Chapter 3  Modelling a continuum of support

My main concern is that teachers sometimes forget that they’re the main reason why we go to school. If a teacher gives us a bad impression about learning and knowledge then that’s going to destroy us because our parents—we see them for like probably six hours a day and the rest of the time we’re at school in front of a teacher. This person is going to lead me into the big world. So if he or she gives me a bad impression about learning is horrible or learning is too hard then that’s going to completely disengage you. Teachers need to inspire students because at the end of the day we see them more than our parents, five days a week. (High school student focus group participant)

Introduction

The Young Adolescent Engagement in Learning (YAEL) Model provides a holistic approach to the provision of support for young adolescent learners. It is predicated on the understanding that all students should have the opportunity to learn, thrive and be equipped with the skills and attitudes to lead fulfilling, productive and responsible lives. High expectations are held for all students, regardless of their ability, behaviour or personal circumstances. Access to powerful and relevant learning experiences, which meet the learning needs of every student, are critical to achieving educational success.

Developed from an extensive review of the international literature, as well as extant student learning support initiatives and strategies, the Model represents a unifying framework of best practice approaches, which serves the needs of
those working in the fields of student engagement and retention. Development of the Model was also informed by findings from a large research study, including consultations and interviews with a range of key stakeholders, in an Australian educational jurisdiction.

In this chapter, we first describe the methodological approach used to develop the Model and then discuss the overarching dimensions that constitute Layer 1 of the Model. As will become clear in this and the following chapters, the YAEL Model is multi-dimensional, with three inter-connected layers, and we therefore weave in and out of key themes in order to elucidate different aspects and characteristics of the overarching dimensions and sub-dimensions. Furthermore, given that it has been developed as a holistic approach to student engagement, those who adopt it should consider the Model in its entirety, adapting features of its characteristics according to contexts and needs.

**The Student Engagement Continuum study**

Previous chapters describe the international literature base that informed the development of the YAEL Model. This first section of Chapter 3 provides an overview of the qualitative study that was also central to this development work.

**Study context**

The Student Engagement Continuum (SEC) research study was contextualised in the large educational jurisdiction of one of Australia’s eight states and territories. To comply with principles of ethical research, the name of the
state/territory and other identifying features of the study have been anonymised. The study sample comprised a cross-section of all government high schools in the jurisdiction, with participants drawn from across the schools and school communities.

The context in which the jurisdiction is situated performs well on a majority of national indicators, such as median weekly income, post-school qualifications, work participation rates, health, levels of life satisfaction, and levels of participation in sport, recreation and culture (Australian Bureau of Statistics, 2011). With a schooling retention rate of over 90% for Years 10–12, the state/territory is also well ahead of national rates. Additionally, it performs highly in the National Assessment Program—Literacy and Numeracy (NAPLAN) (http://www.nap.edu.au/results-and-reports/national-reports), a series of tests focused on basic skills that are administered annually to Australian students in Years 3, 5, 7 and 9.

By contrast, distinct areas of disadvantage have been identified, with 44% of the population aged 15 to 64 experiencing levels of socio-economic disadvantage and 22.4% of this age group falling into the most disadvantaged 40% of all Australians. The high schools in the SEC study were situated in both these geographical pockets of disadvantage, as well as the more affluent areas. Issues related to schooling that have raised concern across the state/territory include a decline in school attendance rates during transition from primary to high school; the number of suspensions in the young adolescent years; and the
rate of Aboriginal and Torres Strait Islander children identified as developmentally vulnerable on one or more of the domain/s as measured by the Australian Early Development Census: physical health and wellbeing; social competence; emotional maturity; language and cognitive skills (school-based); and communication skills and general knowledge (Community Services Directorate, ACT Government, 2015).

Research study objectives

In addition to conducting a review of the local, national and international evidence base around young adolescent student dis/engagement, the study objective most relevant to this current discussion was to develop a model of a continuum of educational support for high school (Years 7–10) with the following features:

- a unifying framework based on research and congruent with jurisdictional strategic planning and existing school network structures; and
- a map of a continuum of educational support components for high schools that addresses the different needs for at-risk students.

To meet these and other objectives, the research team conducted an intensive study over the course of four months in late 2016.
Consultations with key stakeholders

The qualitative study focused on gathering the views of stakeholders across the educational jurisdiction on the range and numbers of at-risk and disengaged young adolescent learners, and types of educational services required to meet their needs. Specifically, it sought to gain views on what works and what does not work in engaging young adolescents, and the evidence to support this. The data collection consisted of three parts: interviews, focus groups and school site visits. In total, 107 participants were involved in interviews, including school leaders, teachers, students, parents/carers, education union representatives, school network staff and allied personnel such as youth support workers and community agency leaders. **Error! Reference source not found.** shows the range and number of participants involved in each part of the data collection. In line with approved ethical procedures, stakeholder and site names have been anonymised.

**Table 0.1** Range and number of participants in the data collection phase

<table>
<thead>
<tr>
<th>Data Collection Method</th>
<th>Participants</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus groups</td>
<td>High school principals, senior advisors/managers, school network leaders</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Multidisciplinary support teams</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Student Engagement and Learning Teams (telephone focus group)</td>
<td>4</td>
</tr>
<tr>
<td>Individual telephone interviews</td>
<td>School principals</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Australian Education Union representative</td>
<td>1</td>
</tr>
<tr>
<td>School site visits (nominated by the Department of Education Office)</td>
<td>Deputy Principal interview</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Students—individual interview</td>
<td>2</td>
</tr>
</tbody>
</table>
Teacher focus group 6
Teacher individual interviews 2

Site 2
Principal interview 1
Deputy Principal—individual interview 1
Teacher focus group 5
Student focus group 5

Site 3
Deputy Principal interview 1
Student focus group 5
Student individual interview 1
Teacher focus groups (2) 6

Site 4
Principal interview 1
Student focus group 9
Teacher individual interview 1
Parent individual interview 1

Site 5
Principal telephone interview 1
Teacher focus group 4
Student focus group 2

Off-site alternative provision
Parent individual interview 1

Community agencies
Focus group 6
Individual telephone interviews 2

Total 107

Analysis of the interview data resulted in themes around student engagement of extreme importance not only to the educational jurisdiction under study but also to schooling more broadly. As Coffey and Atkinson (1996) point out, the delineation of the particular within a study of this nature is informed by an understanding of more general forms and processes—particularly by way of international research—and, therefore, it is appropriate to make generalisations to the global context that remain grounded empirically in the local. The following sections include a selection of the most prominent themes that emerged from
the interviews with key stakeholders, exemplified through SEC case study snapshots.

**The YAEL Model**

In developing the YAEL Model (}
Figure 0.1), the overall intent was to provide a holistic model of schooling support for all students, and with increasing levels of assistance and alternative educational pathways for students with additional behavioural, emotional, psychological, and educational needs. In doing so, the Model points to core components for enhanced engagement for all young adolescent learners and then progresses to in-school flexible options; non-government agency partnerships; and alternative educational programs in concert with a variety of types of support for disengaged students who may have a range of complex learning needs, exhibit behaviours that are challenging or aggressive, or have additional social, health or welfare support needs.
The following sections present a guide to understanding the Model in terms of the elements of best practice in educational re/engagement discussed in Chapters 1 and 2, and contextualised within the specific locale of a large educational jurisdiction and the perspectives of a broad range of key stakeholders. In relation to the latter, while we listened to all who were free to
be interviewed and embedded their views, where possible, in constructing the final version of the Model, we were strongly guided by signature educational research in respect of teaching young adolescent learners, particularly those from diverse backgrounds and those who may be marginalised due to a range of social welfare indicators.

**Rationale for the Model**

As the SEC study proceeded through reviews of literature, examinations of existing schooling support systems locally, nationally and internationally, and analysis of the data collected from key stakeholders in the educational jurisdiction, we experimented with various representations of the key components necessary to re/engage young adolescents in learning.

The starting point of the Model, represented as *Layer 1: Overarching dimensions*, is a school culture that seeks to provide requisite levels of support to all young adolescent learners. The second and third layers of the Model have been strongly shaped by national and international evidence of ‘what works’ for young people on a sliding scale from the risk of disengagement to behaviours that are so unacceptable in mainstream schooling contexts that they warrant students being removed to an external alternative educational site. In terms of numbers of students with needs along the continuum of support, data suggest that these should decrease across this continuum of behaviour, whereas, the need for student support and flexible learning provision increases across the
continuum of behaviour, as depicted in

Figure 0.2.

Figure 0.2  Resource allocation and prevalence of support–an inverse relationship

Therefore, the Model is not a ‘one size for all’; rather, it is intended to provide a range of learning and support options that respond to the varying and changing needs of students over time.
Enabling principles

There are a number of enabling principles that need to be considered to enhance the effectiveness and sustainability of the implemented Model. Fundamentally, the Model represents a strengths-based approach to assessing students’ academic and personal needs, beginning with what students can do and building from there. As discussed in previous chapters, research in the field of student engagement is often approached from an angle of deficit, with a focus on how to manage students who have already become, or who are at imminent risk of becoming disengaged. As has been widely argued (e.g., De Jong & Griffiths, 2006; Te Riele, 2007), these types of approaches tend to position disengaged students as deficient in one or a number of areas, and in need of remediation or intervention. The YAEL Model conceptualises student engagement differently, premised on the understanding that the way schooling is currently constructed plays either a direct or contributory role in marginalising some young adolescents. The Model thus approaches student engagement from an innovative and proactive stance through focusing on aspects of school and teaching improvement, rather than student deficit.

Such thrusts towards improvement cannot rest solely under the auspices of the school or even the school system. It has become increasingly evident through case studies and the international literature that it should be incumbent upon school communities, families and their immediate community networks to take co-responsibility with schools in responding to the challenges of student
dis/engagement and in cooperatively developing grass-roots responses to the generic components of the Model. Cranston et al. (2016) refer to student disengagement as a wicked problem, involving issues of a highly complex educational, social and cultural nature. It is a problem that requires input by a range of stakeholders from a number of different angles. Consider this indicative statement by a Student Engagement and Learning Team (SELT) (pseudonym) interviewee in the SEC study:

> Often times … the issues are much bigger than education … they’re really a social issue. For example, if we’ve invested in an engagement officer and tried to work with the schools as best we can to get kids back into school but they’re not coming to school because of trauma or drug issues in the home, or alcoholism or mental health, those are concerns that are bigger than our scope is to service sometimes. (SELT focus group participant)

As the Australian Public Service Commission (2007) points out, “Wicked problems hardly ever sit conveniently within the responsibility of any one organisation. … They require action at every level— from the international to the local—as well as action by the private and community sectors and individuals” (n. p.). Clearly, in problems of this magnitude, there are political and policy considerations that must also be taken into account. While beyond the immediate scope of the Model, politics and policy do bear an impact on the conceptualisation of its overarching dimensions (Layer 1), to which we turn shortly.
At the local level, in contexts where it is feasible, young adolescents are best served when there is a comprehensive, cohesive interagency approach and collaboration among schools. This type of culture can enhance students’ experiences as they transition between schools (e.g., primary to high school), as well as promote the establishment of shared understandings among stakeholders (e.g., schools and allied support services) about student engagement in learning. Shared services and resources are of little avail if their ambit is not understood; to wit:

I look in there, it's the hotchpotch of what services are there. If you could just map them—it would be like what you’re trying to do is get a map in a region. I'm trying to look in [name of school district] and say, okay, what are people actually doing [there]? The PCYC [Police Citizens Youth Clubs] are in there. The youth engagement teams are in there. We've got messengers in there. We've got ... I think if it's confusing for us, I can't imagine what it's like for a school. Absolutely confusing for schools. (Community agencies focus group participant)

Through a comprehensive and collaborative approach, issues of dis/engagement can be looked at across the whole school sector, from early childhood through to the end of high school, which is particularly important given the existing evidence of disengagement beginning in primary school (see, e.g., Cranston et al., 2016). Collaborative relationships and partnerships between school administration offices, schools and external alternative education providers can also prove particularly important for those small
number of students whose behaviour does not respond to the range of supports provided by the YAEL Model.

Along all stages of the Model, attention needs to be given to student voice and parental consultation so that students can make informed choices to opt in to different learning choices, rather than opting out. Today’s students commonly want to have a say in how they learn (Taylor & Parsons, 2011; Willms, Friesen, & Milton, 2009): “Students want their teachers to know how they learn. They want their teachers to take into account what they understand and what they misunderstand, and to use this knowledge as a starting place to guide their continued learning” (Willms et al., 2009, p. 36). Parental involvement and encouragement has been identified as a key influencing factor in student engagement (Hay et al., 2016; Willms & Flanagan, 2007). Parents need to be made aware of the possible educational choices open to their children, as they have an influence on their children’s decisions from early in their school lives (Schnabel, Alfeld, Eccles, Koller, & Baumert, 2002).

It is important to ensure positive framing of all components along the Model continuum so that they are not perceived by students or others as inferior. In the case of flexible learning pedagogies, for example, the focus should be on the potential benefits that students will gain from intensified pedagogical approaches, and not the student needs that might result in their involvement in these approaches.
Further, *sufficient flexibility in the implementation of the Model* is required to enable students to transition in and out of classes and programs that suit their needs. For example, it is envisaged that some students, over the course of their high school years, might require a more targeted approach via flexible learning programs, yet still remain within the general classroom environment. They might move in and out of flexible learning and mainstream curricula and, if necessary, on-site alternative educational provision. Thus, the overlap of the flexible learning provision indicates that learning and support strategies can and should occur in both mainstream and alternative provision environments.

**A layered ecosystem**

The Model is conceived as a layered ecosystem of overarching dimensions, sub-dimensions and components of provision of educational support. Layer 1 of the Model comprises three overarching dimensions that provide the focus of student engagement. Couched within each of these overarching dimensions, at Layer 2, are their core, overlapping characteristics or sub-dimensions. Layer 3, the components of provision, is situated at the base of the Model and is informed intrinsically by the upper layers.
Layer 1: Overarching Dimensions

Layer 1 of the Model (Figure 0.3) comprises three overarching dimensions that provide the focus of student engagement: school structure and school community; student wellbeing; and teaching, teachers and leaders.

School structure and school community

Schools need to be structured in such a way that they encourage young adolescents to come to school and engage in learning. This cannot be done in isolation; rather, in what can be constructed as a symbiotic and mutually beneficial relationship, schools need to fit in with, draw benefit from, and give back to their own and the wider community. Hence, this is a dimension of engagement that encompasses myriad potential opportunities and barriers, many of which are context-specific. Let’s consider some examples.
In their state-wide case studies into student retention beyond Year 10 in the Australian state of Tasmania, Cranston et al.’s (2016) findings included the following:

- The Department of Education at a systemic level, and individual schools and colleges have implemented a range of programs aimed at enhancing student (and family) engagement with education. However, often the fragmentation and lack of continuation of funding for such support programs impacts on their on-going availability;

- The physical separation of schools across primary to high school and high school to Year 11 and 12 college locations can present as a barrier to continuing in education for some students and their families;

- Perceived and real geographical isolation of students from schools and colleges are barriers for some students – accommodation and transport issues then become significant for some of them;

- Some students disengage from education well before transition points, such as primary to high school, and for some this occurs in early primary school; and

- College-centred issues act as barriers for some students in some locations. These include the college timetable, which results in high levels of free-time for some students; a lack of structure in learning (compared with high school) that impacts negatively on some students (e.g., low engagement with studies and, for some, non-attendance). (p. 12)
American researchers Osher, Banks Amos and Gonsoulin (2012), in their study of delinquent youths transitioning between institutions and alternative and community schools, generated findings that have wider implications for student engagement:

At the system level, a youth’s successful transition is complicated by his or her high level of mobility. Given current policy and practice, this mobility makes it difficult to hold one jurisdiction or agency solely responsible for the youth’s welfare. At the school level, there are often insufficient data available on alternative school outcomes with which to assess the effectiveness of their educational services, and neighbourhood schools often lack staff with the training and capacity to support the transition process. The lack of formal policies and practices in alternative settings and receiving schools regarding data use for monitoring, accountability, and alignment can adversely affect the sharing of information between these settings and comprehensive high schools about students’ re-entry. This gap may also impede the timely transfer of student transcripts between alternative and comprehensive schools. Inattention to these factors by both the alternative schools and the receiving schools can compromise the likelihood of a successful transition. Effective alternative settings address this disconnect by reaching out to the receiving schools. The alternative settings are successful when the receiving schools are receptive to the lessons learned about how to create conditions for success for returning students. (pp. 3–4)

In the SEC study, stakeholders noted a number of factors they believed potentially contributed to disengagement:
SEC case study

School structure and school community

A number of participants commented on the generally traditional schooling structures, such as timetabling, streaming and subject groupings, as potential contributing factors to the alienation of some young people. Some of the student participants, especially, were very critical of the policy of streaming students, stating that they felt this made them feel “dumb” and “stupid.” Adult participants in particular noted that the transition from primary to high school could be problematic for some young adolescents in terms of structural factors. They also believed that sending students off-site for periods of alternative education created problems when they returned to their home school, and that those students soon reverted to old behaviours, which affected the overall school environment.

These illustrations underscore the common misalignment between what students require and what they encounter at school. In 2007, Rudduck expressed concern that, during the previous twenty or so years, schools had changed less in their regimes and patterns of relationship than young people had changed, noting that:

Schools have tended to offer less challenge, responsibility, and autonomy than many students are accustomed to in their lives outside school. We need a more accomplished way of recognizing young people’s capabilities, hooking into their thinking, and harnessing their insights. (Rudduck, 2007, p. 588)
There is significant evidence to suggest that, more than ten years on from Rudduck’s claims, the issues she identified in her work persist, with many schools yet to adapt to provide the continuum of support required by 21st century young adolescent learners.

**Student wellbeing**

The centrality of student wellbeing to engagement in schooling and academic achievement is incontrovertible (see, e.g., Organisation for Economic Co-operation and Development [OECD], 2013; Pollard & Lee, 2003). In their OECD report on the analysis framework for student wellbeing in the Programme for International Student Assessment (PISA) 2015 study, Borgonovi and Pál (2016) note that:

> Over the past decade, there has been growing interest in students’ well-being and in comparing countries, not only in terms of how well students fare academically, but also in how well education systems promote students’ overall development and quality of life. (p. 7)

The five dimensions of wellbeing measured in the 2015 study were: cognitive, psychological, physical, social and material.

In Australia, as discussed in Chapter 1, the Australian Council for Educational Research (ACER) (2012) identifies student wellbeing as one of six guiding principles for junior high school teaching, and many schools and school systems across the country have begun to make matters related to student...
wellbeing a priority. The Queensland Department of Education, for example, has developed a student learning and wellbeing framework (http://education.qld.gov.au/schools/healthy/docs/student-learning-wellbeing-framework.pdf) for implementation in schools across the state. Similarly, the New South Wales Department of Education has developed a wellbeing framework for schools (https://education.nsw.gov.au/student-wellbeing/whole-school-approach/wellbeing-framework-for-schools), which includes a self-assessment tool to assist schools to understand wellbeing, to self-assess their current wellbeing approaches and to make informed judgements and decisions about future approaches.

In the YAEL Model, student wellbeing is represented as one of the three overarching dimensions because of the crucial role it plays in the engagement of young adolescents. It can be characterised in numerous ways; for our purposes, we subscribe to the definition provided by the Department of Education, Employment and Workplace Relations (2008):

> Student wellbeing is strongly linked to learning. A student’s level of wellbeing is indicated by satisfaction with life at school, engagement with learning and social-emotional behaviour. It is enhanced when evidence-informed practices are adopted by schools in partnership with families and community. Optimal student wellbeing is a sustainable state characterised by predominantly positive feelings and attitude, positive relationships at school, resilience, self-optimisation and a high level of satisfaction with learning experiences. (p. 9)
Linked to student wellbeing is a sense of belonging at school (SOBAS), which (as discussed in other chapters) has emerged as a focal area for practitioners and researchers in recent years.

**Teaching, teachers and leaders**

The impact of teaching, teachers and leaders on levels of student engagement and achievement in schools has been demonstrated to the point that it has become almost self-evident. As shown above in Figure 0.3, **teaching, teachers and leaders** constitutes one of the overarching dimensions in Layer 1 of the YAEL Model, with Layers 2 and 3 including approaches and strategies conducive to **high-quality teaching** and **best practice** teachers and leaders. Although each plays different roles in student engagement, teaching, teachers and leaders form a logical grouping, as evident in the findings of the SEC study specifically and across the literature more broadly.

In their United States (US) study, Bridgeland, Dilulio and Morison (2006) came up with a number of suggestions for what might help, depending on context and student need, to stem high levels of high-school “dropout.” According to these authors, schools should work towards:
• improving teaching and curricula to make school more relevant and engaging;

• enhancing the connection between school and work;

• improving instruction, and access to supports, for struggling students;

• building a school climate that fosters academics;

• ensuring that students have a strong relationship with at least one adult in the school; and

• improving the communication between parents and school. (Bridgeland et al., 2006, pp. v–vi)

Similarly, the Australian ACER report mentioned above includes quality teaching and leadership among six guiding principles for effective junior high schooling.

The provision of engagement approaches and strategies through effective teaching, teachers and leaders has been widely advocated, prompting many experts to call for school reform. Americans Rumberger (2011) and Theobald (2009) and Australians Mills and McGregor (2010) are of this number, arguing that approaches to education, as currently constructed, do not satisfactorily match the needs of at-risk students and thus contribute to their disengagement.

In the SEC study, there was an acknowledgement across the stakeholder groups of the importance of tailoring teaching to the needs and interests of
young adolescents, as exemplified in these comments by a high school principal:

… it needs to be more student centred, typically less talk type thing and more about getting the students doing the work and engaging in that particular passion or interest that they have and try to do their best. More time on task is what I’d say but I’d say that for all education everywhere; that’s primarily what we need to be looking at. (High School Principal interview participant)

During young adolescence, students increasingly seek more autonomy to explore their worlds and interests. Student participants in the SEC study were articulate in their desire to do that, but stated that they often feel they have no control over the manner and content of their learning:

You don’t really get a choice over what you learn. … I know that everything that we learn is important, it’s just some teachers aren’t good at teaching. I’ve had teachers which I’ve been [with] for years and I haven’t learnt much… I feel like teachers treat you one of two ways, they either treat you like kids or they treat you like adults because being treated like a teenager is kind of a mix in-between and it’s more difficult to treat someone like a teenager. Since some teenagers are harder to deal with you have to compensate for them. I’ve had teachers that just treat every single person like a Year 3 and I’ve had teachers that just treat everyone like a uni kid. I think that you’ve got to find the balance in there to get the kids to learn something. (High school student interview participant)
By contrast, we also heard from young adolescents in schools, including one school in particular where project-based learning is a featured pathway, who are engaged and focused on their personal projects.

The importance of having the right leader/s in the right school working collaboratively with a strong and capable staff, which was underscored by many in the study, aligns with commonly-held understandings about school leadership, such as those articulated by Shaddock, Packer and Roy (2015): “School leaders play a crucial role in establishing and maintaining good relationships, shaping school culture, developing the attitudes actions of staff, and influencing their colleagues’ interactions with students and families and colleagues” (p. 15).

The SEC study thus served to confirm commonly-found themes in the literature about teaching, teachers and leaders, as well as about the other over-arching dimensions of the YAEL Model (school structure and school community and student wellbeing). In Chapter 4, we turn to a closer examination of these themes in describing Layer 2: sub-dimensions of the Model.

Chapter summary

This chapter has provided key understandings about modelling a continuum of support for young adolescent learners. Specifically, it has:

- described and justified the methodological approach used to develop the YAEL Model, which drew from the international literature on student
engagement and retention, as well as the findings from an empirical study into student engagement conducted across a large Australian educational jurisdiction;

- discussed key themes related to young adolescent learners’ engagement and achievement in 21st century schooling contexts across the globe;

- introduced the multi-dimensional YAEL Model and elucidated its significance as a whole-school approach to student engagement;

- demonstrated how the Model is appropriate to the needs of current-day young adolescents across a broad range of schooling contexts, and shown ways in which these needs can be met; and

- focused on different aspects and characteristics of the overarching dimensions of school structure and school community, student wellbeing, and teaching, teachers and leaders—which constitute Layer 1 of the Model.

**Research implications**

The Model is currently being implemented across the educational jurisdiction in which the SEC study was undertaken. A mixed-method evaluation of the Model will take place from the second year of the roll-out, providing anticipated insights into the outcomes of the implementation project, as well as elucidating levels of significance of the Model in enhancing student engagement and retention in the
SEC study context. Implications for further research include: studying the integration of the Model across different international contexts; adapting the Model to the needs of younger learners (e.g., primary school students), and older students, such as those in senior high school and beyond; and researching the importance of the Model to teacher professional learning in regards to student engagement and academic growth.

References


