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Pivoting an Entrepreneurship Experiential Learning Module Online: Applying a Concrete Experience Framework

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Abstract

Experiential learning has gained in popularity over the past 20 years in many fields and in entrepreneurship education in particular, where many educators posit that it is essential. Delivery of experiential learning activities and courses became extremely difficult and nearly impossible in some countries during the COVID-19 pandemic due to government imposed lockdowns and restrictions, forcing educational institutions to adapt and many opted to move their teaching online. How these changes impacted positively or negatively on experiential learning and students' ability to adapt and learn has yet to be fully understood. This paper introduces a concrete experience framework and describes how it was applied to the process of pivoting an MBA experiential learning module online. It contributes by demonstrating how educators can adopt the framework in their efforts to adapt or create online courses that aim to deliver experiential learning.

Keywords

experiential learning, entrepreneurial learning, online education, remote learning, pedagogy

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Introduction

Experiential learning has gained considerable attention over the past 20 years in fields such as education, management, accounting, information science and psychology among many others (Kolb, 2014; Kolb & Kolb, 2017). Educators have always recognized the need to develop high quality, cohesive experiences for learners (Krishnamurthy, 2020) and higher education in particular places special attention on how to employ experiential learning (Morris, 2020). Despite the increased interest, some believe that relatively little empirical research has been conducted on experiential learning (Bergsteiner et al., 2010; Jarvis, 2012) and with recent developments of new technologies, experiential e-learning (ee-learning) (Murphrey, 2010). Furthering our understanding of these concepts and how to facilitate them is important, particularly for entrepreneurship education where the value of experiential learning is gaining traction (Lange et al., 2012; Minniti & Bygrave, 2001; Rae & Carswell, 2000).

Teaching tools and methods that have recently gained prominence in entrepreneurship such as lean start-up (Blank, 2005, 2022; Blank & Dorf, 2020; Mansoori, 2017; Ries, 2011, 2017), design thinking (Huq & Gilbert, 2017; Sarooghi, et al., 2019) and effectuation (Sarasvathy, 2001; Mäkimurto-Koivumaa & Puhakka, 2013; Memar et al., 2021) compel students to leave the confines of the classroom and interact with potential customers to develop their ideas and business models. Providing such concrete experiences outside the classroom, arguably a requirement of true experiential learning (Morris, 2020), were severely hampered during the COVID-19 pandemic. Government imposed lockdowns and restrictions closed off many borders and alienated communities, making it extremely difficult and in some places nearly impossible, for people to travel or interact in person (Osler, 2020). This forced many higher education institutions to alter their courses and teaching methods, adapting quickly to implement new and untested tools and practices, such as teaching online (Spais & Paul, 2021). For courses not reliant on experiential learning this might have had minor impact, but the same might not be said for courses that rely heavily on it. How these changes impact, positively or negatively, on the effectiveness of experiential learning and students' ability to adapt and learn has yet to be fully understood. The present study adds to the growing literature (Mensah et al., 2022; Morris & König, 2020; Ratten, 2020; Ribeiro et al., 2021; Vecchiarini, et al., 2023) on how entrepreneurship experiential learning was impacted during the pandemic and how many educators adapted their modules to work with or around the new challenges. It does so by developing a Concrete Experience Framework adapted from Morris (2020) expanded definition of the concept and demonstrating how it was used to adapt an international MBA entrepreneurial experiential learning course online during the COVID-19 pandemic when travel and face to face in person teaching were severely restricted in the UK. We describe how live streaming was used to maintain a true concrete experience (Morris, 2020), an essential component of Kolb's (1984) experiential learning model. The framework outlines the principal themes that are essential for a concrete experience and can be adopted by

educators in their efforts to adapt or create online courses that aim to deliver true experiential learning.

Our objectives are:

1. Develop and discuss a framework for concrete experiences.
2. Present a case study that illustrates how an experiential learning course was adapted from in person to online delivery due to pandemic restrictions.
3. Discuss how the framework was used to guide the transition of the experiential learning course from in person to online delivery.

We thereby make three contributions. First, building on Morris (2020) we develop a framework that encapsulates the dimensions of a true concrete experience and which are particularly difficult to deliver in an online course. Second, we present a case study example of how an MBA Enterprise Module transitioned to an online environment while still providing a concrete experience necessary for experiential learning. Third, we demonstrate how the framework can be used by educators when transitioning their experiential learning courses online or to develop new ee-learning courses. Our findings offer lessons for entrepreneurial educators who might be forced to undertake similar pivots in the future or would like to deliver a similar experiential learning course but don't have the time or resources for a fully face to face in person experiential learning experience.

Experiential Learning

Despite recent critiques (Bergsteiner & Avery, 2014; Bergsteiner et al., 2010; Jarvis, 2012; Miettinen, 2000; Schenck & Cruickshank, 2015), Kolb's (1984) experiential learning cycle is considered the most influential and cited model of experiential learning theory (Seaman et al., 2017). Kolb (1984, p. 38) defines experiential learning as "a process whereby knowledge is created through the transformation of the experience and knowledge is derived from the experiences of the learner."

According to Kolb's (1984) four-stage learning cycle, immediate or concrete experiences are the basis for observations and reflections. These reflections are assimilated and distilled into abstract concepts from which new implications for action can be drawn. These implications can then be actively tested and serve as guides in creating new experiences. Experiential learning theory not only includes the cognitive aspects of learning but also addresses one's subjective experiences (Kolb, 2014) so "knowledge is created through the transformation of experience" (Kolb, 1984, p. 41). The theory suggests that following an experience the individual reflects on it and it is through this reflective process that one transforms this into knowledge, which in turn influences future actions taken by the individual (Bélanger, 2011).

Based on research evidence there's been an increased interest and need for testing and incorporating innovative experiential activities in the classroom (Frontczak, 1998; Frontczak & Kelly, 2000). For example, studies have shown that active learning

exercises are more effective than traditional methods in educating (Inks & Avila, 2008) and engaging students (Avila & Chapman, 1991). Furthermore, they are superior for enhancing the understanding concepts and improving critical thinking skills (Wurdinger & Allison, 2017).

Experiential Learning in Entrepreneurship Education

Entrepreneurship educators have also seen experiential learning's value in cultivating an entrepreneurial spirit among students and have moved toward a more experiential and interactive approach to learning by including practical approaches, greater interaction between students and real-world challenges (Motta & Galina, 2023). Many have posited that entrepreneurial learning must be experiential (Lange et al., 2012; Minniti & Bygrave, 2001; Rae & Carswell, 2000), regard it as being particularly effective (Honig, 2004) and to have a longer lasting effect (Fuchs et al., 2008). Entrepreneurship experiential learning focuses on teaching "for" rather than "about" entrepreneurship, which requires going beyond understanding, knowing and talking to applying and acting (Neck & Greene, 2011). Entrepreneurship experiential learning empowers students to learn through entrepreneurship (Gibb, 2002) to foster entrepreneurial competence (Cope, 2005) and instil the entrepreneurial "'know how" (Haase & Lautenschläger, 2011).

It has been suggested that practical hands-on real-world entrepreneurial experiences foster the development of self-efficacy and proactiveness and instil an entrepreneurial mindset and orientation which are likely to actuate successful entrepreneurship (Schoonmaker et al., 2020). A common theme is that opportunities are identified through interaction with concrete and contextually rich entrepreneurial real-world experiences (Morris & König, 2020) thus one aim of entrepreneurship education is to create mindsets, skills and capabilities that enable students to identify and shape opportunities and develop business ventures (Ferreira, 2020). Proactively testing ideas in real-world concrete entrepreneurial experiences is a vital part of entrepreneurial learning. By providing authentic experiential learning opportunities, entrepreneurs are able to test their ideas against a real-world context in an active, experiential, "learning by doing" process (Lindberg et al., 2017; Pluskwik et al., 2018; Rasiah et al., 2019).

A particular feature and challenge of the entrepreneurial teaching approach is that it should address affective and behavioral (Gibb, 2011) as well as cognitive aspects of learning (Kyro, 2006). This is outside the comfort zone of traditional education where educators have opted instead to remain in the safety zone of cognitive learning, concerned with reception, recognition, judgement and remembering (Gibb, 2011). Affective development relates to the response learners have to the subject in terms of likes, dislikes, feelings, emotions and moods. Behavioral development, on the other hand, embraces learners' active drive to make sense of something. Unlike traditional education, concrete experiences present in experiential learning can stimulate all three: affective, behavioral and cognitive learning (Beresford & Michels, 2018).

The Online Challenge: Providing a "Contextually Rich" Concrete Experience

Morris (2020) recently revisited Kolb's (1984) original experiential learning model and expanded on the Concrete Experience dimension. We believe this expanded definition warrants particular consideration as delivering a Concrete Experience in technologically enabled or ee-learning education can present considerable challenges. A Concrete Experience is a key aspect of the learning process that concerns learners having to appreciate that knowledge is situated in context: fluid across time and place. Morris (2020) stipulates that this need for learning to be situated in context was not stipulated in Kolb's (1984, 2014) model and falls against his own conceptualization of experiential learning theory. Kolb viewed concrete experiences as experiences that occur in "all situations and arenas of life" (Kolb, 2014) and come through the sensory cortex (Kolb & Kolb, 2017). For Morris (2020) however, experiential learning is conceptualized by educators and scholars as a process in which learners are immersed in learning experiences that contain the fullest contextual information possible. These learning experiences feature three main themes, namely that they are: hands-on, situated in context and involve risk/novel problems. In Figure 1 we present our framework that encapsulates the dimensions necessary for a Concrete Experience.

The first theme in the framework is that the experience needs to be 'hands-on' (Blair, 2016; Dorfsman & Horenczyk, 2018). In experiential learning, learner participation is central (Munge et al., 2018) and learners are involved, active and engaged in the learning process (Fűz, 2018). Further, this hands-on experiential learning experience is often a collaborative process where learners work with others (Grimwood et al., 2018; Larsen, 2017; Schary & Waldron, 2017) and also engage with the community (Deringer, 2017). They are challenged when they must work together or negotiate on challenging tasks (Gibbons et al., 2018) and assume full or collaborative responsibility for the learning process (Hou & Pereira, 2017).

The second theme is that knowledge is 'situated in context,' emphasizing place (including community, cultural, societal, and/or social aspects) and time (present and/or historical) (Morris, 2020). Engaging with the place compels participants to think more deeply and critically about the societal norms and power structures that surround them (Deringer, 2017). This implies that the socio-cultural and socio-spatial aspects of learning need to be considered (Pipitone, 2018) and learners themselves are central to the context (Burns & Danyluk, 2017). Experiential learning occurs when learners meet and interact with people (Harper, 2018) in a place. These social interactions and engagement with local rhythms and histories are important in grasping the nature of the experience (Pipitone & Raghavan, 2017). In this regard, Jarvis (2012) also critiqued Kolb's (1984) model as it doesn't take into consideration the social context of learning. Lastly, the experience is also bound in time (Blair, 2016) and including historical artefacts, visits and videos creates appreciation of the historical aspects of knowledge.

The third and final theme denotes that interacting with the real world makes engagement with uncertainty inevitable (Isaak et al., 2018) and thus experiential learning involves unpredictability and a heightened sense of risk as it incorporates novel and

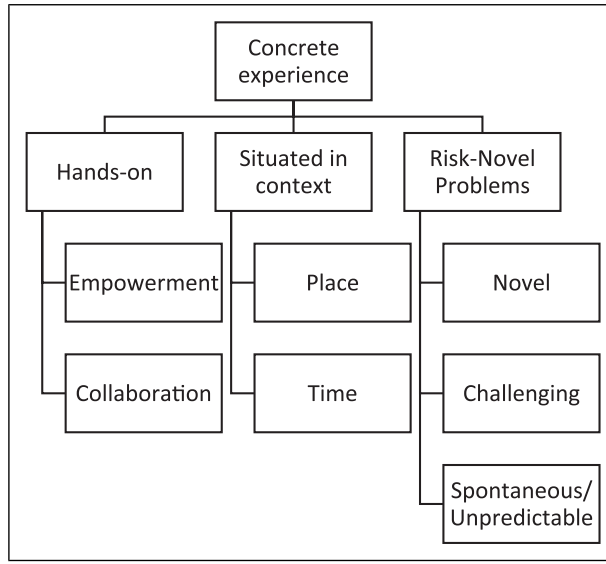

Figure 1. Concrete experience framework.

challenging experiences, which learners are forced to accept and respond to. Each experience is unique and learners are unlikely to be exposed to a uniform experience twice (Asfeldt & Beames, 2017). Moreover, the educator plays a very critical role in facilitating the process, encouraging learners to remain open to trying novel solutions (Isaak et al., 2018). Learning in such an environment is challenging and demands a significant amount of time and effort (Coker et al., 2017). Linked to an environment of uncertainty, learners must behave with spontaneity to the unpredictability and experimentation that the place and time demand (Davidson & Price, 2017; Fűz, 2018). Novel experiences make it impossible to have a "script" (Karoff et al., 2017), which promotes spontaneity and increases task difficulty.

These three aspects of the Concrete Experience and their underlying components (see Figure 1) were developed to serve as a guide in the transition of an international MBA entrepreneurial experiential learning course online. In the next sections, we provide details of the course, both in person and online versions, and explain how the framework was used to develop tools that would deliver a true concrete experience and experiential learning in the online version.

The MBA Experiential Learning and Entrepreneurship Development Module (EED)

The case study in this paper is based on an MBA Experiential Learning Enterprise and Entrepreneurship Development Module (EED), which has been running for almost a

decade in person but was forced to pivot online during the COVID-19 pandemic. Based on the previously outlined literature on entrepreneurship experiential learning, the underpinning rationale for the EED module is that the entrepreneurial person learns by doing, often within the context of uncertainty. To simulate this reality as much as possible, the course takes the form of an intensive immersive week in post-industrial South Wales where a maximum of twelve executive MBA students from multiple countries work with various community organizations and projects. These projects are chosen by a local community leader in collaboration with locals, the university and faculty members leading the module. Much of the detail about the focus of the module and the assessment are purposefully kept to a minimum in advance of the immersive week to provide a sense of uncertainty. The goal is to provide students with the opportunity to gain a real, practically orientated entrepreneurial experience whilst working on a real client-based project. The module aims to help develop students' entrepreneurial aspirations by influencing their deep personal values and underlying motivations leading to greater levels of self-efficacy and confidence (Schoonmaker et al., 2020). Students are expected to be self-orientated and self-motivated (Kolb, 1984; Morris, 2020) and prepared to work in pressured situations as they are put through the rigours of conceiving, developing, and presenting a solution to a real business challenge which may deliver a range of commercial and/or societal/community objectives. Student teams collaborate with a wide range of local community groups and businesses and are encouraged to demonstrate their ability to think creatively about the challenges they're experiencing. While faculty and guest presenters initially lead students through a series of short workshops designed to help them identify ideas and formulate strategies, the elective is largely driven by the students.

The module consists of a 5-day (Monday-Friday) immersion which is the intensive timescale in which the students deliver on the assigned task. Starting on Monday, the faculty team allocate students into groups of three to four students, taking into consideration various factors (sex, country of origin, work experience, education, etc.) to maximize diversity and ensure inclusiveness. The morning is spent on the university campus participating in a series of lectures and networking activities. Students participating in this module are at the end of their MBA program thus lectures and teaching are kept at a minimum and are meant to refresh the coursework they have completed previously. These refresher lectures cover relevant topics such as entrepreneurship theory, social entrepreneurship, creativity and problem solving, business models and the value proposition. In the afternoon students board a minibus and are transported to a bunkhouse in South Wales. The trip is around 3 hrs long and is used as an opportunity for students and staff to chat and bond further in preparation for the intensive work that awaits them. Upon arrival, the students are greeted by their shared accommodations, a bunkhouse converted from an old chapel where they spend many hours working on the projects.

During the next 3 days student teams visit local historical sites, villages and successful businesses in addition to spending their days touring and meeting with the local organizations they will be working with to fully immerse them into the

community, people, history, nature and architecture of the area. During these visits and the conversations with locals, community leaders and the two faculty members students start to get a clear picture of the variety of problems and challenges that the area and the organizations are experiencing. These conversations also provide examples of previous ideas and initiatives that have been implemented by the community and organizations with varying degrees of success. In between visits and in the afternoons the teams are given time to meet and reflect on the day's learnings and to start the process of identifying a particular challenge they wish to work on and brainstorming potential solutions. On the morning of Friday, the last day, the teams are asked to make a clear and thought-through presentation of their proposed solutions to the leaders of the organizations and the faculty team.

As mentioned previously, this process of problem identification and solution generation is largely driven by the students. Faculty are present during all these activities but don't 'teach' and are available to answer questions, provide support and to relate the experiences in real time to current theory. Feedback is also provided to students during the week and more formally on completion of the immersive week. This feedback serves as guideposts and milestones along the process of developing and analyzing the challenge and to make sure the projects meet the interests of the local community groups.

Pedagogical Objectives of EED

The EED module aims to develop academic literacy by critically applying the different perspectives and contexts of entrepreneurial activity and success. Research literacy is enhanced by asking students to contribute to the research of a live business problem and complete team-based research to provide a solution. In addition, it aims to develop critical self-awareness and personal literacy by having students interact with diverse others and reflect on their own practice. It requires students to demonstrate their ability to think creatively about the challenge of the region and those faced by the group. The choice of location, organizations and the embedded nature of the course within the context of the region are part of the experience and more importantly the behavioral, affective and cognitive learning.

The formal learning outcomes of the MBA Module are:

1. Research and identify problems experienced by a real organization.
2. Develop a practical solution to a real entrepreneurial challenge.
3. Present a persuasive case to a client.
4. Reflect on practice and draw conclusions.

The module's broader objectives are to help develop students' entrepreneurial aspirations by influencing deep personal values and underlying motivations leading to greater levels of self-belief and confidence in their ability to succeed.

Students are assessed on two assignments. The first consists of a clear and thought-through group presentation to the client that takes place the morning of day 5 of the intensive week. Assessment criteria for the presentation are:

- Are the economic enterprise concepts and form of enterprise clearly defined.
- Are the concepts coherent and convincing to stakeholders.
- Have appropriate benefits to the different stakeholders been clarified.
- Have challenges and support requirements been identified.
- Is the presentation clear, well-delivered and team-based.

The second assignment consists of an individual written assignment that builds on the work developed during the week as a group. Here the students develop a more comprehensive case to the client in response to the questions and/or concerns that were brought by the faculty members and clients in the final group presentation. Students are expected to incorporate and demonstrate reflexivity on the process they have engaged in and draw on their experience from the week and the group assignment.

Past student projects have produced a variety of potential solutions that use the resources of the region, community and organizations while staying true to the interests of local community groups. For example, taking into account the rich landscape and forests of the area, student teams frequently develop tourism solutions that cater to guests interested in healthy activities such as building a network of mountain bike and hiking trails. Other groups have looked at these same features but have developed tourism ideas for those wishing to relax by proposing glamping tents and cabins located amongst nature. Other groups have focused on the health needs of the community and used the same landscape to provide creative solutions in collaboration with well-being institutions and local general health practitioners. These can include prescribed guided health hikes, yoga classes and or meditation retreats. Finally, some student teams have focused on the educational needs of the community by suggesting the creation of an education centre to teach trades and skills related to woodworking and forestry.

Context: South Wales

The module collaborates with regional community groups in post-industrial South Wales. The choice of context/location of this module is especially relevant given the focus of this current study on concrete experience. For example, the town of Treherbert is a town of just under 6000 people at the head of the Rhondda Valley in South Wales. The town grew rapidly in the 19th Century with the growth of coal mining and the steel industry. By the 1980s the pits and the mills had gone and today half of the working age population is unemployed and have no qualifications. The community groups are exploring the economic potential of the town and surrounding land which include a colliery site that has recently been acquired by a local businessperson for the community. Students are asked to explore the potential for economic enterprise focusing on different areas of interest such as horticulture and food, forestry and forestry products,

health and well-being and energy with a view to providing social and economic benefit to the town (including jobs) and can start to reverse half a century of economic decline and retain money in the region.

For students, this unique post-industrial landscape of slag heaps, small miners' cottages, and the interactions with local people in local shops and community cafes provides an important hands-on immersive experience of the place. The region's past and its economic and geographic challenges and communities provide an important dimension to stimulate affective and behavioral learning which supports the module's pedagogical objectives. This choice of location, organizations, and the embedded nature of the course within the context of the organizations and region are part of the experience and more importantly the learning. Students are required to demonstrate their ability to think creatively about the challenge of the region, the communities and the organizations. Further, the focus of the assignment on supporting local community groups and post-industrial challenges of regeneration, jobs and skills engage students emotionally and stimulates their desire to help, driving affective and behavioral as well as cognitive learning.

Online Streaming: A Lockdown Pivot

As described in the previous section, the immersive week in Wales is considered an essential and necessary component to provide the type of experiential learning that is central to the goals of the module. Given the travel restrictions and safety concerns during the COVID-19 pandemic the module team had to devise a way to continue providing an immersive experiential learning experience without the ability for students to travel, meet and interact in person with the organizations and area of South Wales.

During the COVID-19 outbreak, one way organizations were able to deal with similar issues was through the use of online tools, particularly those in the tourism industry (Mastroberardino et al., 2021). While the term virtual tour lacks a generally accepted definition it has been described as "a simulation of an existing location that is composed of a sequence of video images" (Mohammad & Ismail, 2009). Its main purpose is to authentically recreate the real site experience (Aguilera et al., 2014; Spielmann & Mantonakis, 2018), enabling visitors to see and interact with a simulated environment (Koutsoudis et al., 2007) using the internet or other advanced technologies (Barbieri et al., 2017).

Virtual tours have gained popularity as they usually require relatively little financial investment, offer tools that facilitate learning and allow for an attraction's intangible as well as tangible qualities to be communicated (Mah et al., 2019). In addition, Mastroberardino et al. (2021) found that participants of virtual tours considered them an experiential tourism product even though they must rely on technology to mediate the experience. Both aspects lead to the selection of a live streamed tour as the most viable model to deliver the EED module during lockdown.

In the adapted online version of the module the weekly schedule was kept mostly the same, with the main difference being that only the two faculty members traveled to

South Wales to visit the organizations and communities, historical sites and interact with locals while they live streamed everything online to students' computers. These live streamed tours were guided by knowledgeable locals together with faculty while the students were able to view what they were experiencing, guide the camera to focus on specific areas, scenery or individuals and ask questions in real time. Communication between students and locals was accomplished verbally through the video connection, by text through the streaming application's chat function or through a WhatsApp group that was set up between students and faculty. The two faculty members acted as intermediaries with one managing the camera and interacting with the locals while the second faculty member handled student questions, supervised the chat room and forwarded any inquiries to the local contacts. In addition, virtual one on one meetings between local contacts and students were scheduled into the program allowing students to ask further questions and clarify any doubts directly without faculty serving as intermediaries. All of these features of the tours encouraged participation, interactivity and provided access to local knowledge and expertise. These are important factors as prior research on virtual tours has found that an emphasis on interactivity and the innovative look and feel of the tour are important for student engagement and to maintain their interest (Rice & Gregor, 2013) while studies on consumers of online experiences found that they also value the communication skills of the host, their specialized expertise and their instructional abilities (Cenni & Vásquez, 2022).

All video streams and online meetings were recorded and made available online for later viewing in case of technological or connection issues. As in the in person format, students were given time to and encouraged to meet online with their groups frequently to reflect on the experience and the information accumulated throughout the day. Online meetings were also scheduled with the two faculty members for brief lectures and to clear up doubts, concerns and obtain further information.

Mapping Online Tools to the Concrete Experience Framework

The COVID-19 pandemic and government-imposed travel restrictions placed a significant challenge to the EED Module as it did to many educators. It was particularly vexing given that a central rationale for the EED module is based on the understanding that the entrepreneurial person learns by doing, and students are required to engage socially, intellectually and physically, which is important for rich contextual learning to occur (Fűz, 2018). The tools used in the pivot to an Online Concrete Experience were developed using the Concrete Experience Framework (see Figure 1) as a guide and relied on the faculty team imparting a sense of place and time (Context) during the live stream. In addition to that, they deployed tools through online activities devised by faculty and clients to create a sense of novelty, challenge (Risk-Novel Problems) and encourage spontaneity and collaboration, sharing and on-going reflection and reflexivity (Hands-on).

The next section highlights meaningful features of the In Person Concrete Experience and then presents some of the tools used to create the Online Concrete Experience (see Table 1 for a summary).

Hands On: Empowerment and Collaboration. Student empowerment is ingrained in the DNA of the module's assignment. Early on, students are allocated into groups and need to independently figure out how to work together, delegate and choose which tools better serve to aid collaboration and communication. They must also assume responsibility for solving group issues and deal with these early and independently without involving faculty. Faculty are available at all times for students to bounce ideas off of but there are only minimal formal taught components during the week itself. Very little information and minimal guidance is provided by faculty, so students have to communicate with the organizations themselves to understand the client's needs, collaborate and agree on the problem to be solved, negotiate a solution and determine how best to present their recommendations.

In both versions, travel between locations and downtime serve as opportunities for collaboration between the students. In the in person version students do so while sitting in the minibus while on the online version only two faculty members traveled while the students remained at home. Time together, formal and informal, leads to conversations and exchange of ideas ad-hoc. Affective, behavioral, and cognitive aspects converge during these times and students (particularly from other continents) show real emotion and new insights about the place (the towns in which the project takes place and more broadly Wales and the UK). In the face-to-face version a visit to the local pub allows for social interactions between students and locals, building even stronger bonds. In the online version this was accomplished through interactions, observations and conversations between students, faculty and local guides about the things that were being streamed online. When not streaming, time was allocated for students to meet independently through video with their groups and work on the assignment or socialize virtually. Even during scheduled meal breaks students were encouraged to remain online and chat about the experience or socialize with the other students and faculty. In the in person version, at the end of the week, the return trip to campus allows for faculty and students to de-brief, discuss experiences, learning, positives and negatives, pleasures and pains, achievements and frustrations. In the online version, a virtual meeting between faculty and students was scheduled after the final presentation to reflect on the results, the feedback received and the experience as a whole. All these features relate to Concrete Experience themes including but not limited to Empowerment and Collaboration.

Situated in Context: Place and Time. In the in person version of the module, travel to, from and around the region is important for the place and time dimensions. During travel to and in between Wales' villages students and faculty enjoy the spectacular Brecon scenery and experience unusual and historic places. They are exposed to the geography and landscape, architecture, ad hoc vistas and people. The accommodations

Table 1. Concrete Experience (CE) Themes and Physical and Online Module Tools.

CE Theme	In Person Tools	Online Tools
Hands On	Group work	Group work
		Choice of problem
	Choice of problem	Choice of solution
	Choice of solution	Choice of tools
	Choice of tools	Presentation style
• Empowerment	Presentation style	Camera direction
• Collaboration	Minibus Transportation	Live streamed travel time
		Online social time
	Meals	Online group time
	Workspace	Online chat tool
	Night pub visits	WhatsApp group
Situated in Context	Visits to scenic locations, villages, organizations, forests, stores	Streaming tour of villages Streaming tour of organizations
	Customer interactions	Streaming of scenic views
	Student accommodations	Online photo album (local village, scenic views, stores, morning runs, tutor accommodations)
• Place	Work locations (mill, community center, pubs, cafes)	
• Time	Visit to historic locations	Virtual tours of historic places (mill, castle)
	Conversations with locals	Explanations by local guide
		Online research
	Explanations of the relation of place and time	Live online conversation with organization owners
	Online research	
Risk/Novel Problems	Novel accommodations (bunkhouse)	Unfamiliar organizations
• Novel		Novel technology
	Unfamiliar organizations	Novel collaboration tools
• Challenging	Living environment	Working environment
		Unclear Problems
	Working environment	Short Deadline
	Unclear Problems	Data connection issues
	Short deadline	Meeting fatigue
• Spontaneous/ Unpredictable	Lack of information	Lack of information
		Group work
	Group work	Unclear problems
	Unclear problems	New technology
		New educational experience

and working environment also play a central role as students stay in a riverside bunkhouse where they sleep, eat and work on their projects. When not in the bunkhouse students work in locations around the region such as a small 'base room' above a locally restored flour mill or in the community hall of a former mining town. All these locations enhance the concrete experience. For example, working and conducting their research in the mill, the noise of the watermill turning while customers and locals come in and out of the small gallery and courtyard outside. This puts students center stage in a 'real' environment that many business owners find themselves in (literally working above the shop or factory floor and drawing on personal resources/networks).

In the online version, travel between locations was streamed live online by the faculty team while a local guide rode along to describe the geography, scenery and put the place in historical and economic context. The drive also included stops at spots of special scenic or historic interest and the faculty members made sure to focus the camera on the geography, scenery and other critical locations deemed necessary while the local guide pointed out areas of relevance to place the students in context. The students were asked to log on beforehand for the livestream and it was also recorded and made available for later viewing in case a mobile internet connection was not possible. Students were able to direct the camera and ask questions to the faculty or the local guide during these trips and at any other livestreamed event. The two faculty members also livestreamed their walks around different villages and their visits to local businesses (such as cafes, pubs or retails shops) with important historical connections, that would highlight the economy of the place or any recent developments. All of these relate to Concrete Experience features including but not limited to Place and Time

Risk-Novel Problems: Novel, Challenging, Unpredictable. Working in busy, noisy environments outside the students' comfort, with few of the conventional resources usually available to them and a short deadline to produce a client presentation heightens the sense of novelty and challenge in the in person version of the module. Having little prior information about the area, the accommodations, the organizations and the problems they will be facing creates a sense of uncertainty and novelty. For most students it is their first time visiting the area and working on these types of problems, forcing outside the box thinking and spontaneous solutions. The online version added an extra layer of uncertainty and novelty as the delivery of the module itself (online livestreaming) was novel and created a sense of unpredictability with how the learning would occur and how and whether the technology itself would work. While the students were not able to work locally in the environments available in the area, working from home provided a different and unique set of challenges. For example, the online version maintained the stress of a short deadline to produce a solution but added unique factors such as interruptions by children, pets and mail delivery employees. Internet connection issues were also a concern during the livestreams that relate to Concrete Experience features including but not limited to a sense of Novelty, Challenge, and Spontaneity.

The tools used in the In Person and the Online version and the links to different criteria of what constitutes a Concrete Experience are shown in Table 1.

Discussion and Conclusion

This paper seeks to contribute towards filling the gap in entrepreneurship education literature on concrete learning experience in the context of an online rather than in person face-to-face learning environment by reporting on one experience of transitioning an in person experiential learning module online. Entrepreneurship education has adopted various experiential learning approaches, ranging from consultancy projects to placements and simulations but despite the high adoption there is little in the way of description, discussion and sharing of experiences of such approaches (Gabrielsson et al., 2010) and a lack of discussion of what form experiential education should take and of short-term field-based learning activities that are accessible to all students (Mason & Arshed, 2013; Schaller, 2020). This is even more marked when discussing examples of entrepreneurship ee-learning course design, delivery and assessment. Researchers have argued that educators need assistance in selecting, using, and even developing experiential learning assignments (Frontczak, 1998) resulting in the slow development of good practice and creating major difficulties for entrepreneurship educators. This paper is intended as a contribution towards filling these gaps by providing a Concrete Experience Framework (Figure 1) that educators can use to design or adapt their courses and ensure they provide rich concrete experiences, an essential component of experiential learning. We have also presented a case study that shows how the framework was used to adapt an in person experiential learning MBA module during the COVID-19 pandemic and pivot to an online only delivery while maintaining the experiential learning qualities of the module.

The Concrete Experience Framework provided (Figure 1) was adapted and developed from prior theory on experiential learning (Morris, 2020), answering the call for robust intellectual foundations at both a theoretical and methodological level (Pittaway & Cope, 2007). It therefore contributes to the limited existing research (Fayolle, 2013) that focuses on educational theory supporting experiential learning approaches and together with the growing works on entrepreneurial ee-learning helps educators move towards a more constructivist view of entrepreneurship education.

Implications

With the rapid development and adoption of digital technologies it has almost become possible to travel from home and on-demand, overturning the traditional travel concept anchored to movement and physical space and time (Mastroberardino et al., 2021). This is not to mean that we can just overlook aspects of the in person experience that can never be replicated in the online experience. Embodiment for example, is a central consequence of immersing learners physically in the learning space and includes full sensory participation (the smells and the tasting e.g.) and the escape from everyday routines that in person travel provides and are experienced differently in the in person and online environment. Nonetheless, research in the field of virtual tourism has demonstrated that the technology itself can become an integral part of the experience

and not just as a tool to overcome difficulties. This is an important fact as entrepreneurship educators can consider the adopted technology as more than a tool to deliver traditional teaching methods but one that can complement and further enhance experiential learning. In the case study provided we see how the technology of virtual streaming empowered students by allowing them to direct the camera at areas they considered particularly relevant to the experience and to showcase them to the other students in real time. It also introduced novelty and uncertainty, created new challenges, enriched collaboration and allowed for a variety of ways to interact with the place that complemented rather than hindered the learning experience. Costs associated with the in person and online experience also vary with online education reducing costs in many instances through its ability to consolidate learning across geographical and time constraints, and being cost efficient (Bartley & Golek, 2004; Behzadi & Ghaffari, 2011). In this case study the in person experience included minibus hire, accommodations and meals. In the online version costs were reduced to those of the travel, accommodations and meals for two faculty members and the purchase of some basic equipment necessary for live streaming. This meant the online version was much more cost-effective and whilst this was not a requirement to the delivery of the module, it showed that the online version could be a useful and cost-effective option without diluting the learning objectives of an experiential learning module. Students also benefit from the cost savings that the online version provides as they didn't have to incur the cost of air travel to the UK and being away from work for the duration of the module. These could be considered important selling points to associate deans of Executive Education programs and to the managers/employers of the students who are taking the courses.

Both version of the course also present problems that need to be contemplated by educators. In the in person version of the course, the choice of a bunkhouse is frequently mentioned as a limitation for some students to participate as they are uncomfortable with sleeping in close quarters with strangers and the potential lack of privacy. Travel can also be an issue as the costs of flights, accommodations and meals might be outside their reach. Some may also experience Visa issues that would not allow them to participate. Personal health issues can also be a factor as the frequent travel in a minibus between locations can present significant roadblocks for some. While the online version is able to overcome many of these issues, it adds a new set of problems that the in person version is meant to address and should be taken into account by educators. For example, the intensive week is meant to immerse the students 100% into the experience, which can be difficult while sitting in front of a computer at home and open to interruptions by family, pets and other factors. The immersive experience can also be interrupted by internet connection issues which are inevitable when streaming from remote locations far away from a nearby mobile connection. Finally, students can experience "meeting fatigue" (Nesher Shoshan & Wehrt, 2022) which can impact their learning and ability to stay motivated and involved.

Limitations and Future Research

The main limitation of this paper is a lack of data to provide empirical support to the Concrete Experience Framework and to measure and test the effectiveness of the changes made to the module when moving from in person to online delivery. A second limitation is the fact that as travel restrictions were lifted, module delivery returned to its original in person format, thus the online version was discontinued, limiting the scope of the study and eliminating the ability to collect longitudinal data.

Based on these limitations and our experience developing this case study we believe there are a few important areas that warrant attention for future research. First, collecting data to test the module's and frameworks effectiveness empirically. This could be done by analyzing both assessment results and student module evaluations. The online version can also be run in parallel to the in person version allowing for comparison of data between both and to determine which specific changes work best. The online version could also be run multiple times, which would open the door for longitudinal studies to see the effect of time on learning outcomes. Finally, given that technology can enhance experiential learning, research can be conducted on how new technologies such as augmented reality (AR) can be used to complement the online streaming version or whether a full virtual reality (VR) experience could replace it altogether.

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