In Favor of Large Classes: A Social Networks Perspective on Experiential Learning

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Abstract

Most of the literature has viewed large classes as a problem and a challenge. Furthermore, large classes are often presented to be an obstacle to students' experiential learning and a multitude of solutions can be found in the literature to manage large classes; solutions that include innovative technologies, alternative assessment designs, or expanding the capacity of delivery. This conceptual paper advocates that large classes, when used intentionally as a pedagogical tool, can be a powerful means for socialized and experiential learning for our students. In this work we connect the phenomenon of large classes with social network theory and concepts to re-conceptualize large classes as a social micro-cosmos consisting of a multitude of interconnected student communities. On this conceptual basis we offer three positive features of large classes: (i) higher levels of freedom for students to learn in their own terms (ii) learning from a diverse body of students and (iii) the provision of meaningful experiences of learning. We conclude with suggestions that should enable educators in large classes shift from an individualistic psychology-based model of experiential learning to a sociological model of experiential learning.

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Introduction

We enjoy managing and teaching large classes. In fact, we believe there are educational activities that may be meaningless without a large cohort of participants (e.g., Arvanitakis, 2014). However, the literature implies there is a preference toward smaller classes (Cuseo, 2007; Exeter et al., 2010).

There are good reasons for this preference because experiential learning is thought to happen when the learners and the instructor form strong connections (Laru et al., 2012; Messineo et al., 2007; Wagner & Van Dyne, 1999; Woollacott et al., 2014). In addition, empirical evidence seems to suggest that students prefer smaller classes (Cooper & Robinson, 2000; Wagner & Van Dyne, 1999). In smaller classes, students may be more willing to share their own experience and wisdom, as well as to engage in activities that enhance experiential learning and the interpersonal relationships necessary for trusting and meaningful interactions.

Furthermore, larger classes are challenging. They require a more complex delivery (Arvanitakis, 2014; Maringe & Sing, 2014), they command higher marking loads (Hornsby & Osman, 2014), and entail the management of a larger student population with a diverse set of expectations (Cullen, 2011). For the lead educator of a large cohort module there is the added complexity of managing the teaching team which will deliver the content and will manage the learning experience for these students (Broadbent et al., 2018; Exeter et al., 2010). Thus, large classes can be seen as an inconvenient necessity, a practical and cost-effective means of balancing teaching against all the other demands on a faculty, such as research, academic management, and enterprise (Broadbent et al., 2018; Cuseo, 2007; Dean & Wright, 2017; Game & Metcalfe, 2009).

Unsurprisingly then, the literature on large classes seems relatively one-sided, mostly highlighting all these challenging aspects. We felt that this *Journal of Management Education* special issue offers an appropriate forum to redress, at least partially, the balance of the debate on large classes. Fundamentally, we propose that there are joys and benefits in adopting meaningfully and thoughtfully large class formats as a means of socialized learning, and such benefits may not be easily delivered in small classes. In the process, we aim to address an important critique of experiential learning theory as being overly focused on individual experiences at the expense of the social dimensions of learning (Kayes, 2002). As a source for our argumentation we use our reflections on our own experience and practice as

educators blended with conceptualizations derived from experiential learning literature, social networks literature, and management education literature. True to the spirit of experiential learning, we use reflections from our own personal and professional experiences as students and faculty staff to argue that there is pedagogic merit in large classes.

This article comprises three parts. The first part is split into three interconnected sections. Firstly, it defines large classes; secondly, it introduces experiential learning theory (ELT) in education; and lastly, it connects experiential learning to large classes. The second part has two interconnected sections. The first section introduces the main concepts of social network theory and provides the building blocks that will help examine the social ecology of a large class. This section introduces Hirschman's theory of group behavior (Hirschman, 1970) to explain how the size of a network impacts on members' movement and interactions. In a sense, it suggests that experiential learning at a social level is anchored on the behaviors of members in a particular social group vis-à-vis other social groups within a particular society (in this case, the classroom). This emphasis on social interactions is particularly important because social network literature established early on that active participation within a community is a powerful contributor to learning (Lave & Wenger, 1991; Wenger, 1998). The second section expands on the positive aspects a large class can confer on the learning and teaching experience of both the student and the educator. The third section covers the implications of the authors' work on the role of the educator when engaging with a large class format, where they outline what role and skillset the faculty staff should have when tackling a large class and how these are different from smaller classes. Finally, the conclusion summarizes the main argument.

Large Classes and Experiential Learning

Large Classes

There is a wealth of definitions (e.g., Exeter et al., 2010; Hornsby & Osman, 2014; Maringe & Sing, 2014) on what constitutes a large class. The concept changes depending on the kind of institution, the sociocultural context in which the institution operates and, at a more operational level, the mode of delivery (Dean & Wright, 2017). For example, on the one hand there is the typical MOOC experience where thousands of students can be seen as part of the same "class" and yet each student may never meet another student (Maringe & Sing, 2014). That kind of setup is feasible with the current technology which allows for vast and complex virtual learning environments. In contrast, some universities may have a total student population of 3,000 and

in such institutions a class of 60 students can be viewed as large (Dean & Wright, 2017). However, in larger institutions a class size of 60 would be deemed small and a class of 150 could be perceived as a medium-sized class.

To further complicate things, the definition of a large class can differ by discipline (Hornsby & Osman, 2014). For example, a cohort of 30 undergraduate fine arts students studying a single module could be considered large (Hornsby & Osman, 2014), regardless of the UK Higher Education institution. Yet, in the business and management discipline, a cohort of 100 students would be small, medium, or large depending on the size of the particular business school. The discipline effect is a consequence of supply and demand forces and the popularity of each discipline. For instance, in the UK, for the year 2017 to 2018, the various undergraduate business disciplines combined had a rounded total of 216,000 home students, while the law discipline had a rounded total of 69,000 students, making the potential student population of the business disciplines threefold that of the law discipline (HESA, 2019). Thus, the average business schools have much larger student cohorts than law schools, and indeed, the authors have frequently experienced teaching and managing business classes with more than 100 students.

As the authors are addressing large classes from a management education perspective, they define a large class as a class with more than 100 students. Furthermore, their definition of a large class is limited to a single collocated cohort within which each single student has the opportunity to establish social connections with any other student within the cohort. That could be within a traditional, physically bound classroom where the social networks can readily be observed; within a blended learning environment that combines physical and virtual elements; or even within a virtual delivery mode that combines synchronous and asynchronous activities and provides opportunities for social interactions among the students. The authors' definition of a large class is valid with all these three modes of delivery, and their social network perspective still holds when the delivery is via technology and utilizes online learning and teaching approaches that facilitate interactions among the learners. The ability of this technology to enable social learning is particularly important during these precarious times where the Covid-19 pandemic has affected the Higher Education sector fundamentally and most universities have moved a substantial part of their delivery online.

Experiential Learning Theory and Experiential Education

Experiential learning theory (ELT) proclaims learning as “the process whereby knowledge is created through the transformation of experience” (Kolb, 1984, p. 41). It involves the interplay between two interdependent dimensions of knowledge: acquisition and transformation. Knowledge acquisition is

achieved when the learner resolves the learning tensions between two dialectical modes: concrete experience and abstract conceptualization. Knowledge transformation occurs when the learner resolves the tension between two dialectical modes: reflective observation and active experimentation (Kayes, 2002). These four modes of knowledge constitute the experiential learning cycle. In the experiential learning cycle, the processes of knowledge acquisition and knowledge transformation are intertwined. That is, immediate or concrete experiences are the basis for observations and reflections. These reflections then lead to abstract conceptualizations, which lead to new implications for action. These implications for action can be actively experimented with and can create new experience, thus reiterating the learning cycle.

A common approach in experiential education is when the educator purposefully designs a learning activity for students to “experience”. Through carefully crafted experience and regular educator-engaged feedback, the experience provides direction, continuity, and progress in students’ learning, so that students can focus on reflection, which would lead to an increase in knowledge and skills that would be relevant to the learning outcomes of the teaching experience (MacNab, 2012). Experiential education is relevant to all three modes of delivery, although it may not be immediately apparent when applied to an online delivery mode. However, there is strong empirical evidence that experiential education can be facilitated via virtual learning environments and other online technologies, even though there may be some differences in terms of the kind of outcomes that can be achieved. For example, Park et al. (2020) found that web-based experiential learning is more effective in improving students’ knowledge and skills, but did not affect their attitudes toward their practice. Arnold and Paulus (2010) used the nature and functionality of a social networking website, *Ning*, to engage in experiential learning, while Kaneko et al. (2018) created a game-based experiential learning environment on mobile devices. Yet, when online, the teachers seem to exercise less control over how students experience the learning materials, and often there are deviations in the way students use the online learning systems compared to how the instructors intended (e.g., Tsay et al., 2018).

Large Classes Complementing Experiential Education

Kolb’s framework has been criticized by scholars for its overemphasis on rationality, cognition, and the centrality of individual experience, leading to the decontextualizing of the learning process and a limited account of the emotional, cultural, social, and physical factors and unconscious processes that influence learning (Kayes, 2002; Seaman, 2008). This over-psychologized approach advocated by ELT fails to tackle some of the social and political issues intrinsic to all educational experience (Game & Metcalfe, 2009;

Reynolds, 2009; Taylor, 2018). The weak acknowledgment of power distributions and control, and insufficient analysis of it, in learner-learner, learner-educator relationships, and in relation to the wider society at the theory level (Vince, 1998), has resulted in rendering the role of experience in experiential education at the practice level as mainly a technical issue, a question of design, and mode of delivery.

The authors suspect that it is exactly this limitation at both theory and practice level that has led to the almost deliberate omission of experiential learning pedagogies in large class settings. Indeed, one may argue that the literature has highlighted challenges with experiential learning in general (e.g., the difficulty of accounting for the whole curriculum and all learning outcomes, time constraints, and the possibility of faculty resistance) and other more practical concerns regarding large classes (e.g., preparatory workload and class size) (Remmen & Frøyland, 2014; Wurdinger & Allison, 2017). However, the authors challenge this thinking and advocate that large classes, by virtue of size, are conducive to socialized experiential learning since they naturally provoke a repertoire of non-crafted social experiences and power relations within and between learner communities that would be useful for experiential learning and would enrich students' learning journey, in a broader sense. This requires moving beyond psychology-based interpretations of experiential learning to sociological approaches to experiential learning.

The most obvious sociological quality of a larger class is that it tends to have a more diverse body of students (Maringe & Sing, 2014; Woollacott et al., 2014). Larger classes may consist of a greater mix of pre-experience students and mature students, as well as international students, and could potentially comprise students from a much wider variety of socio-economic backgrounds, adding to the classroom's social diversity. In fact, the larger the class, the more likely its social network would consist of a wider range of communities, so further transcending the narrower local context in which the institution is located. Therefore, a larger class would provide a fundamentally different experience in terms of the number of communities, the diversity of communities, and the opportunities for social mobility of its students.

Benefits of Large Classes from a Social Network Perspective

The Class as a Social Network

Social network theory (SNT) is an umbrella term for a set of philosophically diverse sociological theories which share a view that the society, in which we, the actors, live, is a composite of myriad, complex, layered and multi-dimensional social interactions which daily formulate and reformulate the

social fabric of our society (Floyd & Woolridge, 1999; Moreno, 1947; Mutch, 2002; Uzzi et al., 2007). The interactions among the actors result in a complex, composite net of actors/interactions that form this social network. However, these interactions among the actors require much work for the net to be maintained; hence, the idea of the network (Latour, 1999). In social networks, the points where the interaction threads cross denote the individuals (also known as nodes) within the network, and the lines that bind two nodes denote the social interactions; that is, the continuous work that individuals commit to maintain the network. These interactions between actors (nodes) are labeled ties. Nodes and ties are the main building blocks of a social network.

The university class from a social network perspective is perceived as a social network, a social microcosm (Choudry et al., 2017; Cooper & Robinson, 2000; Hirschy & Wilson, 2002). It consists of individual students who interact continuously with each other every time they meet in the classroom and make a myriad of social micro-decisions in every lecture and seminar. They choose whom they sit with, whom they greet, have a joke with, send an e-mail to, befriend on WhatsApp, or share a video with on TikTok. Eventually, these interactions determine whom the student will collaborate with or learn from. The sum of these decisions forms a social network of interrelated individuals with all the social drama and micropolitics that such social networks generate. These informal, social interactions are a fundamental aspect of the students' learning experience (Terrion, 2006) and extend far beyond the confines of the university space and well into the personal and professional lives of the students.

To deepen their understanding of social behavior among members of communities within the class context, the authors adopted and adapted Hirschman's (1970) conceptual framework, which originally intended to explain conflict, loyalty, and group affiliation in groups, to the class context. Hirschman (1970) suggested that people naturally enter groups, whether that is a community of practice, a political party, a business or any other group. All such groups end up facing a crisis, where the members of the group perceive the particular group to be in decline, or that it is not reflecting what they thought they joined; therefore, it is not providing the benefits expected by the members who joined it. Hirschman (1970) is quite agnostic himself with regard to the origins of the crisis. His main suggestion is that human beings are irrational and eventually shift allegiances, perspectives, and thoughts, often without an apparent rationale. For Hirschman (1970) there is always an inevitable divergence between the group and some of its individual members, and each person has to make a choice: either exit the community or voice their concern about the direction the community is taking. Exiting would mean departing the particular community or disengaging with

the other members of that community. Voicing their concern would mean expressing dissatisfaction within the community and subsequently coming potentially in conflict with the norms and routines of that community.

According to Hirschman (1970), there is an important moderating factor that affects this binary choice, which is loyalty (how committed a member is to a particular community). Loyalty in turn is affected by a number of factors, including availability of choices (are there other communities to enter or is this group a monopoly?), emotional resonance to the aims of the group (does this group align itself to a noble cause one is committed emotionally to, or is it just a casual membership?), and commitment of resources so far (e.g., if it was very hard to enter a particular social group, a member would be far less likely to choose exit as a strategy), and importance of this group to the individual's life (the more important it is, the less likely the individual chooses to exit). Exit, voice, and loyalty affect the behavior of individuals within their communities and the way these communities operate within the social network of the class.

This work will examine three particularly important SNT dimensions in the context of large classes: strength of ties, centrality, and population size.

The first dimension describes the intensity of ties between two nodes (actors). When two individuals interact frequently/less frequently with each other, their tie is strong/weak (Granovetter, 1973). There are occasions where two nodes do not interact at all and so they have no ties to each other. A community is a set of individuals who exhibit a relatively high level of interactions with each other and are, thus, characterized by strong ties. Weak ties are usually exhibited by individuals who traverse communities and may have interactions with individuals who are not part of their main community. Granovetter (1973), in his seminal article, argued that weak ties are as important if not more important than strong ties as it is through weak ties that an actor can gain information that may be dissonant to the knowledge within the actor's main community. Therefore, the information flowing from weak ties becomes an opportunity for an actor to expand their understanding and knowledge of the world.

The second dimension, centrality, measures the extent to which a particular actor is central in a particular network (Russo & Koesten, 2005). The concept of centrality suggests that in each social network there are individuals who are more central, or more influential, within a particular group, community, or network (Farmer & Rodkin, 1996; Russo & Koesten, 2005). A large population would most likely consist of multiple communities, and within each community there will be individuals with a high number of strong ties, the core members of that community who occupy a central position (Choudry et al., 2017), while individuals on the periphery tend to exhibit

weaker ties to the center (Granovetter, 1973) but also tend to have ties to other communities.

This idea of center and periphery is fundamental in SNT and is quite well illustrated in the communities of practice literature (Orsmond et al., 2013; Powell et al., 1996; Pyrko et al., 2019). The core of a community of practice is the centrally located group of individuals who influence the practice, structure, culture, and norms of that particular community (Brown & Duguid, 1991, 2001, 2002). Core members are spending much of their time interacting with other members of the community, iterating and reiterating the norms of that particular community of practice.

The individuals on the boundary of a community are less bound obligated by the center's core norms and beliefs and are thus more open to other communities which may exist around them, and may even belong to the boundaries of more than one community (Gulati, 2007; Maglaughlin & Sonnenwald, 2005). Sytch and Tatarynowicz (2014) argued that such individuals located on the periphery of the community can act as bridges between communities precisely because they reside on those boundaries between communities and have formed weak ties across communities. An individual with a high number of weak ties can be seen as a networker and has the potential to become an embodied bridge between communities (Gulati, 2007). This center-periphery dynamic within a social network is a result of time, positioning, actor personality, and social propensity.

The third dimension is that of social network size. Larger populations, in comparison with smaller ones, lead to a higher number of communities of practice and a greater variation among these communities (Onnela et al., 2011). The same would apply in a classroom setting; the larger the population of students, the more numerous the communities of peers formed within the class—communities that can be very influential in the students' levels of learning and overall well-being (Choudry et al., 2017; Nichols & White, 2001).

The issue of population size is particularly relevant when there is a social conflict within a population. Conflict from a social network perspective is among social groups and it can occur either within a community or among communities (Hafner-Burton & Montgomery, 2006; Labianca et al., 1998). Correspondingly, conflict can be seen as the voicing of members' discontent within a particular community, or as conflict because of the contrarian values between two different communities. In either case, conflict tends to be less intense when the population is larger.

Conflict can result in composition shifts among various communities as students may enter and exit these communities. Whole communities may disappear as students exit from a community to form new communities. In a

large student population, fewer people notice (or even care) when a student or a group of students exit a community as a result of conflict. Conversely, because it is easier to leave a community in a large class context, the ties within each community are looser, making loyalty less intense among members of that community, hence discouraging the formation of powerful cliques within the classroom. When there is conflict among communities, a large population would dilute the impact of that conflict and would provide much needed buffering for the members of the communities involved. Consequently, conflict and voice, mobility and loyalty are all affected by population size, with individuals, as well as communities, developing a range of qualitatively different social behaviors in larger classes compared to smaller classes.

It is important to note here that all three SNT dimensions discussed above are relevant to all modes of delivery of large classes (i.e., face-to-face, blended, online) where social networks can be formed. For example, there is an extensive body of literature of internet-based social media and their impact on learning and teaching (for a review see: Kofinas et al., 2016). Moreover, their impact is contingent on the same dimensions of SNT that are relevant to offline classes, namely network centrality, relative strength of ties, and size (Akyol & Garrison, 2008; Garrison, 2016).

Positive Features of a Large Class Size

These three SNT dimensions, seen from the lenses borrowed from Hirschman's (1970) conceptualizations, underlie the pedagogic advantages of large classes in facilitating socialized experiential learning. This article examines three pedagogic advantages that large classes may lead to:

1. Enhancing students' freedom to learn
2. Allowing for diversity of sociopolitical interactions
3. Facilitating meaningful experiential learning

These positive features will be analyzed in more detail below.

Students' Freedom to Learn. The learning communities that students form to study and learn together are very influential for the students' experience and performance in the Higher Education environment. Larger classes tend to have more communities and greater diversity, allowing for a wider choice of peers for students to learn with, and a higher permeability across communities. The existence of diverse choices allows for a healthier expression of exit and voice for members of student communities when they perceive a crisis within a particular student community. The existence of choice has impact on

the student's freedom to learn on their own terms and choose the peers with whom they would feel comfortable to learn (Macfarlane, 2016).

In a smaller class there would be more urgency in joining a community and, once joining, it would be much harder to exit. There are two arguments why it would be harder for learners to exit a community in a small class setting. Firstly, each of the core student communities would be disproportionately influential within the classroom, and secondly, the cost of exiting the group is high, making the impact of loyalty as a moderating force higher, even if the student is dissatisfied with the particular community. As a consequence, students in small classes tend to be more engaged; yet, at the same time, there is a higher risk that they will voice discontent and engage in conflict, and if they do so, the impact can be much higher. In general, smaller classes do not allow for the full range of the social dynamics of voice, exit, and loyalty to play out. The high cost of exit thus leads to a repression of individual freedom. The authors share two anecdotes to illustrate the issue at heart.

In February 2018, the first author had a class of second-year undergraduate students. There were only seven students and it was a second-year undergraduate direct entry for a February starting point. The February cohorts in this university tend to be smaller compared to the October cohorts of the main recruitment cycle. This particular group consisted of five students from the same overseas country and two other international students. What was observed soon after the classes started was the formation of a very particular social micro-cosmos, depicted in Figure 1. One of the five students was marginalized by the other four, who formed one group (1, 2, 3, 4). The marginalized student (7) was female, while individuals 1 to 4 were three males and one female. At the same time, the remaining two international students formed a second group (5, 6). Figure 1 represents the social network within the classroom as the author experienced it.

The author's teaching team attempted numerous times and across different modules throughout that year to intervene and integrate the sole student. However, any such efforts consistently fell apart. It was only when these seven students joined the more populous third-year October cohort when the solitary student finally found a learning community to join. Unfortunately, that student was marginalized for a whole academic year and there was no community within the class that she could have joined, resulting in a poor student experience.

The second anecdote comes from an experience the first author had in 2015 with a large class of 110 students during an introductory business unit. The staff had designed a 6-day long competition in which all students had to participate. In total they had 13 self-selected teams composed of 6 to 8

Figure 1. The social network within the class for the February cohort 2018.

students each, the majority of them formed along friendship networks. The competition comprised seven activities and points were given for each activity. The activities were diverse by design and tested a range of skills and abilities, making it very difficult for a single group to dominate all seven activities. When a top-performing team of highly competitive students faced defeat (i.e., did not finish first) in the first two activities of this competition, the experience led to a crisis within the team. The crisis culminated to the ostracism of one of the members of the group immediately after the competition finished. This was a multicultural, mixed-gender, mixed age group and yet this particular student was singled out. From subsequent conversations with the student, it seemed that the team held her responsible for the defeat because she did not apparently pull her weight in the group. The staff struggled to understand the team's logic because as independent observers they felt that this student was able and competent. What made the team's decision even more interesting was the fact that the staff had deliberately designed the competition with the intent that no team would dominate in all activities. This student's ostracism by the group seems to have been the unintended consequence of the intended design of the staff's assessment regime. Nevertheless, the class was very large and the ostracized student was able, within a couple of weeks, to join another community. That relatively seamless exit from one community to another would have been impossible in the example of the seven students' class presented earlier.

Hence, in smaller classes the dominant communities exert a disproportionate influence in the class's social dynamics, potentially leading to a toxic environment. In contrast, in large classes there is more fluidity with regard to the learning communities formed because there is choice and greater variation in the types of communities formed. Consequently, each community is

less influential and there is much less potential for a dominant community to be formed. A related advantage of large classes, as illustrated by the anecdotes above, is the opportunity for students to temporarily opt out of joining a community or exit a community and enter another, making it less likely that the exit of a student from any particular community would lead to permanent isolation and marginalization. Students are thus afforded space to experiment and to learn socializing within and across groups with less severe penalties when they experience failure. Any conflict, voice, or exit is diluted by the sheer size of the class's social network. This property of larger classes could be particularly suitable for students with an introverted disposition and a slower approach in establishing peer relationships.

Diversity of social interactions. Beard and Wilson (2018) viewed learning as a holistic process and maintained that, when designing learning experiences, the educator must consider the space, emotions, senses, and levels of challenge. Experiential learning occurs through the interaction between the learner's inner world and the outer world. In large classes, the educators can rely to some extent on the more diverse student body to help them deliver to students a wider and richer sense of space, emotions, and challenge. In large classes the learner is exposed to a larger, more diverse pool of communities, and at the same time this exposure is less threatening to a student's social and personal identity because any particular individual or community only has a diluted impact within the class. There is social space for students to absorb the existence of "others" without feeling the immediacy brought on by a more intimate, smaller class. It is this exposure to "others" in the social microcosm of the class that really bridges the personal, experiential learning with social learning, a social learning experience that large classes are a better context in which to deliver. Similarly, in a larger class it is far more likely for students to find peers who are similar to themselves. Thus, the discerning educator can provide students with experiential learning that enables Kolb's reflective process of experiential learning to occur, with more control over the social context because any resulting conflicts between communities would not be as intense nor as immediate.

The pedagogic literature suggests that deep learning happens in liminal spaces (Meyer & Land, 2003), in moments where individuals are pushed out of their comfort zone because they have encountered a new experience. For experiential learning to occur, these novel experiences need to be reflected upon and the lessons absorbed by the learner (Game & Metcalfe, 2009) otherwise the learner risks losing the opportunity to learn from them (Argyris, 1994). However, the literature acknowledges that exposure to a new experience is challenging and stressful (Hawkins & Edwards, 2013; Meyer & Land,

2003); such liminal encounters with a new experience require us to accept that our current state of knowledge is insufficient to accept and absorb novel information or novel encounters. If we were to absorb this novel encounter and learn from it we have to accept that part of our past self has to “die”; it must be left behind (Kofinas, 2018).

Applications of Kolb’s learning cycle often seem to dismiss the fear that exposure to new experience may generate—the shadowy side of experiential learning (Clancy & Vince, 2019). Each such encounter with the unknown may be tinged with fear, the fear for the infinite possibilities toward which the novel experience could hurl us (Asma, 2014; Fawver, 2013). This is the extreme sublime (Kavanagh & Kelly, 2002), an aesthetic experience described as so intense that our cognitive capacity cannot readily absorb it (Cochrane, 2012; Kant, 1952/1790; Knox, 1936), thus prompting the individual to invent new ways to cognitively subjugate it (Fawver, 2013; Kant, 1952/1790).

The Higher Education experience can often be seen as an experience of the liminal (Kofinas, 2018), and hence an opportunity to enter these liminal spaces of learning (Meyer & Land, 2003), an unsettling space for students who try to absorb new knowledge often presented in new contexts. However, one thing that is rarely highlighted in the literature is the liminal experience of encountering the “other” student. Exposure to the “other” student is often described in the positive language of the diversity management literature. Nevertheless, exposure to different kinds of people during the university experience can be difficult and threatening (Cooper & Robinson, 2000; Farmer, Dawes, et al., 2018).

This line of thinking suggests that, for educators, one of the primary concerns should be to increase opportunities for students to experience a range of “others” within the classroom context and to facilitate the continuous expansion of the students’ social circle of acquaintances within the class (van den Berg & Cillessen, 2015), while ensuring that conflict among diverse “others” is minimized. This dialectic is best dealt with in the context of larger classes and puts much faith in the assertion that the more populous the weak ties across the communities within a population, the healthier the knowledge flows across the population (Granovetter, 1973), and consequently the higher the level of knowing across the whole population. Such an approach would lead to meaningful, socialized experiential learning for students.

To illustrate this point, the first author shares his experience as a Masters of Business Administration (MBA) student from 2000 to 2002, where the educators’ “invisible hand” shaped his socialized experiential learning. The lessons he gained as a student still inform his pedagogy and management style decades later as an educator. During the first year as a student in his two-year MBA program, all modules were compulsory and there was a great range of team-based assessments. Almost every single one of the 15 modules

in the first year of the MBA had a team-based assessment. This team work was completed by teams of students, whose composition was designed by the faculty staff. The students were informed that the team allocations were engineered to ensure that, at least on paper, the teams were of equal strength, multicultural, with mixed age and gender distribution, and composed of diverse academic backgrounds. During the first term of the program, the author found this team-based work very frustrating; a feeling shared among the vast majority of his peers.

However, there was a moment toward the end of the second term where he realized he'd gained something invaluable: he had reached a point where he did not mind (or care) anymore whom he was working with. He subsequently reflected much on that sudden realization from the spring of 2001, all those years ago. There was a clear method behind the pedagogic approach deployed by the educational designers of his MBA experience. He realized upon reflection that by the time he graduated he had developed three powerful social skills:

- i. **Social Flexibility.** Once he found himself in a team he was able to start building meaningful working relationships with his team mates, regardless of the specific character and background of each team member.
- ii. **Social Awareness.** By the end of the first year he was aware of a much greater diversity of individuals and had acquired an expanded social awareness of other cultures and ways of thinking.
- iii. **Interpersonal Evaluation.** He was able to evaluate people beyond a simplistic friendship-based judgment. He could see the strengths and weaknesses of other people, regardless of his personal feelings toward those same people. Now, whenever he has the luxury to form his own teams, he is a bit more intelligent, slightly more discerning in the way he forms teams, and feels he is able to make judgments that are based on more objective criteria, beyond friendship or personal feelings.

All these social skills were developed as a result of the intelligent use of a large cohort's size and diversity. With every additional instance of team work, the students' social network management skills were strengthened as they formed more and more weak ties. The learning was social and experiential and was not solely linked to the contents of each module; it included social learning, through which the students met the learning objectives and achieved the expected knowledge acquisition. This kind of social, and yet highly experiential, learning would have been much harder to design in a smaller class due to the potential lack of diversity and the smaller volume of students.

Meaningful experiential learning. Large classes offer the possibility for powerful innovations in learning and teaching which can provide meaningful experiential learning for the students, the educator, and external stakeholders, such as organizations and businesses.

From a student's perspective, large classes provide opportunities for insightful and meaningful group work. For example, students can learn much from their peers in an environment of social, group-level competition/cooperation. A large class offers a much more conducive environment for such group-level competitive activities, since a certain degree of anonymity reduces the psychological pressures such competition may generate, and can facilitate help-seeking behavior (Karabenick, 2003). In small classes, competition as a means for learning is rendered meaningless because the competitors are familiar to each other and there is a lack of incentive to compete. In large classes, with many communities present, the pressure is minimized and the opportunities for forming weak ties and powerful learning experiences via instances of peer-to-peer competition/cooperation can be enhanced.

An example from the second author's teaching experience is the running of experiential learning exercises for a large-size cohort, which generated data on student performance outcomes. The cohort was engaged in a large lecture every week and numerous smaller-size tutorials. In an expatriate assignment, she adopted a "who to hire" role play exercise where student groups served as a selection panel to discuss their ranking of five candidates with different cultural backgrounds, experiences, educational qualifications, and skills for an expatriate post. The experience had an element of competition for the teams involved. Through a systematic collection of data from five groups in each of the eight tutorials, she was able to share the decision-making results from a total of 40 teams with the whole cohort in the lecture to drive students' deeper thinking on expatriate selection criteria.

The size and wealth of information was only possible because this was a large cohort. Learning from the experience of their peers was motivational for the students, and equally beneficial to the author because she could quickly assess the effectiveness of the exercise design using the "big data" generated by the large cohort. This viewpoint is echoed by Stork's (2003) research where using student data for teaching, especially in courses that are considered technical or "dry", brings relevance to the students' learning. In her course, student survey data were first collected in a large class and were used for teaching statistics. As a result, teaching evaluation in terms of innovation received a higher rating and student feedback and performance were favorable.

Furthermore, from an educator's perspective, a large class offers a great opportunity to test various pedagogical strategies. With a well-established research design, the educator can test the efficacy of a teaching intervention

with the support of statistical data. When the effectiveness of a new teaching intervention varies year by year, it is more difficult to establish the causes of variance in a small cohort than in a large one. The potential richness of data collected from a larger size cohort can help the educator determine what approaches and learning strategies would work for different communities within the student population (Maringe & Sing, 2014). Large classes better represent the student population, providing more confidence in generalizability.

Another example from the second author's teaching experience has been the design, implementation, and evaluation of a gamification project (Tsay et al., 2018). She led a module that focused on developing student employability with 12 team members to around 170 students. The module had problems of limited contact hours and low student engagement; hence, she decided to create a motivational online learning system through gamified elements, such as time-bound challenges, freedom to fail, freedom of choices, progression, points, leader-board, and badges. From analyzing data of student demographics, engagement in the online learning activities, and assessment performance, she found that student engagement was positively related to course performance, after controlling for gender, attendance, and prior performance. In addition, female students participated significantly more in online learning activities than male students, and students with jobs engaged more than those without jobs.

A larger class makes the teaching experience more interesting for the educator because they are exposed to the social dynamics of a complex social environment and can observe the variety of naturally emerging social interactions and peer-to-peer learning opportunities among students in the class. With the findings from the gamified project, the author was able to refine the gamified learning system and implemented it for another year to diversify design choices that better suited the needs of different student communities and to improve the overall engagement level of the whole cohort (for more details please read: Tsay et al., 2020).

Finally, a large class is an important asset when attempting to provide authentic opportunities for engagement with businesses. An interesting example of authentic, experiential learning comes from the authors' experience with live business projects, a well-known vehicle of experiential learning which is often utilized by business schools (Kofinas et al., 2018). From a broad learning perspective, the students' performance is not as relevant as is the experience as a source of reflective thinking and experiential learning. However, if educators aim to offer authentic business experiences as an experiential learning opportunity to their students (and businesses) then students' performance should be evaluated (Keogh et al., 2007) in terms of usefulness to the business. Delivering value to a business should be important for the educators.

Thus, when a business offers a live project for students to engage with, then the educators of a large class can feel reasonably confident that at least one of the student teams could deliver a satisfactory output to the company. There are two reasons for this confidence. Firstly, larger classes have a greater diversity of students and so it is far more likely there will be individuals within the class that will have the knowledge and skills to contribute positively to the performance of the student groups (McKeachie, 1980), hence providing outputs that would be meaningful and helpful to the business. Secondly, the educator of a large class is afforded the luxury of allocating multiple teams to work with a single business, consequently multiplying the chances that at least one of the teams will provide value to the business (Keogh et al., 2007).

Practical Implications: The Role of the Educator in Large Classes

The Higher Education system has its origins in the apprentice model of the early universities. Kolb's ELT, which exerts a strong influence in the sector, provides strong theoretical foundations for an individualized, psychology-based mode of learning which centers around the single learner. The authors' main argument has been that educators can leverage the size and diversity of large classes to facilitate socialized experiential learning, which can supplement the more individualized psychology-based learning. However, socialized experiential learning requires a pedagogic shift – a difference in perspective among the educators. The shift from a psychological perspective in learning and teaching to a sociological perspective requires a different kind of training for educators (Farmer, Dawes, et al., 2018). In fact, Vince (1998) suggested educators should develop the capacity to: (1) accept and engage with emotions for their self and others; (2) work with the complexities of power; and (3) work both with individual experience and the translation of experience through a social context of collective thought and shared assumptions. If the educators do not shift their approach from psychology to sociology, what often occurs is the emergence of an unwritten contract between educator and students where the large classes effectively become “easier”, less interactive, and less engaging (Cooper & Robinson, 2000; Messineo et al., 2007).

This has implications with regard to the kind of pedagogy educators must practice. For example, the importance of facilitating exposure and understanding of diverse social communities for students is fundamental from a social networks perspective; weak ties expose learners to other communities on the periphery of the communities to which they belong. From the educator perspective, this interplay of center and periphery is where rich experiential

opportunities lie for learners at a social level, and large classes should be used for precisely that purpose: providing opportunities for students to learn from experiential exposure to a greater variety of “other” ways of thinking (Game & Metcalfe, 2009). Formative assessments would need to be designed to leverage the social dimensions of the class, while summative assessments should favor group work and social-level experiential learning instead of exams, and/or other solitary summative assessments.

The educators, whether they realize it or not, have disproportionate power to shape the social dynamics within a class (Clancy & Vince, 2019; Farmer, Dawes, et al., 2018; Hirschy & Wilson, 2002). The educator’s “invisible hand” (Farmer, Dawes, et al., 2018) needs to be yielded intently, self-reflectively, and carefully if educators are to accomplish their duties and do justice to their students’ education. For example, in online learning environments, the educator’s “invisible hand” is expressed via the crafting of an interactive learning environment and the immediacy of response to students’ needs and requests (Appova & Arbaugh, 2018; Arbaugh, 2018). In large classes, the educators must yield their influence toward managing the social dynamics in the class and facilitating in their students a social conscience and a more reflective approach toward their social interactions within and outside the class. Essentially, large classes require a shift in thinking; away from a focus on individuals to facilitating the learning of the whole class at a social level in order to develop a socially aware and reflective cohort (Farmer, Talbott, et al., 2018).

A simple example of the mental shift required by educators can be exerting discipline in the class setting. Much of the literature that advocates that large classes are not pedagogically beneficial advocates so from a perspective of the instructor’s control on the process of students’ knowledge acquisition in class (e.g., Broadbent et al., 2018; Carbone, 1999; Hornsby & Osman, 2014). In small offline classes, classroom discipline tends to be a limited problem, while in larger classes, discipline can become a greater issue. However, in small classes the principles of psychology dominate, while in larger classes the educator must seek recourse to sociology, SNT, and socialized approaches to learning in order to manage class discipline. Where in a small class the educator may be dealing with 10 or 20 students, in a class of 100 students the educator may be dealing with 10 to 15 communities of students. Thus, s/he should adjust toward seeing discipline in class as a matter of social dynamics among student communities and should focus on the management of the core centers in each of these communities.

Sharing a personal anecdote to illustrate this point may aid to prove it. In the autumn of 2010, the first author was teaching a large class of 110 students. The classroom had an amphitheater shape with the seats slightly staggered

upwards as they extended further toward the back. And, on the third row from the end, there was a lively group of students from the same cultural background chatting noisily. The first time the author noticed them he used his usual method of silencing a group of students; he looked rather intently and intensely at the individual student who, he suspected, was the main influencer of the group. That student saw the author looking at him and the raucous behavior stopped, for ten minutes. Then it resumed. The author had clearly misunderstood the social dynamics of that group. He focused on the second student, who was also quite lively. The noise stopped again, for ten minutes. . . Then it resumed. The author felt he was clearly missing something.

He went home and, following the precepts of experiential learning, reflected on his actions and ultimately on his failure to manage that group of students. He thought continuously for the whole week, the failure gnawing his mind. He theorized on the interactions among the community members, reflected on who the core members were and who were on the periphery. He also reflected on the way the members were positioned, and wondered what he could glean about their social dynamics from their behaviors.

Next time in class he discreetly observed the group's behavior while they were quiet. Mentally, he drew a map based on the behavior and seating arrangements of all the members of that community and drew a mental image of their boundary. The group consisted of eight students, seven male and one female, distributed on two rows. The author did a double take and a realization dawned on him. The previous week he had not paid enough attention to the female student. He had noticed that she was part of the group, but had not noticed that her inclusion in the group was significant for the social dynamics of the group. He realized he had not paid attention to her positioning for two reasons: firstly, the female student was quiet whenever this group became noisy, and, secondly, because she was female. These students were all of the same, male-oriented culture and yet the female student was seated in a central position within that particular community. Social network theory suggests that the relative location of the actors to each other reveals their role in the social network. The female student had been all but invisible to the author the week before, even though that student was sitting in a central position within the group. Thus, she was probably the main influencer in the group. The author realized he had made a couple of cultural and potentially gender-based assumptions; namely he had not expected that the "leader" of that particular cultural community would be female.

Soon, he noticed that the female student made a couple of quiet comments to the male student on her right. Shortly, the group started getting noisy again, by which time, the female student went quiet, looking very well-behaved indeed. Satisfied, the author realized that the resolution was quite simple: a

stern, focused look at the influencer in the group. Once the main influencer in that community realized she was noticed, she gave a quiet nudge to her neighbors and the whole group quietened down. The class was never disturbed by that particular group of students again.

This is an example from an offline setting of learning and teaching of the shift required. Nevertheless, the authors argue that the shift to social experiential learning applies to all modes of teaching of large classes, including online. If anything, in online delivery, the educators are even more of a facilitator of the context within which these social interactions occur.

Conclusion

In this work, the authors have sought inspiration from their own reflections as educators and practitioners to argue in favor of large classes as legitimate tools for social experiential learning. Large classes, due to their social network size, confer three distinct advantages for social experiential learning. Firstly, they offer more freedom for students to learn on their own terms; secondly, they allow for a greater diversity of sociopolitical interactions; and thirdly, they have a higher potential of facilitating meaningful experiential learning. Thus, the authors suggest that Kolb's reflective cycle does not occur in a contextual vacuum and socialized learning has its place in experiential learning. In that respect, they agree with Kayes' (2002) argument that individualized experiential learning is interlinked with socialized learning. However, the authors now extend this into education and argue that educators are actually in a position to manage socialized learning and to use creatively large classes as the context within which to facilitate social experiential learning.

In other words, this thesis is not meant to negate the need for an individualized psychological perspective on experiential learning, nor to argue that all classes should be large classes. Rather, the authors agree with Cuseo (2007) that there is a need to mix large and small classes in the same way that there is a need to mix types of assessments and types of learning for the students. Nonetheless, the authors depart from Cuseo's (2007) thesis regarding the reasons why they argue in favor of large classes. Large classes need not be seen as an imposition, nor as a practical necessity. They are an important pedagogical tool in their own right and can facilitate social experiential learning, which would further enhance students' learning journeys.

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