

Relationship-rich education at scale

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Abstract

Decades of research demonstrates that student learning and well-being in higher education are enhanced by positive relationships with peers and instructors, particularly for students from groups that have been marginalized in society. Yet one common and significant challenge with relationship-rich education is scale. After reviewing the literature on educational relationships and large enrolment classes, this paper offers three research-informed practical strategies that any instructor can employ to create a relationship-rich class environment that will contribute to equitable student learning and well-being.

Keywords: *large classes; relationships; wellbeing; classroom environment; peer communication; student-teacher relationship*

1. Introduction

Decades of research demonstrates that student learning and well-being in higher education are enhanced by positive relationships with peers and instructors, particularly for students from groups that have been marginalized in society. Yet one common and significant challenge with relationship-rich education is scale. How can instructors build educationally meaningful relationships in a class with several dozen – or many hundred – students? Answering that question can feel overwhelming to instructors, and students often enter large enrolment classes *not* expecting to connect with their professor and peers. Despite these challenges, relational education is possible even in the largest classes.

After briefly reviewing the literature on educational relationships and large enrolment classes, this paper will offer three research-informed practical strategies that any instructor can employ to create a relationship-rich class environment that will contribute to equitable student learning and well-being – without requiring busy instructors to dedicate even more of their time to their teaching.

2. Literature Review

2.1. Relationships in Higher Education

Research demonstrates that the interaction with instructors impacts positively on “the breadth and depth of student learning, retention, and graduation rates, and a wide range of other outcomes, including critical thinking, identity development, communication skills, and leadership abilities” (Felten & Lambert, 2020, p. 5). Positive student-instructor interactions also increase students’ academic self-concept and achievement (Parker, Trolian, & Stolzenberg 2021), mental well-being (Baik et al., 2019), and identity development (Bovill et al., 2023). These relationships are significant for all students, and scholars in the U.S. have shown that they are particularly influential for first-generation students and students of color (Kezar & Maxey, 2014).

Research also reveals that student-student peer interactions are also “positively related to general learning, cognition, racial identity, intellectual/academic self-concept, autonomy, well-being, moral development, retention/graduation, and expected career outcomes” (Mayhew et al., 2016, p. 553). Student peer relationships are particularly important for undergraduate mental health (Hefner & Eisenberg, 2009) and sense of belonging (Nunn, 2021). Interactions across differences (e.g. ethnicity/race, immigration status, religion, and so on) with peers also support student learning and identity development (e.g., Milem, 2003).

Reflecting on this body of literature, Bovill (2020) concludes that a “relational pedagogy [that] puts relationships at the heart of teaching and emphasizes that a meaningful

connection needs to be established between teacher and students” and among students (p.3).

2.2. Teaching Large Enrolment Classes

Higher education teachers may be overwhelmed when working with large class cohorts (Mulryan-Kyne, 2010) and student evaluations can evidence dissatisfaction with large class learning contexts (Persky & Pollack, 2010). However, there is no agreed definition of ‘large’ classes in higher education (Maringe & Sing, 2014) with studies quantifying the concept anywhere between 30 and 1,500 students (e.g. Black et al., 2021; Mantai & Huber, 2021), although most studies seem to have settled on 100+ as a baseline for a class to be considered ‘large’ (Exeter et al., 2010). The perception of ‘large’ is often influenced by experience, discipline and institutional norms (Kerr, 2011).

Assumptions of what is possible (or not) in terms of pedagogy in the large class context influence related decisions and practices. As numbers increase so too does the complexity of the pedagogical challenge presented, requiring creativity on the part of the teacher (Zorn & Kumler, 2003) to “overcome some of the perceived challenges rather than accepting the assumption that a didactic, lecture-style approach is the only feasible teaching method” (Farrell et al., 2021, p.30). Certainly, very large class contexts present practical difficulties such as the physical distance between teacher and students (Cole & Kosc, 2010) which makes eye contact and two-way communication challenging (Allais, 2014). This is compounded by the limitations of the physical classrooms used for very large groups (Maringe & Sing, 2014) which often have rigid seating arrangements, making it difficult for easy movement of students and staff. Connecting in online large enrolment classes is no easier (Glazier, 2021).

For all of the above reasons, and perhaps others not outlined, teachers may experience difficulties forming relationships with students in large groups (Auslander, 2000). Or, perhaps it is more accurate to say that they may experience difficulty forming positive relationships. Moreover, students’ approaches to and perceptions of learning in the large class context are related to their teachers’ approaches to and perceptions of teaching (Prosser & Trigwell, 2014).

Large classes provide possibilities and opportunities for both teaching and learning. They can possess an inherent energy (DeRogatis et al., 2014) which, if activated and harnessed by the teacher, can be highly effective. Learning experiences and outcomes for students are enhanced when the teacher is personally involved and invested in the large class context (Goodman, 2008; Long & Coldren, 2006). Building a relationship with students in a large class shows care on the part of the teacher and the creation of “a classroom community in large classes is key to active discussion and interaction” (Iaria & Huball, 2008, p.6). Arvanitakis (2021) argues that large classes offer possibilities teaching and learning if the inherent possibilities are harnessed. He advocates three key considerations in this context:

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1. Take advantage of class size to enhance understanding.
2. Explicitly and deliberately embed opportunities for interaction regularly within and across sessions.
3. Draw on the wealth of experiences and knowledge within the student cohort.

Indeed, a sense of classroom community can be built up using specific peer-peer strategies which are not too onerous or time consuming. In short, despite the difficulties presented by large enrolment classes, relationship-rich education is possible – and beneficial.

3. Research-based Practices to Scale Relational Education

The literature documents a wide range of practices that support relational education at scale. The following three are among the most efficient and effective, no matter class size or format.

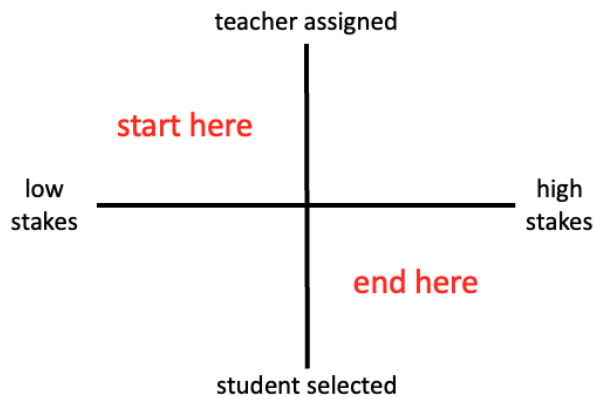
First, explain to students that educationally purposeful peer relationships will support their academic success and well-being. Students, particularly first-generation ones, often do not know this – and some students became deeply disengaged and isolated when Covid disrupted their education. To help them to actively build constructive relationships with peers, instructors should tell them that doing this matters. Martha Mullally, a biology professor at Carleton University in Canada, does this regularly in her large courses (Supiano 2023), telling students, “The reality is that science is a team sport” so if you want to be successful as a student and professional in STEM fields you need to learn to work well with diverse people. She also stresses that learning with peers is more effective than studying on your own – plus it is more fun. Making the benefits of peer relationships explicit to students is a vital first step toward relationship-rich education.

Second, use structured active learning to help students develop those peer relationships during class time. In STEM education, the research is clear that active learning increases student learning (e.g., Freeman et al. 2014) and narrows achievement gaps (e.g., Theobald et al. 2020). Active learning strategies are “relationship accelerators” because these approaches spark and support educationally purposeful student peer connections (Felten et al. 2023, Chapter 7). However, simply offering optional chances to connect is not enough, particularly in large enrolment courses where students often feel (and are) isolated and anonymous. Instead, active learning should be structured into the design of your course, making this relationship accelerator required of and rewarding for students (Hogan & Sathy 2022, p. 32). One particularly impressive study shows that these structured interactions are central to student learning (particularly for U.S. Black and Hispanic undergraduates) in large enrolment biology courses, regardless of whether those are taught online, in-person, or in a hybrid format (Gavassa et al. 2019). Making the peer-peer

educational interactions integral to a course is a second step toward relationship-rich education at scale.

Third, balance student- and instructor-created groups to help students develop diverse and meaningful peer connections during active learning exercises. Annika Fjelkner Pihl, a business professor at Kristianstad University in Sweden, has done helpful research on this topic. For several years she has taught large enrolment (~200 student) first-year courses in business at her university. She noticed that when given the opportunity to form their own groups for active learning and assignments, her students tended to pick peers who were like them in significant ways (e.g., immigrant/international or Swedish native; residential or commuter). Since her academic program prepares students to work in diverse professional settings, this homogeneity concerned her; however, when she formed student groups to ensure diverse interactions, she found that students reported being more stressed and anxious because they were working with unfamiliar peers.

Her research describes one effective way to support student well-being and also to help students learn to work with diverse peers. She begins the academic year with students regularly working in teacher assigned small groups on low stakes (not significant for the course grade) learning activities. She frequently changes group composition at this stage so students have the chance to collaborate with many peers. Then, as the course progresses, she increasingly shifts to students selecting their own groups for higher stakes learning activities. This approach leads to students choosing more diverse peers than they would have at the beginning of the year, but not reporting higher stress or anxiety. Figure 1 illustrates this pattern.



(Figure 1, adapted from Fjelkner Pihl, 2021, p. 93)

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Sequencing how student groups are formed seems to achieve two important academic goals in a relational way – preparing students to work and learn with diverse peers while attending to their well-being.

These three steps are not the only path to relational education at scale, but they do suggest that by designing our courses for structured peer learning we can give students the benefits of relationship-rich education without overwhelming already busy instructors.

Note: Portions of this article originally appeared as a blog post: Felten, P. (2024). Relationship-rich education at scale, aka the too many bodies problem. Center for Engaged Learning. <https://www.centerforengagedlearning.org/relationship-rich-education-at-scale-aka-the-too-many-bodies-problem>.

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