Reconnecting relationships through technology

‘We’ve become a little family now’: Maximising rapport in an accelerated, fully online learning environment

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Online learning spaces are generally considered low-interaction environments. The loss of synchronous time in an online course is balanced by additional flexibility. As such, there are limited opportunities to build rapport with students. This is especially true for online programs that are also accelerated. However, students still view opportunities to engage with educators and peers as extremely important. As a result, there is a need to identify strategies to maximise rapport building within a limited time frame. A Thematic Analysis of data sources relevant to teaching and learning activities in the Monash University Graduate Diploma in Psychology is presented. Four themes emerged and included ‘humanising’ the learning space, fostering opportunities for student-to-student interaction, reducing the power imbalance between teacher and student, and maintaining rapport beyond individual subjects or units. The individual strategies that were employed are discussed in detail. These findings provide a resource for educators to increase rapport within an online learning environment.

Keywords: teaching strategies, student rapport, rapport, connected teaching, higher education learning, student experience, online learning

Introduction

The Monash University Graduate Diploma in Psychology (GDP) is a full-online, accelerated program of study consisting of 6-week units over six teaching periods a year. Asynchronous learning is managed through Moodle, with synchronous live classes and instructor consultations held weekly through Zoom. Our learners seek flexibility but are time- and contact-limited, and constrained through technology. The commitment to embedding a human presence in virtual classrooms, and empowering students with choice are key elements in the GDP vision statement.

Adam (2020) reports that the majority of Monash GDP (online) students have only a “little time” to socialise with peers (p. 202). The majority (51.5%) reported that this connection is very, or extremely important. It is our responsibility to maximise the limited opportunities to build rapport amongst students, and between educators and students in the online environment. Peer interactions are the most important factor for student learning in face-to-face and online learning environments (Astin, 1993; Bernard et al., 2009). As such, there is a need to explore strategies to facilitate structured peer interactions and rapport in the online environment to enhance student learning (Mayhew et al., 2016). It represents a high-stakes endeavour as maintaining rapport increases student satisfaction and wellbeing, as well as reducing attrition (Schaeffer & Konetes, 2010; Shackelford & Maxwell, 2012; Thomas, Herbert & Teras, 2014). Research comparing online programs with on-campus programs has shown that whilst enrolments in online programs are increased, student retention was much lower compared to equivalent on-campus programs (Brown, Keppell, Hughes, Hard, & Smith, 2013).

The identification of factors that increase rapport in the learning environment should be considered against possible mechanisms that negatively impact rapport. As such, the Monash University GDP presented in this study must be considered from an online versus face-to-face contrast, and also as an accelerated program of study. A fully online and accelerated course can be viewed through the lens of deficits, i.e., that this learning experience could be conceived of as ‘less than equal’ to the face-to-face, full-length program. However, the literature offers evidence to the contrary. Harwood et al. (2018) challenge the notion that traditional-length courses produce superior student outcomes, compared to intensive programs (such as the GDP presented in this study). Harwood et al. (2018) reported no significant difference in the length of courses in terms of student performance.
In relation to learning format, Jaggars and Xu (2016) compared both online and face-to-face formats. In terms of student outcomes, their results were mixed. Jaggars and Xu concluded that the human educator is the deciding factor between these settings, and that mode of course delivery alone cannot account for perceived student difficulties. Similarly, Mayhew et al.’s (2016) review of higher education research acknowledges the difficulty in identifying which technologically-enabled tools contribute more to student learning. Mayhew et al. (2016) report that more research needs to be conducted to determine the impact of “availability of online tutors, practice assessments, or web-based information and resources” on student learning (p.46).

One challenge is to limit the transactional distance that can be experienced in a fully online learning environment. Transactional distance is the difference in understanding between teacher and learner in distance education that is exacerbated or reduced through technology (Moore, 2018). The exacerbation or reduction of distance is the result of the learner’s capacity for autonomy, and the quality of dialogue (between educator and learner). The quantity of dialogue can also be considered. Student engagement in the online environment can be mediated by a daily commitment from educators to “student-faculty contact, and active and collaborative learning” (Kuh, 2001, p.13).

This research seeks to outline the ways in which rapport can be facilitated in the online learning experience, and identify ways to reduce transactional distance (as understood by Moore, 2018). This research aims to explore the strategies that educators and students believe build rapport in the online learning environment. Glazer and Harris (2021) identified these areas as underexplored, and a focus for future research. To address the research gap, this study will aim to identify the specific strategies that online educators can employ to “mitigate transactional distance and improve rapport” (Glazer & Harris, 2021, p. 91). To extend Astin’s (1993) seminal research, this study also aims to identify strategies to facilitate peer interactions in a fully online environment. As such, our research question is: what technology-enabled tools/strategies facilitate rapport in an accelerated, online learning environment?

Method

Participants

Participants consisted of students from the Graduate Diploma in Psychology at Monash University. The collection of survey data received ethics approval from the Monash University Human Research Ethics Committee.

Data collection

This study utilised the James Cook University’s (2017) ‘4-quadrant model’ of education evaluation (4QM) to determine sources of data appropriate for investigating this issue. A formal survey of online Monash University GDP students was conducted (n = 97). An analysis of unsolicited student feedback via email, live class recording transcripts, and the online discussion board (‘Ask Your Instructor’ forum) provided the ‘student experience’ data (according to the 4QM). A review of instructor guidelines offered ‘peer review’ data (as identified in the 4QM). Peer discussions and personal reflections on teaching (during teaching periods) provided the ‘self-reflection’ component of 4QM.

Methodology and Analyses

Due to the rich, text-based nature of these data a Thematic Analysis (TA) methodology was employed, following the process defined by Braun and Clarke (2021). TA is a commonly used qualitative method of coding data into categories, and analysing these categories for an overall, emerging theme. According to Braun and Clarke, TA “is a method for identifying, analysing, organizing, describing, and reporting themes found within a data set” (Braun & Clarke, 2006, p. 78). Quantitative considerations for ‘reliability’ and ‘validity’ are not applicable to qualitative analyses. Qualitative concepts that represent equivalence in terms of rigour are ‘reflexivity’ and ‘trustworthiness’ (Tracy, 2010). An audit trail is a traceable and logical documentation of reflexive thinking and emerging themes (Nowell, Norris, White & Moules, 2017). This commonly used TA tool ensures the rigour of the analyses, and the trustworthiness of the emerging themes. Importantly, it is used to identify when saturation has been achieved (Tracy, 2010). Saturation refers to the point in which any new data continues to be coded into existing categories. As a result, no potential new themes will be generated. The coded, text-based data is then refined and formalised as a theme.
Results

Themes were identified, following thematic analysis as defined by Braun and Clarke (2021). The emerging themes are presented, alongside the specific strategies or technological affordances that were perceived to promote rapport.

**Theme 1: Humanising the technology-driven learning space**

The first theme that emerged was that of the ‘human’ educator, which concerned student-teacher connections. In the student survey, students were clear that they wanted to simulate ‘real-world interactions’ as much as possible, which included a preference for the use of microphones and web cameras being turned on throughout any synchronous learning experience. Students spoke highly of educators when they shared aspects of content that educators connected to their life. The process of educators’ sharing their research and study experiences was also appreciative, with students noting the importance of ‘sharing experiences in class, not just covering content’. At the heart of this process is acknowledging opportunities to demonstrate to students that the educator is a lifelong learner. This can be achieved through synchronous discussions but is extended in the asynchronous space. An example of student feedback which evidenced the benefit of this approach is presented: ‘I have felt quite connected with [educator] because she is always willing to talk about other topics in her office hours (her research, honours, careers, etc.).’

An important strategy of reducing transactional distance is increasing intellectual candour (Molloy & Bearman, 2019). This aligns with the ‘pedagogy of care’ principle of pastoral care and shifts the perception of the online educator as a person that they can trust. Students’ willingness to also engage in the process of voicing their intellectual vulnerabilities can be seen as evidence that rapport is being fostered. In one live class, the instructor claimed that they also used to struggle with writing lab reports, which resulted in one student sharing that ‘I’m a little bit anxious approaching this assignment’. Strategies that students commented built rapport in this area were ‘check-ins’ with students, and through online tools such as Zoom reactions, to then initiate ‘real’ conversations about illness, topics that are confusing, or whether they require additional support. Students also appreciated a follow-up through private email or conversation in office hours, and/or extra support provided in the online discussion boards.

There appeared to be multiple mechanisms to humanise the educator within the online learning space. Educators utilised the online space by expressing their personality by embedding memes and gifs into forum posts and educator-student emails, emoticons into assignment feedback, and photos into the ‘meet your instructor’ section of the Moodle page. Another method to allow a two-way sharing of personality was through the use of Zoom backgrounds. Providing students with a weekly Zoom background theme allowed students to show more of themselves as well as build team identity. The sum of these approaches over a teaching period is that the educator is described in the following ways: ‘enthusiastic’, ‘kind’, ‘approachable’, ‘friendly’, ‘honest’, ‘encouraging’, ‘welcoming’, and ‘supportive’, with one student describing the student-teacher relationship as: ‘you always made it clear you were here to support us and not just to teach a class’. The cumulative effect of these efforts is a dedication to building and maintaining rapport with students.

**Theme 2: Maximising opportunities for student-to-student connection**

The second theme relates to providing opportunities for students to connect with each other in the online learning environment. Students’ appreciated time for unstructured discussions in synchronous classes, but also equally valued structured online experiences to share opinions and seek peer feedback, which can be enabled through the use of ‘breakout room’ functionality in Zoom. In particular, the ability to practice skills and knowledge in front of each other was deemed an asset to the learning experience. Apart from Zoom breakout room functionality, Kahoot can also be employed in team mode. Asking students to participate as a team (and especially when utilising a team name) increases a sense of in-group identity and builds rapport within small groups of students.

The thematic analysis process revealed some technology-enabled asynchronous experiences that were identified as useful for building rapport. First, there are specific assessments that facilitate student-student interaction and allow for collaboration on group oral presentations. One student expressed that ‘the group oral presentation was actually quite pleasant and created a sense of connection’. The challenge with this assessment format was that students required flexibility in their availability to work together and in the times they are available to connect online. It is suggested that this can only be effectively managed by students and supported by teachers (if a breakdown in communication occurs). Another strategy is to embed smaller, low stakes collaborative work
experiences into the learning management system (Moodle), which are not necessarily moderated or marked by instructors. An example of this was the inclusion of a student-developed Wiki, based on weekly module content.

An important aspect of online learning was the ability to utilise social communication channels. This led to a range of grassroots initiatives among students to connect with each other. Students often initiate a student-run Facebook group, but this has negatively impacted on the student experience in the past. For example, there was a body of feedback that raised concerns with the level of fear that built up through the echo chamber of the student-run Facebook group, with comments such as ‘I had a much better experience when I wasn’t a part of the [Facebook] group…when they got worried about a task I got unnecessarily worried’.

A positive grassroots initiative was the creation of study groups. Through the use of study groups throughout a teaching period, there was a noticeable difference in the language that was used to refer to each other in discussion forums, transitioning from ‘students’ to referring to each other as ‘colleagues’. One particular cohort was encouraged by the educator to utilise a specific evidence-based format to counter procrastination in their study group, called the ‘pomodoro technique’. This format allows forbursts of silent, focused writing (called ‘writing sprints’), along with short breaks to connect with others and set goals for the next writing sprint. One student commented that ‘there are huge benefits to collaborating, including increased learning, sense of community, helping each other out’, although it should be noted that there is a difference between ‘collaborating’ and ‘colluding’. Previous cohorts had expressed concerns with study groups, with the fear that they would be inadvertently engaging in collusion, and not being sure where the ‘line’ is (in relation to an academic integrity breach). It is recommended that educators support students with official guidelines to encourage more students to engage in study groups, whilst avoiding collusion. One student noted that this could easily be managed by actively avoiding any discussion around the assignment in the break between writing sprints, and simply commit to ‘talk about other things’. A benefit to encouraging student-led online study groups was the increased motivation and connection with each other, which also increased online forum participation and synchronous class engagement.

**Theme 3: Equalising the communication exchange in the online learning environment**

The third theme was about utilising technology to minimise the power imbalance in the student-teacher relationship. This can be done utilising polling technology to vote on class format, or survey students to gauge their ideal class times or days. Related to this concept, is the increase in co-creation opportunities and space for co-created learning spaces. The online learning technology is maximised to enable a more equal two-way exchange of ideas, with the educator shifting their role to that of the facilitator. Utilising ‘gallery view’ in Zoom learning spaces (and therefore avoiding the use of PowerPoint slides), was said to reduce the perception of ‘us [students] versus them [educators]’. Student survey responses show that students prefer ‘seeing a face instead of a static PowerPoint slide’. Similarly, hierarchy is minimised in the gallery view, which then mimics a round table discussion. In this online space, the educator can learn from students as well, by acknowledging the wealth of life experience each learner offers. This approach can help with the co-construction of the learning space, as one student explained: ‘sometimes stuff comes up that makes me want to find out what other people think or feel, or tell people about my experience with something’.

Another online mechanism that allows students to co-construct the learning space is through the use of technology-enabled problem-based learning (PBL), or case-based learning (CBL) experiences. Students felt that the use of breakout groups to provide a space for small-group problem solving allows for ‘meaningful time on video chat to work towards a common goal’, whilst also increasing active learning in the online environment, as specific roles are allocated. An added benefit came from teacher reflection on this activity, identifying that if a different scenario was given to each group then the role of student can be shifted to teacher. Student-led facilitation (such as reporting back on their problem solving, or teaching something they learned about a key concept) can be enacted following the PBL/CBL activity. Educators perceived that a reduction in the power imbalance between teacher and student would result, along with an increase in the amount of student voice and contribution in the online learning space. At the same time, it is acknowledged that at times the educator could lean into a mentorship relationship with students, when it is clear that some guidance is needed to progress the conversation. It also provides the opportunity to address any misconceptions that arise through synchronous class discussions, or in asynchronous forum discussions.

**Theme 4: ‘Continuing the conversation’: maintaining rapport for the whole learning journey**

Students and educators voiced the belief that whatever rapport is established, must be maintained for their whole learning journey. There are strategies to build rapport before students begin individual units of study, and
methods of developing this rapport both after synchronous activities and after the unit has concluded. Engaging students in rapport-building strategies prior to unit commencement was the result of welcome webinars that allow connection and enthusiasm for the subject. These webinars are held the week before the unit begins and allows educators to share their personal interest in the subject, any connections to their research, and ask students to discuss their career interests and progression in the course. Prior to any class selection, students are introduced to their instructors through videos, photos, and short biographies.

Another strategy identified by students as important to retaining a sense of connection to others in their units was the provision of recordings of all synchronous experiences. One student noted the benefit of being able to revisit class discussions, stating that ‘there were times when I was really down, and looking at you through the video… I’ve got you always there’. This is supported by additional multimedia embedded into Moodle, including video walk-throughs of assignments, which was viewed positively by students as their educator acting ‘supportively’. This relationship is supported by a specific forum for discussions between students and educators, called the ‘Ask Your Instructor’ (AYI) forum. The key issue for students in all communication with their online educators was timeliness and access, and a 24-hour turnaround time was appreciated.

Beyond the set synchronous hour, an additional office hour (that immediately follows the class) is also recorded and takes the form of an unstructured discussion time. Both the AYI forum and recording mechanisms for continued student-teacher discussion were said to encourage students to ‘continue the conversation’. The sharing of related or interesting articles and videos outside of formal class time was seen by students as knowing that their educator was ‘interested in talking with us’, and ‘not seeing us as just a number’. In several cases, educators expressed that this enabled students to seek educators as referees for further study and in volunteering positions.

Webinars to build students’ career literacy were provided between teaching periods. The webinars, focusing on career development, were devised as an opportunity to maintain the educator-student relationship upon concluding the unit. Student survey data reported that ‘attending some outside professional development webinars… gave me the opportunity to discuss what I’d learned and what I thought afterwards’. Another student noted that ‘the recent webinars on professional psychology have been good, as we’ve been able to discuss together afterwards [what we want to do with our career]’. As such, discipline-specific employability webinars remain a viable tool to maintain rapport within the fully online learning environment.

An aspect of this theme which should be discussed was the idea that there could be ‘too much of a good thing’ when it came to technology-enabled communication channels. If there were too many communication channels, students believed that the rapport built between student and teacher (as well as student-to-student) was compromised. With multiple communication channels, it can result in a frustrating experience for the student as they become ‘hard to keep track of’. A consequence of this is a reduction in interaction in any one space. The researchers suggest that a commitment to quality communication channels should be prioritised over quantity.

**Discussion**

The research aimed to identify strategies that not only reduced the transactional distance between educators and students in the Monash University online GDP but fostered rapport. Data was drawn from a number of sources, following James Cook University’s 4-quadrant model of evaluation (4QM; JCU, 2017). Four themes emerged from thematic analyses and included the importance of ‘humanising’ the learning space (theme one); fostering student-to-student interaction (theme two); reducing the power imbalance between teacher and student, and increasing student voice (theme three); and maintaining rapport beyond individual subjects or units (theme four).

High interaction instructors use strategies to increase ‘instructor presence’ as “the ability of the instructor to project themselves in the learning environment” (Laves, 2010, p. 24). There is an explicit link between increased presence and increased perception of care (Jaggars & Xu, 2016). The literature supports the strategies listed in theme one to build rapport, by increasing instructor presence listed under theme one. These strategies include the use of microphones, cameras, and reactions in synchronous interactions. Also, the expression of personality through memes, emoticons, gifs and photos in asynchronous interactions not only increases instructor presence (through an increase in communication activities) but projects their personality into this communication. Glazier (2021) advocates for the use of informal rapport-building strategies to humanise the online environment, such as check-ins, memes, and sharing animal pictures. These seemingly minor additions add up to a perception of a connected learning environment. Similarly, these kinds of humanising (or personality-sharing) strategies mirror the kind of interpersonal communication that students already engage in,
so there is merit in communicating to students “using online language [gifs, memes, and emoticons], that students will appreciate and understand” (Moffitt et al., 2010). Moffitt et al. (2020) experimented with different feedback formats and concluded that online non-verbal paralanguage features (three smiley faces, specifically) increase perceptions of warmth and emotionality (in markers) without impacting perceived professionalism or competence. As such, these methods minimise transactional distance in relation to students’ experiences of feedback.

Similarly, when intellectual candour (Molloy & Bearman, 2019) is fostered in the online learning space (both synchronously and asynchronously), students can feel comfortable demonstrating their own intellectual vulnerabilities and an increase in trust, thus reducing transactional distance. A key constraint is time, with Carless (2012, p.90) explaining that “with limited time and space for the development of interpersonal relationships, trust may be in short supply”. However, Bearman and Molloy (2017) offer a shortcut to the development of trust: the intentional display of educator vulnerability, known as ‘intellectual candour’ (Bearman & Molloy, 2017). Intellectual candor can be defined as “verbalisation of thinking with respect to a genuinely complex problem or situation” (Molloy & Bearman, 2019, p. 36). Bearman and Molloy explain that the process of displaying vulnerability in academic thinking builds trust and leads to reciprocity (i.e., students are also more willing to engage in the process). Intellectual candour can be achieved by modelling in discussions with students such as “I don’t quite understand this yet, but what I’m thinking is… or, what I struggle with in my own [research/learning] is…” (Molloy & Bearman, 2019, p. 36). Projecting the ‘human’ into the online learning environment using these strategies builds rapport, and ultimately aims to reduce transactional distance.

Aligning with theme two, interpersonal interaction may reduce transactional distance between student-student (Jaggars & Xu, 2016; Moore, 2013), and permit the building of rapport that can extend from the student-led study group and into the online learning space. The strongest impact on learning comes from interactions that increase student-student contact (Astin, 1993; Bernard et al., 2009). As such, initiatives to increase opportunities to foster rapport between students can be pre-structured, or led by students. In theme two, an example of student-driven study groups was presented. In addition, structured learning experiences can be provided to facilitate student-student connection, which is advocated by Mayhew et al. (2016). These experiences should allow for flexibility in interactions and joint co-construction of knowledge, such as the Wiki example in theme two. This tool is supported in the literature, with Brack et al. (2010) advocating for student co-constructed Wikis to foster relationships between students, as well as developing collaborative learning skills.

Theme three introduced approaches to building rapport by increasing student voice in the online learning space. Also, theme three identified ways to balance the perception of hierarchy through peer facilitation of learning. One approach was the use of PBL (or CBL) in breakout group sessions. A key aspect of the PBL model is the process of assigning roles to students. This has implications for building rapport, as providing students with roles increases their shared responsibility within the learning environment. When students are able to lead the discussion the educator is able to focus on facilitating discussion, as well as being seen to be more interested in the opinions of students (Schwartz, 2019). This process shares power between teacher and student (Zydneu, deNoyelles, & Seo 2012). Mayhew et al. (2016) advocate for this method of peer-to-peer teaching, with their review showing that students obtain “benefits from both teacher and learner roles” (p.100). Whilst theme two discussed online PBL in the synchronous Zoom class, there is also literature to support the use of assigning roles to students in asynchronous discussions to build rapport between students (Olesova, Slavin & Lim, 2016).

Theme four discussed ways to develop rapport before a unit that is supported by the literature, such as welcome webinars and a space for educators to introduce themselves and their research interests (Glazier, 2021). Then, a discussion of ways to maintain rapport between synchronous experiences within the unit (including the use of the Ask Your Instructor forum, and the sharing of related resources between educator and students). Literature advocates for the use of these informal forums to build rapport between students with educators (Wegmann & McCauley, 2014). However, this rapport depends on a timely response to students in the maintenance of teacher-student rapport, with Jaggars and Xu (2016) specifically endorsing the 24-hour turnaround time. Daily educator behaviour (maintaining student-educator contact) is reported to enhance student satisfaction (Kuh, 2001).

One limitation of this study was the collection of data from a single university. Similarly, data was based on one specific program of study, and a single discipline. Future research could extend this study design to include multiple disciplines and universities. The benefit of such an approach would be the development of a larger evidence-base. It is hoped that these findings can be integrated into any future research study, to develop a broader understanding of rapport-building in an online, accelerated learning environment. Future research could...
evaluate student retention rates prior to employment, and after employing the various strategies and tools provided in this paper. Conducting these evaluations would provide ‘student learning’ quadrant data, according to the 4QM (JCU, 2017), and offer additional insight into the impact of these strategies on student outcomes.

The research identified several strategies to reduce transactional distance between educators and students in the online learning space. Increasing opportunities for students to build rapport with each other was also found to be beneficial to the online learning environment, with an increase in participation in both asynchronous communication (forum posts) and synchronous class discussions. Perceptions of educators as being ‘approachable’, ‘warm’, and ‘caring’ were discussed by students as positively impacting their educational experience. Utilising strategies presented in the four themes (for building rapport) may minimise attrition, whilst increasing the perception that the educator cares for each student. The specific strategies that underpin these themes can act as a resource for educators to employ, in order to increase rapport in the online learning environment.

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