Abstract

Purpose – Post-pandemic education will be impacted by spatial and technological shockwaves, alongside other areas of society. Significant expansion of online learning will build on skills developed by educators and students in this tumultuous time, and in response to emerging challenges and structural transformations. This paper explores an oft-overlooked skill that underpins contemporary teaching, and posits that "coordination" will find its way to the centre of this new online world. The paper presents research investigating the translation of tactics for good subject coordination to an online context.

Design/methodology/approach – The authors reviewed academic literature that explored coordination in higher education settings, and recent grey literature identifying expected changes to post-pandemic university learning. The authors developed a survey instrument to investigate the translation of previously identified characteristics of good coordination, and tactics to achieve them, into the pandemic-driven online learning environment. Survey analysis explored the level of difficulty reported by subject coordinators for this translation online, as well as their suggestions of additional tactics or concerns.

Findings – While the low number of respondents limits these conclusions, initial analysis suggests that the identified Tactics for Coordination can be applied with relative ease to online learning environments. At the same time, the expected burgeoning of online education identified an expected increase in demand for these skills.

Originality/value – The authors identified a lack of literature addressing subject coordination as a key skill, or evaluating coordination tactics, as well as a lack of resources for focused skill development. This paper addresses this gap, and prompts further and urgent response.

Keywords Subject coordination, Education, Design, Built environment, Learning, Teaching, Pandemic, Post-pandemic, Online, Coordination

Introduction

Even without the additional challenges of a global pandemic, contemporary education of future built environment professionals requires an increasing set of skills. Educators, tasked with delivering content based on their professional expertise, must integrate learning activities on and off campus, whilst facilitate these as leaders of teaching teams. The expectations of today’s university students have expanded beyond a focus on gaining skills and knowledge to encompass their broader study experience. As student cohorts continue to grow and diversify, coordinating teaching and learning activities at the subject level is an increasingly complex challenge. Just as a project management role takes on greater significance in large building projects, the coordinator of a large enrolment subject must direct considerable effort toward the coordination of content and activity, and integration with other student experiences.

This balancing act has been assisted, or at least framed, by curated Learning Management Systems alongside the tacit understandings of face-to-face learning activities in the recent
past. The wholesale dislocation of learning in 2020 has however highlighted the essential role of conscious and effective coordination for distributed online student cohorts, and the importance of these skills for subject coordinators in emergent teaching contexts.

This paper describes work by the Built Environments Learning and Teaching (BEL+T) group at the University of Melbourne to support subject coordinators. We argue that coordination will have an increasingly important role in post-pandemic blended and online education, and will call for refined capacities and skills. We also suggest that as educational technology offers a plethora of options, subject coordinators will need to be critical of its application and impact on pedagogy and learning. We report in this paper on research reviewing the translation of *Tactics for Coordination* to emergent needs in online learning environments. BEL+T’s DIAgram, developed in response to the rapid move online, offers a representation of coordination in relation to foundational aims of learning engagement and learner belonging. The paper concludes by considering effective development of this increasingly important skill.

**Background**

The BEL+T group, within the Faculty of Architecture, Building and Planning at the University of Melbourne, is an academic group focused on the sustained improvement of educational outcomes for built environment disciplines. Established in mid-2018, our approach is to apply creative problem-solving and design-led approaches, evidence-based research methodologies, and project-focused consultancy to improve teaching quality and student engagement. These orientations draw on the skillsets of BEL+T group members, as designers and researchers from multiple disciplines, as well as the opportunity to engage with our Faculty as the location and inspiration, and also the beneficiary, of focused built environment learning and teaching research.

As we supported the Faculty to move teaching online in 2020 as a result of COVID-19, our design of a *parti* diagram as a “spatialization of a selective abstraction” (Garcia, 2010, p. 18) helped us to conceptualise and communicate this new world, guiding our actions and allowing us to consider their impact. A relational framework emerged through an iterative design process that was informed by engagement within the Faculty and with international colleagues who were also navigating these challenges. The framework (Figure 1) was applied to the elements, influences, aims and mechanisms of built environments education. Our name

![BEL+T's DIAgram](https://example.com/belt диаграмма.png)
for the resulting “DIAgram” references three chief, interrelated tasks: how to deliver subject content, to support interaction between students and their peers and staff, and to effectively assess online. This DIA framework continues to challenge us to consider its application for the specifics of subject area, cohort and learning aims.

In this paper, we explore the single element within the DIAgram – “coordinated”. Graphically, it appears as a triangle reflecting its role as the “connective tissue” between delivery, interaction and assessment activities for teaching and learning. The DIAgram shows learning engagement and sense of belonging as the ultimate objective of a teacher’s efforts, located at the centre of the design, which is enabled by the effective coordination of delivery, interaction and assessment activities.

Coordination refers to the “behind-the-scenes” work required to plan and carry out meaningful learning experiences for students. Effective coordination has been identified by both students and educators as an essential foundation for valuable and meaningful learning experiences, and the reduction of student attrition. Our own review of student evaluations in 2019 found high levels of satisfaction in subjects with strong organisational foundations, and informed the development of a set of Tactics for Coordination. This resource highlights the value of constructively aligned activities and assessments, clear and consistent lines of communication, and effective logistical preparations. Analogies from the design and construction industry underscore the value of project management skills.

What is subject coordination?

As a general term, coordination refers to the “organisation of the different elements of a complex body or activity so as to enable them to work together effectively” (OED, 2020). In the higher education sector and the institutions and activities it includes, coordination assumes a different focus depending on the type and scale of activity. At the sector level, governments have a role coordinating priorities for higher education in relation to national interest (McConnell, 1961). At an institutional level, governing bodies coordinate how faculty operations align with university strategy (NCCABS, 2005). At a faculty level, program coordinators have a myriad of responsibilities to ensure that subjects comprising programmes align with faculty expectations of teaching quality, course objectives and compliance (Stuckleman et al., 2017). Subject coordinators – a title that varies depending on one’s institution (see below) – are responsible for leading and managing academic activities of staff and students within individual subjects (Lefoe et al., 2013; Kessell, 1995).

This paper is focused on subject coordination activities, and the Tactics for Coordination resource described below aligns with this subject-level tier of concern. The tasks of a subject coordinator include both teaching and administrative duties (Cohen et al., 2007). The extent to which an individual subject coordinator will be involved in these duties varies across and within institutions. Typical teaching duties include designing the subject’s curriculum and delivering content via lectures and tutorials (Percy et al., 2008). Administrative duties may include managing student enrolment and teaching budget, record keeping, policy adherence and general student counselling (Kessell, 1995). Embedded within such administrative duties are “managerial duties” that relate to supporting sessional staff who contribute to the day-to-day teaching (Cohen et al., 2007). Commonly this involves creation of subject briefings weekly lesson plans, as well as facilitation of meetings and moderation sessions (Percy et al., 2008). In this paper, we examine the “behind-the-scenes” activities undertaken by subject coordinators to support student learning, outside of their work on subject content and/or the development of learning activities.

There is limited literature exploring the subject coordinator role in depth, and what is available is difficult to identify. The situation appears impacted by three apparent influences. First is the multifaceted nature of coordination at various tiers of the higher education system, as highlighted above, making definitions complex and contested. Second, the challenge of definition – of both the term and the role – is made more difficult by the range of
terms that describe the same or similar roles in different institutions: unit coordinator, module leader, course leader, unit convener, unit chair, course coordinator, etc. (Lefoe et al., 2013). In this paper, the term “subject coordinator” is adopted as it corresponds with the terminology used at the authors’ institution to describe the role. Thirdly, literature on this topic appears limited, as subject coordination is “just one responsibility encompassed in the [lecturer] role” (Roberts et al., 2011, p. 11), and further that the coordination aspect of the role “is unrecognised, hidden and poorly supported” (Lefoe et al., 2013, p. 2). Despite these challenges, it became evident that students value subject coordination, and have their own understandings of the term and its significance. Their feedback further reminds us of the multiple agendas to which subject coordinators must respond.

According to de Pablos-Heredero et al. (2013, p. 202) “the need [for] coordination is a prerequisite to reach good results at organizations”. Universities are no exception, where “the importance of properly coordinated processes has been positively related to quality in higher education” (Margalina et al., 2017, p. 1,657). Although it may take various guises, coordination make a regular appearance when researchers attempt to identify commonly held dimensions of teaching effectiveness. For instance, Devlin and Samarawickrema (2010) cite several studies that identify dimensions of teaching effectiveness such as clarity, organization and preparation – all of which can be considered elements of coordination. Importantly, they also note that “collective understandings of effective teaching need to be periodically reviewed and renewed to absorb the transformations that are occurring within universities and beyond them” (p. 701). We are now most certainly facing a context when such a review is warranted. Changing student expectations, as well as larger and more diverse student cohorts, continues to increase the scope and significance of coordination in relation to teaching quality and the student experience. As Clement (2018) argues, “For decades, college instructors never thought of classroom management as something they had to plan, but times have changed and today’s college students need to know what’s happening”. Within our own faculty, for instance, and its dedication to educating built environments professionals, it is now usual for individual subjects to be comprised of hundreds of students and dozens of staff, particularly in undergraduate studies. This scale and complexity demands a substantively and qualitatively different approach than the traditional model of the single instructor coordinating their own subject and student group. Of course, increasingly blended modes of delivery, or the online learning environment amplified by the COVID-19 pandemic, only exacerbates this trend.

**Tactics for coordination: understanding student perspectives and responding with a staff resource**

The University of Melbourne conducts a Student Evaluation Survey (SES) at the end of every semester. These anonymous surveys follow the typical format of global higher education institutions to gauge student satisfaction with learning in identified subjects. Respondents are asked to rate the degree to which they agree with various statements about their experiences in a subject on a Likert scale, and may also respond to several open-ended questions. The results are intended to be used by subject coordinators and faculty-level administrators to improve teaching quality. Within our faculty, the BEL+T group and others have analysed results by program level, discipline and subject, in terms of overall mean scores and individual question responses. In 2018, the group worked with members of undergraduate and graduate studies committees to develop and test a protocol to identify subjects for additional support.

The BEL+T group was tasked by the Faculty to review SES responses to identify areas for teaching improvement as part of the strategic plan. The group therefore undertook a review to identify areas that might benefit from support for teaching improvement. At the
end of each semester in 2019, BEL+T was able to identify and share a general positive trend in student responses, then proceeded to explore these in more detail. Using quantitative responses to the summative question as a guide (“Overall, this subject has been well-taught”), subjects receiving the highest, and the lowest, scores were identified. A representative balance of selected subjects across the discipline mix was also considered in the selection of a set. For the selected subjects, the highest or lowest “other” Likert response was also identified and common pairings reviewed. This review identified a number of items valued by students in high-scoring subjects. Low-scoring responses at both undergraduate and postgraduate level included “Overall, this subject has been well-coordinated”. This common factor was identified for focused exploration.

The definition of “well-coordinated” was not provided as part of the survey for students. BEL+T reviewed student responses to the SES’s open-ended questions (“What were the best aspects of this subject?” and “What aspects of this subject do you believe should be improved?”) in an attempt to clarify the collective student understanding of “coordination” – both positive and negative. The process identified comments that related to coordination issues, which were then coded and grouped into thematic clusters. This process produced five characteristics of coordination: **structured, cohesive, consistent, organized** and **clear** for further exploration.

Coordinators of selected subjects were invited to explore these issues further. They provided detail about the design and teaching of the subjects, and were asked to interpret representative phrases for the “well-coordinated” characteristics in the context of the subject and SES score. Through these productive meetings, as well as a series of facilitated group conversations with the same set of coordinators, the five characteristics of “well-coordinated” subjects were further explored, and a set of tactics to support them was identified. The list of “things to consider” for each tactic, provided in the full resource, gave nuanced advice for application to particular subject types or cohort sizes. It is noted that the terms themselves are not necessarily those used by students in their survey comments. Students expressed satisfaction or frustration with particular approaches or situations, and BEL+T’s identification of themes and naming of characteristics produced a language and structure for the diverse ways that “coordination” was described. This approach has allowed a better understanding of teaching quality and coordination in terms of student expectations, through consultation with staff to develop responses.

BEL+T produced and then shared a resource document, **Tactics for Coordination**, for use by all teaching staff in the Faculty. Definitions of the five characteristics, and some tactic examples, are provided in Table 1.

**Why coordination matters online**

Margalina et al. (2017, p. 1,655, citing Simpson, 2012) claim that “online and distance education is the fastest growing area of education in both developed and developing countries”. Undoubtedly, growth and demand for online education has been be accelerated by COVID-19. In online environments, “e-learning is characterized by task interdependence, uncertainty, time constraints and tacit knowledge. In order to face all the challenges, e-learning institutions must develop mechanisms to reach better results in terms of quality and performance” (Margalina et al., 2017, p. 1,666). Ghazal et al. (2018) identify that the “ability of instructors to control the progression of an online class and ensure that students are receiving appropriate learning opportunities” is directly related to learners’ experiences and satisfaction in an online environment, suggesting that students’ identification of “structured” and “organised” characteristics are key to their experience of well-coordinated subjects. Similarly, Guardia Ortiz et al. (2013) highlight the importance of a clear learning plan and directions for effective online MOOC design for online learning. They argue that students
need a clear study plan including milestones and deliverables, relating assessment tasks and learning, so they can plan their time and learning activities effectively. Students’ increased independence is necessary for self-directed activities in an online environment, however Guardia et al. argue that the increased heterogeneity of the cohort calls for more support.

The Background section of this paper has introduced the DIAgram – a relational framework designed by BEL+T to assist educators in the move online prompted by COVID-19. As above, the connective element of the DIAgram, *coordinated*, refers to the “behind-the-scenes” work required to design and curate meaningful learning experiences for students, with the foundational aims of *learning engagement* and sense of *belonging* sought through the effective interrelation of *delivery, interaction* and *assessment* activities. Effective coordination has been identified by both students and educators as an essential foundation for valuable and meaningful learning experiences (Zehner et al., 2010) and the reduction of

<table>
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<th>Characteristic</th>
<th>Definition</th>
<th>Examples of applying tactic</th>
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| STRUCTURED    | To students, a well-coordinated subject is *structured*. This means that the subject content and activities follow a structure that is *logical, predictable and reasonable* | (1) Sign-posting at the beginning and/or end of lectures and tutorials  
(2) Pacing student workload and communicating “crunch times”  
(3) Allocating weighting of each assessment task to correspond to anticipated effort required |
| COHESIVE      | To students, a well-coordinated subject is *cohesive*. This means that they recognise alignment across lecture, assignment and tutorial content / activities | (1) Aligning weekly content and learning activities to explicitly support learning aims  
(2) Designing tutorials to reinforce deeper/ applied comprehension of that week’s focus  
(3) Curating guest lecture content to align with current assessment task and content |
| CONSISTENT    | To students, a well-coordinated subject is *consistent*. This means that students receive *consistent messages from all staff about subject expectations and objectives* | (1) Communicating regularly with your teaching colleagues to develop a consistent team approach  
(2) Sharing documents with tutors that provide a structure and set of objectives for each tutorial  
(3) Observing at least one of each tutor’s sessions per semester |
| ORGANISED     | To students, a well-coordinated subject is *organised*. This means that *staff planning for logistical issues enables a smooth learning experience for students* | (1) Scheduling and organising student access to learning spaces, equipment and off-site opportunities  
(2) Setting major deadlines carefully  
(3) Using Canvas or other online systems effectively to deliver the subject and enhance the student experience |
| CLEAR         | To students, a well-coordinated subject provides *clear* documentation that is *straightforward and transparent* in terms of information and expectations | (1) Being predictable regarding timeframes and deliverables  
(2) Communicating the structure of the subject clearly to students  
(3) Connecting subject documentation to the University and ABP Faculty context |

**Table 1.** Tactics for coordination
student attrition (Naylor et al., 2018). Well-coordinated subject delivery, particularly online, could be understood as approaching the task “as a designer”. Certainly it is of note that several approaches to online learning highlight the application of design thinking or design skills to education and learning, such as a “backwards design” building toward identified learning outcomes (Wiggins and McTighe, 1998), or Swan’s identification of constructivist and constructionist models for the design of learner, knowledge, assessment and community-centred online teaching (Swan, 2005).

Subject coordination in a post-pandemic world
The lockdown of educational institutions worldwide due to COVID-19 prompted a situation of “teaching moving online on an untested and unprecedented scale” (Burgess and Sievertsen, 2020). At the peak of the relocation and confusion, many educators were “focused on the transfer of educational content to the digital world and not specifically on online teaching and delivery methods” (Adnan and Anwar, 2020). Educators quickly adopted “almost any available digital tools” to ensure the continuation of classes (Terás et al., 2020, p. 2). Consequently, the education technology industry “celebrated” the pandemic as an “unexpected business opportunity, a tipping point after which schools and universities will finally adopt digital education as a mainstream mode of teaching and learning” (Selwyn, 2020). While it seems likely that teaching and learning in the post-pandemic world will continue to involve technology through a blended model (Agarwal, 2020; Martel, 2020; Mishra, 2020), there are concerns about the long-term implications of the pandemic on education, and particularly the legacy of “emergency strategies” used to teach online. Hodges et al. (2020) argue that “well-planned online learning experiences are meaningfully different from courses offered online in response to a crisis or disaster”. There remains a risk that without the right support in place, educators will continue to utilize the practices they adopted quickly in order to survive (Hodges et al., 2020). This includes a reliance on digital platforms built by software developers with “little understanding of sound pedagogical principles” (Terás et al., 2020, p. 3). Critically, this underscores the increasingly important role of good planning and subject coordination, as reinforced by St. Amour (2020) who argues:

Now is not the time to hastily adopt new technology, rather, it’s the time to return to the basics, figure out what works the best for the most people and ensure students are getting the basics they need in order to learn.

This position is shared by Margalina et al. (2017, p. 1,661) who argues that the “quality of educational processes in e-Learning does not depend so much on the technology, but on the quality of the learner–instructor interaction”. BEL+t posits through the DIagram that the effective coordination of a subject in support of learning engagement and sense of belonging – drawing together the delivery of subject content, supportive interaction between students and their peers and staff, and effective online assessment – is a useful expansion of quality in these terms.

Survey design
Despite the important role of the subject coordinator, and the many duties of that role as summarised above, there is “little targeted support in place for unit coordinators to handle issues arising from leading a unit of study” (Pepper and Roberts, 2016, p. 118, citing Cohen et al., 2007; Parrish and Lefoe, 2008; Lefoe et al., 2013). Following the move online, BEL+t sought to investigate the translation of coordination tactics to online environments. While the Tactics for Coordination were devised with primarily face-to-face teaching in mind, we
hypothesised that the five characteristics were also applicable for coordinating online subjects. To test the hypothesis, we developed a survey and invited responses from the initial selection of participant subject coordinators. The survey was built in Qualtrics with the following three sections:

1. **Section 1** was designed to collect contextual information about the respondent and the subjects they were coordinating. We asked them to identify their discipline(s), the level of the student cohort they were teaching, the relevant semester(s) in which their subject ran, and whether their subject was full-length (12 weeks) or ran as an “intensive” (5 or 10 days).

2. **Section 2** was the largest of the three sections and was designed to collect information about the respondent’s experience applying the five characteristics of coordination for teaching online. For this we used a Likert scale (Likert, 1974) with skip logic and branching to tailor the questions and elicit more detail depending on the answers (Lavrakas, 2008). The Likert scale was used to ascertain “how easily” the subject coordinators could apply each characteristic, considered individually, to the online environment. A five-point scale was used: 1 = Extremely difficult, 2 = Moderately difficult, 3 = Neither easy or difficult, 4 = Moderately easy and 5 = Extremely easy. To assist respondents, a definition for each characteristic was provided matching those in Table 1, along with examples of how they might translate to teaching tactic. The survey’s skip logic and branching came into effect if a respondent had experienced some difficulty applying the particular characteristic to an online environment. In these cases, they were asked to describe their experience in an open text field. They were then asked whether they had, as a result of this difficulty, developed any new tactics to realise this characteristic. If they claimed to develop a new tactic, they were asked to provide more details in an open text field. We chose to only investigate “difficult” situations in order to identify possible “corrective action” or new tactics for revised guidance, an approach supported by Finkelstein and Fishbach (2012).

3. **Section 3** was designed to collect information that could help us adapt and/or expand coordination tactics for online environments. The single, open text field question asked respondents to suggest any additional characteristics that might be added to the five already identified. This question was intended to be forward-thinking and to encourage respondents to reflect broadly about their experience of teaching online.

**Survey findings**

The survey was piloted by members of the expanded BEL+T team and emailed to the 18 subject coordinators who participated in the initial exploration of coordination. The email was sent in Week 3 of Semester 2, and the survey was open for eight days. Eleven subject coordinators representing six of the Faculty’s programs completed the survey. Seven of the respondents taught in a single program, while four taught in multiple programs. The largest number of respondents (six) were from the Architecture program. Regarding student cohort, each of the respondents had experience coordinating postgraduate subjects in 2020. Five of the respondents exclusively coordinated postgraduate subjects, while the remaining six coordinated both undergraduate and postgraduate subjects. None of the respondents coordinated only undergraduate subjects. Each of the respondents were coordinating subjects in Semester 1, during the shift to online learning. Eight of the respondents were also coordinating subjects in the current semester (Semester 2). Five of respondents were coordinating “intensive” subjects.
We treated the quantitative portion of the survey results as nominal data and analysed it by collapsing the responses for each tactic into binary classes (difficult, neutral, easy) then counting the number of responses in each class (Mangiafico, 2016). This method was chosen because of the small sample size \( n = 11 \) and objective of the research, which was to learn more about the subject coordinators’ overall experience of applying tactics associated with the five characteristics to the online environment. Also, across the dataset for responses, the option “extremely difficult” on the Likert scale was not selected, while “extremely easy” was rarely selected – only once each in relation to “structured” and “organised”, and twice in relation to “clear”. The bar chart in Figure 2 provides a summary of the Likert scale results, which can be elucidated with the qualitative portion of the survey results.

While the low number of respondents’ limits conclusions, this initial analysis suggests that the Tactics for Coordination can be applied, with relative ease, to online environments. The easiest characteristic to apply online is “structured”, with 73% of respondents responding favourably the question. The single respondent who experienced some difficulty with achieving a structured approach to teaching online declined to provide any details about their experience.

Overall, respondents identified “organised” as the most difficult of the five characteristics to apply online. Just over half the respondents (55%) applied the tactic with some degree of ease. The three respondents who experienced some difficulty being organised online provided an account of their experience but did not develop any new tactics to help them overcome the difficulty. Two of three respondents attributed the difficulty they experienced to the use of Canvas, the Faculty’s Learning Management System (LMS), which was newly introduced across the University at the commencement of 2020. The relationship between Canvas and being organised may require further exploration, involving a larger sample, before firm conclusions can be drawn. Staff association of Canvas with being “organised” may be attributed to the Tactics for Coordination description “…using Canvas or other online systems effectively to deliver the subject and enhance the student experience”. The concerns expressed by respondents relate to using Canvas as a “one-stop platform for teaching” and the time required to become proficient in using Canvas to deliver teaching resources and manage communications. One respondent commented that it was “far easier” to simply email students a PDF of the subject outline to explain the subject’s organisational structure.

Seven respondents (64%) were able to apply the remaining three characteristics with a degree of ease. However, a relatively high number of respondents experienced difficulty...
being “cohesive” online. In all three cases the difficulty arose from the large amount of subject material that staff wanted to share. Respondents felt that the focus on asynchronous delivery and the reliance on LMS led to challenges for students seeking to access and follow subject documentation, as they became overwhelmed by the amount of content and subsequently did not complete certain activities or engage with certain resources provided. As a consequence, subject coordinator respondents suggested that students were challenged to perceive alignment across lectures, tutorials and assignments. To overcome this difficulty the three respondents each developed new tactics. Two of these approaches reinforce the need for subject coordinators be explicit in online environments about what students need to do by when. “Sign-posting” and a subject “road-map” proved to be helpful learning tools. The third respondent restructured their course content into “digestible and consistent” packages, and during their video recordings used a bell to signify a slide change to help students follow along.

Being “clear” was the most polarising characteristic, with equal numbers of respondents finding it either “extremely easy” or “moderately difficult” to apply to an online environment. For one respondent, an integral part of being “clear” is using students’ body language as an indicator of comprehension. This is a challenge that many staff face in online environments, whether interaction occurs synchronously or asynchronously, and strategies for overcoming it vary (Aldrich, 2020a, b). In the survey the respondent described inserting deliberate pauses into lectures for questions, and also encouraging students to use the chat function. This is of course only possible during synchronous lectures, which may bring other challenges such as equity and accessibility (Hamraie, 2020) beyond the scope of this paper.

The final section of the survey invited respondents to describe a characteristic for coordinating subjects online that may be missing from the original Tactics for Coordination resource. Six respondents supplied an answer to this question. Three recommended actions similar to those relating to the existing characteristics of coordination, but offered further tactics of how it might be applied. In general, the additional time needed to coordinate online learning was highlighted by responses to this question.

Future of teaching – after the “pandemergency”

Despite still being amidst the unfolding disruption of COVID-19, our attention turns to exploring what the future of higher education might look like in a post-pandemic world. Here we draw on some ideas raised by Salama (2020), as well as our colleagues at the Melbourne Centre for the Study of Higher Education. Using a PESTEL analysis, Croucher and Locke (2020) describe ten ways that higher education may be impacted by COVID-19 at different points in the future. Two of the trends point towards a significant change in how and to whom higher education is delivered.

The “how” recognizes the “growing student acceptance of online study” (Croucher and Locke, 2020, citing Barn, 2020). As already outlined in this paper, the pandemic has been the tipping point for education to adopt online learning (Selwyn, 2020). New educational technology has emerged as large numbers of educators have experimented with new methods of online delivery, interaction and assessment (Teräsvirta et al., 2020). While gains in knowledge of teaching and learning online will continue to prove valuable into the future, the “current experiment with online teaching is providing universities with real-time data about which aspects of their courses can be substituted, complemented or augmented and which cannot be replaced by the digital medium” (Govindarajan and Srivastava, 2020). This, combined with student preference for face-to-face teaching (Abbasi et al., 2020), suggests that universities will adopt a hybrid or blended learning model, once it is deemed “safe” to return to campus (Agarwal, 2020; Martel, 2020; Mishra, 2020). The question of “when” it will be safe remains at large, and the growing uncertainty is alluded to by Salama (2020) through his reference to
Litchfield (2020), who questions how long the pandemic will run and continue to cause disruption. For an answer, Litchfield cites researchers from the Imperial College of London (Ferguson et al., 2020), who have modelled the effects of COVID-19 suppression strategies in the United Kingdom. They forecast that “school closures will be in force some two-thirds of the time – roughly two months on and one month off – until a vaccine becomes available, which will take at least 18 months” (Litchfield, 2020, citing Ferguson et al., 2020). This forecast applies to the period between March 2020 to November 2021 and is likely to mirror the experience in the US and elsewhere (Litchfield, 2020).

The “to whom” recognises the diminishing ability for international students to travel and study abroad (Croucher and Locke, 2020, citing Academica Group, 2020), as well the growing numbers of domestic students who will choose to not come to campus (Croucher and Locke, 2020, citing Govindarajan and Srivastava, 2020). Such decisions may relate to students’ lifestyle or the desire to “socially distance”, which Salama (2020, p. 4, citing Litchfield, 2020) argues “will upend our way of life, in some ways forever”. Therefore, while universities may aim to adopt a blended or hybrid learning model, part of their offering will need to remain entirely online in order to retain and/or attract the enrolments of students who cannot, or will not, be on campus (Davies, 2020). To ensure quality, the methods used to teach courses entirely online will therefore need to be evaluated, especially if they were developed in haste during the pandemic, as “improvise[d] quick solutions in less than ideal circumstances” (Hodges et al., 2020).

The above discussion of “how” and “to whom” are tightly intertwined issues, which at their core are about providing students with options regarding the provision of quality teaching and learning. Regardless of whether it is online, on campus, or a mix of both, ensuring quality will require good coordination (Ghazal et al., 2018; Guardia Ortiz et al., 2013). Through developing the Tactics for Coordination, BEL+T learnt what students perceive “well-coordinated” subjects to look like. The importance of those five characteristics are reinforced by the body of grey literature emerging about student perceptions of online learning during the pandemic, and specific areas of concern about continuing to learn online during these uncertain times. The main concern of 7,400 current and prospective international students surveyed in March 2020 about learning online was “staying focused and self-motivated” (Witherow, 2020). This includes concerns about not being able to “keep track of assignments and due dates”. Another notable concern of students was not being able to understand the teaching material in an online format. These two concerns relate back to the importance of teaching strategies that the Tactics for Coordination resource promotes – specifically, the need for subject coordinators to structure content so that it is logical, predictable and reasonable, with sufficient signposting; as well as the need to provide students with clear documentation that is straightforward and transparent in terms of information and expectations.

Our survey of subject coordinators supports the idea that the Tactics for Coordination can be applied, with relative ease, to online environments. However, it also confirmed the need for educators to be explicit, when teaching in online environments, about all aspects of the learning experience. Therefore, we plan to expand our definition of “clear” to apply to all correspondence, rather than be limited to course documentation. While this change is only subtle, it is significant as it represents the necessary fine-tuning of a resource that is valuable given that “there are virtually no instances of formalized standards of practice” (Percy et al., 2008, p. 13) and “little targeted support” (Pepper and Roberts, 2016, p. 118) for subject coordination. Reviewing Tactics for Coordination in the context of the disruption caused by COVID-19 was intended to offer subject coordinators the kind of “just in time, just for me” training resources that “focus on a real world dilemma” as called for by Peppers and Roberts (2016, p. 118, citing Scott et al., 2008; Percy et al., 2008).
Conclusion
Alongside other areas of society, post-pandemic education will be impacted by spatial and technological shockwaves. While the “pandemergency” has prompted significant expansion of online learning, and new skills developed by educators and students, emerging challenges and structural responses will call for further extension of these. This paper has identified “subject coordination” as an oft-overlooked skill that has quietly increased in significance alongside the increasing scale and diversification of the contemporary student cohort. In a post-pandemic education context, the paper argues that this skill will be increasingly in demand.

The paper has reviewed subject coordinators’ reported experiences, as they translated previously identified characteristics of good coordination, and tactics for their application, to an online learning environment. These characteristics suggest that well-coordinated subjects are: structured, coherent, clear, consistent and organised. The research has found the translation of the related tactics to an online environment was relatively straightforward, but that further exploration of this is needed.

In specific terms, we would suggest that subject resources and activities may take different forms and formats within online environments, and that articulation of a logical structure should be effectively presented to students on LMS sites. Furthermore, students may be working individually and also collaboratively, with these efforts distributed over space and time, calling for coherent constructive alignment of resources and activities. Clear expectations for those activities should also, therefore, be communicated to students. This is particularly important if learning experiences include on- and off-campus locations, and online engagement, demanding preparation be carefully and overtly organised. Where this activity is supported by tutors, or other teaching assistants or colleagues who may also be working remotely, communications with students must be consistent to provide clear guidance.

While the “pandemergency” has prompted much development of “just in time” technological solutions, a critical and informed, student-focused response is needed to support effective pedagogies in the “next normal”. More support for the development of learning-specific coordination skills is needed, and a better understanding of the markers of coordination quality, to inform this crucial work.

References


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