

## Immersive learning in a block teaching model: A case study of academic reform through principles, policies and practice

Thomas Roche  
*Southern Cross University, Australia, thomas.roche@scu.edu.au*

Erica Wilson  
*Southern Cross University, Australia, erica.wilson@scu.edu.au*

Elizabeth Goode  
*Southern Cross University, Australia, liz.goode@scu.edu.au*

Follow this and additional works at: <https://ro.uow.edu.au/jutlp>

---

### Recommended Citation

Roche, T., Wilson, E., & Goode, E. (2024). Immersive learning in a block teaching model: A case study of academic reform through principles, policies and practice. *Journal of University Teaching & Learning Practice*, 21(2). <https://doi.org/10.53761/1.21.2.12>

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library: [research-pubs@uow.edu.au](mailto:research-pubs@uow.edu.au)

---

# Immersive learning in a block teaching model: A case study of academic reform through principles, policies and practice

## Abstract

Universities across the globe are considering how to effect meaningful change in their higher education (HE) delivery in the face of the COVID-19 pandemic and shifting student learning preferences. This paper reports on a descriptive case- study of whole-of-institution curriculum reform at one regional Australian university, where more traditional 13-week semesters have been replaced with a 6-week immersive block model known as the Southern Cross Model. Based on a synthesis of literature in best practice HE pedagogy and principles, the case study draws on both a review of policy and staff interviews ( $N = 5$ ) to outline the key changes necessary for successful HE transformation. Analysis revealed themes related to the vital roles of leadership, capacity building, monitoring the transition, staff adoption, and adequate technical systems in implementing a radical, multifaceted institutional transformation. Implications for practice at institutions considering reforming their curriculum model are also discussed. The findings from this case study indicate that an institutional transformation to an immersive block model requires both a considered change in institutional policy and process, as well as the appropriate resourcing of roles, governance committees, technical solutions, and, importantly, communities of practice.

## Practitioner Notes

1. Radical disruption to traditional teaching approaches, such as the introduction of an immersive block model, is one way that universities can respond to student achievement issues and changing student learning preferences
2. Whole-of-institution curriculum reform is best supported by evidence-based pedagogical principles
3. Evidence indicates that immersive block models combined with the application of active learning pedagogies can significantly improve student engagement and academic performance
4. Whole-of-institution curriculum reform should include transparent leadership structures, fit-for-purpose governance mechanisms, communities of practice, appropriate levels of resourcing and planning, as well as robust monitoring processes
5. Key challenges for institutions to overcome during radical curriculum transformations include countering uneven adoption among academic and professional staff, and timely implementation of technical solutions that support related changes in policy and business processes

## Keywords

student retention, active learning, immersive scheduling, block model, curriculum reform

## Introduction

Globally, universities are seeking teaching and learning innovations that better engage students in order to retain them through to their studies' completion (Bebbington, 2021; Treve, 2021; Whalley et al., 2021). Contemporary surveys of student sentiment indicate that higher education (HE) delivery mode preferences are changing, with many cohorts wanting more flexible, blended, and hybrid learning opportunities. Evidence of these changing HE student preferences can be seen in anglophone universities in Australia (i-graduate, 2021), the United Kingdom (UK) (Studiosity, 2021), and the United States of America (USA) (Fishman et al., 2022), and with international students in those countries (Quacquarelli Symonds, 2021). Identifying and implementing innovative HE models that accommodate those preferences while creating the conditions for student success and improved retention has become increasingly important (Eri et al., 2021; Jackson et al., 2022).

Retaining students to completion in HE, or retention, is considered a “wicked problem” (Rittel & Webber, 1973). Student academic achievement is a dynamic phenomenon, with multiple contributing and interacting factors (Beer & Lawson, 2018). Attempts to increase student completion rates often deal with isolated factors (Sherman & Peterson, 2009). Research at one regional Australian university identified a range of personal issues that contribute to students discontinuing their studies (i.e., attrition), including poor physical and mental health; competing demands of work and family; and low levels of connectedness to peers, staff, and the institution (Willans & Seary, 2018). These findings are not unique and have been identified as attrition factors in universities elsewhere: in Australia (Baik et al., 2019), the USA (Tinto, 2012), the UK (Trotter & Roberts, 2006), and English Medium Instruction (EMI) courses in non-anglophone countries (Roche et al., 2015). Although universities can and should try to address issues such as students' connectedness to staff and other students, personal issues such as health and work responsibilities are more difficult for HE providers to address.

Radical disruptions to traditional HE pedagogy, such as block models, are one response some HE providers have used to improve retention (McCluskey et al., 2019; Wilson & Roche, 2022), success rates (also known as pass rates), and grades. Innovations in HE pedagogy, particularly those implemented institution-wide, should be both principled and evidence-based to maximise and sustain positive impact (Kift et al., 2010; Moorhouse & Wong, 2022). The process of whole-of-institution curriculum reform is seldom reported on in depth, even though such accounts are valuable for other institutions considering curriculum change at scale (Walker et al., 2019). This paper reports on a descriptive case study of whole-of-institution curriculum reform at one regional Australian university, implementing a six-week teaching term model: the Southern Cross Model (see also Roche et al., 2022). It is based on a synthesis of literature of best practice HE pedagogy and principles drawn from anglophone HE contexts. The case study includes a review of policy and analysis of staff

### Academic Editors

Section: Special Issue  
 Editor in Chief: Joseph Crawford  
 Senior Editor: Jo-Anne Kelder

### Publication

Received: 20 April 2023  
 Revision: 18 July 2023  
 Accepted: 20 August 2023  
 Published: 31 January 2024

Copyright: © by the authors, in its year of first publication. This publication is an open access publication under the Creative Commons Attribution [CC BY-ND 4.0](https://creativecommons.org/licenses/by-nd/4.0/) license.

interviews to outline key changes necessary for successful HE transformation. Implications for practice at institutions in similar contexts considering reforming their curriculum model are also discussed.

## **Immersive Block Learning: Principles for Promoting Student Success in HE**

A review of literature on block, immersive, or intensive models in anglophone HE contexts reveals three core principles for successful university learning: (1) use focused learning through immersive teaching blocks; (2) use active learning to foster student engagement; and (3) use guided learning with blended curriculum content curated to develop learner agency and learning communities.

### **Principle 1 – Focused Learning: Immersive Block Teaching Periods**

Block models, such as those used at Victoria University (VU) in Australia (McCluskey et al., 2019), and also described as “immersive scheduling” at the University of Plymouth in the UK (Turner et al., 2021), have all drawn upon a focused teaching approach first developed at Colorado College in the USA over 50 years ago (McKie, 2022). Where traditional HE models typically deliver four subjects at a time over 12–15 weeks, immersive block models, such as Colorado’s, typically deliver only one subject at a time over much shorter durations (e.g., two to six weeks). These models draw on cognitive load theory, which proposes that human cognitive processing capacity is finite, and that learning capacity may be overloaded when engaged in multiple tasks, which can in turn lead to decreases in cognitive performance (Sweller, 1988). By extension, at the macro level in learning, engaging with multiple learning topics and tasks may result in decreased learning outcomes (Mason et al., 2016). Hence the shift to fewer concurrent subjects in “block”, “intensive” and “immersive scheduling” models, hereafter referred to as “immersive block” models.

Immersive block models provide greater focus through fewer competing demands than traditional university approaches (Goode et al., 2023a). Walsh et al. (2019) found that students in a six-week model achieved higher grades and perceived the model to be less stressful than traditional studies. A recent paper compared over 3,000 students at a UK university and found that immersively delivered subjects resulted in significantly higher marks for students (Turner et al., 2021). Loton et al.’s (2022) VU study showed that through introducing the block model, assessment results lifted almost an entire grade on average across the institution. An analysis of student achievement data at VU has indicated that students from some equity groups, for example, non-English speaking background, and low SES (socio-economic status) saw improved learning outcomes through their block model (Winchester et al., 2021).

To the focus added through timetabling, further focus in learning can be added through constructive alignment, a pedagogical framework ensuring that learning outcomes, learning activities, and assessment tasks, are purposefully designed and delivered (Biggs, 2014). Clear learning objectives should be formulated, with assessments developed to allow students to demonstrate they meet these objectives. Subsequently, learning activities are designed to remove unnecessary content to enable the achievement of the learning objectives. It has been argued

that constructively aligned units result in deeper learning (Hailikari et al., 2022) as well as increased enjoyment and motivation (Stamov Roßnagel et al., 2021).

## **Principle 2 – Active Learning: Beyond Passive Content Delivery**

Immersive block models not only provide greater focus through their scheduling but also involve innovative content delivery approaches (Buck & Tyrrell, 2022; Goode et al., 2023a; Huber et al., 2022). Through the active learning pedagogies employed in immersively scheduled curricula, students are required to “make choices, pose problems, engage in enquiry and be an active participant in their education” (Ambler et al., 2021, p. 536). This facilitates enhanced student engagement, connection, and community development (Goode et al., 2022a, 2022b; Samarawickrema & Cleary, 2021), which has been shown to deliver greater levels of academic achievement among diverse student cohorts in immersive block models (Loton et al., 2022), including students from underrepresented and equity groups in HE (Roche et al., 2023; Winchester et al., 2021) and international students (Goode et al., in press). High satisfaction has also been observed in some immersive block models (Goode et al., 2023b), although impacts on satisfaction tend to be more modest and varied than they are for achievement (Loton et al., 2022).

Founded upon social constructivist theory (Vygotsky 1962, 1978), active learning pedagogies emphasise that learning occurs through engagement, reflection, and socially situated activity rather than through more didactic, transmission-of-knowledge approaches (Biggs, 1999; Papadopoulou, 2020). For example, traditional didactic university lectures, where an academic typically talks and students listen, have been shown to be less effective for learning than more active approaches (Armbruster et al., 2009; Jin et al., 2022; Lasry et al., 2008; Schmidt et al., 2015). One review (Freeman et al., 2014) of over 200 studies of undergraduate STEM courses found that student outcomes were improved in classes where students were active rather than passive while an academic lectured. Schmidt et al. (2015) argue that heritage didactic approaches rely on the fallacy of information transmission – that when a student is told something, they learn it.

Over 70 years of cognitive psychology research has shown that a passive student is less likely to learn, and that to learn students must be attentive and engaged (Dehaene, 2020). Research on the pedagogy of additional language learning (Linebaugh & Roche, 2015; Ortega, 2014) and academic literacies (Roche, 2017) demonstrate principally similar findings to those STEM learning studies: to learn a skill, it is important to engage students in activities that focus on the use of that skill rather than being repeatedly and passively exposed to that skill.

When active learning pedagogies are applied, students generally perform better on university assessments and improve their knowledge retention (Karpicke et al., 2009) and real-world problem-solving skills (Crouch & Mazur, 2001). For example, asking students to respond to questions requiring reflection improves students’ subsequent information retrieval compared to reading alone (Karpicke et al., 2009). Providing feedback on students’ question responses further enhances retrieval in comparison with using questions alone (Roediger & Butler, 2011). Moreover, active learning approaches can engage students in higher order skills, such as analysis, synthesis, and evaluation, and develop capacities for problem-solving and creating (Bonwell & Eison, 1991; Michael, 2006). Ideally, the authenticity of the learning experience is also increased, as students apply knowledge in ways that emulate real-world situations beyond the university

classroom (Hao et al., 2021; Syme et al., 2022). Many students report valuing opportunities to engage with interactive tasks in supportive classroom environments where dialogue is central (Goode et al., 2022a, 2022b).

However, it is of note that active learning pedagogies have been challenged as privileging able students; thus, reasonable accommodations must be made in their implementation (Bowers et al., 2015). They have also been critiqued as being poorly defined (Drake, 2012), leading teachers to focus on developing learning experiences where students “do things” at the expense of focusing on developing learning outcomes. With this concern in mind, the third principle specifies a form of active learning required for successful delivery of immersive block models.

### **Principle 3 – Guided Learning: Providing Safe Passage Through the Learning Journey**

There are many forms of active learning. Educational psychologists’ analyses of active learning demonstrate the importance of learning experiences remaining guided by teachers (Kirschner et al., 2006). Successful immersive block learning involves a clear and rigorous sequence of tasks, differentiating it from pure discovery learning where students are left to uncover information and skills independently (Mayer, 2004). Good practice guides for teaching in immersive blocks emphasise the need for the careful design and delivery of curriculum to ensure the pace and volume of learning is manageable (Huber et al., 2022; Kops, 2014; Male et al., 2016; Samarawickrema et al., 2022). For example, Male et al. (2016) advocate preparing students before classes, monitoring progress, and providing formative feedback on students’ engagement. Nerantzi and Chatzidamianos (2020) further emphasise teacher presence in immersive block models, whereby academics should be “present, participate, model engagement, interaction, comment and give feedback” (p. 488).

Increasingly, and particularly in post-pandemic times, delivery of HE content has taken a converged or blended delivery format involving both face-to-face and online learning (Bebbington, 2021). Immersive block models typically guide students through both synchronous and asynchronous learning opportunities (Buck & Tyrrell, 2022; Goode et al., 2022a; Loton et al., 2022; Nerantzi & Chatzidamianos, 2020). Such approaches have been shown to build students’ confidence and independence, while supporting improved academic achievement (Buck & Tyrrell, 2022; Goode et al., 2022b) and high satisfaction (Goode et al., 2023b).

Presenting unit material in packages of engaging content chunks delivered through online learning sites provides students with greater flexibility in terms of when and where they access their learning (Joyner & Isbell, 2021). This practice reflects a movement away from sedentary understandings of universities as static, bounded places, and acknowledges the increasing mobilities of learners who interact across various social spaces to achieve feelings of being “at” university (Bayne et al., 2014). It is also becoming an accepted form of delivery. In 2022, a survey in the USA indicated that 55% of Americans now believe the quality of online education is the same as, or in some cases better than, in-person education (Fishman et al., 2022). Despite increasing preferences for online learning options beyond the COVID-19 pandemic (Alexander et al., 2021), online learning is not universally preferred. Concerns have been noted with students’ “reduced contact, connection and support” (Hews et al., 2022, p. 135) while learning online. Research has also highlighted the deleterious effects of students lacking suitable private spaces

for study and inconsistent access to technology, particularly for students from minority backgrounds in HE (Mercer-Mapstone et al., 2022).

Where online learning materials are offered as part of an immersive block curriculum, it is important that learning sites are designed purposefully to maximise engagement and reduce cognitive load. The literature indicates that adding “interesting but conceptually irrelevant” text and videos to multimedia learning materials can hinder students’ abilities to process information and transfer learning to new situations (Mayer et al., 2001, p. 196). It follows that it is important to select materials focusing on aligned content (Biggs, 2014) and omit extraneous elements (Mayer et al., 2001). A curation approach to designing learning experiences implies an important shift away from teachers as content creators and knowledge transmitters to becoming curators and guides (see Kellermann, 2021; Wolfe & Andrews, 2014). Evidence from both immersive block and traditional semester models indicates that when teachers act as guides through curated, engaging self-access content, learners are better able to self-regulate and learn more independently (Goode et al., 2022b; Lee et al., 2021).

Providing regular opportunities for feedback is another crucial way through which students can be guided through a curriculum and towards the achievement of learning outcomes. Feedback can occur through interactive self-access materials such as quizzes, interactive widgets, and other responsive activities via class activities wherein a teacher or peers provide feedback during and after the completion of a task and through assessments. To maximise its impact on learning, feedback must be provided in ways that are level appropriate and that “feed up”, clarifying the goals of learning in the context at hand. Feedback allows students and teachers to gauge progress towards such goals, and “feed forward” provides guidance on what to do next to enhance progress (Hattie & Timperley, 2007). Such feed forward enhances the clarity, cohesiveness, and value of a learning experience, aiming to reduce discrepancies between “where students are and where they are aiming to be” (Hattie & Timperley, 2007, p. 90).

Often, shifts to immersive block models require a change in teaching and learning approaches from both staff and students. Depending on current institutional practices, they may require a significant cultural shift in how academics deliver learning experiences, harnessing educational design and evidence-based learning and teaching strategies that promote focused, guided, and active learning (e.g., Laurillard, 2012; Verenikina et al., 2017). Although there is a growing evidence base demonstrating that immersive block models improve learning and teaching outcomes, implementing these models requires a change in roles (both academic and professional staff) and must be managed in a considered fashion to avoid conflict on issues such as homogenisation of the curriculum and to delineate roles and responsibility as the curriculum is rolled out (Tay et al., 2023).

## **Methodology**

We aim to describe how one regional public Australian university revolutionised its approach to learning and teaching in an attempt to address entrenched student performance issues (i.e., in success/pass and retention rates). The reported transformation and learnings from this process can provide insights about the relationship between pedagogy, policy settings, and implementation for institutions in similar contexts. Employing a single case study of the Southern

Cross Model, we report the change management processes and academic governance modifications that were necessary to facilitate a whole-of-institution transformation.

Case studies enable investigators to provide in-depth understanding of specific elements of a phenomenon (Stake, 1995). We acknowledge that the findings reported here, in the described context, may not be readily generalisable to other HE contexts (Gerring, 2007) with differing legislative frameworks, cultures of education, and student populations. However, the in-depth, contextualised analysis presented in this single case study can help readers better understand how one such transformation was made and allow those in similar contexts to identify potentially relevant approaches (Ridder, 2017).

Three types of single case studies are commonly used (Yin, 2014): exploratory, explanatory, and descriptive. Of these approaches, the descriptive case study is the most appropriate method for this paper, documenting the intricacies and interdependencies of our case. The case meets the conditions required for single descriptive studies (Yin, 2014). The institution described shares common challenges with other HE providers: its struggle with undesirable retention rates, particularly in the context of higher numbers of underrepresented students (e.g., first-generation or low SES students, etc.), and it is experiencing changing student study preferences and behaviours (Bebbington, 2021; Whalley et al., 2021). This is also a critical single case in that there are few published reports on the governance mechanisms used to institute an immersive block model in HE contexts. The description of the transition to the immersive block model presented here will help define the theoretical constructs underpinning block models as well as the policies and business processes through which these can be operationalised.

## **Method and Analysis**

Policy, process, and practice changes were required to implement the Southern Cross Model and bring about institutional transformation and uplift. Through this case study approach, we aim to understand and share key stakeholders' perspectives and experiences of this change via a series of in-depth interviews.

Semi-structured interviews were undertaken with five university staff members, purposefully selected from across both the management and governance arms of the university. The interview sample was deliberately selected to include both academic and professional (administrative) staff, drawn from the executive-level Academic Portfolio Office (APO) which is overseen by the two Pro Vice-Chancellors Academic; academic leadership from the faculties and colleges, such as Associate Deans Education; and Academic Board (AB), Governance Services, and Student Services. The five interviewees worked in core leadership and management roles directly relevant to academic uplift and change, and each had significant involvement in the design, implementation, and development of the Southern Cross Model. Interviewees provided informed consent to participate in the study, and the university's Human Research Ethics Committee approved the research (# 2022-054).

A semi-structured interview guide was used to elicit responses and guide conversation on transition to the Southern Cross Model. Questions covered four broad areas focused on change management, governance, staff adoption of the model, and opportunities for learning:



1. Change management processes:
  - a. What change management processes were put in place to create the right conditions for transitioning to the new model?
  - b. In retrospect, were these effective? What would have strengthened them?
  - c. In retrospect, were there any additional processes or teams you would have engaged differently?
2. Governance mechanisms:
  - a. What governance mechanisms were put in place to create the right conditions for transitioning to the new model?
  - b. In retrospect, were these effective? What would have strengthened them?
  - c. In retrospect, were there any additional processes or teams you would have engaged differently?
3. How would you describe the adoption of the model by staff?
4. What key learnings have you taken away from this experience?

The questions were modified to reflect the role of the interviewees. Conversations were not conducted by a participant's direct supervisor or a more senior staff member. Participants were given the opportunity to review and edit transcripts prior to publication.

A grounded theory approach (Birks & Mills, 2015) was used to analyse interviewees' voices and experiences, and to uncover salient issues. Grounded theory is so named because theory unfolds from, and is grounded in, the data (Lincoln & Guba, 1985). It is an inductive approach that searches for underlying themes or patterns of meaning (Connell & Lowe, 1997). In this way, any hypotheses or conclusions are connected to the data and reflect a dialogue between data, analysis, and theory/concept development (Dey, 1999).

Themes were identified in the transcriptions, which were coded first by one researcher and then reviewed by a second researcher (O'Shea, 2016). These were discussed, engaging the researchers in reflection on their positions (Moser & Korstjens, 2018). Any discrepancies were negotiated until consensus was reached. Through discussion, these were then further reduced to categories, which are reported on as follows. This method allowed the researchers to explore individual opinions while allowing for common themes to emerge (Longhurst, 2010).

### **Case Study: The Southern Cross Model**

Southern Cross University is a regional public institution with around 18,000 students enrolled in undergraduate, postgraduate, and enabling/pathway courses. These are delivered by four faculties and two colleges in the disciplines of health, science, engineering, laws, business, information technology, education, Indigenous knowledge, and the arts. Courses are offered at three main campuses, at three metropolitan city campuses, and offshore via strategic educational collaborations. The university's central administration is based in northern New South Wales, on Australia's east coast. As a self-accrediting Australian HE institution, the university is governed by a Chancellor and a board of Council members, including the Chair of the AB, and managed through the Office of the Vice-Chancellor and President and their Executive (Rowlands, 2017). Council is directly responsible for the oversight of the university and its affairs. The AB is the major

body advising Council on academic matters. Through the Vice-Chancellor, the university's overall academic management is provided through the APO, and, at the faculty level, the Executive Deans, Associate Deans Education (ADEs), and Discipline Chairs (Chairs).

In 2019, the institution's leadership began a period of deep reflection on its success, status, and achievements over the past quarter of a century since its establishment. At the time, only 25% of its students gained admission based on high school results, 60% of those admitted were the first in family to study at university, 42% were regional or remote enrolments, 41% studied online, 18% were international students, and nearly 5% identified as Aboriginal or Torres Strait Islanders. Although there was much to celebrate in terms of the university's excellence in research, graduate outcomes, engagement with its communities, and achievements in widening university participation, there was concern that student achievement needed to be greatly improved. The university's student success (i.e., pass) and retention rates were intractably poor. Between 2014 and 2018, the attrition and success rates for all domestic and international students across all course levels - sub-bachelor, bachelor, and postgraduate - were worse than the mean of all self-accrediting Australian public universities (Department of Education, Skills and Employment, 2020).

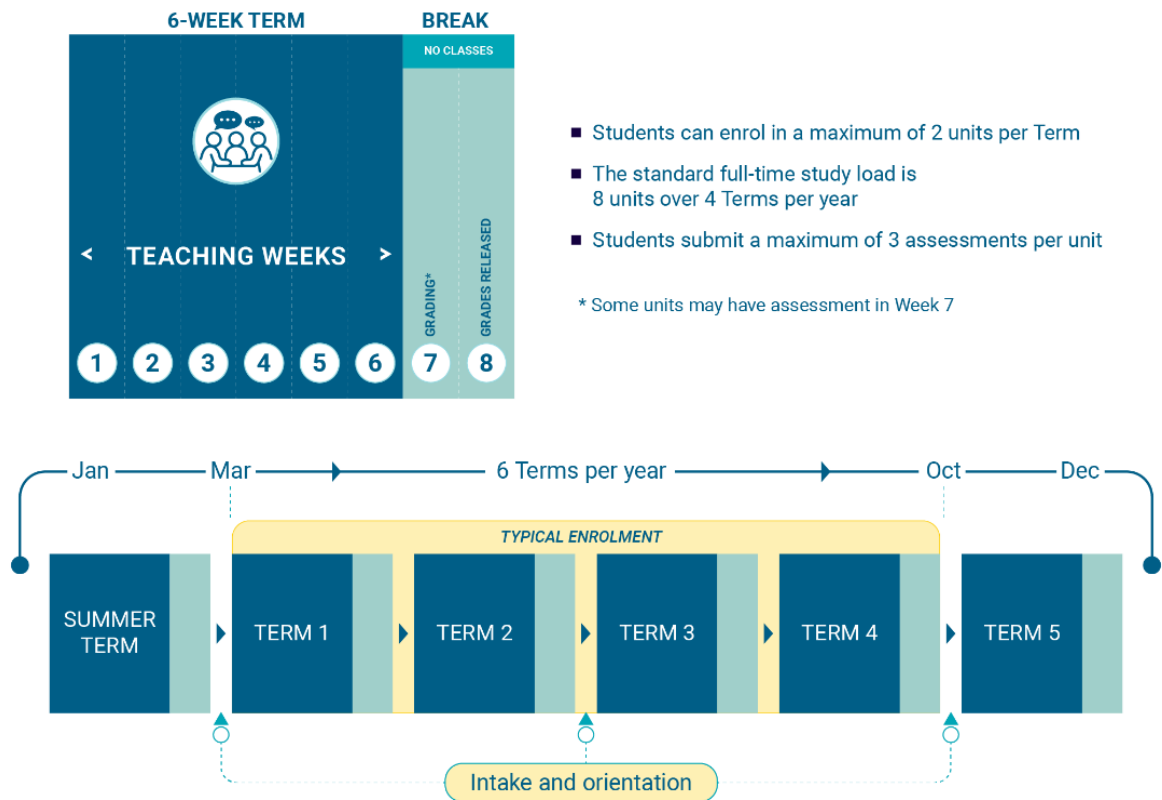
It was increasingly clear that, rather than continuing to tackle student performance in individual disciplinary areas, courses, or faculties, major academic reform would be required across the institution. To break the ongoing attrition cycle, the university needed to do something altogether different – and with some urgency. With the above three pedagogical principles front of mind, the university developed the Southern Cross Model, which at the time of writing is in its third year of implementation. Firmly in line with the university's revised strategy, with a central, guiding purpose of “changing lives through revolutionary learning and research with real impact” (Southern Cross University, n.d.), and with the support of Council, the Vice-Chancellor, and Executive, the institution set out to improve student success - its pass rates - and retention through the Southern Cross Model.

### **Six-Week Teaching Terms: Greater Focus Through Immersive Blocks**

A foundational element of the Southern Cross Model is to provide students with greater focus through block scheduling (Goode et al., 2023a; Turner et al., 2021) – an approach that reduces the number of concurrent subjects and consequentially the number of assessments that students need to complete at any one point in time. The model shifts from the institution's previous trimester calendar to an academic year staged through six 6-week teaching terms. In a variation on most immersive block models, the Southern Cross Model offers students two units at a time in six-week terms as shown in Figure 1, rather than the typical one unit at a time approach, as shown in McCluskey et al., 2019. Full-time students typically study a maximum of two units per term over four consecutive terms. Unlike traditional one-unit-at-a-time block models, in the Southern Cross Model students can also study part-time, taking only one unit over six weeks instead of the full two-unit approach.

**Figure 1**

*Teaching Terms in the Southern Cross Model*

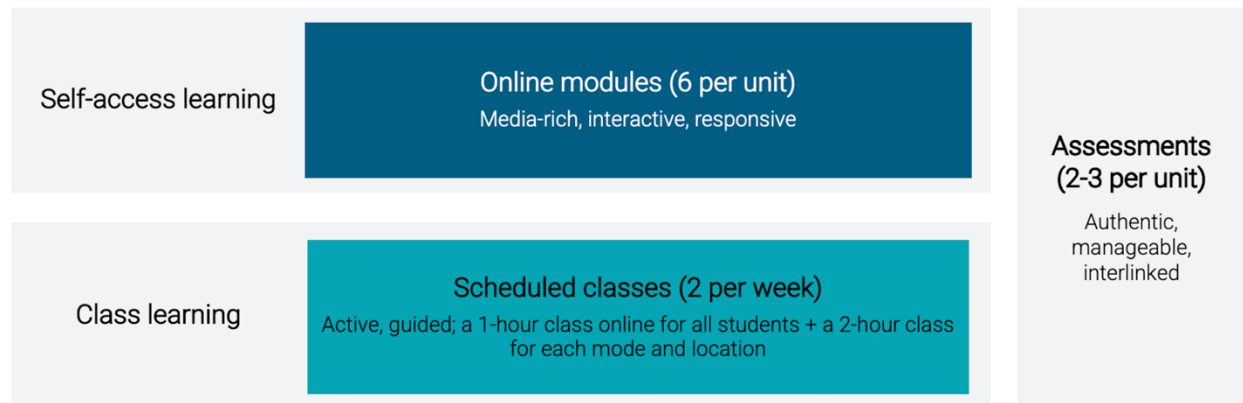


### Unit Design: Curating Guided, Active Learning Experiences

The Southern Cross Model develops students' knowledge, skills, and application of these through blended delivery involving two forms of study: online self-access and class learning as shown in Figure 2. A single weighted unit in the model is typically delivered via three hours of class learning and up to 20 hours of online self-access learning, including assessment preparation, per week.

**Figure 2**

*Forms of Learning in the Southern Cross Model*



**Online unit module design: Self-access learning**

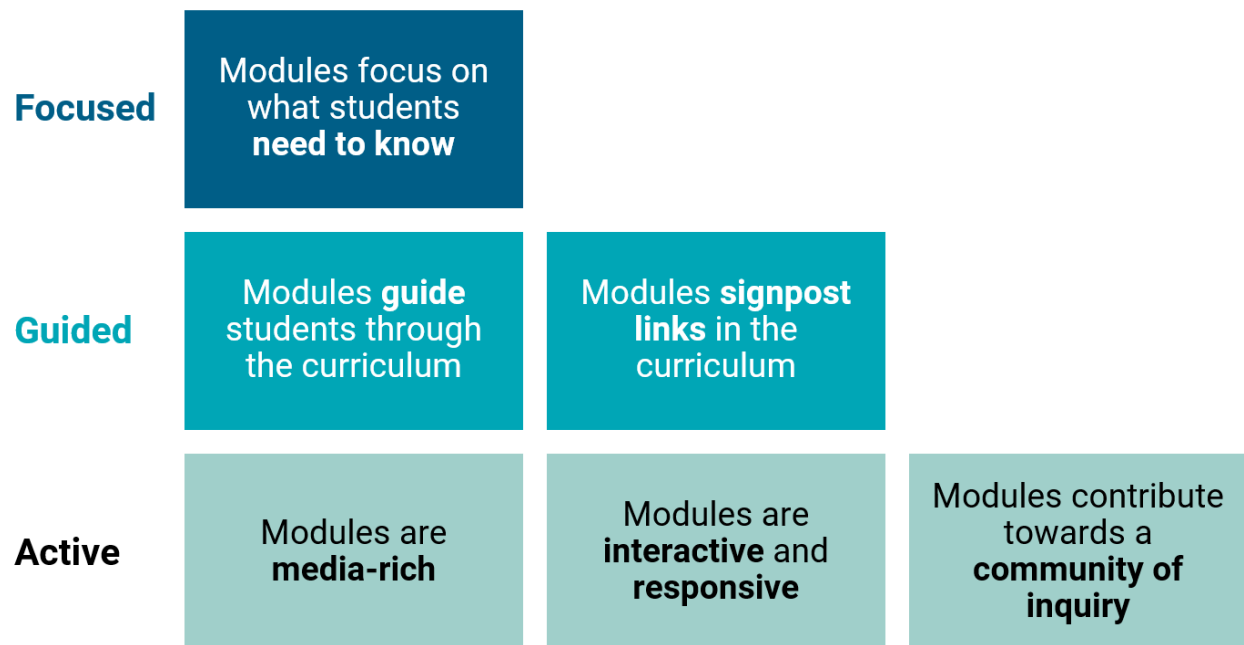
Self-access learning in the Southern Cross Model is a guided, active learning experience delivered through Blackboard learning sites. It affords students the opportunity to progress through discrete, engaging chunks of learning material – modules – at a time and pace that is right for them within each term, allowing students to study around competing commitments (McCluskey et al., 2020). These modules enact a learning-centred approach to content delivery designed to foster learner agency. They are accessible on demand and provide the flexibility students are increasingly seeking to balance work and other commitments (Quacquarelli Symonds, 2021). This change also accommodates students’ changing preferences for the volume of on-campus learning and being able to access resources remotely.

The unit modules are media rich (e.g., videos, sound recordings, online readings), interactive, and responsive (see Goode et al., 2022a, for examples). Media-rich learning means choosing the most appropriate, easy-to-use digital communication tools to support and streamline sensemaking and cognitive effort (Covello, 2019). Interactive learning activities require responses from the learner (e.g., problems, quizzes, reflection, discussion tasks, or H5P interactives such as drag-and-drops). Students are not simply required to read or watch material but are consistently prompted to reflect on and respond to the concepts being presented. Responsive activities are designed to provide automated feedback to help students gauge their understanding and where there may be strengths or gaps in their learning; they can also help academics assess student learning, engagement, and progress.

In the Southern Cross Model, the modular unit design is guided by six core tenets (see Figure 3). In this way, academics become the content curator before a unit is offered, then the guide during the term, moving beyond the role of lecturer or “sage on the stage”. Research has shown that the degree to which academics embrace block models and present to students as knowledgeable, skilled, and caring curriculum leaders affects the student experience (Ambler et al., 2021). It is important to support academics’ professional development, so they are able to deliver their subjects effectively in and according to the principles of the model.

**Figure 3**

*Core Tenets of Unit Module Design in the Southern Cross Model*



### ***Class learning and design***

Class learning in the Southern Cross Model is a scheduled, guided, and active learning experience delivered either on campus or online in real time. Although the lecture can be a powerful pedagogical tool and is immediately recognised by students as a traditional form of university teaching, it is not a method that readily lends itself to the more active (e.g., Thalluri & Penman, 2018), interactive (e.g., Lasry et al., 2008), and dialogue-based learning (e.g., Peterson, 2009) that the model draws on. As such, in the model there are no more lectures delivered on campus or online. Class learning in the model typically takes place via two class types:

- a 2-hour scheduled tutorial held on campus or online (depending on the students' mode of enrolment), and
- a 1-hour scheduled and recorded online workshop for all students enrolled both online and on campus.

Each faculty or college at the university sets the order of these classes, which may vary due to the type of knowledge and skills being applied. Classes employ active learning, such as case studies, problem-solving, discussions, polls, Q&As, debates, and simulations (see Crouch & Mazur, 2001; Lasry et al., 2008; McGrath et al., 2020). By reducing on-campus lectures, the model accommodates students' changing preferences for more flexible options for study, particularly post COVID-19 (Alexander et al., 2021; Hews et al., 2022; Stone, 2022).

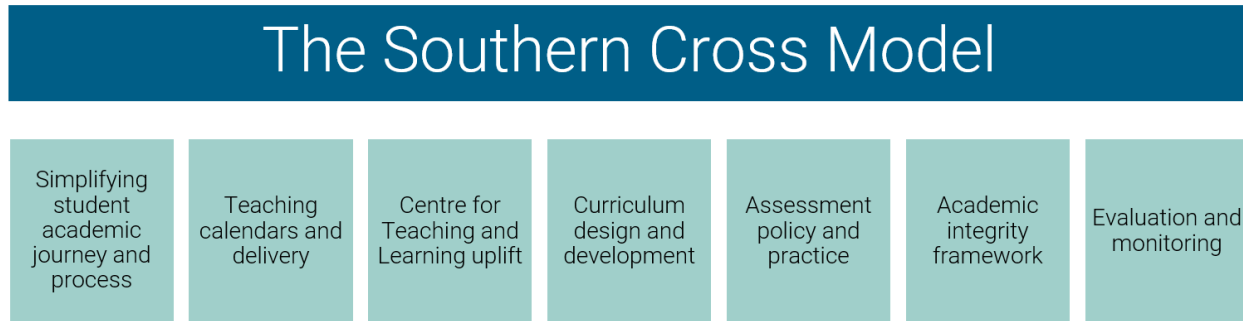
### **Institutional Change: Academic Governance and Policy Settings**

The shift to the Southern Cross Model necessitated significant change in university policy, process, and practice as shown in Figure 4. Academic quality standards were maintained through

robust academic governance processes, with oversight and support from the University’s AB and Council.

**Figure 4**

*Elements of Institutional Change to Support the Southern Cross Model*



The university’s policies and institutional settings had all been developed for a traditional 13-week semester. Like other HE providers undertaking radical reforms (Buck, 2023; McCluskey et al., 2019), a complete recasting of institutional processes was required – from teaching delivery and calendars through to grade ratification.

At Southern Cross University, management and governance needed to work together to ensure academic standards were maintained, and resourcing was required to enable changes. As Foucault notes, policy constructs a field of possibilities, through articulating regulatory roles, responsibilities, and the lexicon of a regime (as cited in Ball, 2016). The university embraced a fundamental repositioning of policy and process settings. These drove changes in academics’ practice, as they negotiated, contested, and implemented the model (Annala et al., 2023).

Table 1 synthesises the academic governance and policy changes that were reviewed and redeveloped to implement the Southern Cross Model.

**Table 1**

*Key Academic Governance and Policy Changes Required to Implement the Southern Cross Model*

<b>Policy title</b>	<b>Core policy aim</b>	<b>Practice outcome – Supporting the Southern Cross Model</b>
Academic Promotions Policy	A framework and principles within which academic promotions processes are implemented. Recognises more clearly the role of Scholarship of Learning and Teaching (SoLT).	<ul style="list-style-type: none"> <li>Incentivise scholarly investigations of teaching, sharing of practice, formal reviews, external benchmarking, and innovation</li> </ul>

Assessment, Teaching and Learning Policy	Articulate new assessment and teaching design principles to govern the university's approach to learning resources, teaching and assessment of learning.	<ul style="list-style-type: none"> <li>• Replace lectures with interactive workshops and tutorials</li> <li>• Cap number of assessments per unit (assessment volume)</li> <li>• Reduce assessment turnaround time from 14 to 7 days</li> <li>• Limit and justify use of examinations in favour of authentic assessment</li> <li>• Require online, interactive, responsive learning modules</li> <li>• Support clear, effective, and consistent assessment moderation</li> <li>• Guide volume and use of learning resources (e.g., limit textbooks to where necessary)</li> </ul>
Curriculum Design and Development Policy	Articulate new design principles governing the design and development of courses and units, including curriculum design principles.	<ul style="list-style-type: none"> <li>• Create clear, consistent course (degree) and unit design structures using a "design team" approach</li> <li>• Specify appropriate volume of curriculum and content for a 6-week term</li> <li>• Remove unnecessary unit barriers and requisites</li> <li>• Require course outcomes, unit learning outcomes, and assessment constructive alignment</li> </ul>
Grade Release and Quality Assurance Procedures	Articulate processes and responsibilities for determination, submission, approval, and release of grades.	<ul style="list-style-type: none"> <li>• Specify and streamline end-to-end academic grading process: quality assurance, monitoring, submission, approval, late grade management</li> <li>• Readjust quality assurance and grades thresholds</li> <li>• Reduce grading processes time frame from 22 to 7 days</li> <li>• Improve grade submission time frame with 100% of grades submitted on time</li> </ul>
Rules – Student Academic and Non-Academic Misconduct	Define academic and non-academic misconduct. Set out procedures and timelines for determining allegations of academic (i.e., plagiarism and other forms of cheating) and non-academic misconduct. Prescribe educative interventions, penalties, and rights of appeal.	<ul style="list-style-type: none"> <li>• Support efficient consideration and resolution of misconduct allegations</li> <li>• Enhance clarity of rules and processes</li> <li>• Strengthen the educative approach to academic integrity at the university</li> </ul>
Rules Relating to Coursework Awards – Student Assessment and Examinations	Define the grounds for and evidence required for special consideration for assessment due date extension.	<ul style="list-style-type: none"> <li>• Shorten special considerations processing timeline</li> <li>• Establish a consistent and time-appropriate schedule of extensions that can be applied in the immersive block model</li> </ul>

## Results and Discussion

The interview data provided insight into staff experiences and attitudes on the shift to the model. Both academic and professional staff reflected on change management processes and governance aspects of the transformation. Themes identified were leadership and communication, creating capacity, monitoring, uneven adoption, and technical systems.

### Leadership: Community and Communication

Analysis of the interview data revealed that newly established leadership structures helped facilitate whole-of-institution transformation. The APO, established in 2020, led the curriculum reform project. It worked from inception closely with the Office of the Vice-Chancellor (OVC) on a significant change proposal, which was presented to the university community, documenting a phased and supported implementation of the model between 2021 and 2023. The proposal documents the transformation's alignment with the University's Strategic Plan (2020–2026) with an aim to improve students' achievement.

Interviewees noted that the focused, guided, and active learning approach of the model using digital technologies represented a significant practice change for many academics more familiar with and committed to traditional delivery approaches, for example, lectures, print, or static digital resources such as PDF readings). To equip academic staff with the ability to deliver interactive content for the Southern Cross Model, leadership was required to systematically direct and communicate the change as well as plan for professional development for all academics. As one ADE noted, *"it's been a huge awareness raising operation from the Vice-Chancellor down, coming to Faculty Board[s] and the College Board[s] ... talking about the change, talking about what was happening. Why it was happening, before really anything happened"*.

The APO constituted an academic design team, which functioned as a cross-institutional community of practice (CoP) for actioning that cultural change (Annala & Mäkinen, 2017). The team drew representation from all faculties, colleges, and professional work units such as Student Administrative Services and the International Office, and collaboratively developed the new academic model drawing on the key pedagogical principles above. Input was sought from the literature and educational experts across the sector on teaching, assessment, and academic operations.

The group took its recommendations to faculty and college Deans and to the AB where these were discussed, modified, and endorsed. Once initial endorsement was achieved, the academic design team became the Southern Cross Model Steering Committee (SteerCo), which met weekly to share information on streams of work and make determinations on issues arising. The ADEs from each faculty and college were central to the academic leadership and oversight of the Southern Cross Model, as were colleagues from Governance and the Chair of the AB.

This group has continued to meet for over three years, eventually moving to a monthly meeting in the third year of the model's implementation. Sub-working groups on timetables, change communication, and a grades-system project reported weekly to the SteerCo. They were used to consult on and draft policies that drew on benchmarking and examples of best practice from universities operating in block models. A CoP approach enjoined stakeholders across the



institution not only in the co-authorship of the model, its principles and policies, but ultimately in how it was implemented.

One interviewee noted that having reporting and oversight was important, but also that the faculty had responsibility for change at the course and unit level. Colleagues who had relationships prior to the change process drove the change locally. The level of change required local champions, and also established trust. The interviewee described the shift to the model *“less about a decision at high levels”*.

A learning and teaching CoP was then established to help share and spread practice on designing content for and teaching into the model. Initially, this work was co-led by a teaching scholar based in the APO with an academic lead from each faculty. This was later led by staff from the University’s Centre for Teaching and Learning (CTL). From the early adopters in the pilot year, successful academics were identified to share their practice on, for example, learning sites and assessment approaches. Two interviewees noticed the importance of teaching academics across the faculties being champions of change, thereby giving the endeavour greater credibility. Practitioner-led professional development workshops were noted as essential in the success of the transition.

Collaboration and timely communication were also vital to the successes of the reforms. For one manager, *“collaboration with the key stakeholders was a really key activity”*. At the same time, however, the communication efforts across the university were perceived to be so vast and complex that sometimes important messages may not have filtered down as best or as quickly as they could have:

*Obviously, communication is a big thing with these big changes; we had key steering groups, but often information didn’t really filter down to the lower level people, so sometimes they kind of weren’t aware of all of the changes happening ... So probably a bit more communication around those activities.*

### **Creating Capacity: Newly Defined Roles**

New academic roles known as Associate Deans Education (ADEs) were resourced by the Vice-Chancellor for leading teaching and learning practice in the faculties and colleges. While these roles reported to the faculty or college Deans, they worked closely with the APO.

The university’s CTL, reporting to the APO, was expanded in capacity in the lead-up to the model’s delivery. CTL employed new teams of digital designers and educational designers, who led professional development sessions on best practice prior to and during the rollout. This surge in digital and educational design resources, accompanied by strong project management, greatly helped manage workflows, though concerns associated with the transition identified by Tay et al. (2023; e.g., centralisation, homogenisation) persisted.

The APO created a group of academic influencers who were led by a change management leader in the APO. These were the ADEs, discipline Chairs, and other academics and teachers. The group developed 10 messages and shared these. Key messaging was given to this group via a one-page brief, which was discussed every two weeks via the SteerCo.

Participants noted that staffing capacity to deliver the whole-of-institution transformation surged in the first two years of the project. It became clear that the small team of the APO could not manage all work strands, so external consultants with teams including business analysts and change managers were employed until these roles were created in the APO.

Finally, participants noted that the APO led projects relating to a new Academic Integrity Framework, Special Considerations, and Grade Ratification policies and process so that students could receive determinations in a timely fashion in the new six-week terms. These projects were led through steering committees chaired by the APO's Pro Vice-Chancellors Academic and are described in the policy section above.

### **Monitoring: The Transition and the Model's Impact**

All interviewees referred to the importance of communicating the principles, policies, and processes associated with the model, but also of being able to dynamically track course content's shift to the model. One interviewee noted the importance of developing consistent reporting templates for reporting on progress and identifying risk to the Executive, including Executive Deans of faculties. One ADE mentioned a constant sense of time pressure, and that the earlier creation of reporting mechanisms and timelines for monitoring unit development may have helped. This was echoed by a senior manager: *"Some of the assessment and teaching arrangement changes came a little late in that development, so that triggered multiple unit amendments ... [with] impact on the faculties and teams trying to process all those."* To assess the impact of the model, the APO led the development of an assessment and reporting framework. Through the university's Business Intelligence and Quality unit, a series of PowerBI dashboards were developed for dynamic tracking of student achievement (success/pass rate, GPA, absent fail, early withdrawal) and student feedback (overall unit and teaching satisfaction, satisfaction with workload, assessment, etc.). Student performance and feedback could then be reported on each term to the Executive through the Vice-Chancellor's Group and the University Council. The APO also established a *Scholarship of Learning and Teaching (SoLT) SSRN eJournal* for sharing early form research and scholarly investigations of the Southern Cross Model. This gave greater visibility of the model's performance to the university community.

### **Uneven Adoption**

While interviewees essentially viewed the above leadership, new roles, and monitoring as effective, all participants noted that faculty and college adoption of the new model was uneven. Although many academic staff viewed the move to the model as *"an exciting opportunity for us to really refresh and review and revamp all learning materials and [teaching] approaches"* (ADE), others questioned or opposed the model. There was "variable adoption" by staff: *"Some were excited, liked to innovate and were dedicated to teaching and learning. At the other end, were academics who saw teaching as something to ... convey knowledge to students ... they already had excellent feedback, so, why change?"*

While the breadth of staff views on the model were not in focus here, it was notable that interviewees attributed this variance less to the clarity of the parameters of the model's features than to the buy-in of individuals and to an emerging sense in some disciplines that the model would not be appropriate for them. One interviewee suggested creating more local CoPs within

the faculties and colleges at arms-length of central functions may engage greater numbers of staff with differing views on the model in discussions on its implementation. One participant noted that the differing views should be accepted and may ultimately be healthy for continuously improving the model. Another participant reflected that *“overall, I think [the adoption] has been quite positive, and I think it will be good this year and next year to just embed those processes a bit more and get things coming along”*.

A second issue that interviewees noted that may have contributed to the uneven adoption was an underlying culture of “unit ownership” by individual academics. In some colleges and faculties, this culture created great variability in how units were shifted into the model. The AB Chair noted that although curriculum policy required design teams, in practice there was slower cultural shift away from sole unit ownership and design.

Finally, interviewees attributed the uneven adoption to enculturating academics into the new model in a context where staff are joining the institution every term. During the transition it was

*difficult to know whether everyone is inducted into our approach ... they may not be across all the changes we have been making or the principles and policies guiding practice ... We didn't really have in place a source of truth, a staff development program for this kind of change.*

This highlighted the need for a consistent academic induction approach and the importance for unified professional learning.

### **Technical Systems and Professional Development**

Finally, participants noted the importance of having appropriate levels of technical resourcing to ensure that changes in policy and business process could be implemented: *“[to] understand the systems implications [of policy changes] ... we didn't have the capacity or capability to support some of these changes [for] academics or other staff”*. Some policy changes were made without extant technical systems to accommodate them. This required investment in technical infrastructure and staff professional development on how to use these systems (e.g., grading, academic integrity, special considerations). One example provided was the new grades processes. These were not developed prior to the commencement of delivery in the first year: *“We didn't have the settings in place in advance. Having some of [those] policies and processes would have smoothed the transition a bit.”*

## **Discussion and Implications for Practice**

This case study fills a gap in the literature by outlining the principles, policies, and business processes put in place to effect an immersive block model curriculum change (Walker et al., 2019). Implementing the Southern Cross Model has also required change in practice across a range of activities from teaching delivery through to assessment and grade ratification. These changes are outlined above.

A theme emerged from all interviewees that the principled and evidence-based approach taken to curriculum reform, as recommended by the literature (Kift et al., 2010; Moorhouse & Wong, 2022), greatly facilitated the successful transition. Institutions considering such a curriculum reform should begin by identifying an evidence-based set of principles. Second, the interviewees'

responses highlighted the importance of a leadership structure drawing on fit-for-purpose governance mechanisms such as policies and steering committees, connected to CoPs drawing on wide membership from across the institution, as fundamental to the success of the development and implementation of the model (Annala & Mäkinen, 2017).

Resourcing appropriate roles was essential in facilitating the change (e.g., business analysts, change managers, digital designers, educational designers, and leadership positions, such as ADEs and Pro Vice-Chancellors). These roles and CoPs communicated and drove change across the institution while also gaining input and buy-in from staff.

Monitoring processes were essential for reporting on unit development and tracking subsequent performance of those units such as student achievement and satisfaction. A third step to consider is which metrics will be monitored to measure the impact of new curriculum and establishing tools, for example, dashboards, to monitor this change dynamically as the change is rolled out, communicating achievements to the university community as appropriate.

However, even with these leadership structures, new roles, monitoring mechanisms, and CoPs in place, adoption of the model was uneven across the institution as academics and professional staff negotiated, contested, and implemented the model (Annala et al., 2023). Interviewees suggested this would to some extent always be the case; however, having localised CoPs within faculties may have helped better address this.

The interviews surfaced the importance of having the technical capacity to implement new business processes associated with the model's attendant policies. Institutions need both the policy settings right to inform the pedagogy used, and the technical solutions to ensure that business processes of marking, ratification of grades, and academic integrity and special consideration case applications are managed in the shorter time frames of immersive block models. A fourth finding to emerge is the importance of auditing and changing policies, business processes and technical systems to ensure these can accommodate the new flows of marking, grade releases etc. in the new academic calendar.

It is of note that this case study and the evidence base it draws on are from anglophone countries (Australia, UK, and USA). Further research could explore the extent to which these principles and the experience described above are relevant to other HE contexts. The findings are based on interviews with management, and interviews with staff in other roles, such as teaching academics, would undoubtedly bring further valuable insights into the shift to an immersive block model.

In this paper, we set out to describe how one university revolutionised its approach. As history shows, however, not all revolutions are successful. Student outcomes resulting from the transition are not reported at length here. Research comparing student achievement, that is, success/pass rates in courses that shifted to the model, with their previous semester-based offerings in prior years and other courses offered in the same year in semesters as a control group, are reported elsewhere (Goode et al., 2023a; Wilson et al., 2023) showing how students at this institution, including students from underrepresented and government-defined equity groups, have benefited from this new model (Roche et al., 2023).

This paper provides HE institutions with an in-depth understanding of how radical reforms to university teaching and learning, through the introduction of a focused, guided, active learning

model that we call immersive block learning, require a considered change in policy and business process, and also the appropriate resourcing of roles, technical solutions, and, importantly, CoPs. Through a planned implementation, institutions can transform their practice and support more students to reach their educational, professional, and personal development goals.

### **Conflict of Interest**

The authors disclose that they have no actual or perceived conflicts of interest. The authors disclose that they have not received any funding for this manuscript beyond resourcing for academic time at their university. The authors have produced this manuscript without artificial intelligence support.

## References

- Alexander, S., Littlejohn, A., Sharpe, R., Bennett, S., & Varga-Atkins, T. (2021, December 17). COVID has changed students' needs and expectations. How do universities respond? *The Conversation*. <https://theconversation.com/covid-has-changed-students-needs-and-expectations-how-do-universities-respond-172863>
- Ambler, T., Solomonides, I., & Smallridge, A. (2021). Students' experiences of a first-year block model curriculum in higher education. *The Curriculum Journal*, 32(3), 533–558. <https://doi.org/10.1002/curj.103>
- Annala, J., Lindén, J., Mäkinen, M., & Henriksson, J. (2023). Understanding academic agency in curriculum change in higher education. *Teaching in Higher Education*, 28(6), 1310–1327. <https://doi.org/10.1080/13562517.2021.1881772>
- Annala, J., & Mäkinen, M. (2017). Communities of practice in higher education: Contradictory narratives of a university-wide curriculum reform. *Studies in Higher Education*, 42(11), 1941–1957. <https://doi.org/10.1080/03075079.2015.1125877>
- Armbruster, P., Patel, M., Johnson, E., & Weiss, M. (2009). Active learning and student-centered pedagogy improve student attitudes and performance in introductory biology. *CBE—Life Sciences Education*, 8(3), 203–213. <https://doi.org/10.1187/cbe.09-03-0025>
- Baik, C., Naylor, R., Arkoudis, S., & Dabrowski, A. (2019). Examining the experiences of first-year students with low tertiary admission scores in Australian universities. *Studies in Higher Education*, 44(3), 526–538. <https://doi.org/10.1080/03075079.2017.1383376>
- Ball, S. J. (Ed.). (2016). *Michel Foucault and education policy analysis*. Routledge. <https://doi.org/10.4324/9781315647258>
- Bayne, S., Gallagher, M. S., & Lamb, J. (2014). Being 'at' university: The social topologies of distance students. *Higher Education*, 67(5), 569–583. <https://doi.org/10.1007/s10734-013-9662-4>
- Bebbington, W. (2021). Leadership strategies for a higher education sector in flux. *Studies in Higher Education*, 46(1), 158–165. <https://doi.org/10.1080/03075079.2020.1859686>
- Beer, C., & Lawson, C. (2018). Framing attrition in higher education: A complex problem. *Journal of Further and Higher Education*, 42(4), 497–508. <https://doi.org/10.1080/0309877X.2017.1301402>
- Biggs, J. (1999). What the student does: Teaching for enhanced learning. *Higher Education Research & Development*, 18(1), 57–75. <https://doi.org/10.1080/0729436990180105>

- Biggs, J. (2014). Constructive alignment in university teaching. *HERDSA Review of Higher Education*, 1, 5–22. <https://www.herdsa.org.au/herdsa-review-higher-education-vol-1/5-22>
- Birks, M., & Mills J. (2015). *Grounded theory: A practical guide* (2nd ed.). Sage.
- Bonwell, C. C., & Eison, J. A. (1991). *Active learning: Creating excitement in the classroom* (ASHE-ERIC Higher Education Report No. 1). The George Washington University. <https://files.eric.ed.gov/fulltext/ED336049.pdf>
- Bowers, P. H., Boyas, J. F., & Mitschke, D. B. (2015). The ablest privilege activity: An active learning classroom exercise. *Research & Reviews: Journal of Social Sciences*, 1(1), 44–52.
- Buck, E. (2023, February 2–3). *Blending the block: Being bold with pedagogy at the University of Suffolk* [Keynote presentation]. IBILTA Conference 2023: International Block & Intensive Learning Teaching Association. <https://youtu.be/Zq834EYZJsM>
- Buck, E., & Tyrrell, K. (2022). Block and blend: A mixed method investigation into the impact of a pilot block teaching and blended learning approach upon student outcomes and experience. *Journal of Further and Higher Education*, 46(8), 1078–1091. <https://doi.org/10.1080/0309877X.2022.2050686>
- Connell, J., & Lowe, A. (1997). Generating grounded theory from qualitative data: The application of inductive methods in tourism and hospitality management research. *Progress in Tourism and Hospitality Research*, 3(2), 165–173. [https://doi.org/10.1002/\(SICI\)1099-1603\(199706\)3:2<165::AID-PTH87>3.0.CO;2-I](https://doi.org/10.1002/(SICI)1099-1603(199706)3:2<165::AID-PTH87>3.0.CO;2-I)
- Covello, S. (2019). *Teaching with rich media*. Granite State College (USNH). <https://granite.pressbooks.pub/rich-media/>
- Crouch, C. H., & Mazur, E. (2001). Peer instruction: Ten years of experience and results. *American Journal of Physics*, 69(9), 970–977. <https://doi.org/10.1119/1.1374249>
- Dehaene, S. (2020). *How we learn: The new science of education and the brain*. Penguin.
- Department of Education, Skills and Employment. (2020). *Attrition, retention and success rates for commencing higher education students*. <https://www.education.gov.au/higher-education-statistics/student-data/selected-higher-education-statistics-2020-student-data-0>
- Dey, I. (1999). *Grounding grounded theory: Guidelines for qualitative inquiry*. Academic Press.
- Drake, J. R. (2012). A critical analysis of active learning and an alternative pedagogical framework for introductory information systems courses. *Journal of Information Technology Education: Innovations in Practice*, 11, 39–52. <https://doi.org/10.28945/1546>

- Eri, R., Gudimetla, P., Star, S., Rowlands, J., Girgla, A., To, L., Li, F., Sochea, N., & Bindal, U. (2021). Digital resilience in higher education in response to COVID-19 pandemic: Student perceptions from Asia and Australia. *Journal of University Teaching & Learning Practice*, 18(5), Article 7. <https://doi.org/10.53761/1.18.5.7>
- Fishman, R., Nguyen, S., & Woodhouse, L. (2022). *Varying degrees 2022: New America's sixth annual survey on higher education*. New America. <https://www.newamerica.org/education-policy/reports/varying-degrees-2022/>
- Freeman, S., Eddy, S. L., McDonough, M., Smith, M. K., Okoroafor, N., Jordt, H., & Wenderoth, M. P. (2014). Active learning increases student performance in science, engineering, and mathematics. *Proceedings of the National Academy of Sciences of the United States of America*, 111(23), 8410–8415. <https://doi.org/10.1073/pnas.1319030111>
- Gerring, J. (2007). Is there a (viable) crucial-case method? *Comparative Political Studies*, 40(3), 231–253. <https://doi.org/10.1177/0010414006290784>
- Goode, E., Nieuwoudt, J. E., & Roche, T. (2022a). Does online engagement matter? The impact of interactive learning modules and synchronous class attendance on student achievement in an immersive delivery model. *Australasian Journal of Educational Technology*, 38(4), 76–94. <https://doi.org/10.14742/ajet.7929>
- Goode, E., Roche, T., Wilson, E., & McKenzie, J. W. (2023a). Implications of immersive scheduling for student achievement and feedback. *Studies in Higher Education*, 48(7), 1123–1136. <https://doi.org/10.1080/03075079.2023.2184472>
- Goode, E., Roche, T., Wilson, E., & McKenzie, J. W. (2023b). Student perceptions of immersive block learning: An exploratory study of student satisfaction in the Southern Cross Model. *Journal of Further and Higher Education*. Advance online publication. <https://doi.org/10.1080/0309877X.2023.2277419>
- Goode, E., Roche, T., Wilson, E., Zhang, J., & McKenzie, J. W. (in press). The success, satisfaction and experiences of international students in an immersive block model. *Journal of University Teaching & Learning Practice*.
- Goode, E., Syme, S., & Nieuwoudt, J. E. (2022b). The impact of immersive scheduling on student learning and success in an Australian pathways program. *Innovations in Education and Teaching International*. Advance online publication. <https://doi.org/10.1080/14703297.2022.2157304>
- Hailikari, T., Virtanen, V., Vesalainen, M., & Postareff, L. (2022). Student perspectives on how different elements of constructive alignment support active learning. *Active Learning in Higher Education*, 23(3), 217–231. <https://doi.org/10.1177/1469787421989160>



- Hao, Q., Barnes, B., & Jing, M. (2021). Quantifying the effects of active learning environments: Separating physical learning classrooms from pedagogical approaches. *Learning Environments Research*, 24, 109–122. <https://doi.org/10.1007/s10984-020-09320-3>
- Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77(1), 81–112. <https://doi.org/10.3102/003465430298487>
- Hews, R., McNamara, J., & Nay, Z. (2022). Prioritising lifeload over learning load: Understanding post-pandemic student engagement. *Journal of University Teaching & Learning Practice*, 19(2), 128–146. <https://doi.org/10.53761/1.19.2.9>
- Huber, E., Davila, Y. C., & Thomson, A. C. (2022). Designing intensive mode science subjects: Improving the student and teacher experience. *Journal of University Teaching & Learning Practice*, 19(5), Article 04. <https://ro.uow.edu.au/jutlp/vol19/iss5/04>
- i-graduate. (2021). *Student barometer: Online study*. <https://www.i-graduate.org/>
- Jackson, J., Tangalakis, K., Hurley, P., & Solomonides, I. (2022). *Equity through complexity: Inside the “black box” of the block model*. National Centre for Student Equity in Higher Education. <https://www.ncsehe.edu.au/publications/black-box-block-model/>
- Jin, L., Gao, Y., Liu, T., Creed, P. A., & Hood, M. (2022). A comparison between flipped and lecture-based course delivery of a career development programme for Chinese undergraduates. *British Journal of Guidance & Counselling*, 50(6), 916–932. <https://doi.org/10.1080/03069885.2021.1934398>
- Joyner, D. A., & Isbell, C. (2021). *The distributed classroom*. MIT Press. <https://doi.org/10.7551/mitpress/14095.001.0001>
- Karpicke, J. D., Butler, A. C., & Roediger, H. L., III. (2009). Metacognitive strategies in student learning: Do students practise retrieval when they study on their own? *Memory*, 17(4), 471–479. <https://doi.org/10.1080/09658210802647009>
- Kellermann, D. (2021, March 8). Academics aren't content creators, and it's regressive to make them so. *Times Higher Education*. <https://www.timeshighereducation.com/opinion/academics-arent-content-creators-and-its-regressive-make-them-so>
- Kift, S., Nelson, K., & Clarke, J. (2010). Transition pedagogy: A third generation approach to FYE – A case study of policy and practice for the higher education sector. *The International Journal of the First Year in Higher Education*, 1(1), 1–20. <https://doi.org/10.5204/intifyhe.v1i1.13>

- Kirschner, P. A., Sweller, J., & Clark, R. E. (2006). Why minimal guidance during instruction does not work: An analysis of the failure of constructivist, discovery, problem-based, experiential, and inquiry-based teaching. *Educational Psychologist*, 41(2), 75–86. [https://doi.org/10.1207/s15326985ep4102\\_1](https://doi.org/10.1207/s15326985ep4102_1)
- Kops, W. J. (2014). Teaching compressed-format courses: Teacher-based best practices. *Canadian Journal of University Continuing Education*, 40(1), 1–18. <https://doi.org/10.21225/D5FG7M>
- Lasry, N., Mazur, E., & Watkins, J. (2008). Peer instruction: From Harvard to the two-year college. *American Journal of Physics*, 76(11), 1066–1069. <https://doi.org/10.1119/1.2978182>
- Laurillard, D. (2012). *Teaching as a design science: Building pedagogical patterns for learning and technology*. Routledge.
- Lee, R., Hoe Looi, K., Faulkner, M., & Neale, L. (2021). The moderating influence of environment factors in an extended community of inquiry model of e-learning. *Asia Pacific Journal of Education*, 41(1), 1–15. <https://doi.org/10.1080/02188791.2020.1758032>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage.
- Linebaugh, G., & Roche, T. B. (2015). Evidence that L2 production training can enhance perception. *Journal of Academic Language and Learning*, 9(1), A1–A17. <https://journal.aall.org.au/index.php/jall/article/view/326>
- Longhurst, R. (2010). Semi-structured interviews and focus groups. In N. Clifford, S. French, & G. Valentine (Eds.), *Key methods in geography* (pp. 103–115). SAGE Publications.
- Loton, D., Stein, C., Parker, P., & Weaven, M. (2022). Introducing block mode to first-year university students: A natural experiment on satisfaction and performance. *Studies in Higher Education*, 47(6), 1097–1120. <https://doi.org/10.1080/03075079.2020.1843150>
- Male, S., Baillie, C., Hancock, P., Leggoe, J., MacNish, C., Crispin, S., Ranmuthugala, D., & Alam, F. (2016). *Intensive mode teaching guide*. Australian Government Office for Learning and Teaching. <https://doi.org/10.13140/RG.2.2.10101.93920>
- Mason, R., Seton, C., & Cooper, G. (2016). Applying cognitive load theory to the redesign of a conventional database systems course. *Computer Science Education*, 26(1), 68–87. <https://doi.org/10.1080/08993408.2016.1160597>
- Mayer, R. E. (2004). Should there be a three-strikes rule against pure discovery learning? *American Psychologist*, 59(1), 14–19. <https://doi.org/10.1037/0003-066X.59.1.14>

- Mayer, R. E., Heiser, J., & Lonn, S. (2001). Cognitive constraints on multimedia learning: When presenting more material results in less understanding. *Journal of Educational Psychology*, 93(1), 187–198. <https://doi.org/10.1037/0022-0663.93.1.187>
- McCluskey, T., Smallridge, A., Weldon, J., Loton, D., Samarawickrema, G., & Cleary, K. (2020). Building on the VU block foundations: Results from the inaugural first year cohort. In E. Heinrich, & R. Bourke (Eds.), *Research and development in higher education: Vol. 42: Next generation, higher education: Challenges, changes and opportunities* (pp. 61–72). Higher Education Research and Development Society of Australasia. <https://www.herdsa.org.au/publications/conference-proceedings/research-and-development-higher-education-next-generation-6>
- McCluskey, T., Weldon, J., & Smallridge, A. (2019). Rebuilding the first year experience, one block at a time. *Student Success*, 10(1), 1–15. <https://doi.org/10.5204/ssj.v10i1.1148>
- McGrath, G. M., Blaer, M., Williams, M., Wilson-Evered, E., & Whitelaw, P. (2020). A suite of system dynamics T&L simulations and games based upon the Australian Qualifications Framework (AQF). *Journal of Hospitality & Tourism Education*, 32(4), 194–205. <https://doi.org/10.1080/10963758.2019.1685890>
- McKie, A. (2022, January 6). Is block teaching the future of university pedagogy? *Times Higher Education*. <https://www.timeshighereducation.com/depth/block-teaching-future-university-pedagogy>
- Mercer-Mapstone, L., Fatnowna, T., Ross, P., Bricknell, L., Mude, W., Wheat, J., Barone, R. P., Martinez, D. E., West, D., Gregory, S. J., Vanderlelie, J., McLaughlin, T., Kennedy, B., Able, A., Levy, P., Banas, K., Gabriel, F., Pardo, A., & Zucker, I. (2022). *Recommendations for equitable student support during disruptions to the higher education sector: Lessons from COVID-19*. National Centre for Student Equity in Higher Education. <https://www.ncsehe.edu.au/publications/equitable-student-support-disruptions-higher-education-covid-19/>
- Michael, J. (2006). Where's the evidence that active learning works? *Advances in Physiology Education*, 30(4), 159–167. <https://doi.org/10.1152/advan.00053.2006>
- Moorhouse, B. L., & Wong, K. M. (2022). The COVID-19 pandemic as a catalyst for teacher pedagogical and technological innovation and development: Teachers' perspectives. *Asia Pacific Journal of Education*, 42(Suppl. 1), 105–120. <https://doi.org/10.1080/02188791.2021.1988511>
- Moser, A., & Korstjens, I. (2018). Series: Practical guidance to qualitative research. Part 3: Sampling, data collection and analysis. *European Journal of General Practice*, 24(1), 9–18. <https://doi.org/10.1080/13814788.2017.1375091>

- Nerantzi, C., & Chatzidamianos, G. (2020). Moving to block teaching during the COVID-19 pandemic. *International Journal of Management and Applied Research*, 7(4), 482–495. <https://doi.org/10.18646/2056.74.20-034>
- Ortega, L. (2014). *Understanding second language acquisition*. Routledge.
- O’Shea, S. (2016). Navigating the knowledge sets of older learners: Exploring the capitals of first-in-family mature age students. *Widening Participation and Lifelong Learning*, 18(3), 34–54. <http://doi.org/10.5456/WPLL.18.3.34>
- Papadopoulou, T. (2020). Developing construction graduates fit for the 4th industrial revolution through fieldwork application of active learning. *Higher Education Pedagogies*, 5(1), 182–199. <https://doi.org/10.1080/23752696.2020.1816844>
- Peterson, E. (2009). Teaching to think: Applying the Socratic Method outside the law school setting. *Journal of College Teaching & Learning*, 6(5), 83–88. <https://doi.org/10.19030/tlc.v6i5.1145>
- Quacquarelli Symonds. (2021). *International student survey: Global opportunities in the new higher education paradigm*. <https://www.internationalstudentsurvey.com/international-student-survey-2020/>
- Ridder, H.-G. (2017). The theory contribution of case study research designs. *Business Research*, 10, 281–305. <https://doi.org/10.1007/s40685-017-0045-z>
- Rittel, H. W. J., & Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy Sciences*, 4(2), 155–169. <https://doi.org/10.1007/BF01405730>
- Roche, T. B. (2017). Assessing the role of digital literacy in English for Academic Purposes university pathway programs. *Journal of Academic Language and Learning*, 11(1), A71–A87. <https://journal.aall.org.au/index.php/jall/article/view/439>
- Roche, T., Goode, E., Wilson, E., & McKenzie, J. W. (2023). Supporting the academic success of students from equity backgrounds in higher education through an immersive block model. *Southern Cross University Scholarship of Learning and Teaching Paper No. 9*. <https://doi.org/10.2139/ssrn.4480689>
- Roche, T., Sinha, Y., & Denman, C. (2015). Unravelling failure: Belief and performance in English for academic purposes programs in Oman. In R. Al-Mahrooqi, & C. Denman (Eds.). *Issues in English education in the Arab world* (pp. 37–59). Cambridge Scholars Publishing.
- Roche, T., Wilson, E., & Goode, E. (2022). Why the Southern Cross Model? How one university’s curriculum was transformed. *Southern Cross University Scholarship of Learning and Teaching Paper No. 3*. <https://doi.org/10.2139/ssrn.4029237>

- Roediger, H. L., III., & Butler, A. C. (2011). The critical role of retrieval practice in long-term retention. *Trends in Cognitive Sciences*, 15(1), 20–27. <https://doi.org/10.1016/j.tics.2010.09.003>
- Rowlands, J. (2017). *Academic governance in the contemporary university: Perspectives from anglophone nations*. Springer. <https://doi.org/10.1007/978-981-10-2688-1>
- Samarawickrema, G., & Cleary, K. (2021). Block mode study: Opportunities and challenges for a new generation of learners in an Australian university. *Student Success*, 12(1), 13–23. <https://doi.org/https://doi.org/10.5204/ssj.1579>
- Samarawickrema, G., Cleary, K., Male, S., & McCluskey, T. (2022). *Designing learning for intensive modes of study*. Higher Education Research and Development Society of Australasia. <https://www.herdsa.org.au/publications/guides/designing-learning-intensive-modes-study>
- Schmidt, H. G., Wagener, S. L., Smeets, G. A. C. M., Keemink, L. M., & van der Molen, H. T. (2015). On the use and misuse of lectures in higher education. *Health Professions Education*, 1(1), 12–18. <https://doi.org/10.1016/j.hpe.2015.11.010>
- Sherman, J., & Peterson, G. (2009). Finding the win in wicked problems: Lessons from evaluating public policy advocacy. *The Foundation Review*, 1(3), 87–99. <https://doi.org/10.4087/FOUNDATIONREVIEW-D-09-00036.1>
- Southern Cross University (n.d.) *Purpose and Values*. <https://www.scu.edu.au/about/purpose-and-values/>
- Stake, R. E. (1995). *The art of case study research*. Sage Publications.
- Stamov Roßnagel, C., Fitzallen, N., & Lo Baido, K. (2021). Constructive alignment and the learning experience: Relationships with student motivation and perceived learning demands. *Higher Education Research & Development*, 40(4), 838–851. <https://doi.org/10.1080/07294360.2020.1787956>
- Stone, C. (2022). From the margins to the mainstream: The online learning rethink and its implications for enhancing student equity. *Australasian Journal of Educational Technology*, 38(6), 139–149. <https://doi.org/10.14742/ajet.8136>
- Studiosity. (2021). *2021 UK student wellbeing survey*. [https://www.studiosity.com/hubfs/Studiosity/Reports/2021-UK\\_STUDENT-WELLBEING-REPORT.pdf](https://www.studiosity.com/hubfs/Studiosity/Reports/2021-UK_STUDENT-WELLBEING-REPORT.pdf)
- Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science*, 12(2), 257–285. [https://doi.org/10.1016/0364-0213\(88\)90023-7](https://doi.org/10.1016/0364-0213(88)90023-7)

- Syme, S., Roche, T., Goode, E., & Crandon, E. (2022). Transforming lives: The power of an Australian enabling education. *Higher Education Research & Development*, 41(7), 2426–2440. <https://doi.org/10.1080/07294360.2021.1990222>
- Tay, A. Z., Huijser, H., Dart, S., & Cathcart, A. (2023). Learning technology as contested terrain: Insights from teaching academics and learning designers in Australian higher education. *Australasian Journal of Educational Technology*, 39(1), 56–70. <https://doi.org/10.14742/ajet.8179>
- Thalluri, J., & Penman, J. (2018). “We just don’t sit there—We participate, interact and learn, and we rarely get bored”: That is a lectorial. *Focus on Health Professional Education: A Multi-Professional Journal*, 19(2), 68–71. <https://doi.org/10.11157/fohpe.v19i2.241>
- Tinto, V. (2012). *Completing college: Rethinking institutional actions*. University of Chicago Press. <https://doi.org/10.7208/chicago/9780226804545.001.0001>
- Treve, M. (2021). What COVID-19 has introduced into education: Challenges facing higher education institutions (HEIs). *Higher Education Pedagogies*, 6(1), 212–227. <https://doi.org/10.1080/23752696.2021.1951616>
- Trotter, E., & Roberts, C. A. (2006). Enhancing the early student experience. *Higher Education Research & Development*, 25(4), 371–386. <https://doi.org/10.1080/07294360600947368>
- Turner, R., Webb, O. J., & Cotton, D. R. E. (2021). Introducing immersive scheduling in a UK university: Potential implications for student attainment. *Journal of Further and Higher Education*, 45(10), 1371–1384. <https://doi.org/10.1080/0309877X.2021.1873252>
- Verenikina, I., Jones, P. T., & Delahunty, J. (2017). *The guide to fostering asynchronous online discussion in higher education*. FOLD. <https://ro.uow.edu.au/asdpapers/734/>
- Vygotsky, L. S. (1962). *Thought and language*. MIT Press. <https://doi.org/10.1037/11193-000>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Walker, S., Salines, E., Abdillahi, A., Mason, S., Jadav, A., & Molesworth, C. (2019). Identifying and resolving key institutional challenges in feedback and assessment: A case study for implementing change. *Higher Education Pedagogies*, 4(1), 422–434. <https://doi.org/10.1080/23752696.2019.1649513>
- Walsh, K. P., Sanders, M., & Gadgil, S. (2019). Equivalent but not the same: Teaching and learning in full semester and condensed summer courses. *College Teaching*, 67(2), 138–149. <https://doi.org/10.1080/87567555.2019.1579702>
- Whalley, B., France, D., Park, J., Mauchline, A., & Welsh, K. (2021). Towards flexible personalized learning and the future educational system in the fourth industrial revolution



in the wake of Covid-19. *Higher Education Pedagogies*, 6(1), 79–99.  
<https://doi.org/10.1080/23752696.2021.1883458>

Willans, J., & Seary, K. (2018). “Why did we lose them and what could we have done”? *Student Success*, 9(1), 47–60. <https://doi.org/10.5204/ssj.v9i1.432>

Wilson, E., & Roche, T. (2022, November 20). Revolutionary teaching & learning the Southern Cross U way. *Campus Morning Mail*.  
<https://campusmorningmail.com.au/news/revolutionary-teaching-learning-the-southern-cross-u-way/>

Wilson, E., Roche, T., Goode, E., & McKenzie, J. W. (2023). Creating the conditions for student success: The impact of an immersive block model at an Australian university. *Southern Cross University Scholarship of Learning and Teaching Paper No. 10*.  
<https://doi.org/10.2139/ssrn.4560491>

Winchester, M., Klein, R., & Sinnayah, P. (2021). Block teaching and active learning improves academic outcomes for disadvantaged undergraduate groups. *Issues in Educational Research*, 31(4), 1330–1350. <https://www.iier.org.au/iier31/winchester.pdf>

Wolfe, J. K., & Andrews, D. W. (2014). The changing roles of higher education: Curator, evaluator, connector and analyst. *On the Horizon*, 22(3), 210–217.  
<https://doi.org/10.1108/OTH-05-2014-0019>

Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Sage Publications.