sophisticated analysis of plot, character, action, and dialogue with nuanced consideration of film's visual language and structural elements.
	It provides compelling evidence from the source material to support the argument.	The quality of material is high: clips are clear and audio reflects the original source. Where original effects are added, including text, voice-over, graphics etc. their inclusion enhances the meaning and effect. They are well-produced, and skillfully combined with source material to clarify or enhance its meaning and impact.	The creator's understanding of film language is demonstrated in the production of the video essay itself. The essay uses as well as describes film language, creating sophisticated effects and meanings through a discerning selection of film techniques. It demonstrates sophisticated command of visual and verbal communication.
	It consistently highlights how the evidence relates to and develops the argument.	Timing and pace of the essay are excellent. Music, sound and video are skillfully matched so that their intellectual and emotional impact are enhanced.	The video essay makes insightful comparisons and connections across and between movies. Analysis identifies and communicates the style and impact of these movies, demonstrating a sophisticated understanding of this source material.
	It rarely or never uses source material only to illustrate.		Analysis of film language displays conceptual and technical sophistication, identifying this where present in the source movies, or demonstrating it in critique or analysis of how source material creates ideological or emotional effects.
	The essay demonstrates a willingness to experiment formally, successfully exploring the possibilities of the form in terms of visuals, audio, and editing.		
Good	The video essay exhibits a	The video essay is competently	Increasingly includes analysis of film's

	clear topic, argument and/or personal interpretation of the subject.	assembled, using a number of appropriate techniques, including text, voice-over, visuals, editing, multiple frames, music and sound.	visual language as evidence to support argument and interpretation. The creator's understanding of film language is demonstrated through analysis of specific techniques. Terminology is used correctly. The essay begins to use as well as describes film language, creating some effects and meanings through a range of film techniques. It demonstrates command of both visual and verbal communication.
	It provides evidence from the source material to support this.	The quality of material is sound: clips are clear and audio reflects the original source. Where original effects are added, including text, voice-over, graphics etc. their inclusion communicates clearly. They are well-produced, and effectively combined with source material.	Makes purposeful comparisons and connections across and between movies. Analysis identifies and communicates the style and impact of these movies, demonstrating sound understanding of this source material.
	Use of source material as illustration is effective and limited.	Timing and pace of the essay are good. Music, sound and video are matched so that they work together effectively.	Analysis of film language displays good conceptual and technical understanding, identifying this where present in the source movies, or demonstrating it in critique or analysis of how source material creates ideological or emotional effects.
	It highlights how the evidence relates to or develops the argument.		
Pass	The video essay exhibits a topic, argument and/or personal interpretation of the subject.	The video essay is competently assembled, using two or more appropriate techniques, including text, voice-over, visuals, editing, multiple frames, music and sound.	Draws on analysis of plot, character, action, and dialogue to provide evidence. The creator's understanding of film language is demonstrated through identification of techniques. The essay describes film effects and meanings in relation to a range of film elements. It demonstrates some command of both visual and verbal communication.
	It sometimes provides evidence from the source material to support this.	The quality of material is acceptable: clips are clear and audio reflects the original source. Where original effects are added, including text, voice-over, graphics etc. their inclusion communicates ideas and analysis.	Where film language is the focus of analysis, the film makes some comparisons and connections across and between movies. Analysis identifies and communicates the style and impact of these movies, demonstrating some understanding of this source material.
	It primarily uses the source material to illustrate points.	Timing and pace of the essay are sound. Music, sound and video are matched so that they do not detract from each other.	Analysis of film language begins to display conceptual and technical understanding, identifying this in general terms in the source movies, or demonstrating it in critique or analysis of how source material creates ideological or emotional effects.
Fail	The video has no clear topic, argument and/or personal interpretation.	The video essay is not competently assembled. It does not use appropriate techniques.	The video essay shows little or no understanding of film language, either in its analysis of source movies or in its own use of techniques. It demonstrates little or no command of visual and verbal communication.
	There is no connection between material provided as evidence/illustration and the overall topic.	The quality of the material is unacceptable. Original clips are of low quality, audio is degraded, with incomprehensible dialogue and garbled voice-over. Original effects do not communicate effectively.	The video essay makes no comparisons and identifies no connections across and between movies. Analysis is absent or fails to identify style and impact of the movies.
		Timing and pace of the essay are unsound. Music, sound and video are not matched and the result fails to communicate ideas or analysis.	The video essay displays little or no conceptual and technical understanding.

Having fully informed of the module requirements, students of ENG1400 were then given clear explanations of the research objective and rationale of the study. They were at liberty to join the study of undergraduate students' perception of video essays as a key assessment component. It turned out that forty out of forty students (100%) taking the GE module agreed to participate in the study.

Thus, in week 12 of Semester 2, about two weeks before they handed in the video essays at the end of the Semester, a questionnaire was distributed to the forty participants which collected their demographic information, views and perceptions of creating video essays as module assignments. The questionnaire was in English, and the survey was conducted during the 15-minute break time of the Film Art lecture. Among the forty students of the Film Art module, twenty-eight of them (70%) were year 4 students, ten (25%) were year 3 students, one (2.5%) was in year 2, and one (2.5%) was in year 1. Following the survey, three students were also selected to join a focus interview. Their personal comments on the experiences of creating video essays were recorded in detail.

5. Research Findings and Discussion

5.1 Demographic Findings

The demographic information collected from the survey indicates that the Film Art class was mostly made up of Chinese students studying in Hong Kong, among which three of them (7.5%) were Mainlanders, five (12.5%) were South Asians, and thirty-two (80%) were local Hong Kong undergraduates whose mother tongue is Cantonese. All of them were able to speak and write English at university level.

5.2 Quantitative Findings and Discussion

In part two of the questionnaire, the participants were asked whether they had previous experiences in creating video essays. It is found that about 50% of the class had experiences creating video essays when taking other modules, and half of them had none. Interestingly, when being asked whether it is the case that they enjoy watching a video essay more than reading a written essay, 35% and 62.5% of the students strong agreed and agreed with the statement respectively. Only one student (2.5%) stated that he/she was "fine with both", and no students disagreed or strong disagreed with the statement. Such responses may imply that most students prefer visual learning. The main reason for their preference has been pinpointed in previous research studies - students understand and remember information better when they see it (Raiyn, 2016, p.115).

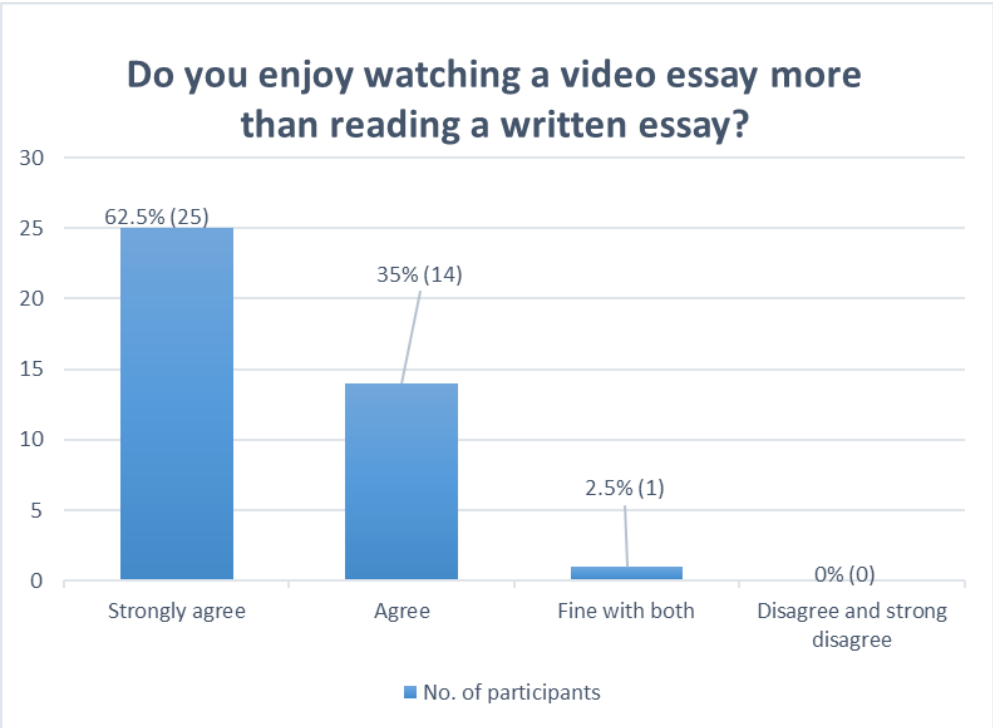

Figure 1. Participants' responses when being asked if they enjoy watching a video essay more than reading a written essay

While students prefer watching video essays to reading written essays, it does not necessarily mean that students are comfortable with creating video essays as assignments. As can be seen, the apps that students used to create their video essays are mostly user-friendly video editor and maker which can be download freely:

Video essay creating apps	**PPT**	**iMovie**	**Window Movie Maker**	**Capcut**	**Others (e.g. InShot)**
Percentage (No. of participants)	47.5% (19)	40% (16)	5% (2)	5% (2)	2.5% (1)

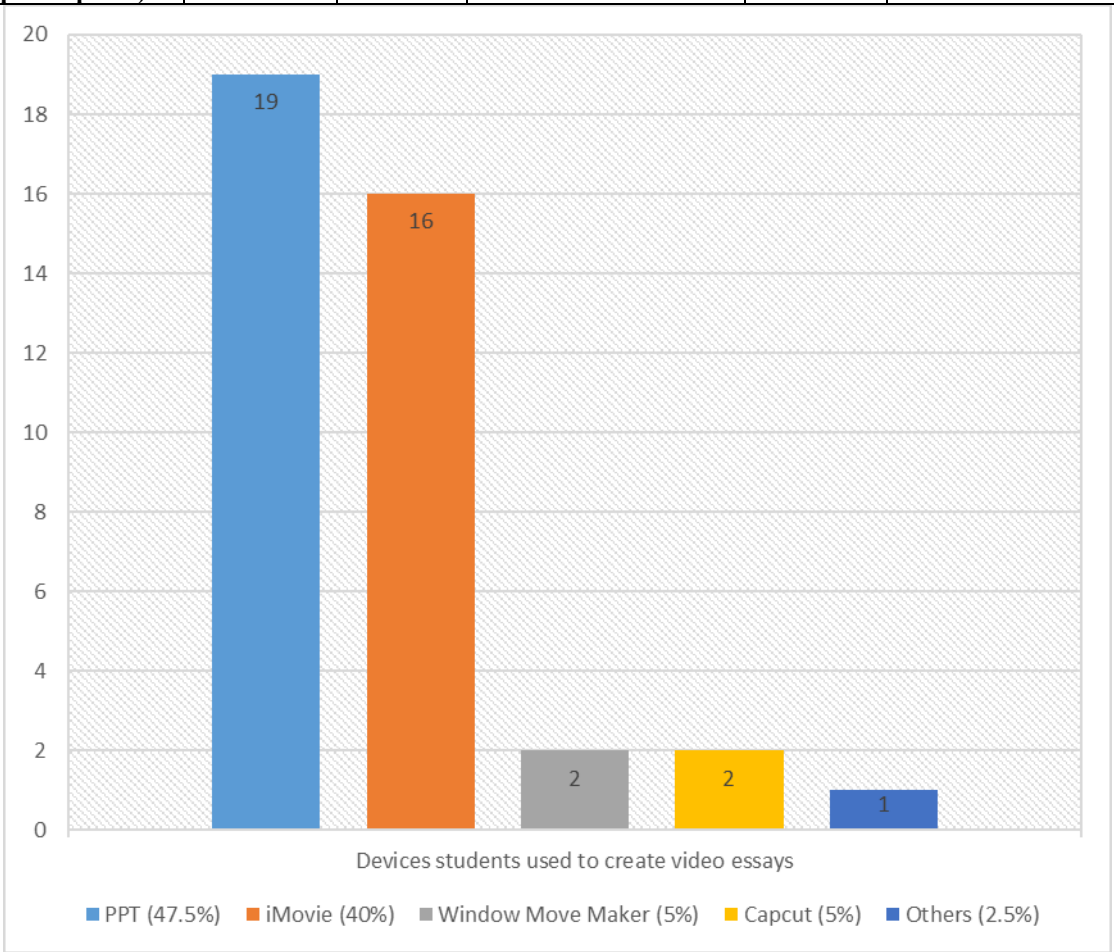

Figure 2. Devices students used to create video essays

The heavy reliance on PowerPoint may as well reflects that students were more at ease with using an old software that they were familiar with. Capcut, iMovie, and other video creating apps such as InShot may be easy to use. Students could have used more user-friendly functions that allow users to create more special effects in their videos. Yet, as reflected in Figure 2, students were not entirely comfortable with using new video creating and editing apps. It appears that they would rather choose conservative devices that they think they could handle well.

In part three of the questionnaire, participants were asked to express their views and perceptions about creating video essays as module assignments. It is revealed that the majority of the Film Art students did realize that the use of video essays as module assignments is getting more and more trendy and common at university. As can be seen in Figure 3 below, up to 80% of the students strongly agreed and agreed that in future, more employers will require employees to master the soft skills of creating and presenting data and ideas visually and digitally. Having that said, creating video essays was still a challenge to many students. 72.5% of the participants admitted that compared to writing a traditional written essay, creating a video essay was more time-consuming.

Table 2. Survey on Hong Kong undergraduates' views and perception about using video essays for assessment

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1. I prefer creating a video essay to writing a written essay.	10% (4)	17.5% (7)	45% (18)	25% (10)	2.5% (1)
2. I need more time to create a video essay than to write a written essay.	42.5% (17)	30% (12)	25% (10)	2.5% (1)	0% (0)
3. I find creating a video essay more enjoyable than writing a written essay.	12.5% (5)	40% (16)	35% (14)	12.5% (5)	0% (0)
4. I believe that creating video essays will be the trend for tomorrow as more and more jobs require the skills of creating and presenting data and ideas visually and digitally.	20% (8)	60% (24)	17.5% (7)	2.5% (1)	0% (0)
5. More assessments should be converted to video essay assignments.	2.5% (1)	37.5% (15)	42.5% (17)	15% (6)	2.5% (1)

Similarly, while over half of the participants said they found creating a video essay more enjoyable than writing an essay, most students held a neutral attitude about using video essays as an assessment tool. For example, only about 30% of the participants prefer creating a video essay to writing a written essay if they have the right to choose. Likewise, only 40% of them strongly agreed and agreed that more assessments should be converted to the video essay format. By and large, the findings may mean that students were not confident that their video essays could earn higher scores than their written essays.

5.3 Qualitative Findings and Discussion

The data from the focus group interview is in line with that collected from the questionnaire Participants made even more solid and specific comments to address their concerns:

Table 3. Comments from the three Film Art students in the focus group interview

Comment 1	"I have a hard time keeping the video essay under five minutes. There is so much I want to talk about, but my voice over cannot go too fast. It needs to be well-paced. It is not easy to cover all the main points while taking care of the audio and visual elements in the video clip."
Comment 2	"I am not entirely sure whether it is legal to excerpt video clips from a film and have them inserted into my own video essay. I know works in the public domain are no longer protected by copyright and can be used freely, but I find it difficult to determine whether a work is in the public domain. It seems that copyright terms vary depending on the jurisdiction and the type of work."
Comment 3	"The video essay allows me to express my ideas in creative ways. Now I became more aware of the importance of setting the voice over volume, soundtrack volume, as well as the use of subtitles and pauses, many of which were aspects they I overlooked before I started creating my own video essay."
Comment 4	"It's great to know the rubric for marking the video essays. I need to know the criteria for assessment, which help me understand what is expected of us. The sample vide essays also give me good ideas about the level of achievement expected for each assessment criterion."

One student participant who obtained an A grade from her Film Art written essay expressed that she was worried that she might not be able to keep the video essay to just five minutes. Although she could rely on her voice over script, she wanted her voice over to match with the edited film clips she prepared for the video essay. It had not been easy for her to set the right speed for her voice over.

Another participant confessed that she was not familiar with the concept of fair use. She understood that she should use only materials that are in the public domain or available under open licenses. She also knew that she needs to provide proper attribution so as to avoid plagiarism. However, there were

still times when she could not tell whether a certain work is in the public domain. She was not certain whether she needs to seek permission from the copyright holder. Her other concern was that the copyrighted materials could be expensive. To play safe, she might just as well refrain from using materials that cause copyright issues.

Last but not least, the third student participant happily shared what he has learned during the process of creating a video essay. He pointed out that it was during the production process that he realized how multimodal aspects such as voice over volumes, running images and subtitles should be used and adjusted to optimize the effects of the video essay. The video making experience is useful not just for the Film Art module, but also for future use. He was also thankful to the lecturer for giving clear instructions and marking rubric for the video essay assignment.

6. Conclusion and Recommendations

Although the sample size of this small-scale study was only forty, it did bring to light the latest first-hand data of how local undergraduate students' perceive the use of video essays as assessment tools. From the survey findings and focus group interview feedback, it is observed that the notion of creating video essays as assignments was quite new. Despite the growing popularity of video essays in tertiary education, half of the Film Art class had never created a video essay for their studies before taking the GE module. On being asked to create a video essay, 47.5% of the students in the class turned to PowerPoint, a familiar app that was not primarily designed to create and edit video clips.

To improve students' digital literacy and engage them in multimodal learning, teaching staff, regardless of which discipline, is recommended to incorporate video essays as part of the module assessment. As a matter of fact, alongside the Film Art module, other modules designed to give students a digital edge, including Corpus Linguistics, Digital Literacies in English, Film and Literature have also adopted the video essay as an assessment method. Apparently, video essays are more demanding than written essays. Besides taking care of the structure, organization and language of the traditional essay, students will also need to master their editing skills, storytelling abilities, and visual communication principles to create a compelling piece of work. Those who can create an effective video essay are keen multimodal learners who can also use multiple modes of communication to convey ideas, "which can include virtual texts such as film clips, audio clips, image projections, as well as interactive devices such as games, apps, and social networks" (Tso & Lau, 2018, p. 179). As a form of authentic assessment, video essays can help students with different learning styles to better understand and retain information.

One issue when creating video essays as assignments though, is that students may encounter complicated copyright matters. Students might want to include copyrighted materials such as images, video clips, music, or other intellectual property in their video essays. Using these materials without permission from the copyright holder or without a valid fair use claim can lead to copyright infringement. Below are some tender reminders to protect oneself against copyright infringement claims:

a. Copyright arises automatically at the time the work is created. The work can be created by any person (individual or corporate) anywhere in the world. No registration is needed. In Hong Kong, the duration of copyright protection of any artistic and/or literary work lasts for the life of the author plus an additional 50 years. As for the work of joint authorship, the duration of protection lasts for the life of the last author plus an additional 50 years. Sonnets written by Shakespeare, for example, are considered works in the public domain. They can be used freely by anyone because they are no longer protected by copyright.

b. As a general rule, permission of the copyright owner has to be sought should one wants to reproduce, adapt and/or distribute any part of the work. The copyright owner retains all rights by copyright law. For the use of their work, a payment of remuneration should be made to the copyright owner. In Hong Kong, Reprograhic Rights Licensing Society Limited (HKRRLS) grants licenses for various publications including books, periodicals, etc. Meanwhile, the Hong Kong

Copyright Licensing Association (HKCLA) grants licenses to works in a number of local newspapers and magazines.

c. Fair use is a doctrine in copyright law that allows limited use of copyrighted materials for purposes such as criticism, comment, news reporting, teaching, scholarship, or research. However, there is no general fair use in Hong Kong. There are limited specific exemptions under Hong Kong laws. Fortunately, according to the Copyright Ordinance of Hong Kong Law, Cap. 528 (2019), fair dealing exceptions include research and private study, criticism, review and news reporting, incidental inclusion of copyright material, education, libraries and archives, and others such as back-up copy of computer programmes. In other words, as long as the dealing is (i) in a specific course of study; (ii) for the purpose of giving or receiving instructions, and (iii) provided by an educational establishment, i.e. the university as defined by the Copyright Ordinance, it is unlikely that the teacher or the student will breach any copyright. Nevertheless, the video essay assignments must not be shared beyond exempted premises such as the university website or Moodle.

d. Last but not least, even if students are allowed to use copyrighted materials under fair dealing, they should still provide proper citations and give credits to the original creators. Failure to do so may constitute plagiarism, which can have serious academic consequences.

Limited by the scale and duration of the research, this study has not been possible to reflect the perception of video essays from the teachers' perspective. It is envisaged that teachers may encounter difficulties in marking essays. Further research on the effective use of video essays as assessment is needed. Notwithstanding, this small-scale study proves that video essays do bring pedagogical benefits as teachers can teach students how to use copyrighted works legally and ethically (Sendra, 2020, p. 74). Video essays, as authentic and creative assessment, can be a unique way to assess students' various understanding and visual communication techniques. Unlike traditional written essays, video essays allow students to demonstrate their knowledge and creativity by using audiovisual elements.

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Student-Teachers' Practicum Experiences in Hong Kong and Macao during the COVID-19 Pandemic

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Abstract: Teaching practicum plays a critical role in teacher education for student-teachers in enabling them to adapt educational theories to real practices in authentic contexts. Pre-service and in-service teachers also acknowledge practicum as an opportunity to interact with students in classrooms with supervision from mentors and university supervisors, different from other taught courses in teacher training programmes. This study investigates two groups of student-teachers in Hong Kong and Macao, grounded in a pilot study, to identify the critical features of practicum practices during the COVID-19 pandemic. At this time, normal school operations were affected in the two special administrative regions in the Greater Bay Area, and this study examines eight student-teachers' practicum experiences during this period. The practical implementation of the practicum, including lesson planning and supervision from universities and schools, was studied. Post-practicum interviews with the student-teachers were also conducted to explore their perspectives on the distance learning aspect of the practicum. Other corresponding forms of data, consisting of teaching plans and video-recorded lessons, were collected to triangulate the analysis. The major findings of the study include the identification of various pedagogical foci in the practicum, the different assessment tasks being developed, consequences of parental involvement, evaluations of the exercise, as well as challenges faced by student-teachers during the practicum. Implications include innovation of practicum as well as reconsideration of some of the critical elements of the teaching practicum offered by current teacher training programmes.

Keywords: practicum, online learning, teacher training, higher education

1. Introduction

The COVID-19 pandemic has had a tremendous impact on education, including changes in teacher education (Carrillo & Flores, 2020). Schooling at various levels, including universities, was suspended due to the need to control the spread of the virus and maintain social distancing, with a distance learning mode adopted. The transition took place abruptly and rapidly, using technology to shift learning away from traditional face-to-face modes and towards digital platforms.

Bozkurt et al. (2020) have looked at the global outlook on the interruption of education, reflecting on the circumstances of K-12 and higher education, highlighting the importance of alternative assessment and evaluation methods during the pandemic. With the physical closure of universities and colleges around the world, the emergency e-Learning situation (Linnes et al., 2022; Murphy, 2020) has also been discussed specifically in relation to higher education. One specific topic across different levels of K-12 and higher education is practicum in higher education. Lei (2023) conducted a study investigating the experiences of student-teachers in Teacher Education Institutions (TEIs) at this time.

Two cities in the Greater Bay Area (GBA) in China, Hong Kong SAR and Macao SAR, are formerly colonies of Great Britain and Portugal respectively. The education systems in these cities are also similar in that they have fifteen years of free education, and teacher education in both provides local and international content to support student-teachers, offering qualify teaching to children and students from kindergarten to secondary level. More specifically, the teacher education programmes in the SARs in higher education offer professional training for student-teachers who intend to become teachers in K-12 schools. The Education Bureau (EDB) in Hong Kong SAR requires school teachers to be either registered teachers or permitted teachers. For the registered teachers, one of the requirements is to hold a teaching qualification, e.g., local teachers' certificate or post-graduate diploma/certificate in education, to meet the professional standards of teaching (EDB, 2000). The Education and Youth Development Bureau (DSEDJ) in Macao SAR requires school teachers to have higher diplomas, or above, with recognised pedagogical training (Macao Special Administrative Region, 2012). Teacher education institutes (TEI) in both SARs provide similar teacher education training with practicum arrangement. TEIs in Hong Kong SAR offer higher diploma in education, bachelor of education and postgraduate diploma in education programmes which are accredited as holding teacher qualification for teacher registration. The teacher training programmes in part-time and full-time modes are undertaken in Hong Kong SAR for pre-service and in-service teachers. TEIs in Macao SAR offer bachelor of education and postgraduate diploma in education programmes that day-time and night-time modes are implemented respectively in practices.

1.1 Schools in Hong Kong and Macao during the COVID-19 Pandemic

At the start of the pandemic, the Hong Kong Special Administrative Region (SAR) government (2020, January 31) extended Chinese New Year holidays at secondary schools, primary schools, kindergartens, childcare centres and special schools. The EDB then stated the phases for the resumption of face-to-face classes at primary and secondary levels. The first phase was for secondary three to secondary five students, i.e., senior secondary forms, who resumed face-to-face classes in May 2020 while cross-boundary students resumed their classes in June 2020 (2020, May 22). Primary four to secondary two students also resumed classes in June 2020 (2020, June 3). All primary and secondary schools then suspended face-to-face classes from July 2020 and used online modes of teaching and learning (2020, July 27) due to the spread of COVID-19. Kindergarten three, primary one, five and six, and secondary one, five and six students then resumed face-to-face classes in September 2020 (2020, September 23), followed by all other K-12 students by the end of this month (2020, September 29). All students and teachers strictly followed the guidelines on schooling during the pandemic issued by the EDB including the wearing of face masks in schools and conducting a daily self-COVID-19 test. However, classes for kindergarten children and primary one to primary three students were suspended again (2020, November 20), followed by all K-12 schools, from December 2020 (2020, November 29). The EDB announced the resumption of face-to-face classes for K-12 in April 2021 (2021, March 26) a few months later. Another large-scale class suspension for kindergarten to primary schools occurred in January 2022 (2022, January 11), and few days later for all secondary schools (2022, January 20). Face-to-face classes were suspended until March 2022 (2022, February 14). At this time most of the schools conducted distance learning and students attended online classes at home. Kindergartens resumed face-to-face classes in phases, from May 2022 onwards, with one-third of the children allowed to go back to school in each phase. Primary school students had already resumed half-day face-to-face classes from April 2022. Secondary students resumed half-day face-to-face classes in May 2022. All students needed to conduct rapid antigen tests (RATs) and were only allowed to attend classes with negative results (2022, April 11). The EDB updated the guidelines on presentation of communicable diseases and required students to attend school activities with negative RATs results (2022, May 19).

Students from secondary schools were allowed to attend whole-day classes providing the COVID-19 vaccination rates were high, i.e., 90 percent or more of the total number of students of the whole school or an individual class level; students from primary schools resumed face-to-face classes in December 2022, with COVID-19 vaccination rates reaching 70 percent or more (2022, October 25). The EDB announced that all schools had resumed face-to-face classes as of February 2023 (2022, December 30).

The Macao Special Administrative Region (SAR) government postponed, after Chinese New Year holidays, the resumption of classes in tertiary and non-tertiary education (2020, January 24). The DSEDJ revealed that the schedule of class resumption was correlated with that of Zhuhai and Zhongshan in the Greater Bay Area (2020, February 27), as some cross-border students who studied in Macao lived in Zhuhai. It also issued guidelines regarding the resumption of classes, and provided a flexible assessment arrangement embracing formative assessment (2020, March 17). Face-to-face classes in non-tertiary education resumed from May 2020, with a three-month class suspension (2020, April 19). The senior forms in secondary levels were the first cohort to resume face-to-face classes in schools, from 4 May 2020, followed by the second cohort of junior secondary levels on 11 May 2020. The senior primary and junior primary levels resumed face-to-face classes from 25 May and 1 June 2020 respectively. However, face-to-face classes conducted at the beginning of the class resumption strictly followed the guidelines of the DSEDJ, for examples, the wearing of face masks and reduced social interactions among students and teachers in schools. For kindergartens, three-year-old or older children were allowed to attend school activities from the start of the academic year of 2020-2021, i.e., from September 2020. A year later, the DSEDJ announced a suspension of face-to-face classes in tertiary and non-tertiary education from 25 September 2021 due to the spread of COVID-19 (2021, September 25). Non-tertiary education resumed face-to-face classes after one month (2021, October 21), and the DSEDJ allowed tertiary institutions to decide the dates of resumption of classes based on their situations. Some schools with cross-border students were allowed to use hybrid modes of teaching and learning, i.e., an online mode for students who were not able to go back to school and the face-to-face mode for students who attended classes at the schools. The DSEDJ decided to end the 2021/2022 academic year (2022, June 22) early compared to the normal academic calendar. Some schools with students and/or teachers who caught COVID-19 had their classes suspended (2022, December 12). All schools resumed normal classes from January 2023, and were allowed to provide special arrangements for students and teachers diagnosed with COVID-19.

In short, K-12 schools, i.e., kindergarten, primary and secondary, in Hong Kong and Macao were suspended for certain periods during the pandemic while face-to-face classes were sometimes shifted to e-learning. The SAR governments encouraged schools to have hybrid modes in order to offer learning opportunities to students who were not able to attend face-to-face sessions. In addition, it allowed schools to conduct classes in either face-to-face mode or e-learning according to the situation of schools with students infected by COVID-19. Therefore, different modes of teaching and learning emerged in schools. For the higher education sector in Hong Kong and Macao, universities and colleges adopted e-learning, allowing students to attend lectures online. However, for the practicum in education programmes in the two cities, practices were determined by the situations in non-tertiary education at the certain time during the pandemic.

1.2 Research Questions

This study aimed to investigate the practicum experiences of student-teachers in teacher education programmes in Hong Kong and Macao during the COVID-19 pandemic, guided by the following two research questions:

1. What were the experiences of student-teachers in the practicum in teacher education programmes in Hong Kong and Macao during the pandemic?

2. What were the common and different features in the practicum in teacher education programmes in Hong Kong and Macao during the pandemic?

2. Literature Review

The Greater Bay Area (GBA) is comprised of the two Special Administrative Regions (SARs) of Hong Kong and Macao, and the nine municipalities of Guangzhou. The two SARs governments have similar historical backgrounds, including shared geographical location and economic significance in China's social and economic landscape. A triple "I" strategy of Integration, Innovation and Internationalisation is also present in the region (Xie et al., 2020). The two SARs are the only cities in China under the "one country, two systems" framework. However, higher education, in particular teacher education, has various contextual and cultural differences between the cities, and a lack of systematic collaboration and sharing of resources (Shi, 2021). Thus, it is critical to inquire into the features of teacher education programmes in both the cities in order to provide direction on establishing meaningful collaboration in education in the GBA.

The emergency remote teaching, defined by Hodeges et al. (2020), that emerged at the start of the pandemic marked a turning point in education, with the rapid switch from a face-to-face education environment to online instruction, resulting in the largest distance-learning experiment in history (Linnes et al., 2022). Carrillo and Flores (2020) analysed over a hundred empirical studies on online teaching and learning practices in teacher education and found three domains in the educational experience, namely Teaching Presence, Social Presence and Cognitive Presence. Teaching Presence, directed at achieving learning outcomes, examines special pedagogical issues related to the design and facilitation of the educational experience. It is concerned with the pedagogical approaches adopted, the relevant and authentic assignments assigned, and appropriate tools and technologies utilised. Social Presence highlights interactions among peers and educators to promote collaboration and a relationship connecting participants affectively and effectively. The development of online activities is fostered by an optimal level of cohesion in the learning community. To establish the social presence, educators provide opportunities to enhance belongingness, collaboration in small groups, regular discussion, and high levels of support and cooperation. Cognitive presence refers to active intervention by educators in the process of constructing meaning, including the ability to pose questions that deepen individuals' critical reflection. Sometimes it is difficult to distinguish from Social Presence, with the higher order cognitive skills developed in complex discussions in groups blurring the boundaries of the presences. However, key is the extent to which learners are able to construct meaning through sustained reflection and communication in the community of inquiry. Apart from the three presences, the ability of teachers and learners to affectively engage in relationships is essential in the educational experiences (Carrillo & Flores, 2020). In addition, the intersections between the presences practically overarch and generate contextualised, personalised, socialised online teaching and learning environments. In addition to the presences, student-teachers struggled with maintaining students' active engagement and identifying the appropriate time to scaffold students' learning in the online learning procedures. To handle these struggles, applied strategies for online teaching have included modeling, a student-centered approach and patience in the online learning environment (Jin, 2022).

Teaching practicum is prominent in teacher education. As noted previously, for long periods during the pandemic, teaching at many K-12 schools and tertiary institutions in China was suspended from 2020 to 2023. Tekel et al. (2022) have systematically reviewed the implementation of practicum on educational activities in some countries during the pandemic. Three ways of delivering the teaching practicum at this time were identified, including (1) moving teaching practicum online; (2) abolishing teaching practicum requirements; (3) re-opening schools after a short closure. Many countries in the world adopted distance learning in practicum, with online courses at K-12 schools and online peer teaching, for example, recording teaching videos or using virtual reality technology in order to keep teaching practices in digital world. Some countries, for example, Canada, re-recognised their teacher qualifications in order to allow student-teachers who did not have the chance to conduct teaching practicum to fulfill the provincial teacher certification requirements (Van Nuland et al., 2020). Lei (2023) conducted a pilot study examining critical features of student-teachers' practicum experiences during the pandemic. Practicum supervisions on online pedagogy, practicum reflection and evaluations, as well as communications between student-teachers and supervisors, were examined in the complex practicum situation during the pandemic.

In this study, a theoretical framework has been created to analyse the situations of student-teachers' practicum experiences in Hong Kong and Macao SARs, grounded in the results of the reviewed research studies. More specifically addressing three dimensions of the means of practicum, supervision from student-teachers' viewpoints, and assessment in the theoretical framework to answer the two research questions, specific perspectives are prominently highlighted in the study.

3. Methods

This is a naturalistic research inquiry to compare cases on experiences of practicum for student-teachers in Hong Kong and Macao. It adopts a qualitative approach, wherein textual data was gathered to holistically analyse the specific context (Creswell et al., 2003) of student-teachers' experiences during the pandemic. The research was undertaken in the final stages of the pandemic, interviewing student-teachers in the SARs and reviewing the arrangement and implementation of practicum during the entire pandemic period. It uses content analysis on the basis of comparative interpretation of the phenomenon in its real-world contexts (Schreier, 2012), i.e., cross comparison of the two SARs in the Greater Bay Area. To analyse the data collected from both cities, the three dimensions of the theoretical framework were formed as the main categories to examine the specific situations described in the data.

3.1 Participants

Four student-teachers in higher education in each SAR participated in the study, i.e., eight participants. Among four of them, one was an in-service teacher and three were pre-service teachers. Pseudonyms (Hannah, Harley, Harry and Henry; Mia, Matthew, Morris and Michael) were assigned for confidentiality. All participants had conducted the whole or part of their practicum in teacher education programmes during the pandemic. The background information of the participants is shown in Table 1.

Table 1. Participants' Background Information

City	Participant	In-/Pre-service	Programme
Hong Kong	Hannah	In-service	Bachelor of Education
	Harley	Pre-service	Bachelor of Education
	Harry	Pre-service	Higher Diploma in Education
	Henry	Pre-service	Higher Diploma in Education
Macao	Mia	In-service	Post-graduate Diploma in Education
	Matthew	Pre-service	Post-graduate Diploma in Education
	Morris	Pre-service	Post-graduate Diploma in Education
	Michael	Pre-service	Post-graduate Diploma in Education

3.2 Data Collected

Semi-structured interviews were conducted, and transcribed. The teaching reflection papers of each participant were collected, and teaching materials, including video records, teaching movies and online tests were gathered for examination of the trustworthiness of the analysis as well as consistency between the ideas extracted from the interviews and the actual actions in the cases.

3.3 Analysis

Comparative analysis was utilised (Lincoln & Guba, 1985) in the transcription. Coding text was executed and grouped into categories generated from the systematic presentation of the transcripts and other materials collected. The generated codes were used to compare with the dimensions formed in the theoretical framework for analysing the collected data.

4. Results

There are five major results found in the study, including practicum experiences, impact on supervision, student assessment, teaching challenges and influences on student-teachers.

4.1 Practicum Experiences

4.1.1 Adapting to Online Teaching

Due to the COVID-19 pandemic, K-12 schools in Hong Kong and Macao were closed. To ensure the continuity of students' learning, many schools conducted classes switching from in-face lessons to online teaching.

> The format of online classes is that the teacher conducts online teaching from the school classroom while the students attend the classes from home. However, to facilitate the learning process, each class was divided into two groups and one teacher was assigned to each group. The first five minutes were spent greeting the students, followed by using online teaching materials and engaging the students in simple interactive activities to facilitate the learning of basic knowledge. [HENRY, 13:45]

> Online teaching was a bit challenging for Physical Education lessons. We set goals and provided videos for students to exercise at home. The students would film their workout video and submit them to the teacher for review when classes resumed after the suspension. [MIA, 02:48]

> During the suspension, our school conducted online teaching. The teacher would record some videos for the students. … For example, during Chinese language lessons, the teacher created an online video of a story for students to listen before asking them to answer two open-ended questions related to the story. [MICHAEL, 02:04]

In conclusion, the COVID-19 pandemic prompted a creative shift in pedagogy from traditional classrooms to online learning. Schools used multimedia resources and real-time teaching platforms to ensure learning continuity.

4.1.2 The Difference between Face-to-Face and Online Teaching

We explored the disparities between face-to-face and online teaching. Through interviews with the student-teachers, we uncovered the challenges, as well as the benefits, of using each method. In addition, we also examined student engagement, class management, interaction and feedback mechanisms in both methods.

> The main difference between face-to-face teaching and video-based online classes is the interaction between teachers and students. In face-to-face classes, students could immediately inform their teachers if they didn't understand a concept, whereas in video-based online classes, they could not do so. This results in a less effective learning experience because they move on to the next topic without fully understand the previous lesson. [MIA, 07:18]

> The key difference was difficulty in receiving student feedback in online classes. Without knowing students' understanding and learning progress, it became challenging. On the other hand, face-to-face instruction allows for better communication and engagement between teachers and students, enabling the use of different teaching methods. Therefore, face-to-face instruction is considered more effective. [MICHAEL, 05:40]

In summary, although online teaching offers flexibility it lacks the immediate feedback, student interaction and disciplinary structure found in face-to-face teaching. Understanding these differences

helps in developing effective teaching strategies that cater to the unique needs of students in both methods. Social presence is deficient in online teaching, influencing the teaching presence of student-teachers.

4.1.3 Impact of Parental Involvement on Online Teaching

Parental involvement and its impact on online teaching was explored, particularly for younger students who need constant guidance. This part of the research also sheds light on how parents help in accomplishing home-based learning tasks, creating parent-child interaction, and the challenges faced by teachers due to parental oversight.

> Parental involvement creates pressure for teachers. They fear making any mistake in the presence of parents. Placing too much focus on a student often leads to complaints from other parents about favoritism or exclusion of their students [HANNAH, 34:08]

> Online courses can provide opportunities for parent-child bonding since both the students and their parents engage in those activities together. This not only allows the students to learn but also increase their time with their parents which later boosts their interest in learning. [HENRY, 09:57]

> It places pressure on teachers to prepare teaching materials. This was due to the teaching principles announced by the Macao government during the suspension, which emphasised a relatively simple rather than tight teaching approach. However, the primary school students still required assistance from parents with online learning tasks. Thus, we had to be very careful when designing homework. Both the difficulty level and workload of homework needed to be well controlled to avoid complaints from parents. [MIA, 34:08]

> For grade one and grade two students, they required parental assistance to complete their video-based online learning. Therefore, parents played a significant role in supporting their students' learning at home. [MICHAEL, 07:29]

In summary, parental involvement was pivotal to the success of online teaching since it promoted the quality of parent-child interaction, as well as the younger students' learning. However, this involvement can impose pressure on teachers. The balance of the parental involvement hence plays a significant role in shaping the online teaching environment.

4.1.4 Reflection on Teaching

Teaching experiences of student-teachers during challenging times were determined in specific ways during the pandemic. This included how student-teachers reflected on their teaching, the tools they used to record their reflections and the subsequent impact of these reflections. Different strategies ranged from peer reviews, self-reflection and use of logbooks to adapting teaching methods to more engaging activities and supervisors' feedback.

Table 3. Comments from the three Film Art students in the focus group interview

> I observed the students' learning and reflected on it. [HANNAH, 04:19]

> Due to the pandemic, my main method of conducting the practicum was through filming instructional videos. We would review our own videos for self-reflection. Additionally, our supervisor would watch the videos and provide comments. Moreover, we would watch each other's videos among our peers before doing the peer assessment, which served as another method for refection. [HARRY, 02:13]

> I would send the videos I recorded to my supervisor for evaluation. He later identified the areas that I needed to improve on. Through this process, I understood my own teaching strengths and weaknesses. [HENRY, 02:21]

> I saw the teachers maintaining a teacher logbook during my practicum. This logbook documented the details of each class and each child's learning progress. Therefore, reflection was regular practice for every class. [MIA, 10:04]

> The feedback during my practicum helped me to identify some of my weakness in teaching. [MORRIS, 02:56]

Overall, teachers greatly valued self-reflection as a critical tool to evaluate teaching effectiveness related to teaching presence, and they adjusted their strategies accordingly. They tended to utilise resources like video recordings, logbooks, peer feedback and supervisor evaluations to facilitate their reflections. However, time constraints and work stress often hindered consistent reflection. The feedback gleaned from this reflective process nevertheless led to a noticeable improvement in their teaching, reinforcing the importance of reflective practice in education.

4.1.5 Changes in Teaching Practicum

Practicums are required for student-teachers, where they conduct lessons observed by a supervisor or school mentor. However, with the suspension of face-to-face teaching, student-teachers were required to video record their lessons, with or without the presence of the students before sending them to their supervisors for evaluation.

> Due to the pandemic, my main method of conducting the practicum was through filming instructional videos. We would review our own videos for self-reflection [HARRY, 02:13]

> I used my computer and iPad to record videos, employing PowerPoint to deliver storytelling lessons [without any student]. I also incorporated teaching tools in the videos to teach basic mathematics concepts, such as addition and subtraction. [HENRY, 03:16]

> I used video recording as a means of evaluation and submitted it to the university supervisor for observation. In the school where I conducted my practicum, I placed the camera at the back of the classroom due to privacy reasons. [MIA, 22:29]

In summary, the suspension of face-to-face teaching led to changes in classroom observation methods. Some lessons were conducted with students present, respecting their privacy by positioning cameras to capture only students' backs, while others were performed without students. These student-teachers utilised different methods for instruction, including the simulation of online classrooms through platforms like ZOOM, using PowerPoint for lesson delivery, or incorporating tangible teaching aids such as toys and cards for demonstrating basic mathematics concepts. The videos were made with various devices and platforms and submitted to supervisors for review. This alteration presents potential challenges in assessing teaching practices due to limited student interaction and privacy concerns as mentioned in social presence.

4.1.6 Challenges in Teaching Practicum

Student-teachers faced a significant transition in terms of their teaching practicum as it shifted from face-to-face teaching to recording their own lessons with or without the presence of students. The latter is completely different from the traditional one. This could pose challenges for the student-teachers.

> The difficulty of filming video lies in not knowing how well you teach. During the face-to-face practicum, you can observe the reactions of the students and determine whether they are interested in your teaching. As a teacher, gauging students' interest and engagement in your

> teaching is crucial. However, without students present in the classroom, it is uncertain whether your instructional content can spark students' interest. [HARLEY, 22:27]

> In a face-to-face classroom, the interaction between teachers and students is essential, which is absent in video-based class observation. For instance, (since I placed the camera at the back of the classroom and only captured the students' backs), students' facial expressions could not be observed to determine their level of knowledge absorption or mastery. Additionally, the video did not reveal whether students were attentive, such as if they were dozing off or feeling that the content was boring. Consequently, the teacher's responses to such situations could not be reflected in video-based lessons. [MIA, 27:16]

In conclusion, the transition from traditional face-to-face class teaching practicum to a video-based one significantly impacted on student-teachers. This format change presented challenges, especially in sessions where students aren't present. Student-teachers found it hard to gauge authentic student reactions without student interaction or determine whether their teaching designs align with students' learning needs. The student-teachers observed difficulties in assessing the effectiveness of instruction due to the absence of students and the lack of necessary student-teacher interaction during video-based practicum. In addition, essential details needed for instructional assessment were often overlooked because the camera only captured the backs of the students. The lack of an in-person classroom observation experience limits the comprehensiveness of feedback and advice provided by the supervisors.

4.2 Impact on Supervision

4.2.1 Supervision through Online

Due to the pandemic, the communication between student-teachers and university supervisors had to transition from face-to-face to online. This section explores whether online communication methods had an impact on supervision.

> I used WhatsApp to ask my supervisor questions, and she replied very quickly. It was a good way to communicate. When I didn't know how to conduct certain activities, the supervisor would provide me with some suggestions. After filming the instructional videos, I would send them to my supervisor, and she would provide individual feedback on ZOOM so that I could do better in my next lesson. [HANNAH, 29:50]

> The support for online teaching practices was not sufficient. Perhaps most teaching methods were taught focus in face-to-face classrooms. However, the supervisor should provide some teaching methods for online classes. [HENRY, 20:43]

> I remembered considering how to allow my supervisor to observe my class, such as recording with a mobile phone or live-streaming for the supervisor to watch. The supervisor provided me with many suggestions. The supervisor also taught me how to write and revise self-reports. … [Researcher: Did the supervisor provide any suggestions for your teaching design?] Because my original lesson plan focused more on how the teacher delivers the content, but the supervisor's advice was to pay more attention to the students and whether they absorbed the knowledge, which made a qualified lesson plan. [MIA, 31:07]

> I communicated with my supervisor through WhatsApp. The supervisor responded promptly, but her responses were often brief. [MICHAEL, 30:43]

In conclusion, this section reflects on the switch from in-person to online communication between student-teachers and supervisors during the pandemic. It shows that various platforms such as WhatsApp and email were used effectively for supervision. The student-teachers reported that online feedback was prompt and personalised, aiding their instructional improvements. A few highlighted a

lack of support for online teaching methods, but overall, the shift to digital mediums for supervision did not lead to significant differences in the experience of receiving feedback.

4.2.2 Supervision of the Class Observation

Supervision for class observation involves assessing teaching materials, activity alignment with students' abilities, and the overall interest generated. This section explores the challenges faced in supervision.

> It's difficult for supervision because no student was present to react or respond during the video. When the supervisor watched my videos, they tried to view it from a child's perspective, which could improve my shortcomings. Face-to-face interaction and video recordings were very different. The videos missed out on witnessing things and the dynamic responses from the students. These limitations restricted the supervisor from seeing the areas I needed to improve. [HARRY, 26:49]

> The supervisor primarily assessed the adequacy of my teaching materials, whether my activities aligned with the students' abilities, and if the overall explanations of the activities were interesting. They also considered the editing of the videos and whether any beautification had been done to attract the students' interest. … I believed that using video recordings for class observations didn't provide significant assistance in the assessment by the university supervisor. This is because video recordings can be rehearsed and repeated multiple times, which doesn't capture the most authentic performance. [HENRY, 21:58]

In summary, supervision for class observation is challenging due to the absence of real-time reactions and responses from students in videos. Viewing videos from a child's perspective could help improve teaching shortcomings. It refers to the omission of social presence and the lack of cognitive presence. However, face-to-face interactions provided more dynamic classroom experiences and unexpected responses. The limitations of video recordings restricted the supervisor from observing areas for improvement.

4.2.3 The Role of Onsite Mentors

Besides the university supervisor, an onsite mentor is assigned to each student-teacher during their practicum. This mentor facilitates a smooth transition for student-teachers into the school environment and provides them with practical teaching experience. However, due to the pandemic, some student-teachers were not assigned an onsite mentor while others could only receive such support after the resumption of classes.

> New teachers are assigned an onsite mentor in our school, such as the department head or deputy head. The mentor monitors their teaching methods, provides advice, and may conduct classroom observations once or twice a year to observe their teaching approach with students. There may also be individual meetings with the new teacher periodically, where the mentor offers reminders or provides teaching suggestions on how to improve their performance in teaching and within the school environment. [HANNAH, 36:12]

> My mentor shared online resources with me and suggested tools that I can use to assist students. They recommend using basic teaching tools to engage students in different activities. In instructional videos, I can also teach activities that students can practice at home. … My mentor has taught me how to teach students in online classes. For instance, they showed me how to use PowerPoint to create some activities for interactive teaching between teachers and students. [HENRY, 18:40]

> The onsite mentor has been very helpful to me. Firstly, for the General Studies subject at my school, I needed to create PowerPoint slides for online teaching. The mentor assisted me in checking and making numerous revisions to ensure the content of the PowerPoint meets the

> standard. She also helped me review and modify the homework questions to match the students' level and align them with the specific knowledge to be taught. [MIA, 29:36]

> I followed my onsite supervisor and attended all lessons conducted by her, who also briefly talked to me after each lesson. She gave me a lot of suggestions. And then I would reflect on her comments. As I had improved in the next lessons according to her comments, she appreciated the improvement. For example, she told me I was less stressed than in my previous trials. [MATTHEW, 10:30]

> If there was no onsite mentor to provide guidance or suggestions, it would have a significant impact. Having someone to tell you how to fulfill the role of a teacher correctly is crucial, otherwise your students might continuously lack respect for you. It is difficult for oneself to recognise shortcomings, such as how to communicate effectively or how to motivate students to progress. The onsite mentor provides hints and suggestions in these areas. [MICHAEL, 29:00]

In conclusion, this section discussed the pivotal role of onsite mentors for student-teachers, supplementing university supervision with practical, school-based guidance. During the pandemic, some student-teachers missed the opportunity to receive such support, experiencing the profound implications of its absence. Feedback from mentors on teaching techniques, student interaction and self-improvement are thus highlighted as critical to the professional development of student-teachers.

4.3 Student Assessment

4.3.1 Assessment of Students' Online Teaching during School Suspension

Schools adopted various teaching methods during the pandemic to ensure that students could continue their learning. These included creating instructional videos for students to watch and conducting online lessons using platforms like ZOOM. However, determining how to assess students' progress during this time posed an intriguing question, that warrants further exploration.

> Due to the pandemic, students could not attend school, so teachers had to assess their abilities through questions sheets. I believe that face-to-face communication is crucial in teaching, but since we couldn't meet in person, I could not determine whether students understood the content. … Without face-to-face interaction, students could only attend online classes through their computers. We could not ascertain whether students had family members helping them with their homework. … Regarding the questionnaire, I found it somewhat inadequate compared to traditional assessment methods. Students often completed the questionnaire after watching a video or PowerPoint and generally scored well, without failure. However, in face-to-face classes, individuals do not usually pass the in-class exercises after each lesson. Conversely, in online classes, failures are rarely observed. [MIA, 06:00]

> Online classes recorded in videos lack assessment tools and feedback. … The biggest problem during the pandemic was not knowing whether students at home had watched the videos. The school lacked a mechanism to check if students had viewed the videos. [MICHAEL, 04:12]

In conclusion, the student-teachers during the pandemic found online assessment challenging as an issue of cognitive presence due to lack of face-to-face interaction, the inability to assess the role played by help from family members or track video viewership. While online question sheets often showed high scores, teachers felt that these didn't reflect students' true understanding. Some sought alternatives, like creating student portfolios from classwork.

4.3.2 Assessment of Video-Based Class Observation

In a class, it is essential to assess students' performance. However, due to the pandemic, some student-teachers' class observations lacked student participation, making student assessments challenging. This section explores student assessment in classroom observations for student-teachers during the pandemic.

> Evaluation is challenging [in video-based class observation]. We had previously mentioned that we didn't have students [in the class], so it was difficult for us to determine if this classroom was truly meeting the learning needs of students. … There was a limitation. We tried involving our classmates in classroom observations to see if the students could follow along if implemented. We might have also asked the supervisor for feedback on areas that need improvement. [HARRY, 12:38]

> Basically, there were no significant impacts even when conducting video-based classroom observation [in a face-to-face classroom. There are students in the classrooms]. We followed the usual procedures… In essence, the use of video recording for classroom observations did not affect these assessment methods. [MIA, 23:16]

In conclusion, the student-teachers faced challenges assessing students during the pandemic due to the absence of learners in video-based class observations. However, when students were present after class resumed following the easing of the restrictions, the usual assessment methods were unaffected. Alternatives like peer and supervisor feedback were explored to compensate for the lack of student response in virtual classrooms. The impacts of these factors on practical student evaluation are considered in this section.

4.3.3 Student Assessment after Resumption of Classes

During the pandemic, the mode of teaching shifted to online learning. Upon resuming in-person classes, adjustments in assessment might then be necessary to help students readapt to learning on campus. This section discusses the measures and perceptions of teachers in modifying the difficulty of assessments after resumption.

> In terms of assessment, after resuming the face-to-face classes, we skipped some evaluations. For example, we only conducted simple assessments, such as evaluating students' language and so on, instead of comprehensive evaluations like we normally do. It would be fairer to make the assessments slightly easier due to the long suspension. [HANNAH, 22:52]

> The assessment criteria were slightly adjusted, lowering the difficulty level of the assessment objectives. Students only needed to complete simple tasks to meet the standards. [HENRY, 13:12]

> Actually, it had a significant impact, especially on grading. The scoring method changed in my school. The scores for online classes were recorded as "formative assessment" on the scoring sheets, grading from A to E, but not showing the exact scores. I think this had a greater impact on students. … I believe an easier assessment policy is more beneficial for students. During the online learning period due to the pandemic, teachers were unaware of whether students had grasped the key knowledge. However, if tests or exams were immediately conducted upon returning to school, it would be challenging for students to catch up on their learning progress. [MIA, 21:37]

Overall, this section discusses the necessary modifications in student assessments after shifting from online to in-person classes. Simplified evaluations were preferred, focusing on fundamental skills rather than comprehensive criteria, to ensure fairness for students readjusting to physical classrooms. Formative assessments as cognitive presence with qualitative grades replaced precise scores to acknowledge the unique challenges of online learning.

4.4 Teaching Challenges Faced during the Pandemic

4.4.1 The Change of Teaching Schedule

This section delves into the impact of the pandemic on teaching schedules, focusing on content reduction and duration shortening, and their effects on both students and teachers.

> This kindergarten was originally providing whole-day schooling, but it shifted to a half-day schedule due to the pandemic. Children no longer stayed for lunch, and school ended at noon. The two classes had their afternoon lessons via videos filmed by the teachers. Subsequently, they would also provide assessments for students to take home and follow along with the video instructions. There were minor adjustments where the afternoon lessons were geared more towards arts and crafts, allowing students to express their creativity. [HARRY, 18:35]

> The teaching schedule was impacted as the content of the curriculum was reduced and the class duration shortened. Therefore, much teaching content had to be simplified while still conveying important information to the students. [HENRY, 09:15]

> For instance, in the subject of General Studies, we used to cover the content of four lessons in a week. We adjusted the teaching schedule, stretching the teaching time, preventing students from absorbing too much information simultaneously. … However, slowing down the teaching schedule made it harder for teachers in the next academic year as they had to catch up with the previous year's teaching content. [MIA, 21:58]

The pandemic led to a simplification of teaching content and modified teaching schedules. While some schools lengthened delivery periods for better student comprehension, others shortened class durations. However, this adjustment challenged teachers who now had to cover delayed content in the future.

4.4.2 The Impact of Wearing Face Masks

Face masks during the pandemic presented challenges in the teaching environment. Student-teachers and students experienced difficulties in communication and understanding due to obscured facial expressions and limited visibility of mouth movements. This section explores the impact of mask-wearing on teaching and learning processes, focusing on language acquisition, emotional expression, and so on. Insights from interviews highlight the obstacles teachers and students faced and the adaptations made to facilitate effective education.

> Particularly in language learning, understanding a language or pronouncing a word involves more than just listening. One needs to see the teacher's mouth shape and sometimes how their teeth and tongue work together. A face mask can limit the students' language learning as they can't see your mouth, and can only hear your voice accurately. … I noticed that face masks hinder emotional reading and expression discernment. More body language was required to convey emotions and instructions, as verbal communication alone, especially with face masks, was often insufficient and could lead to misunderstandings or delays in comprehension. [HARRY, 16:19]

> As all students were required to wear face masks, it was difficult for me to recognise their faces. I could only identify some of them who were more active. [MATTHEW, 31:00]

> It affected Chinese teaching as sometimes when you needed to demonstrate pronunciation or inform students how to read a word, it could be impacted. Wearing masks affected our intonation and it sounded a bit strange. [MICHAEL, 13:29]

In short, the requirement for face masks in classrooms significantly challenged teaching and learning. Teachers have encountered difficulties in recognising students' faces and interpreting their expressions. Language learning has been affected, as students rely on visual cues for pronunciation and comprehension. Emotional reading and expression have also been hindered, requiring increased reliance on body language. In physical education, face masks restrict breathing and necessitate adjustments to teaching content. Transparent face masks have been employed to mitigate these challenges. These findings highlight the multifaceted impacts of mask-wearing on the teaching framework.

4.4.3 Constraints on Group Activities and Discussions

During the pandemic, schools generally discouraged group discussions or collaborative tasks in order to reduce the risk of virus transmission. This exploration of limiting group activities examines the impact on teachers and students.

> I believe that a lack of encouragement for group activities can limit instructional design. Students should interact appropriately with teachers or classmates during classroom activities to make the lessons more enjoyable. If the students are left alone, they may feel bored. Therefore, if students can only do activities individually, there will be many limitations. [HENRY, 07:39]

> Limiting group activities had an actual impact. For instance, group collaboration was essential for many activities in General Science. However, these group collaborations were cancelled. This predominantly left instructional content. Thus, students are certainly affected because they typically anticipate and enjoy interactive lessons. … The same applied to Physical Education. During the pandemic, students had to wear masks in class, which had limitations. One limitation was the potential oxygen deprivation and resulting physical problems for students. Therefore, we needed to consider the design of activities carefully. [MIA, 12:11]

> Because of the pandemic, the school didn't allow students to conduct too much group work. I asked my students to do some pair work, but reminded them not to be physically too close. It was difficult for me to design such kinds of activity as students may be too close. In addition, due to the face masks, I needed to spend some time clarifying what the students were saying. The extra time for clarification interfered with me completing the tasks designed in the lesson plan. [MATTHEW, 23:40]

> The absence of group activities didn't have much of an impact on me. Since I taught Chinese language during the practicum, I didn't see significant issues with independent learning for Chinese. [MICHAEL, 13:02]

In conclusion, the pandemic reduced group activities in schools, affecting both teachers and students. Teachers faced challenges in designing activities that adhered to social distancing guidelines. Students missed the interaction and enjoyment of group work. The limitations on group activities significantly impacted upon instructional design, particularly in subjects like General Science and Physical Education. Despite some teachers adapting to individual learning, the absence of group activities during the practicum was perceived to have had little impact on Chinese language learning.

4.4.4 Improve Student Engagement after the Resumption of Classes

This section delves into the various challenges and responses faced by educators in improving student engagement and readjustment after the resumption of classes following an extended closure.

> When I returned to teaching, I observed K1 children in November. Some students adapted well, but others struggled. Some felt nervous and scared on their first day back at kindergarten and some even cried. Some had difficulty adjusting their sleep patterns, resulting in tears, and crying upon returning to kindergarten. Although it had been two months since the start of the

> school year, the situation persisted. … Due to the pandemic, children were out of school for an extended period. For example, at our school, starting from N1, we focus on teaching children's self-care skills, such as getting things, changing shoes, using the restroom and eating independently. However, after the kindergarten closure, many students struggled even with basic tasks like queuing. Communication with others was also significantly affected. … Teachers needed to start over and teach them gradually, just like when they first started schooling. I tried to make the instructional activities as interesting as possible to engage students and temporarily distract them from their anxiety. Additionally, I provided them with toys to play with, helping them become familiar with the classroom environment [HARLEY, 21:35]

> Students couldn't adapt immediately. After they returned to school, I observed that they felt tired and had difficulty adjusting to campus life. … For instance, in Physical Education, we incorporated more game-based instructional activities to help students restore their physical fitness through play. We also emphasised stretching and warm-up exercises to improve their physical capabilities gradually. In the case of General Knowledge, we adjusted the teaching progress. [MIA, 19:20]

The resumption of classes revealed a significant struggle in students' adaptation to school life. The student-teachers highlighted varying issues from disrupted sleep patterns to decreased physical fitness and communication struggles. Teachers implemented strategies, including gamified learning, familiarising students with the environment, and slower teaching progress to ease students back into a normalised learning state gradually.

4.4.5 Decline in Students' Abilities

In this section, we explore the decline in students' skills, specifically in writing and fundamental knowledge, as observed by teachers. The pandemic-induced shift to online learning and subsequent return to physical classrooms has revealed significant gaps in students' abilities, requiring additional teacher support and guidance.

> In terms of writing, the control of the fine motor skills of the children's hands tended to be slightly inferior compared to those who constantly practiced. When students were writing, teachers might need to provide extra assistance. [HARRY, 14:30]

> Teachers noticed that students' performance had significantly declined when classes resumed after the pandemic. From the start of the pandemic in 2020, the teachers who took over these students said that their basic skills had worsened. … I believe the pandemic has had a negative impact on students, as they've had less time to absorb knowledge. Furthermore, when physical classes resume, we won't reteach the points covered in online classes. Therefore, students either learn what they can or miss out on some aspects. The impact was even more significant in secondary schools than primary schools. [MIA, 36:11]

> I feel that the overall impact of the pandemic on students has been negative. As a teacher, I found that the students did not master many key concepts due to the suspension of classes during the pandemic. For instance, it was very difficult to fill in the gaps in knowledge that second-grade students missed due to the suspension of classes, especially when you need to start teaching third-grade material immediately. Students might find it hard to comprehend the lessons. [MICHAEL, 41:17]

Overall, the student-teachers perceive that the pandemic has largely negatively impacted on students. Teachers have observed a significant decline in their abilities and grasp of critical concepts due to class suspension during the pandemic. Students have also had less time to absorb knowledge from online lessons, which is not reiterated in physical classes.

4.5 Influences on Student-Teachers

4.5.1 Increased Workload

This section examines the relationship between video content creation and workload, specifically focusing on its implications in an educational environment. It delves into the complexities of video creation, the dedication it requires and its overall impact on the responsibilities of those involved.

> It increased the workload. Having never filmed before, if you cannot find someone to assist you, you need to set and check the camera position yourself to ensure that it can clearly capture you. During the teaching process, if you inadvertently make a mistake or feel the explanation wasn't good enough, you'll stop and reshoot. There is also the task of editing, which significantly increased the workload. [HANNAH, 25:25]

> The process increased the workload. You might need to prepare more detailed content, explaining each step clearly and in detail. Sometimes a video could not be completed in one take, you had to ensure the video is clear and understandable for students. When you need to perfect every step, you might have to shoot multiple times to produce a satisfactory video that can help students. This process could consume a lot of time. [HARRY, 20:32]

> I believe that filming videos increased my workload. Apart from preparing basic teaching materials, I also needed to learn how to edit a video, enhance its aesthetics, and ensure a smooth teaching process within the video. These were all skills that required special learning. [HENRY, 04:23]

> Observing classes by filming increased my workload, as I was unfamiliar with videography. I had to seek advice from others, such as the IT department, and inquire with school authorities about filming permission due to concerns over violating student privacy. It was crucial to capture from the right angles, avoiding the students' faces. As such, it took a considerable amount of time for me to learn. [MIA, 24:27]

> I was asked to assist a teacher in preparing a video consisting of specific applications requiring certain skills. Since it required a few days for me to work on it, I took more time to do it." Researcher: "Did you know how to use it?" "No, the teacher sent me a link to self-explore the video. I also discussed with the teacher to see how to make the video. [MATTHEW, 37:30]

> Filming videos didn't increase the workload. You still need to teach and prepare the educational content. The only difference was that you needed to record it using a smartphone. Even if the supervisor is not present, what you do remains the same. … Since I usually make videos, I think very few people are unfamiliar with it now. Because I was familiar with the filming process, I didn't feel that it added to my workload. [MICHAEL, 23:09]

Overall, including video creation in educational practices adds a significant workload. Detailed preparation, multiple retakes, self-learning of videography, editing skills and privacy concerns were highlighted as key contributing factors. While a few felt familiarity mitigated this impact, most of the student-teachers found this approach time-consuming and increased their workload.

4.5.2 More Familiar with the Technology Tools

Now, we present insights from the interviewees highlighting their increased familiarity with technological tools after the process of adapting to new modes of learning and teaching during the pandemic. The interviewees shared their experiences of learning about electronic products, PowerPoint, video editing, filming techniques and mastering the online class setup.

> It enhanced my understanding of electronic products. I wasn't familiar with these electronics before, so I had to learn before filming. I started with PowerPoint, such as how to add flashing text effects, or include images and music. During the pandemic, I also learned video editing and post-production techniques to make the videos more engaging, adding subtitles to make it clearer for the supervisor. [HANNAH, 26:54]

> I think of this as a learning process involving video editing and filming, mastering shooting angles, and understanding the workflow of filming videos or participating in online classes. As you spend more time filming, you become more adept and conscious of how to make it more appealing to students, and how to facilitate students to do what you want them to do at home. With more filming experience, you really become familiar with it. [HARRY, 21:39]

> I had grown familiar with using electronic products since I never attempted filming classes before. I learned how to use these devices, to shoot videos and understand how to position the camera. Essentially, I had gained an additional skill. [MIA, 25:25]

In summary, the student-teachers demonstrated that using technological tools facilitated their transition into digital learning environments, and led to personal skills enhancement. By exploring these tools, they gained confidence, mastered new techniques, and found innovative ways to engage students in at-home learning, ultimately cultivating a deeper understanding of the evolving technology.

4.5.3 Impact of Online Practicum without Students

The impact of an online practicum without students may affect student-teachers' instructional experience, job prospects and future academic pursuits. In the following analysis, we delve into the perspectives of per-service teachers regarding their roles, and explore the implications of this impact.

> An entirely online internship without students definitely has an impact, as it reduces practical experience. In my Higher Diploma programme, I only had two practicums. One became void due to the lack of students, leaving only the second one. After completing the second practicum, I would have graduated and could have applied for teaching jobs. However, my experience would have been limited as the second practicum was only about 20 days long. Having only 20 days of experience before becoming a teacher would have had an impact. That's why I decided to pursue a Bachelor of Education degree. … It is related to the pandemic because I lack sufficient teaching skills. After graduating from my Higher Diploma programme, I struggled to communicate with students during my second practicum because it was my first opportunity in a face-to-face classroom. I had no prior experience, and with only 20 days, there were many things I didn't know. Even though I learned more during my second practicum, I didn't have another chance to apply it before graduating. That's why I need to continue studying and have more practicum experiences. [HARLEY, 06:26]

> After completing an entirely online practicum without any student present, my first face-to-face teaching experience at the school after the easing of the pandemic had a profound impact on me. I realised that there were many things I didn't know, and I was unsure how to guide the students through the tasks. As a result, the first one to two weeks were quite challenging for me as I tried to adapt. I would have been genuinely worried if all my practicum had been limited to online experiences. Learning how to lead students through activities and handle unexpected situations is something I believe would have been better learned before starting a teaching job, rather than afterwards. … I believe that online practicum can impact recognition and further education. Others might perceive that you have only taught students online but haven't had the practical experience of teaching in face-to-face classroom settings. Face-to-face teaching challenges a teacher's ability to adapt to unpredictable situations and respond to each child's needs. [HENRY, 23:38]

> I believe that student-teachers without face-to-face teaching practicum will face challenges finding future employment. Online and face-to-face teaching are fundamentally different.

> Face-to-face instruction provides practical experience and enables teachers to assess student reactions and feedback, which is lacking in online classes. Therefore, I was concerned that teachers with only online teaching experience might struggle with the skills required for in-person instruction [MIA, 35:05]

Overall, the absence of students in online practicums has a significant impact on student-teachers. Limited practical experience and unfamiliarity with routine tasks and handling unexpected situations makes the transition to face-to-face teaching challenging. The student-teachers recognised the need for in-person teaching experiences to develop crucial skills. They expressed concerns about their future employment readiness and emphasised the fundamental differences between online and face-to-face instruction. Notably, one interviewee mentioned that the lack of student interaction during online practicums made for an insufficient experience, motivating him to pursue further education to acquire additional teaching techniques. These observations underscore the substantial impact of online practicums without students on student-teachers.

4.5.4 Positive Influence of the Pandemic on Student-Teachers

This section explores perceived positive influences of the pandemic on the student-teachers, encompassing skills development in digital teaching and handling unexpected situations.

> I believe that there are both pros and cons for teachers. Some people may think that I missed two opportunities to have practical experiences at school due to the pandemic, which might have resulted in a lack of experience. However, don't think that I couldn't learn anything through making videos or simulating classes on ZOOM. My filming and video editing skills have improved, and my teaching methods for online classes are clearer compared to teachers who haven't experienced this period. Overall, I see it as a valuable experience. [HARRY, 29:00]

> The impact of the pandemic on teachers, I believe has both positive and negative aspects. In this era of digitalization, the pandemic has taught us how to use electronic devices to arrange live broadcasts or create videos in case of unexpected situations, without disrupting students' learning progress. [MIA, 36:57]

> It has positive impacts on teachers. During the pandemic, including online teaching and handling unexpected events, I believe many schools hoped that teachers would have experience dealing with such situations. For schools, having teachers who have already dealt with emergencies allows for a quicker response and eliminates the need for retraining if similar circumstances arise again. [MICHAEL, 38:51]

Overall, the pandemic, despite presenting challenges, has been beneficial for the student-teachers by fostering their digital teaching skills and preparing them for unexpected scenarios. This resulted in personal skill development and equipped them to promptly address similar future situations, thereby mitigating disruption in learning.

5. Conclusion and Discussion

Due to the COVID-19 pandemic, there was a sudden switch from a face-to-face learning environment to remote teaching and learning at short notice which greatly impacted upon student-teachers in teacher education, particularly their practicum practices. In this study, we have explored and compared the perspectives of eight student-teachers in the Hong Kong and Macao SARs on their practicum experiences during the COVID-19 pandemic. Besides post-practicum interviews, other corresponding data including teaching plans and video recordings, have shed light on the similarities and differences of student-teachers' practicum experiences across the two SARs in three main aspects, namely the practicum reflection and assessment, challenges related to online practicum, and supervision and support during practicum.

Practicum reflection and assessment are crucial to determining the student-teachers' readiness to teach and their ability to articulate connections between their experience and course content, including knowledge, skills and values. Hence, the practicum is a crucial stage in the student-teachers' educational and learning process. During the pandemic, K-12 schools were closed for certain periods. Students-teachers from both SARs discussed their experiences of learning how to use various electronic gadgets, for example, Powerpoint, video editing and filming techniques, as well as class setup on online platforms for their own lessons and/or how to conduct virtual lessons for their supervisors' assessment and self-reflection. However, practicum reflection and assessment in Hong Kong tended to be more detailed and stringent than that of Macao. Student-teachers in Hong Kong, for example, reported that not only were they required to review their own videos and send them to their supervisors for further evaluation, they also had to evaluate their peers' videos and complete evaluation forms. In contrast, Macao student-teachers had greater freedom and flexibility in completing self-reflections. The reason for this cross-cultural difference may be related to the parental pressure on teachers in Hong Kong since one of the student-teachers indicated that teachers fear making mistakes in front of parents, and parents tend to complain when teachers aren't teaching well. In fact, it is not uncommon as the education sector in Hong Kong is geared toward ensuring top teaching quality among teachers, so even student-teachers go through a rigorous assessment and evaluation for their teaching abilities.

Although online practicum can be beneficial for student-teachers as it enhances their digital teaching skills and prepares them for future scenarios, it also poses several challenges. For instance, with the online practicum, they have to familiarise themselves with the different technological tools. Even though the student-teachers in both SARs expressed their discomfort and difficulties in adapting to such new approach of learning and teaching, they nonetheless greatly valued this new approach. It not only facilitates their transition into digital learning environments and personal skill enhancement but also allows student-teachers to take a more comprehensive review of their own performance since they can review their lessons at any time and somewhere appropriate, provided they have the necessary equipment, so they can improve their teaching based on that information.

Having difficulties in designing lessons and assessing the understanding of the students is another common challenge for student-teachers in both SARs. For instance, the pandemic led to a simplification of teaching content and shortening of lesson times. Student-teachers were required to make adjustments to their lesson plans to ensure that their students could learn and understand the required contents within the shortened timeframe. In addition, student-teachers also expressed difficulties in interacting and assessing the understanding of their students, especially language learning, since students relied on visual cues for pronunciation and comprehension. This finding suggested that teachers in Hong Kong and Macao greatly value the importance of mouth movement and facial expression in their language teaching. Lastly, student-teachers in both SARs were concerned about the absence of students in online practicum. The transition to face-to-face teaching was also challenging due to limited practical experience, unfamiliarity with routine tasks, and an inability to handle unexpected situations. They further recognised the need for in-person teaching experiences to develop crucial skills, and had concerns about their future employment readiness, emphasising the fundamental differences between online and face-to-face instruction.

Despite the challenges faced by the student-teachers in both SARs, they continued to receive support from their supervisors and onsite mentors through various platforms such as instant messenger and emails, which were effectively used in the supervision. Student-teachers reported that online feedback was prompt and personalised, aiding them in their instructional improvements. Furthermore, they also received important feedback and support from their onsite mentors relating to teaching techniques, student interaction and self-improvement, crucial to the professional development of student-teachers. Overall, the shift to digital mediums for supervision did not lead to significant differences in the feedback experience among the student-teachers in both SARs.

In conclusion, during the pandemic, student-teachers in both SARs experienced unprecedented change and displayed great flexibility in handling new challenges, especially in their own practicum practices. While the interviews have highlighted the common challenges faced by student-teachers across both

SARs, there are still differences due to subtle contexts in education training between Hong Kong and Macao. The study provides empirical evidence, on one hand in local context to depict practical concerns of student-teachers, supervisors and TEIs in teacher education programmes offered in both SARs; on the other hand, in global context to contribute to the dialectic of embracing digital learning and teaching trend in practicum in the post-pandemic era. For future development of innovative pedagogy in practicum experience using emerging technologies, or in face-to-face mode, or blended mode, educators put technical skills, communication between student-teachers and supervisors, parental involvement into consideration. In addition, future research can investigate the review assessments of student-teachers including quantitative research for larger scale analysis and longitudinal studies can examine the long-term impacts of COVID-19 on student-teacher training.

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Teaching Practical Journalism Modules Online: a Blessing or a Nightmare to Teachers?

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Abstract: Throughout the semester, several courses would be offered in undergraduate journalism classrooms. However, by their very nature, half of the courses would be practical modules. Filmmaking, photojournalism, picture editing, news writing, and even graphic and information design, as well as other practical modules are some examples of these practical modules. Since traditional face-to-face instruction in a physical venue has been the standard form of instruction in most universities for the past few decades, the transition from these modules to online mode will strain the university's faculty members. Culling in-depth interviews with university instructors who primarily taught practical modules throughout the semesters during the Covid-19 pandemic, this study identifies various teaching strategies that were implemented to grab the attention of students and to accelerate their learning behavior. This posed huge difficulties to instructors who needed to teach practical modules as the face-to-face method of classroom teaching had almost vanished. More than that, it had been thought that teaching using communication technologies—such as a more direct contact approach through apps like WhatsApp and WeChat—was the best way to deal with such challenging circumstances. Last but not least, the majority of respondents came to the conclusion that teachers must adopt offline connection, even if it is only a brief face-to-face exchange, because insufficient online interaction may lead to many problems that are yet to be resolved. They also argued that, in the long term, it would take some time for online instruction to effectively replace traditional instruction in classroom settings since such circumstances still have to be overcome.

Keywords: online teaching, journalism modules, practical modules, pedagogical approaches, teaching approaches, traditional classroom

1. Introduction

As Covid-19 started to make waves worldwide in 2020, it gradually changed educational settings in many countries as well as educators' pedagogical approaches to teaching. The pandemic didn't only affect the junior level such as primary and secondary student which relies heavily on *in-person* classroom teaching—where teachers need to spend a lot of time taking care of their students' progress—it also changed the tertiary level's way of administering courses online. Still, it seems that the adverse effects of non-*face-to-face* teaching to the tertiary sector isn't much when compared to the junior education setting. For instance in Hong Kong, at the associate degree, degree or post-graduate level, courses immediately switched to Zoom teaching alongside a partial self-learning method through reading journals (i.e. asynchronous learning) which seemed to put the more mature students on the safe

side of things. Nevertheless, we might overlook that for journalism courses, education at the university level could not simply be switched to an online setting, especially since teachers who teach *practical journalism modules* must rely on face-to-face methods in order to move around gadgets for better demonstration. In other words, their *hands-on* pedagogy cannot simply be replaced by online means. The difficulties experienced by instructors are further explored in this study for a better understanding of their makeshift approaches in online teaching. This study also identifies the potential adverse effects posed on the students themselves in these scenarios.

The pandemic has presented difficulties for both professors/teachers and students alike. They are aware that industry-specific knowledge is becoming more and more challenging to impart virtually. Imagine a journalism student seeing their teachers working the camera while they are in the classroom, either using their own camera or one the studio has rented. The teachers' hands-on actions toward the things that the students have physically shared access to would serve as a practical lesson for the students. It is difficult to convey the same lesson to pupils through Zoom or other virtually mediated setting because using a camera and adjusting the lens in a face-to-face classroom environment should be more straightforward by way of observation. In contrast, theoretical classes and its two most important components, lecture content and theory illustration, could be effectively carried out through a short video and via Zoom or alternative videoconferencing platforms. Technical classes on the other hand, are deemed to be more challenging to deliver and accomplish than classes that merely focus on theories and the sharing of textbook knowledge. However, given how complex the subject matter is, much will depend on the abilities of the teachers and the learning environment which will have a direct impact on how engaged the students will be with the module's material. According to research that shows how attention spans have been declining during the pandemic (SCMP, 2021), people have been finding it difficult to even maintain their focus during a two-hour movie. This finding has been echoed by other media outlets that have shared similar observations and opinions (Psychology Today, 2021). As such, this study explores the dimensions of such problems in light of the online learning setting during the pandemic in Hong Kong. The practical modules offered in journalism degree normally includes *Newspaper Publishing and Practicum; Photojournalism; TV Production; Design and Publishing,* etc. The theoretical modules that are offered in Journalism degree module are commonly related to *Mass Communication Theory; PR Theory; Social Science Foundation,* and also *Research Methods.* As a number of teachers have come across difficulties in launching online classes, for instance, the technical problems for not being able to get access to the account, the volume problem, the setting in launching classes in a rather noisy environment, etc. Not only the teachers face such problems, likewise, students might also encounter similar situations. Apart from these, teachers who launch the practical modules, for example, teaching the students to use the cameras is hard to be explained in class. And, module like newspaper practicum, teachers have to demonstrate to the students how to launch the typesetting for a newspaper. In class, teachers could easily show how the materials could be arranged, however, if it is carried out online, the difficulty of displaying the skills is much higher. In light of this, this article is going to explore the difficulties faced by the journalism teachers during the covid time, and see if they have come up with any effective solutions in solving the problems ahead of them.

2. Literature Review

Journalism education consists of two major parts (De Burgh, 2003; Steel et al., 2007; Murthy, 2011). As aforementioned, these are the practical modules and also the theoretical foundation courses; both are emphasized in the study so as to train media scholars and professional media practitioners. To identify the major debates that journalism programs all over the world face, the structuring and rethinking of the field is essential, such as focusing on a combination of practical and contextual training. For instance, journalism departments could choose whether to include liberal arts courses or not (Deuze, 2006; Josephi, 2019). In other words, while journalism education is expected to cover theoretical and philosophical thinking, it should also help students obtain hand-on skills in dealing with matters of the frontline. Mensing (2010, p.513) scrutinizes the future of journalism education, whether it shall stay within the notion of "industry-centered journalism education" to focus on teaching skills and techniques, while at the same time pushing forward the development of research. It is expected a well-design journalism module is a good mix of practical and theoretical modules. Therefore, a

journalism graduate is expected to be equipped with both skills in either pursuing further study or getting ready to work frontline.

However, as pointed out earlier, teaching practical modules online is never an easy task. Prior studies have highlighted the difficulties in teaching (Tso, 2019; Ma et al., 2020; Tso et al., 2022), which hint to the fact that it isn't only journalism education that is being affected by this phenomenon, but different disciplines at the university level as well. As such, journalism education, with its teaching of practical modules during the Covid-19 period, was expected to be hindered. Despite these prior studies discussing different pedagogical contexts, what is lacking is a fresh perspective on adapting journalism in online means, such as asynchronous or blended learning. Some most recent publications focused on teaching courses online (Hassan, 2021; Oliveira et al., 2021; Mendoza & Rodríguez, 2020; Unger & Meiran, 2020) but only few focus on practical journalism subjects (Fowler-Watt et al., 2020; Grabelnikov et al., 2020). Thereby, it contributes a research gap for researchers to further explore for journalism education, how the instructor combat with the adverse situations during the pandemic.

2.1 Definitions and of virtual teaching and the effects to the students

People often define the virtual teaching as teaching online with aid of technology. Orhan and Beyhan (2020, p. 33) note how professors describe remote education as "needing technology, ongoing education, a callous education, and communicating with students," hence providing impetus to define the concept. Due to such usage of technology to facilitate the learning process both by students and teachers, some people classify remote learning and distance learning as forms of e-learning (Hassan, 2021; Oliveira et al., 2021; Mishra et al., 2020; Safdar et al., 2020; Yu & Jee, 2020). Prior studies and academics state that there are challenges and barriers to communicating in a virtual setting which is relevant to teaching journalism online (Larrondo Ureta et al., 2021). They were also able to shed light on the challenges that can arise when using virtual platforms for communication and task coordination (platforms such as WhatsApp, Wix, Google Drive, and Skype, the last of which proved challenging due to time zone differences)—for instance, when conducting virtual collaborative learning in online newswriting (Larrondo Ureta et al., 202, p.25). According to the study by Sturgis and Lamb (2022), students were concerned that the online module transitions would negatively impact their grades. Meanwhile, in addition to the challenges that the students had experienced, the teachers had also been under a great deal of pressure to run classes and maintain engagement amongst the students. The aid of technology could only be an alternative in not affecting the class schedule, however, the possible negative effect brought to the students could not be under-estimated.

This study, however, demonstrates the benefits of online learning such as how students can get the chance to practice speaking a foreign language and continue their virtual conversations with teammates, among other things. Here are some thoughts from one of the instructors:

Squires' homebound experience from the previous spring came in handy. He taught remotely using Skype while he recovered from an injury. But when the school closed for the pandemic, he went on YouTube, and went through about three or four 10-min Zoom tutorials. "I was ready to go," he said. Moreover, he said on Zoom that the experience was different than on Skype: (Sturgis & Lamb, 2022, p.134)

> I'll give them questions to answer right there in the Zoom menu in the chat. So that can be responsive, and there are things that I can do and say to prompt everybody to respond. I let them know that if you don't respond, I can look at the chat later and see you and you will lose participation points (Ibid, p.134).

In light of this, it poses a question whether the online teaching would be a hurdle to the teachers teaching journalism, particularly if they need to demonstrate the use of equipment to the students. Or, will online teaching be a plus to the teachers and students in teaching the practical module?

2.2 Major Difficulties of Launching Online Teaching in the Past Decades

There have been studies from the 1990s, one of which discusses the abundance of online tools for journalism and mass communication education (Hepworth et al., 2018). What can be learned from it was that despite the fact that the vast majority of institutions, as well as staff and students, adopting the use of online resources to conduct and participate in traditional classes, the use of Internet connections in distant education is still in its infancy and is being pioneered only by a small group of people. Only a small number of institutions acknowledged providing online education, and this general skepticism of remote learning could inspire innovative teaching strategies from traditional teachers (Arant, 1996). After 20 years of development on the Internet and the rapid expansion of social media networks, the maturity of online learning is still not very popular among classes held in schools, colleges, or even universities. We might need to ask the question of whether the teachers are well-trained enough to conduct classes online. It's easy to think that everyone is a 'digital whiz' since mobile device features available to the public have improved over the last ten years. However, while many teachers are trained to teach online or are accustomed to teaching online, they rarely had the opportunity to be completely online and manage a three-hour session prior to the pandemic. According to Delaney and Betts (2020), training opportunities, instructional design assistance, and consistent support from administrators and staff would all contribute to increasing the effectiveness of online learning in the future. In addition, Fowler-Watt et al. (2020) put forward the challenges of managing students during a lockdown when they had to gather news articles for their homework, "building the contacts from ground up" (p.5). When face-to-face classes cannot begin, it is assumed that the teachers lack the emotional facilities they need to deal with the well-being of students in addition to the practical knowledge that they need in order to teach. The study of the anatomy courses from the faculty of medicine by Zarcone and Saverino (2022), and they see issues caused by a decline in visual-spatial learning and a significant decline in student-to-student and student-to-teacher interactions. Mendoza and Rodríguez (2020) also noted that educators do not adequately prepare for this and do not comprehend the advantages of an effective online course. As a result, not even the professors are given much information about starting classes that are entirely online. Yohannes et al (2021) also pointed out that specific topic in Mathematics course are hard to be taught online, for instance, geometry and trigonometry. On another note, Joshi et al (2021) shared some very common scenarios of conducting classes online/ at home, for example, some teachers may face family interruptions in home environment settings and a lack of technical assistance, training and instructions. This study also found a lacking motivation and course technology integration. These all will eventually reduce the students' participation in online instruction and testing. Thereby, Lestiyanawati (2020) showed in their findings that different teaching strategies were applied by teachers for instance online chat, video conferencing, or a combination of it. Though the strategies might not be as effective as face to face teaching, but many teachers consider them a remedy in helping with the class.

Not only teachers are facing problems in conducting classes, we can see from the studies both the teachers and students also found difficulties in conducting classes and receiving information online especially they need to carry out practical lab work, and less interaction would create less capacity in problem solving skills from the students' perspectives (Alturise, 2020). Also, the mental status of the students is deemed less satisfactory and the experience score is much lower because of online learning experience (Walters et al., 2022). On the other hand, many students in the remote e-learning environment do not have access to enough resources and technology (Sturgis & Lamb, 2022). In addition, Unger and Meiran (2020) remark on parental involvement in the process of distant learning. They specifically note that parental involvement, student attitudes, and administration support would improve the satisfaction of students regarding an online learning environment. Abdullah et al (2021) also shared the difficulties in conducting classes online and highlighted the fact that teachers have to come up with solutions to handle the adverse situation during pandemic so as to make the students feel better during their classes online. In light of these, different teaching approaches were launched to combat with such situation.

2.3 Teaching Approaches Worldwide during the Covid-19 Pandemic

In determining the ideal teaching strategies for a particular module, prior studies introduce several different teaching philosophies. Williams and Gil (2018) provide some advice on using videos to flip classrooms. For example, their videos should be brief and straightforward; they can be segmented to include the key concepts. Set up quizzes to prompt the students to think about the topics covered in the videos; and emphasize the concepts in order to use them in journalistic practices. One study (Grabelnikov et al., 2020) had students and teachers initiate "face to screen" interactions, which revealed difficulties with planning and participating in the online learning environment. They also emphasized the need for customized teaching methods in order for the programs to start off well. The benefits and drawbacks of using social media to introduce oral radiology lessons were observed by Pontual et al. (2020). For instance, Pinterest assisted in both disseminating case reports and offering a comprehensive repository of radiologic visuals.

Fowler-Watt et al (2020, p.11) has a specific insight, citing one of the educators to sum up his research on the students and teachers during the lockdown period:

> At the end of the day, education is about forming personas. It is about integral, responsible citizens who, for sure, are employable, but more importantly are committed to their community and with a broad perspective on what happens in the world. (Francisco Marmalejo, 2020)

Fowler-Watt et al (2020) put forward the idea that we as journalism educators should reimagine pedagogical practices and learn how to adopt digital spaces to stimulate innovative thinking and care of our community.

Furthermore, Nambiar (2020) argues that with the quality of classes and interactions between students and professors, things like technical support and online delivery are all considered crucial antecedents. Mayo-Cubero (2021) pinpoints how instructors taught television journalism courses with Moodle. The study reveals how the instructors adopted Moodle as a teaching instrument for journalistic writing and also how they carried out the evaluation of grades achieved by the students. The students were satisfied with the module's feature on Moodle, and the delivery of both practice and theory was well balanced. Although the feedback of the students are generally satisfactory, the study reinforced the idea that "professors should be the facilitators of scaffolding that guides students to achieve their desired goals" (Ibid, 2021, p.191). In Elhaty et al. (2020), observably second and third year students deemed watching practical lessons online more useful while first year students are somehow "behind in terms of skills" (Ibid, 2020, p.2871). Along the same line, there is a study (Fire, 2021) focused on the area of flipped classroom for teaching social media while the students and the teachers both faced similar obstacles regarding remote learning during the crisis. The students were not entirely welcoming toward the idea of using Instagram Live in order to carry out their work. Among these examples of online learning scenarios, we could see how there is a spectrum of feedback concerning online teaching environments during the pandemic.

For Ahshan (2021), the research model below shows which crucial matters reflect the success of remote teaching—with the three circles highlighting the subject matters of "learning, reinforcement, deepening understanding"; "summative assessment", and "formative assessment". In the model, it highlights the online learning platform, like Moodle is adopted to facilitate formative and summative assessments online and communication with the students. On the other hand, learners could launch oral presentations online. As for remote teaching, some key functional elements for instance the material delivery mechanism, and understanding deepening are emphasized. Therefore, we can see the model also sheds light on the student engagement. On another note, material delivery if put online as a live discussion between students and teachers which ensures student-instructor interactions. Based on this model, we wish to explore while the instructors maintain the functional elements will they encounter any potential difficulties.

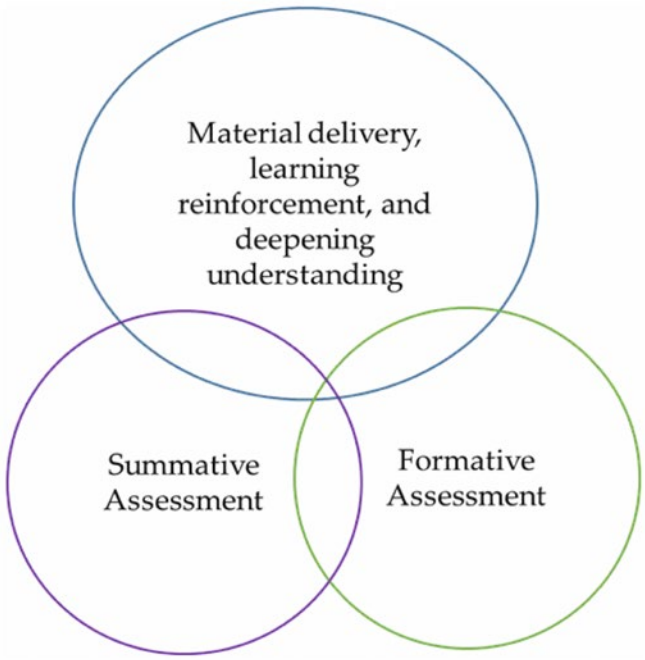

Figure 1. Functional elements of remote teaching and learning adopted from F2F teaching and learning (Ahshan, 2021, p.2)

Based on this model, and in view of the problems that online teaching has been known for, this study pursued the following research questions:

1. What are the dimensions of the difficulties that teachers in universities have been facing during the Covid-19 period concerning these three perspectives?

2. What teaching strategies did they apply in their practical modules to help students learn?

3. To what extent could traditional face-to-face teaching be irreplacable by online modules from the point of view of the instructors?

3. Methods

This research employed a purposive sampling of teachers from 6 universities in Hong Kong, where the education system blends high-tech and traditional approaches very well. Hong Kong's well developed media landscape is an ideal focus of this study as journalism instructors are not lacking the digital skills that are necessary in teaching practical modules, although their adeptness did not necessarily give them advantage during the very strict imposition of Covid-19 lockdowns across China. Purposive sampling is advantageous for a qualitative study such as this (Etikan et al., 2016), and it can be done with rigor appropriate to the key argument being made (Campbell et al., 2020). In this study, we are arguing that there is unprecendented pressure being imposed on instructors of journalism to teach practical modules online, which are not unfamiliar to other disciplines who experienced the same brunt of the pandemic. The qualitative and purposive method offered in this study can thus provide researchers with the justification to make generalizations from the study sample (Rai & Thapa, 2015).

While focusing specifically on the context of journalism education in Hong Kong, since it is a quintessential example of a course that is half practically driven and half theoretically oriented, we only invited teachers who teach practical modules. These include newspaper reporting and publishing, news writing, investigative reporting and digital photography, among others. Because these and many other practical modules are not always made available to students (each term the students are offered a different set), we tried our best to include most of the practical modules in the past semesters (the period which was affected by Covid-19 since 2021). To ensure the representativeness of the samples, we also

made sure that all the teachers who participated have had a rich teaching experience in the tertiary sector and were very knowledgeable and experienced in delivering journalism practical modules for 2 years or more (at least 4 semesters). This was to ensure that they were not new in conducting classes and that the difficulties that they had previously encountered are familiar to and solvable within prior traditional classroom teachings.

3.1 Selection Process

As aforementioned, this qualitative study was designed to explicate the phenomenon and the approaches to teaching by journalism teachers during the pandemic. The 6 journalism teachers were invited to take the in-depth interview starting from late August until the end of September 2022—which was right after the peak of the Covid-19 pandemic in Hong Kong. The purposive sampling entailed contacting the teachers via (email/phone/video chat) and explaining that their participation is key to sharing insights about their firsthand experiences. They were specifically selected because they have relatively similar number of years of teaching practical modules in journalism, while also demonstrating their adeptness in using online technologies.

Listed below (Table 1) are the participating teachers in code, the communication tools that they adopted, and also the subjects that they taught.

Table 1. Interviewees' background

Interviewees	**Gender**	**Years of teaching experience**	**Modules they taught during pandemic (2021 onwards: Autumn and Spring term)** Note that some modules are not opened for registration in every semester	**Face-to-face time-slot for some small groups of students** (Yes/ No)	**Social media channels as a way to communicate with the students** (Yes/ No)
C1	F	5 Years +	Newspaper Publishing Modules; Business and Financial News Reporting and Writing	Yes	Yes
D2	F	2-3 years	Investigative Reporting; Introduction to TV production	Yes	Yes
F3	M	5 years +	News Writing in Chinese	No	Yes
T4	M	2-3 years	Digital Journalism	No	Yes
E5	M	5 Years+	Digital Photography Digital Journalism	No (but have arranged some separate timeslots to meet students online)	Yes
S6	M	2-3 years	Design and Publishing; 3D Graphics (AI and Indesign)	No (but have arranged some separate timeslots to meet students online)	Yes

3.2 Specific Data Analysis Procedure

The research data collection process touched on a few key aspects, such as whether there are any motivating antecedents for students in online teaching environments, plus the difficulties encountered by module instructors in said environments, as well as the benefits when compared to traditional classroom teaching and learning. Semi-structured in-depth interviews allowed the participants to express their own thoughts. Probing was also carried out to ensure that they would delve into the contexts we wish to discuss in order to answer the research questions.

The interview questions were based on the constructs developed and validated by prior studies (Larrondo Ureta et al., 2021). The interview process targeted three main goals. First, it was intended that the interviews would provide insight into the instructors' experiences as they taught online courses for practical modules. Second, with sufficient probing, the interviews touched upon aspects that would not be easily explicated from general discussions of difficulties in launching the modules (such as the instability of networks and also the problems with online teaching tools), but more specifically the nature of incapability of practical modules when it comes to online teaching. Third, interviewees' personal opinions were accounted for as regards how online or hybrid teaching might be managed with specific strategies based on the firsthand experiences they had accumulated over the year.

The transcripts of the interviewees were analyzed through thematic analysis (Lochmiller, 2021) since the answers given by the interviewees were based on the context they faced. Hence, it can be foreseen that the more practical the module is, the more difficult it would be to launch the online class. The display of the findings below are context-specific, evidencing different dimensions of difficulties and the relative teaching strategies coping with the problems within online environments.

4. Insights Gathered from the In-depth Interviews with Faculty Members in Hong Kong

4.1 Difficulties and Differences in Delivering Classes within the Online Setting vs the Offline Environment

Most of the respondents have pointed out that students seem to vanish during online classes which was confirmed by the lack of responses and engagement from students during the online class. The teachers would observe the needs and the characteristics of the modules they teach in order to modify their teaching strategies and cope with the difficulties in launching practical module teaching. In modules requiring the usage of cameras, instructors would often need to exert extra effort in order to demonstrate to students how to utilize their cameras. Some respondents in the interview mentioned a few layers of difficulty when faced with a similar scenario when teaching journalism modules (Note that the quotes below have been subjected to minimal grammar correction and some details were removed for clarity, and only those interviewees who have 2 sessions of interviews will state interview part I and II):

When teaching the reporting and filming related modules, the instructors faced the below scenarios that might affect the class performance:

> D2: Concerning the filming of videos, it relies much on the students to launch the research, and apply to the reporting. This process, if conducted on mostly online, the effectiveness is deemed weak. The interaction with teachers is bad, sadly speaking. (0:5:50)

> E5: When teacher has to carry out the three-point lighting skills, it is hard to tell students how to launch it via Zoom/Teams. If it is launched in the classroom, I could easily demonstrate how to place the lighting equipment in the classroom. (Interview Part 1: 0:02:04)

Some teachers shared insights on how they practically approach difficulties they experienced in online teaching. These insights are course-specific; in other words, their approach depends on the practical modules they are teaching:

> T4: At one time, I need to go to film myself about the chaotic situation I faced when launching the filming in a real-life setting. I reenacted the chaotic and weird gestures on the street to help students understand even better about the reporter's day to day work. (Interview Part 1: 0:10:56)

> E5: I will help the students in telling them how to use their phone to take the photos. I also encourage them to use phone to take a natural photo without the step of post-photo-editing. I

> asked them to mark down the shutter, aperture, and ISO numbers to me for showing the skills they obtained. (Interview Part 1: 0:24:28)

Not only filming classes encounter difficulty in the context of online teaching, instructors teaching writing classes also shared their rather adverse situations in conducting classes:

> F3: As I am teaching the news writing and the module will touch on certain political issues. Most of my online classes will turn on the recording mode that I could feel the tense atmosphere among the students that they are more reluctant to express the political viewpoints. (0:03:15)

> C1: I teach editing class, and sometimes I could discuss the news topic and angle together with the students, and the students could just knock on the door of my office if they have any questions. However, when it was done online, it is deemed much harder. (0:4:37)

In terms of asking the students for feedback, the insights demonstrate that it is not always easy to receive inputs from the students during class as compared to in-person settings:

> S6: Some students did shy away from the online classes that they could not catch up with the progress of the class. But they did not respond very well in class when I asked them if they understand what I am teaching. (0:06:52)

> E5: When I teach in person/in an offline setting, I could ask for the students' feedback easily (Interview Part 2: 00:00:45)

As illustrated, the respondents all agree on some common problems that they would come across when conducting lessons online. For example, the stability in Internet connection, the disappearance of the students who appear to be online but do not actually follow the lessons, and also the lack of responses when teachers ask whether anyone has any questions or concerns. Some instructors pointed out that this problem only seems to be getting more serious every semester that they teach in an Asian country and that there hasn't been much improvement regarding the lack of response and engagement from students. Among all the practical journalism modules, the modules that require the operation of gadgets face the most adverse situation, and then followed by the writing classes which requires the interaction between teachers and students to finalize the media angles.

4.2 Social Media Becomes the Major Key Platform for Students to Interact and Ask Questions

Some teachers have already been utilizing social media platforms to help their students learn better despite the fact that the students tend to be less focused on learning, as reflected from the observations shared by most of the respondents in this study. Because students do not interact much with each other on Zoom, the class cohesion is deemed weak in online settings. In cases like these, teachers think about ways of bringing the students together to better prepare for the assessment:

> S6: I used free tools online to help students schedule meetings for their consultation and learning purpose. Some of them are too shy to ask questions online unlike in face-to-face settings where they could just ask after class. Now, students could WhatsApp me if they encountered difficulties. (0:03:54; 0:08:20)

> D2: I also welcome WhatsApp to contact the student from day 1, or vice versa, let the students contact me. But I can see there is not much motivation from the students to reply to the message. (0:10:06)

> C1: I also adopted WhatsApp, Teams, or some other online teaching platforms but seems that the interaction is still not comparable to the face-to-face setting. (0:12:00)

As shown, some instructors also introduced different strategies for the students to extend their learning experiences outside of online classes, albeit chat/messaging apps are still entirely online. These

strategies help inform the learning performance of students because it gives them a "second chance" to catch up with the progress of the class. Some of the professors give this opportunity to students who are considered "deadline fighters", as they might need separate sessions for consultation. In an in-person setting, students would often talk to their teachers after class. However, in an online setting students are not brave enough to speak up because of various reasons. Hence, the module instructors need to spend more effort and time to address this.

4.3 More Creative Teaching Strategies in Online Teaching Settings for Practical Journalism Modules

The teachers all agree that online teaching also gives room for students to develop their computer skills. In the classroom setting, a lot of students might only focus on listening to the instructors instead of using their computers. However, in practical modules, the delivery of practical skills online is completely different when compared to an offline setting. The following are some of the major difficulties concerning the nature of practical modules that make it difficult to maintain teaching performance. For instance, S6 teaches both graphic design and AI, and here are some of his responses highlighting his difficulties in delivering classes:

> S6 (re graphic design): I used a few cameras to film my class as topic involves a few moving parts, for instance, my students need to know every key that I pressed; each button that I click, and also the overall steps that go together with these actions. (0:05:15 on wards for this and below)

> S6 (re AI): I set three computers for my teaching. One computer is for demonstration; one computer is to check the interaction and questions raised by the students; and one computer/tablet is to show the overall setting/actions of myself when carrying out the procedures. However, the students when they listened to the approach, they would not have a spare computer to touch the software's functions and followed the steps.

Other interviewee also shared the experience of capturing some data/ teaching materials before the online classes in order to demonstrate to the students:

> T4: I taught a practical module related to photojournalism. Since I know it will be conducted online, so I filmed a few examples during my day to day frontline media work. (Interview Part 2: 0:13:14)

Concerning the participation and assessment of the performance, teachers adopted some different approaches:

> S6 (re Participation): I will assign small tasks to them and leave "a tail" to them (my students). For instance, I might teach topics related to branding and logo, and then next week I will ask which branding did the students choose. They need to respond to my questions the following week. (0:15:38)

> D2 (re Participation): I also added the numbers of tutorials for my group projects. I encourage the students to join as I can help with their filming tasks. Of course, it created pressure to teachers as well. (0:15:07)

Still, when asked about other creative approaches, some teachers focus on the difficulties rather than the solutions:

> C1: In some scenarios, when we need to discuss the media angles for a specific topic, then I might require the students to come up with some ideas. However, unlike face to face setting, students and instructors might often face various distractions, for instance the technical issues. Some of their conversations are accidentally stopped because of internet instability. (0:03:17)

> T4: Somehow when I played the video via online setting, the students claimed they could not hear the audio from time to time, the technical issues could not be solved in a short period of time. (Interview Part 1: 0:12:12)
>
> E5: In the future development, I guess offline classes are more preferred by the teachers as we can actually see the direct responses from the students instead of students who only appear there but actually away from the online platforms (idling) (Interview Part 2: 0:09:40)

In light of the pedagogical approaches that were altered during the pandemic, we could see from the responses of the teachers that they have put in the extra effort to keep track of the learning progress of students. At the same time, the pedagogical approaches aided in helping the students feel like they are watching the teachers "perform" for them in classes. Nevertheless, as highlighted by some of the interviewees, the difficulties of conducting the practical modules in many circumstances cannot be ignored. They also mentioned that in the future, it would be very unlikely for face-to-face classes to be completely converted to online classes.

5. Discussions

5.1 Future Challenges of Teaching for the New Normal Era

Quite a number of teachers have mentioned the fact that their students are gradually losing the patience to listen to long lectures. This observation has been shared among the teachers after the post interview of this study—at the start of the autumn semester of 2022. The pandemic has affected us in many ways. It has not only affected the approaches to conventional teaching by many teachers, but also affected the learning intentions and attention spans of students (Kalloo et al., 2020; Nambiar; 2020). In the long run, it is expected that a hybrid mode of teaching might be the way to go for the learning and teaching community. One of the challenges that we came across in these past few years is the familiarization of the use of digital tools. However, given how we have progressed, if the pandemic makes a comeback in the near future, students can expect an improvement in both teaching and delivery from the teachers.

5.2 Teaching Strategies in Relation to the Online Teaching Setting in View of the Shifting Learning Expectation from Students

According to Johnston (2010), students who finished the tutorial for the online information literacy module managed to actually grasp the topics better. The instructors also believe that students learn best when the captioned module is delivered in a flexible, self-paced manner. Students anticipate that in the post-pandemic period, there may be a greater use of digital technologies in face-to-face instruction. They have discovered benefits in using online e-learning tools to support learning during the pandemic. One of their findings is that students enjoy interacting with the e-tools, which can make the class more enjoyable. Since the pupils must focus throughout the class in a face-to-face setting, different uses of pedagogical approaches online will improve the quality of teaching and learning. Barbour et al (2020, p.3-4) mentioned the four phases in the new normal. Phase 1: Rapid Transition to Online Education and Instruction; Phase 2: (Concerning) The Fundamentals of Adding In emergency course transitions, institutions must (re)incorporate fundamentals: course management, equitable access to address the issue of unreliable computers and broadband, assistance for disabled students, and academic integrity; Phase 3: Extended transition in the midst of ongoing chaos. Schools need to be ready to support students throughout the entire school year and for online delivery; also, Phase 4: New Normal is forming. The adoption of online learning in this phase is unknown, but it is likely to be higher than it was before Covid-19. It is also pointed out in the study that (Rapanta et al., 2021) the experience of teaching with digital technologies can gradually give way to a harmonious combination of physical and digital tools and methods for more active, flexible, and meaningful learning.

5.3 Possible Way Out for a New form of Teaching and Learning in Journalism Classes

In the long run, the pedagogical approaches of teaching and learning shall be partially shifted to the online setting. Badrkhani (2021) has mentioned how instructors adopt visualization tools to enhance the online educational environment while promoting a sense of creativity for teachers and a sense of elaboration. This helps boost the digital literacy in a faster pace. Despite there being causes of great disruption in the education system during the Covid-19 pandemic, it was confirmed by the respondents that they did better after two years of using e-tools online to conduct classes.

Most of the teachers shared the idea that face to face teaching shall be irreplaceable. Class effectiveness can be reflected from the real-time feedback from the students. This could not be all reflected from the online classes. On top of that, as pointed out by interviewees, journalism has quite a number of modules which involve face to face demonstration in class. Though assessments could be launched online, however, some of the instructor-student interactions on managing the cameras, studio equipment, and also typesetting are required. In the long run, it is expected a few strategies shall be prepared if pandemic affects the face to face teaching. The instructors might be advised to get themselves familiar with filming themselves for a clear demonstration of using the equipment. With today's advanced technology, the resolution shall not be a big problem but clarity has to rely on the camera angle and presentation skills the instructor adopted while filming. On the other hand, a better use of online platforms might be required. For instance, the instructors have to teach software skills to the students. It is advised besides filming the steps, a clear handout showing the steps shall be displayed, and it could be uploaded to the online platforms like Moodle in advance. This is to ensure the delivery could be helpful and reachable to the students. More than that, more subsidies from the university are expected to support the purchase of the equipment so that the instructors need not to rely on their own. It is expected that teachers are more mentally prepared for the online courses, and college are physically more prepared.

With concerted efforts, both from the cooperation and involvement of the students and also the devotion of the teachers, the experience of teaching would offer a leeway for teachers to further invent new ways to teach and come up with new strategies to contribute to the ever-changing learning and teaching environment. From the interviews above, the teachers and students seem to have gotten used to the online platforms to attend classes. And reflected by some of the observations from the students is that that they feel contented that they are able to save some time in their day as well as money in commuting.

6. Conclusion and Limitations

This study aims to take an exploratory perspective to take into concern the perspectives of teachers in dealing with journalism-related modules online. however, giving a rather limited voice in the learning environment without the students. Further studies could take into consideration the responses of students in related studies. All in all, we can see that Covid-19 has brought educators into unprecedented territory. The pressure does not only fall on the teachers but also the students. The learning process shall go well if it balances the well-being of the students and the teachers. This study ably points out that the online learning environment has to be supplemented with face-to-face interaction or a separate small group online session in order to somewhat simulate the same effect that faculty members can achieve in face-to-face classroom settings. In a nutshell, it is foreseeable that online teaching cannot completely replace face-to-face teaching unless face-to-screen communication is able to remove some of the barriers it has when dealing with matters of practical modules. There are no responses from students included in this study, but in the future, their sentiments shall be taken into consideration so as to offer a more balanced perspective.

Research Ethics

This study has obtained the research ethics approval in 2022 September (URC-RE-2122-035) from the Hang Seng University of Hong Kong.

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Appendix

Interview Questions: (Semi-structured interviews)

1. How did you launch the classes online? (And your module title is?)
2. When comparing classes in a physical setting to those that are offered online, what are the key changes in the classroom environment?
3. What are the major difficulties you encountered? Say, your course nature, the use of equipment, etc.
4. How did you solve the problems? Say, the teaching methods?
5. What are the motivational strategies did you apply to help encourage students to stay awake in the online classes?
6. What are the assessment methods, did you alter them when launching the online courses? What are the rationales?
7. What are the major communication platforms did you adopt to maintain communication with the students?
8. What is the technical support for the students? Any other forms of support?
9. Are there anything that you discovered, say in physical setting, they will not do this, but within the online platforms, they will react differently? Any examples?
10. In the online setting, in what aspects do you think help improve the teaching?
11. When teaching the practical modules online, what do you think traditional/ physical setting could not be replaced by an online setting?
12. Do you think one-day traditional teaching could be fully replaced by online teaching? Or do you prefer a hybrid setting in the future?

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Gongyeh App: EFL students' Voices from Hong Kong

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Abstract: This study examines the experiences of university EFL students preparing and evaluating oral presentations via the Gongyeh App, an online presentation assessment platform devised by an EMI university in Hong Kong. A key goal of the App is to enhance students' presentation skills by providing audience feedback so that maximizing learning effectiveness can take place. The present study was guided by the following questions: 1. What were students' attitudes and beliefs concerning the application of the Gongyeh App? 2. Does the Gongyeh App improve students' oral presentations compared to a teacher-centered approach? A total of 12 university EFL students participated in this study, which took the form of in-depth semi-structured interviews. Based on the data, it is revealed which learning support the students feel is most pragmatic and useful for overcoming the challenges of giving feedback on oral presentations. The article will end with the author sharing his insightful reflections on the necessity of further support for students in providing professional oral presentation feedback.

Keywords: Gongyeh App, oral presentation, peer feedback, assessment

1. Introduction

It is commonplace in tertiary education settings throughout the world to deliver oral presentations. Tsang (2020) pinpointed that all subject disciplines utilize presentations as a means of assessing students' knowledge and assisting them in acquiring relevant skills. Presenting effectively is an essential skill that can still be employed after graduation in a variety of circumstances such as job interviews and assignments in the workplace (Tsang, 2020). Generally, tertiary-level students need presentation skills to be competitive worldwide in the 21st century, which falls under the communication skills category. Presentation constitutes a major part of the academic experience for many students in higher education and is "inherently associated with a person's future career path" (Elliott & Higgins, 2005).

In the process of teaching and learning in the classroom, there is often a very strong emphasis on developing oral presentation skills, which can be seen in the fact that students are regularly required to present their ideas, arguments, opinions, and research results either individually or in groups throughout the study. As a result of all these activities, students will be able to improve their oral presentation skills, which will help them when they graduate and start working as professionals in the future. It remains a matter of concern that students do not have effective oral presentation skills; complaints about graduates' poor presentation skills persist. In contrast to the standards of good oral communication perceived by the industry (Jackson, 2014), graduates tend to rate their oral communication skills highly (Jackson, 2014). The disparity in communication standards has prompted previous studies to call for more preparation for oral presentations among undergraduates and clearer communication expectations among industry stakeholders (DuPre & Williams, 2011). Today, university students and graduates are required to have the ability to present an English presentation to a public audience, and some of them

are even obligated to perform that presentation in English (DuPre & Williams, 2011; Heron, 2019; Jackson, 2014).

Currently, there are a considerable amount of studies relating to self-evaluation, teachers' feedback, peer feedback and the comparison of these (e.g., Barry, 2012; De Grez et al., 2012; Murphy & Barry, 2016; Reitmeier & Vrchota, 2009; Yamkate & Intratat, 2012); however, it remains relatively understudied how presentations can be assessed (e.g., Babaii et al., 2016; De Grez et al., 2012). Studies on pedagogical issues, such as teaching and improving presentation skills, are even rarer. While traditional teachers' and peer feedback for evaluating presentations are plentiful, a lack of research has been conducted on how online peer feedback from educational technological tool contributes to successful presentations and how to address learners' delivery problems and enhance presentation skills, particularly during and in the post COVID-19 landscape. The purpose of this research is to shed light on the implementation and the importance of the online peer review technological tool, Gongyeh App, which contributes to successful presentations. This study is guided by the following research questions:

RQ1. What were students' attitudes and beliefs concerning the application of the Gongyeh App?

RQ2. Does the Gongyeh App improve students' oral presentations compared to a teacher-centred approach?

1.1 Teaching Context

The study examined the learning experiences of first-year students at an EMI University in Hong Kong, including the study of Design, Physiotherapy, Optometry, Mechanical Engineering, Nursing, Land Surveying, Accounting, and Chinese Bilingual Studies. All students in these disciplines are required to complete two-credit courses in English for Academic Purposes (EAPs) in both Year 1 and 2.

The EAP module is being offered for thirteen weeks in the post-COVID-19 landscape, for three hours each week. Two written assignments have to be completed to pass this module, which include a first draft and a second draft of a problem-solution essay, along with a video presentation that had to be recorded beforehand. A key objective of this course is to assist students in enhancing and developing their proficiency in the English language in a safe and supportive learning environment within the University, as well as to help students study efficiently within the English language learning environment.

There were approximately 1600 students enrolled in this course at the time of the study. Groups of students were assigned based on the course timetabling and management needs of their host departments, according to the profile of the students. This course's learning outcomes include (a) analyzing and practicing elements of academic writing, such as word choice, hedging devices, and register; (b) developing an idea much more smoothly and understanding the common pattern and elements that make up a problem-solution essay and an argumentative essay; (d) summing up and paraphrasing; and (e) identifying the elements, structure, and tone of academic presentations.

1.2 Reason for the Innovation

Through the semester-end feedback questionnaire, participants taking the same EAP course in previous cohorts expressed disappointment in their limited opportunities to conduct presentations using online tools such as Blackboard, Microsoft Teams, and Zoom. Additionally, they expressed that they had received very little oral feedback from their classmates and teachers during COVID-19 online classes. The students also faced challenges when it came to learning and being evaluated on their oral presentation skills. Using online platforms for assessment purposes is one of the challenges students encounter. In a study conducted by Mu'awanah et al. (2021), several challenges were identified related to the use of Zoom for supporting English language learning. These challenges included a general lack of confidence when students are asked for clarifications by the teachers and a delayed response. Moreover, students stated that individuals are incapable of accurately presenting themselves online due

to the lack of paralinguistic cues (Moorhouse, 2020). With such challenges in mind, I, as a teacher, began considering innovations as a way to increase student engagement and facilitate technology-assisted learning in university language courses. Questions I asked myself involved "Why are students reluctant to speak in the online lessons?", "How can I promote online peer review to university students?" and "Shall I promote the use of the Gongyeh App in my courses?"

I decided to use the Gongyeh App in my course and take advantage of its interactive peer review functions. Known as Gongyeh, which means "say something" in Cantonese, this online tool allows peer feedback on oral assessments. Using the app, learners can evaluate the performance of their presentations. This tool supports both live presentations in class as well as post-class video submissions via web browsers and mobile apps. Moreover, the Gongyeh App allows presenters to review the recordings of their presentations and monitor anonymous comments synchronized in real-time for evaluation and improvement. The application is available on the App Store for both iOS and Android devices. The service allows teachers to create classes and add students by entering students' email addresses, uploading a CSV file, or instructing students to scan the QR code after subscribing to https://www.gongyeh.com/ (Figure 1). Once the presentation tickets have been configured, they can be generated for each presenter or group. In what follows, the special features of the Gongyeh App will be highlighted.

1.3 The Innovation Aspect

This section elaborates on the use of the Gongyeh App and highlights the importance of interactivity and collaboration among peers in using this technological tool. In preparation for the online peer review process, the teacher instructed and assisted students in understanding the assessment rubrics. As part of the EAP course, students should comprehend the importance of Content, Delivery, Language, and Pronunciation as cornerstones of presentation success. A presentation rehearsal was then performed by students in front of the teacher and other students. As part of the evaluation process, students become the assessors for both themselves and their peers. The experience of undertaking these two roles was beneficial to students not only in helping them develop a better understanding of the expected assessment standard but also in helping them discover their weaknesses, which could be useful at a later stage when the students are supposed to present. As a last step, a critical evaluation of the Gongyeh App will be conducted and a post-evaluation will be performed (Figure 2).

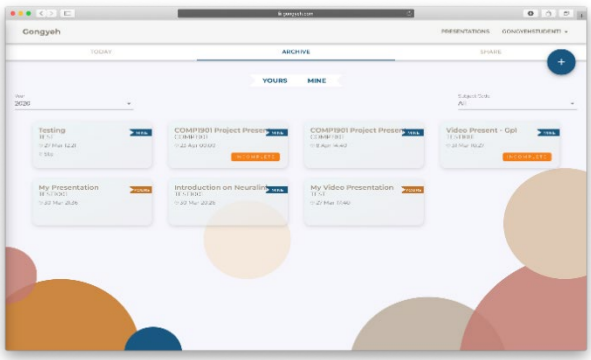

Figure 1: Interface of the Gongyeh App Online Assessment Platform (Knowledge Transfer and Entrepreneurship Office, 2021)

Figure 2: Process model of online presentation peer review (modified from Ho, 2022)

The above figure illustrates how students can benefit from the online peer review interface, Gongyeh, since it creates a standardized assessment parameter for all end users. Students may provide evaluative comments after they have a grasp of what constitutes good performance. Observing only good and bad exemplar videos will not suffice. A reasonable amount of time was given to students to explain their perception of the good and bad presentation videos. The teacher's expectations and the student's expectations would be narrowed in this sense. A teacher-student conversation can help student assessors clarify any concerns before the presentation assessment begins.

2. Methodology

2.1 Participants

The study involved full-time Year 1 students at an EMI university in Hong Kong between September 2022 and December 2022. A convenience sampling method (Cohen et al., 2018) was used to select the study subjects. About 28 students initially expressed interest in participating in this study after receiving email replies from ESL English for Academic Purposes (EAP) students who enrolled in the three-credit EAP course. As a result of the response time from their email replies, 12 students were chosen from the pool of participants. A variety of factors were considered when selecting students, such as gender, place of origin, year of study, and field of study. Participants originated from Hong Kong (n=6), Mainland China (n=4), and South Korea (n=2). There were seven females and five males from Year 1 entry, representing a variety of academic disciplines. Selection into the study did not require prior learning experience at other Hong Kong tertiary institutions or experience in equivalent EAP courses. It was guaranteed that participants would remain anonymous, and participants could withdraw from the study at any time.

2.2 Methods of Data Collection and Data Analysis

Twelve semi-structured interviews were conducted with ESL university students participating in the EAPs, ranging in length between 10 and 16 minutes. A relaxed and comfortable environment was created so that student participants could respond freely, and their perceptions of Gongyeh as a tool to assist them in peer evaluation and feedback were investigated. Data reliability was verified twice by member checks (Merriam, 1998). Each interview transcript was approved by the respective interviewees without modification. The data analysis was undertaken using Braun and Clarke's (2006) six-step framework, which included familiarizing myself with the data, developing initial codes, searching for themes, reviewing themes, and defining and naming themes based on the relatively small sample size. For identifying the key language components that reflect the students' critical perceptions of an issue, the tape scripts were reviewed carefully to develop initial codes. Based on the frequency of

occurrence and similarities, I developed my interim themes after extracting my initial codes. Further comparisons of the original codes led to the refinement of the themes, which in turn were given the coding labels. By utilizing Braun and Clarke's (2006) six-step framework, an account of the rich, detailed, and complex findings could be discovered. Through thematic analysis, researchers can integrate their key ideas and viewpoints while maintaining their flexibility at the same time. Toward the end of the data collection process, student participants were asked to confirm that the final research findings and discussion were accurate representations of their experiences throughout the research process as part of the second member check.

3. Results and Discussion

RQ1. What were students' attitudes and beliefs concerning the application of the Gongyeh App?

From the semi-structural interview, students were asked about how they perceived the use of the Gongyeh App in an EFL course. It can be inferred that this educational tool was considered useful and convenient as confirmed in four-fold based on the thematic analysis:

3.1 Usefulness and Convenience

> Gongyeh App is super convenient because the App can automatically generate video transcripts without asking us to do it manually. (Patrick)
>
> Gongyeh App can leave time-synchronous comments which is very time-saving. (Zoe)
>
> The use of the Gongyeh App makes my life easier as the app can classify comments with hashtags, which is super great. Without this function, I need to keep on checking what those comments are. (Mandy)
>
> The comment report can be generated through the app. I can review the presentation recording in a much more relaxing way. (Hugo)

From the above, it can be seen that EFL students are enthusiastic about using the Gongyeh App in presentation practice. Student presenters can maximize their learning efficiency and effectiveness with cutting-edge technology such as speech-and-text recognition programming and automated hashtag classification.

3.2 Grasping the Importance of Paralinguistic Knowledge

> In my high school, I seldom paid attention to oral presentations because usually high school students just bring along their note cards to come out and stand in front of other classmates and do presentations. That's it! (Ruth)
>
> In fact, my high school English teacher didn't pay any importance to oral presentation. As you may be aware, the HKDSE speaking paper only weighs 10%. Therefore, my teacher rarely asked my high school classmates and me to come out and do some speaking practice. But through the Gongyeh App, I can learn a lot of concrete feedback from my peers. (Jennifer)
>
> I realized how important body language is in the presentation after reviewing my presentation video and a classmate's recorded presentation through the Gongyeh App. Everything becomes much more visualized. (Jarvis)

The above quotes illustrate how the negligence of paralinguistic knowledge in oral presentation is a deep-rooted problem among students in Hong Kong because linguistic knowledge is overemphasized

rather than paralinguistic knowledge (Ho, 2022). It is more likely that the use of the Gongyeh App will compensate for the traditional input made by teachers as well as the printed handouts, with the assistance of multimodal features.

3.3 Less Outcome-oriented

> In the past, I was always thinking of getting good grades in my public exam, i.e., HKDSE. I just care about the final product, which is the assessment result, and pay less focus to the knowledge that has been learnt so far. But after using the Gongyeh App, I started to realize that body language, eye contact, pronunciation, intonation, and visualized materials are even more important than the final grade I earn. The feedback given by peers seems to be particularly useful in my future career. (Matthew)

A Confucian legacy has left Hong Kong with an examination-orientated culture (Berry, 2011). In the Hong Kong context, students are primarily interested in grades at university because in the past these were their final and most important outcomes. The local curriculum tends to place a great deal of emphasis on assessment results, which may in turn lead to tremendous pressure for students to strive for academic excellence. Students might lose focus on what they learn along the way if this continues over time. Yu et al. (2006) claim that feedback should be considered a critical function of all assessment methods. Ideally, feedback should result in student behaviour changes, which is how it is evaluated. In addition, a teacher and peer feedback system aims to complete the feedback loop by encouraging students to respond (Sadler, 1989). As a result, it is essential to explain to students how important feedback is in preparing for future assessments and career decisions.

3.4 Promotion of self-critique skills

> During the consultation, I presented to my teacher what I had found while peer reviewing my classmate's presentation video. Then, the teacher in turn gave me some major useful feedback as well so that I can prepare well in my next round of presentation assessment feedback. (Adam)

> In the old days, I gave my classmate some presentation feedback like Good! Excellent! It's OK! With the help of the Gongyeh App, now I know those comments I gave to my classmate beforehand were empty. If I continue giving those empty comments to my classmate, then my classmate will give me similar comments which will not be constructive and useful. (Jessica)

What can be gathered from the above is the importance of developing concrete, solid, and constructive comments. A key component of their feedback is to indicate how student presenters will interpret it and reflect on their learning development in response to the feedback.

In an effort to improve a student's presentation, it is a good idea to pick no more than three aspects that can be done within the student's time and other constraints. Students can be referred to external materials that they can reasonably access if possible. A longer list can result in students 'shutting down' and disregarding all of your suggestions.

RQ2. Does the Gongyeh App improve students' oral presentations compared to a teacher-centred approach?

The second research question involved exploring how students perceived the importance of the Gongyeh App in improving students' oral presentations compared to a teacher-centred approach. Overall, students see the importance of integrating the Gongyeh App into the EFL courses as confirmed in the following comments:

> Sometimes, teachers won't have any spare time to give us oral presentation feedback, particularly if all presentation timeslots are tightly packed in one lesson. With the use of the Gongyeh App, I can raise questions and read those comments raised by peers. (Rose)
>
> I feel my learning effectiveness has been enhanced with the use of the Gongyeh App. You know, in our culture, it is not so good to give some bad comments to others directly, especially during face-to-face interaction. But with the use of the Gongyeh App, it allows me to be anonymous to give peers a platform to comment on other people's work based on the assessment rubrics customized by our teacher. (Charles)
>
> By using the Gongyeh App, I can watch the presentation video and provide either synchronous or holistic feedback and grade every assessment criterion at any time and anywhere. (Jennifer)

As a result of the above, it is clear that the Gongyeh App not only assists peer assessors enrolling in university English courses with giving synchronous or holistic feedback and grades by the assessment criteria set by their subject teachers but also enables student presenters to receive constructive and useful feedback from their peers in real-time without time or venue constraints. A further advantage is that students would be able to analyze their weaknesses and even develop corresponding plans for improvement via the Gongyeh App (Ho, 2022).

4. Conclusion and Future Pedagogical Direction

The purpose of this study is to examine students' perceptions of the effects of the Gongyeh App on speaking assessments. As opposed to traditional pedagogy, which is a one-way street, the Gongyeh App not only helps teachers to reduce their workload while giving feedback, but it also alleviates student peers' embarrassment and anxiety associated with giving synchronous feedback. According to university students, the Gongyeh App facilitates the acquisition of professional presentation skills, which are considered extremely valuable in the pursuit of academic excellence and future employment. As this article demonstrated, one of the central tenets of Gongyeh App's success is that the app is inextricably linked to multimodality. The Gongyeh App provides presenters with the opportunity to review feedback according to a set schedule and to replay the presentation video at any time. In fact, a groundbreaking transformation is taking place in our world as a result of big data and smart digital technologies, as stated by Har (forthcoming). Despite this, little attention has been paid to understanding how mobile applications like the Gongyeh App affect language learning or how they can be used as auxiliary tools in conventional EFL speaking lessons that are considered to be more flexible, inclusive, and efficient than currently available tools in language learning. Presumably, the Gongyeh App will enable student learners to prepare themselves for the rapidly evolving workplace context caused by digital technologies.

As evidenced by the incredibly low mark distribution on the Hong Kong Diploma of Secondary Education Examination (English Paper 4 Speaking: 10%) (Hong Kong Examinations and Assessment Authority [HKEAA], 2023), it is unsurprising that oral English skills may also be neglected in a local university educational system that is primarily assessment-oriented. While this remains true in most ESL classrooms, oral presentation skills must be emphasized more. By using peer-reflective methods, students will be able to reinforce their presentation skills with each other, which is a skill that is usually overlooked and not addressed by local high school English teachers and students.

Considering the relatively small sample size, it is not possible to represent the entire population of Hong Kong EAP students and ESL teachers studying and teaching English in universities in Hong Kong. The findings of this study, however, may contribute to a debate about whether the Gongyeh App can promote peer review in students' presentations and boost students' engagement by illustrating what students value. Currently, students' perceptions are revealed in the data, but adding the perspectives of other participants, such as teachers, could provide a more comprehensive picture. The retrospective dimension of this article allows us to understand how students perceived the Gongyeh App, while the prospective dimension provides insightful information on the possibility of peer review functionality in

EAP speaking assessments at the university level. It is interesting to note that the Gongyeh App has opened an array of new opportunities in the teaching of English as a result of the strategies that have been employed to utilize this app.

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