Liberating Education
Research Project Report

February 2020

EDMUND RICE EDUCATION AUSTRALIA

EDMUND RICE EDUCATION
AUSTRALIA

EDMUND RICE EDUCATION AUSTRALIA

Contents

Foreword

The culminating aspiration of the EREA Strategic Directions 2020-24 is:

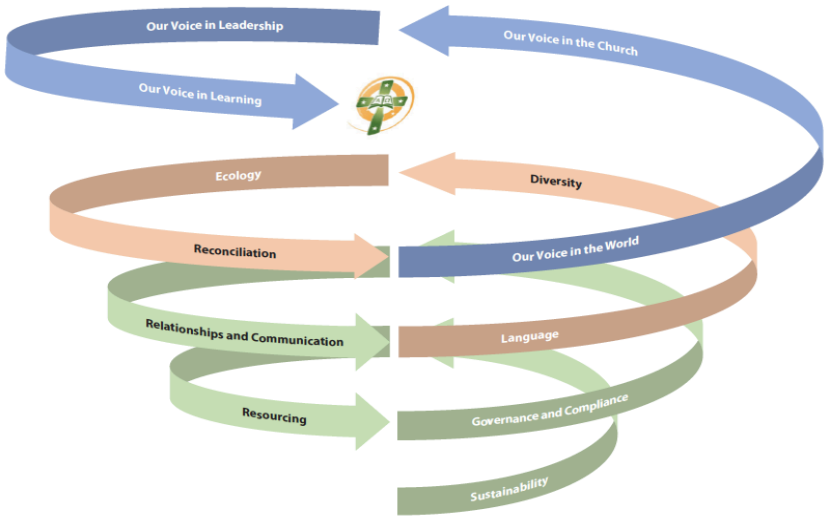
In building a better world for all, EREA will raise its collective voice in relation to the nature of learning, the student at the centre of liberating teaching and learning practice, ensuring wellbeing, safety and student voice underpin our education vision.

It was determined that the first step in pursuing this aspiration would be an investigation into the "nature" of holistic learning, teacher pedagogy and catering for individual difference in fifty-four diverse EREA schools across Australia. In the first research of its kind in the story of Christian Brothers/EREA schools, Dr Paul Shannon (Director of Learning, EREA) has provided a platform for all in our network of schools to engage in meaningful discussion and debate about which elements might constitute a liberating education in the Edmund Rice tradition.

This research values the voices of our students, our Principals, our Deputy Principals, our Identity Leaders and our Leaders of Learning. In the context of current research, these voices are at the centre of each finding and recommendation. The proposed frameworks and models which flow from the recommendations will challenge each of us.

Can we make the claim that there are defining characteristics of an Edmund Rice Education in Australia? We are called to engage with this question and further explore the alignment between the Liberating Education Touchstone and our active, explicit practice.

Ray Paxton
National Director Liberating Education
Edmund Rice Education Australia



Executive summary

In the last few decades, the context in which education systems find themselves has fundamentally altered. Within this larger context, EREA schools have a unique role to play. EREA schools have a mission-driven responsibility to create nurturing and inclusive environments where children and young people are respected, their voices are heard and they are safe and feel safe. The education of young people today requires teachers who know how they learn. It requires teachers who can build strong relationships with their students, and know how to respond to the needs of the individual. It also requires teachers who are prepared to encourage young people to develop character and knowledge. EREA schools have a rich educational heritage and dedicated staff. However, this heritage is continually challenged and often shaped within a society that promotes a narrow view of success. In order to be counter-cultural, a philosophy of student voice and inclusivity, the celebration and acceptance of a diverse range of talents, and using the language of growth and personal excellence must underpin our decision making and practice.

The Liberating Education Research Project attempted to gain insights into the prevailing cultural understandings of holistic learning, teacher pedagogy and individual differences. The research aimed to capture the current reality in EREA schools in relation to teaching and learning. EREA Principals were asked to reflect upon the above themes and participate in a taped conversation. Deputy Principals made presentations and approximately 300 students participated in focus group interviews which were taped, transcribed and coded. To complement this qualitative data, school leadership teams completed an online survey. We are now challenged to reflect on these insights and consider ways of engaging in this important aspect of the EREA mission. Finally, an EREA Learning Framework will be proposed: one which invites engagement and critique from the educational community and amplifies our "voice" in learning in the national debate.

Edmund Rice Education Australia faces challenges to remain faithful to its vision and mission.

EREA schools are being challenged to keep pace with young people who are immersed in an interconnected world that is fast paced and complex. These young people have access to information that is instantaneous, and shifts from one online stimulus to the next at a rapid rate. They live in an online 'virtual world', and seem to have the capacity to juggle multiple devices and multiple thoughts at one time. The society they are being prepared for is media saturated. They encounter their world through a filter of mobile and home-based games, laptops and tablets. Young people have a desire to communicate using technology and this has implications for the classroom. They are open to 'anywhere, anytime' learning. Technologically enhanced learning environments can have a significant and positive impact on student learning. They can provide young people with opportunities for innovation that go beyond the four walls of the classroom. However, finding the right balance between innovation, the future needs of young people and how they make meaning requires further investigation.

The role and purpose of EREA schools is to provide an educational experience that has a future focus on the unique needs of young people. The challenge is to cater for the diverse learning needs of each student, with a view to maximising learning outcomes. Australian research shows that achievement can be spread over five to eight year-levels within a single class. The teacher therefore has the complex task of catering for those with additional needs, or with high ability, and differentiating the curriculum. In addition, Principals are faced with the daunting prospect of how best to apply limited resources to young people with individual differences.

There is evidence to suggest that the impact of student engagement is reduced if learning opportunities are narrow and traditional. In addition, a narrow view of success is often over-emphasised by highlighting external testing or ranking tools such as PISA, NAPLAN and ATAR. This places undue pressure on young people, raises anxiety levels among learners, teachers and parents, all impacting on student wellbeing. The future needs articulated by young people point to the responsibility of EREA schools to produce well-rounded individuals. Are EREA schools agile enough to provide these innovative, collaborative and collegial environments?

Priority 1: Nurture *holistic learning* opportunities for young people to function well and contribute to the common good.

The search for meaning in a complex world can be a challenge for young people. The mission of EREA schools is to invite young people on a search for meaning that is experiential, interpersonal and intellectual. The everyday liberating actions that occur in the classroom provide an opportunity to experience gospel-centred engagement. As members of EREA schools the way we teach liberates. The data from this research project highlights the commitment to the social and emotional wellbeing of young people. The structures and pastoral care programs that are in place highlight the importance of young people being personally known, cared for and respected as individuals. The aim is to assist young people to function well so that they can be resilient, positive, balanced, self-regulated, able to constructively face challenges and mentor others. To achieve this emphasis on student wellbeing and the education of the whole person, EREA schools need to audit current practices, policies, procedures and structures and allocate resources to achieve these goals. Shifting the language and emphasis of what it means to be successful in an EREA school will assist in a broader understanding of achievement. Celebrating diverse achievements through publications, rituals, symbol and experience will go a long way to nurturing holistic learning opportunities and producing well-rounded individuals.

Priority 2: Explore contemporary *teacher pedagogy* strategies that co-construct meaning and prioritize a positive emotional climate.

Students interviewed for this research project appreciated loving, caring and supportive qualities in teachers. Lessons that were delivered under friendly and warm conditions were preferred. EREA leaders who were surveyed, endorsed the belief that teachers should make students feel safe and secure to enhance belonging and connectedness. Young people also appreciated flexible, passionate, organised and knowledgeable teachers who could provide a tailor-made learning program. When teachers give great lessons, they inspire young people to engage with their learning through interactive, creative, hands-on and real-world learning activities. Teachers need to be afforded the time to plan and cater for multiple modes of delivering information and curriculum knowledge that is both logical and experiential. In order to support the future needs of young people, this report recommends adopting an integrated approach, outlined in the Australian Curriculum to include cross-curriculum priorities and general capabilities. This would highlight the need to explicitly teach collaboration, problem-finding, problem-solving and critical analytical skills to young people. Permeating through this is the impact of digital technologies on student learning and the need for EREA schools to commit to ongoing professional learning that frees up time for teachers to work together.

Priority 3: Cater for *individual differences* by teaching for a variety of learners as a driver for positive change.

The most difficult task that teachers are asked to do is to differentiate the curriculum. Teachers need to know their students as people and learners in order to design learning tasks tailor-made to suit their individual needs. Diagnostic testing that is inclusive of verbal and non-verbal reasoning, general reasoning and wellbeing is essential data to place in the hands of teachers. This gives teachers the tools to develop stretch, build and consolidate tasks to cater for a range of abilities within the classroom. The survey data from this research project indicates that differentiation was strongly supported by the majority of EREA leaders. The challenge for EREA schools is to define what differentiation actually means and apply evidence-based practices to this complex area of school life. A philosophy of team teaching, which is inclusive of education support staff, can form the foundation for supporting the individual needs of young people and differentiating the curriculum. There was strong endorsement for continued professional learning on differentiated practices for all teachers, whose preservice training has not necessarily equipped them for this challenge.

Three priorities have been identified ...		
Nurture ***Holistic Learning*** opportunities for young people to function well and contribute to the common good	Explore contemporary ***Teacher Pedagogy*** strategies that co-construct meaning and prioritise a positive emotional climate	Cater for ***Individual Differences*** by teaching for a variety of learners as a driver for positive change
... and five areas have been identified to address them		
1. Identifying the uniqueness of an Edmund Rice Education in Australia.	• Describe the liberating actions that occur in the classroom every day that lead to an authentic spirituality. • Include non-intellective factors and an integrated curriculum to broaden the definition of success. • Provide young people with a tailor-made program and the attributes to thrive in an ever-changing world.	
2. Adopting student voice as a philosophy of teaching.	• Promote the importance of high quality relationships between teachers and young people. • Change the language of behavioural management policies and procedures to wellbeing support. • Design learning activities that are interactive and engage young people in their learning.	
3. Integrating a pedagogical framework into the everyday delivery of classroom activities.	• Create inspiring activities that engage young people in their learning. • Teach collaborative skills that enable young people to learn with others. • Develop creative, innovative and inventive skills for young people to transfer across future professions.	
4. Committing to a teacher manifesto to support student voice and learning.	• Ensure each young person is cared for and respected as a person and a learner. • Structure well planned lessons for typical and atypical learners in a warm and friendly environment. • Challenge young people to think independently and interdependently using a variety of techniques.	
5. Establishing research centres to support teacher professional learning.	• Establish research centres that support teachers with the complex demands of teaching. • Connect teachers with research that is informed by educational best practice. • Use data to generate teacher research, reflection and thinking that improves student learning.	

Findings

PEDAGOGY	
Finding 1 Young people demand access to myriad forms of content, multiple examples of interactive learning activities, and time to collaborate with others.	**Finding 2** Young people have a desire to communicate using technology.
Finding 3 Young people understand the need and value of digital technologies. They also understand the shortcomings.	**Finding 4** Teachers who adopt a learner-centred approach can enhance interpersonal skills, teamwork, relationship management and consolidation of curriculum knowledge.
Finding 5 Offering multiple modes of learning such as visual, auditory and kinesthetic is required to fully engage young people.	**Finding 6** Schools should have a comprehensive Wellbeing Support Policy based upon the principles of social and emotional learning and common ground.
Finding 7 Learning for young people should be profoundly personalised, and sensitive to individual and group differences in terms of background, prior knowledge, motivation and abilities.	**Finding 8** A school community that is conducive to positive student outcomes establishes an atmosphere of collaboration, collegiality and teamwork.
Finding 9 Learning is contextual and curriculum planning needs to cater for the individual circumstances of the school community.	**Finding 10** A focus on staff professional learning, by leadership teams in schools, establishes a culture of lifelong learning.
Finding 11 Young people will disengage quickly if they are not exposed to a variety of innovative, hands-on learning opportunities.	**Finding 12** Enabling a flexible team environment in the classroom allows the skills of collaboration, collegiality and negotiation to thrive.

HOLISTIC LEARNING

Finding 13
Sound interpersonal relationships are evident when teachers display, and have the opportunity to show, warmth towards young people and one another.

Finding 14
A personalised and individualised school program that offers a diverse range of subject choices and pathways can prepare young people for an unknown future.

Finding 15
Having varied learning opportunities for young people that are celebrated equally, enables them to feel safe and included.

Finding 16
Linking the formal curriculum with real-life, social-justice initiatives is transformational for young people.

Finding 17
EREA schools have a responsibility to produce well-rounded individuals.

Finding 18
While the performance of young people in the areas of literacy and numeracy against national benchmarks is publicised widely, the social and emotional wellbeing of students is sometimes neglected.

Finding 19
Safe, inclusive and warm school environments can provide young people with a sense of belonging and connectedness.

Finding 20
Rich learning opportunities occur when young people are able to choose their learning program from a varied curricular program that emphasises growth and personal excellence.

Finding 21
Young people appreciate a school that offers a variety of educational opportunities that cater for their passions and interests.

Finding 22
Adolescents may often mask differences in order to maintain their place with the 'in crowd' or avoid maltreatment from others.

INDIVIDUAL DIFFERENCES

Finding 23
In most cases, young people with additional needs should be included with students from their year level.

Finding 24
Differentiation should mostly be experienced by students in mainstream classes.

Finding 25
Meaningful student data needs to be accessed to inform teachers about the capacity of high-ability learners.

Finding 26
The resources required to meet the individual needs of students are stretched.

Recommendations

PEDAGOGY

Recommendation 1
Continue to implement comprehensive digital technology strategies to enable transformative teacher–student–parent interaction regarding student learning.

Recommendation 2
Explore interactive classroom techniques where exploring content occurs at home; and teamwork, conversation, seeking clarification and a focus on teaching collaboration skills occur in class.

Recommendation 3
Investigate the interrelationship between digital technologies, student wellbeing and how young people are making meaning in their lives.

Recommendation 4
Establish ways for teachers to interact with students regarding learning, particularly in senior school, in one-to-one or in small group situations.

Recommendation 5
Consider how EREA schools might implement programs that address the recent Gonski Report (2018), Priority 2: 'Equip every child to be a creative, connected and engaged learner in a rapidly changing world'.

Recommendation 6
Review and communicate comprehensive wellbeing support policies and procedures based upon the philosophy of social and emotional learning and common ground. Ensure these policies have a degree of flexibility to cater for individual circumstances, with the view to guiding young people to responsible choices.

Recommendation 7
Establish ways to provide teachers with comprehensive data on students, so they can implement an individual approach to student learning and achievement.

Recommendation 8
Promote student growth in awareness of themselves and others in social and group interactions, and develop their skill to engage in highly effective small group work.

Recommendation 9
Continue to review the state and national curriculum to ensure young people are equipped with the skills necessary for their successful transition into the workplace.

Recommendation 10
Create a continuously improving profession through the provision of high-quality professional learning for teachers that is appropriate to their career stage, developmental needs and the changes rapidly occurring in society.

Recommendation 11
Create opportunities for teachers to participate in high-quality professional learning that addresses a variety of innovative, hands-on, pedagogical approaches.

Recommendation 12
Enable ways for teachers to investigate, implement and receive feedback regarding emerging flexible pedagogies that may enliven, motivate and engage young people.

HOLISTIC LEARNING

Recommendation 13
Implement a house structure, with reduced student numbers, to ensure the pastoral needs of young people are met and relationships with teachers are positive.

Recommendation 14
Cater for the individual needs of students by providing pathways that are varied and will prepare young people for future job markets.

Recommendation 15
Ensure school policies and practices reflect safe and inclusive philosophies that embrace traditionally marginalised groups (such as same-sex attracted and gender questioning), visual and performing arts and cultural and religious diversity.

Recommendation 16
Continue to explore ways that integrate experiential, interpersonal and intellectual encounters that assist young people in their search for an authentic spirituality.

Recommendation 17
Teach with the intent to produce well-rounded young people, within classrooms and schools that promote high levels of spiritual and social connection, to help develop a sense of inclusivity and compassion for the poor and the planet, and outward-looking, responsible, global citizenship.

Recommendation 18
Adopt a whole-school approach to the pastoral care of young people. This includes pastoral support, counselling services, pastoral programs, the formal curriculum and parent/community involvement.

Recommendation 19
Continue to create various ways in which young people can be accepted, connected and celebrated within their school community.

Recommendation 20
Provide all students with varied curriculum opportunities and pathways to allow their individual gifts and talents to be nurtured and celebrated.

Recommendation 21
Implement a broad curriculum and personalised learning program that caters for the individual needs of young people.

Recommendation 22
Pursue development of culture, language and wellbeing philosophy that promote student growth in awareness of their own emotional experience and their capacity to articulate that.

INDIVIDUAL DIFFERENCES

Recommendation 23
Review existing policies, procedures and protocols surrounding support for young people who require learning enhancement.

Recommendation 24
Consider how EREA schools might address findings 4 and 5 from the recent Gonski Report (2018), which states: 'Teaching curriculum based on year or age levels rather than levels of progress leave some students behind and fails to extend others. Reporting against year-level achievement standards hides both progress and attainment for some students and does not amount to a diagnostic assessment of real learning needs...'

Recommendation 25
Review the way in which high-ability students are identified and select a model that responds to their needs.

Recommendation 26
Consider whether the objectives of learning support programs are realistic in terms of resourcing and how each component could improve the program.

List of tables

List of figures

List of Abbreviations

ACARA	Australian Curriculum and Assessment Authority
ACOLA	Australian Council of Learned Academies
AITSL	Australian Institute for Teaching and School Leadership
ATAR	Australian Tertiary Admission Rank
COAG	Council of Australian Governments
EPI	Educational Practices Inventory
EREA	Edmund Rice Education Australia
FSN	Flexible Schools Network
ICT	Information and communications technology
LEX	The Learning Exchange
LMS	Learning management system
NAPLAN	National Assessment Program Literacy and Numeracy
NCCD	Nationally Consistent Collection of Data
OECD	Organisation for Economic Co-operation and Development
PISA	Programme for International Student Assessment
RAP	Reconciliation Action Plan
STEM	Science, technology, engineering and mathematics
TAFE	Technical and further education
UNESCO	United Nations Educational, Scientific and Cultural Organization
VET	Vocational education and training
WBG	World Bank Group
WISC	Wechsler Intelligence Scale for Children

Acknowledgements

Thanks primarily to the EREA Board and Executive who turned their attention to enhancing support for the Touchstone of Liberating Education. The preliminary work of the Liberating Education Working Party sought to strengthen the intent and commitment to a broader learning agenda and look at ways of highlighting and celebrating the success of the EREA schools in teaching and learning across a diverse range of contexts.

Thanks to Ray Paxton, the National Director Liberating Education, who had the vision and commitment to drive this research project forward. His leadership of EREA Congress, School Renewals, the Strategic Directions 2020–2024 and the Teaching and Learning Conference has culminated in a framework that will announce the EREA voice in learning on a national stage.

Thanks to the Principals and young people who were interviewed for this research project. The taped conversations provided valuable insights into the lived experience of school life. Thanks to EREA Deputy Principals who made presentations at regional gatherings on the nature of learning. Thanks also to EREA Leaders of Learning who completed a survey on various themes relevant to teaching and learning.

Thanks also to the Liberating Education National Office team and the Liberating Education Reference Group who acted as sounding boards throughout the research project. Thanks to the research centre (T.Lab) of St Bernard's College Essendon, for providing the services of their director and professional psychometrician to create and analyse the survey data. This research project documented the nature of learning in EREA schools. Without the support of school communities, this project would not have been possible.

EDMUND RICE EDUCATION AUSTRALIA

Chapter 1 Introduction

1.1 Introduction

The focus of this research project is to strengthen the intent of Edmund Rice Education Australia (EREA) to broaden the learning agenda in their system of schools. As part of an exploration into the Touchstone of Liberating Education, EREA hopes to highlight and celebrate the success of its schools in teaching and learning across a diverse range of contexts. These issues were explored in the context of Catholic schools in the Edmund Rice tradition within Australia. EREA created the role of Director of Learning in anticipation that this research would announce the EREA voice on a national stage, help improve workplace practice and, consequently, improve educational outcomes for young people. This research project attempted to gain an insight into the prevailing cultural understandings of holistic learning, teacher pedagogy and individual differences. The globalised world of digital technology provided the broader context in which the research was conducted. The challenge for teachers is not only to connect with their students in the classroom but to prepare them for the future, for jobs that may not yet exist (The Foundation for Young Australians, 2018).

1.2 Adolescence

Adolescent young people are immersed in a reality that is interconnected and fast paced (Turkle, 2017). They are accustomed to a phenomenal rate of change and they can easily move across the space-time continuum (Harvey, 2016). Advances in technology have enabled them to be ubiquitous and omnipresent. Technology serves as a fundamental means of social integration (Felgenhauer & Gabler, 2017). Connected by multiple devices, the world of young people comprises networked societies, where growing up is a digital experience (Robertson & Montuoro, 2017). Flexibility and mobility are attributes of this society that enable instantaneous communication (Kneuer, 2016). This generation is being prepared for a media-saturated society and they use it to share self-generated content (Bauder, 2017). They encounter their world through an easily accessible suite of mobile and home-based games, laptops and tablets (Moore, Fowler & Watson, 2007).

The desire to communicate using technology has implications for how young people make meaning. Augé (2008) explains, 'what is new is not that the world lacks meaning, or has little meaning, or less than it used to have; it is that we seem to feel an explicit and intense daily need to give it meaning' (p. 24). This socially constructed reality is occurring instantaneously and without filters. Meaning is made in an online world that is sterile and removed from personal interaction (Robertson & Montuoro, 2017). The distancing from human contact makes it more difficult to regulate actions and interactions (Storey, 2014). Educators are challenged to connect with this generation and prepare them for futures-oriented lifestyles.

1.3 Futures-oriented lifestyles

Reflecting on changed societal interactions, Harvey (2016) highlights the need for 'cities to appear as an innovative, exciting, creative and safe places to live in or visit, to play and consume in' (p. 143). The same could be said for the way in which we engage with young people and their learning. Schools have the opportunity to lay the foundation for a transformative future. While the 'what' in education is often prescribed by the national curriculum, teachers have control over the 'how', with opportunities to create interest in what sometimes seems like an uninspiring list of 'stuff' to study (Rawding, 2014). Curiosity, excitement, anticipation and exhilaration engender in students a lifelong love of learning. Assuming these dispositions can be acquired, the next challenge is how these learners become responsible decision-makers of the future.

Banks (2017) argues that 'transformative citizens take action to implement and promote policies, actions, and changes that are consistent with values such as human rights, social justice and equality' (p. 367). Schools that prioritise spiritual, social and emotional intelligence enable students to empathise and work together to solve problems. Education systems are challenged to produce graduates who are committed citizens of the world. Patience, understanding, humility and compassion are some of the qualities that highlight the interconnections, from a holistic perspective, that underpin thought (Rawding, 2014). Hence, if national and local programs are to be implemented optimally, educators must be aware of the holistic nature of what it means to be educated. Promotion of the ideals of innovation, good citizenship and collaboration gives hope to future generations. Central to this is education that develops selflessness and attention to the needs of others, to challenge the current focus on individualism.

1.4 Societal individualism versus cooperation

The growing individualism in society has dissolved previously held beliefs and social, cultural and political practices – including a decline in tradition and custom (Elliott, 2015). Technology has fractured the manner in which traditional values, principles and beliefs are passed on. Digital culture is created in a space where new norms, practices and values emerge (Wenzlhuemer, 2017). Often played out in the form of remote actors from distant places, within the privacy of the bedroom, online connectivity appears to be the lifeline of young people (Sterly, 2017). In this environment, individualism contributes to young people being drawn away from family and friends (Elliott, 2015). Such behavior raises questions about how to best prepare them for the world. This is a challenge for the teaching profession, which is responsible for exposing young people to experiences that develop character, build knowledge and cultivate a willingness to serve others. A growing body of literature recognises the importance of innovative knowledge-sharing and collaboration (Bentley & Butler, 2017). Schools can play a pivotal role in achieving these goals by educating the whole person and producing graduates who develop an active and genuine concern for others. Tolerance and inclusivity are examples of the values required by young people to participate in an environment of collaboration and cooperation (Norden, 2015).

Inclusivity may best be nourished by human interaction and the relationships between individuals (Norden, 2015). Schools seem to be in a position to offer a range of opportunities for young people to interact using digital technologies. When these experiences are positive a sense of belonging overflows from being part of a group. Consequently, group membership can act as a type of umbrella of solidarity as members relate to one another and create a sense of community (Jenkins, 2014). Young people who are open to participating in various groups know each other intimately and often

develop healthy relationships with adults in the process. Team membership is in direct contrast to the new individualism that is marked by a relentless emphasis on self-reinvention (Elliott, 2015). An emphasis on self is in conflict with what flows on from team membership and teamwork, where people are willing to help each other. A way in which young people learn to make good judgements is by working with others. Bentley & Butler (2017) support the belief that learners should have the opportunity to communicate effectively and work collaboratively. This includes making decisions as a team, negotiating and resolving conflict situations and developing leadership skills.

A young person encounters worthwhile activities, many of which include those that have a genuine sense of teamwork. The challenge for education is to provide a broad curriculum that encompasses the whole person (Caldwell & Harris, 2008). Taking a holistic approach expands the mind beyond an individual worldview, and provides the essential underpinning for thought (Rawding, 2014). In the current world of capitalism, assisting young people to appreciate that they belong to something larger than the self can lead to love and respect for people and institutions, including the environment and sustainability (Harvey, 2017). Youth may become real beacons of hope in their communities when they demonstrate active and genuine concern for others. Many of the themes permeating Harvey's (2017) research concern the need for young people to work together in a collaborative and collegial way. As Banks argues (2017) there is need for a delicate balance of unity and diversity as essential capabilities for future [democracies] 'democratic nations'. Learning about self, and feeling encouraged to be reflective about relationships and connections with place, remain important elements of personal development. At the heart of the change process is the role of schooling.

1.5 The global education context

Education systems belong to something larger than their local reality. A number of global organisations have an influence on education policy and direction. The United Nations Educational, Scientific and Cultural Organisation (UNESCO) outlines that a cornerstone for all schools is to 'promote education as a fundamental human right' (2014, p. 20). The Incheon declaration, adopted by the World Education Forum in 2015, affirmed 'inclusive and equitable quality education and lifelong learning for all' and endorsed 'flexible learning pathways which includes access to quality technical and vocational education training and higher education research' (UNESCO, 2015, p. 8). The World Bank Group (WBG) has advocated strongly for investment in education, claiming that 'improved education and skills training can facilitate the reallocation of labour into the most productive sectors, boosting productivity and long-term growth' (WBG, 2016, p. 41). The Programme for International Student Assessment (PISA) is beginning to have an impact on education policy around the world. An analysis by Breakspear (2012) suggested that PISA 'plays an important function as nations seek to evaluate and improve system performance in response to the demands of the global knowledge economy' (p. 12).

In the twentieth century, and continuing into the twenty-first century, the Organisation for Economic Co-operation and Development (OECD) has played a pivotal role in encouraging cooperation between like-minded international countries. It seeks answers to common problems and identifies good practices. Regarding education, the OECD aims to encourage 'inclusive and equitable quality education and promote lifelong opportunities for all' (Organisation for Economic Co-operation and Development, 2016, p. 13). Evidence suggests that collegiality, teamwork, identification of problems and discussion and analysis of ways in which they may be solved are fundamental to the skills required for the modern learner (Reichert, Hawley & Tyre, 2010). To achieve collegiality and teamwork, the OECD promotes a learner-centred focus for all activities (2016). Thus, the role of teachers is to produce

graduates who are independent learners who can also function effectively in a team environment and use digital technologies effectively (Blackmore et al., 2010). Teachers can play a pivotal role in leading experiences for learners that are 'profoundly personalised and sensitive to individual and group differences in terms of background, prior knowledge and abilities' (Blackmore et al., 2010, p. 10). This global reality has implications for education policy makers at the national level.

1.6 The Australian education context

In Australia, the recent Gonski Report (2018) prioritises an increased emphasis on teaching general capabilities that provide young people with the skills to make a positive contribution to society: 'A strong and sustainable schooling system that ensures that all children receive an excellent education matters for Australia's future' (Australian Government, 2016, p. 1). The Australian Government believes investing in education is the key to economic prosperity. To build upon school success, the Australian Government focuses on 'quality teaching, school leadership, engaging with parents and strengthening the curriculum and funding' (Australian Government, 2016). The introduction of the STEM (science, technology, engineering and mathematics) domain is an innovation that has become a major focus in curriculum planning and development. The Australian Government has 'mandated compulsory mathematics and science subjects that will contribute to a graduate's Australian Tertiary Admission Rank (ATAR) in their final year of schooling' (Australian Government, 2016, p. 9). Innovation, collaboration and collegiality are considered to be the core ingredients to cater for the future needs of young people.

One of the challenges facing the Australian education system, according to the Australian Council of Learned Academies (ACOLA), is to develop an evidence-based approach to measuring educational outcomes. Many of the themes permeating ACOLA'S findings concern the need for young people to work together in a collaborative and collegial way. A key element to achieving success, according to ACOLA, is to improve the present and future wellbeing for all Australians. The council argues for 'measures that consider qualitative data including subjective wellbeing, community belonging, relationships, life satisfaction and happiness' (ACOLA, 2013, p. 8). ACOLA's (2013) research has shown that tolerance, caring for others and using digital technologies appropriately must be considered essential capabilities to achieve the future that Australians want. Lastly, ACOLA advocates multiple methods of collecting data that will inform public policy and provide evidence for how Australia can become a knowledge nation.

Australia has responded to global developments through the following initiatives: STEM ; a focus on Asia; and an emphasis on information and communications technology (ICT). These initiatives provide a framework for an integrated approach to pedagogy and attempt to break down the barriers of subject disciplines that often work in silos, particularly in secondary schools. In December 2015, the Council of Australian Governments (COAG) Education Council outlined its national STEM school education strategy. The strategy, which was endorsed by parliamentary ministers from each of the Australian states, highlights the need for 'skills in cross-disciplinary, critical and creative thinking, problem solving and digital technologies' (Education Council, 2015, p. 3). Centred on the decline in performance of Australian students compared with their international equivalents, the paper also highlights the potential need for an increase in employment opportunities for those who have acquired STEM-related skills and knowledge. Achieving a high level of student engagement with STEM will require support from parents, the broader community, industry and the tertiary education sector.

The Australian Curriculum has long endorsed the need for strong ties with Asia and encouraged young people to communicate with people from this region. This includes the opportunity for young people to study a variety of Asian languages from primary to secondary school. The Australian Curriculum and Assessment Authority (ACARA) has developed an ICT strategy that includes how young people communicate and make meaning, and how they develop an understanding of hardware, software and systems. This skill-related approach is the focus for the young people of Australia as they graduate from schools and shape the nation for future generations.

1.7 The Edmund Rice Education Australia context

While the challenges identified by ACOLA are significant in both private and public sectors of education, this report focuses on EREA schools within the Catholic Education Sector. It was anticipated that the research would help improve workplace practice at EREA schools and, consequently, enhance student engagement. Catholic schools were established in Australia essentially to provide a religious dimension that was deemed to be missing in the secular education offered by the various states and territories. The Catholic Education network focuses on the development of the whole person with the hope that graduates will contribute to the common good. In contributing to the common good, Catholic schools educate 20 per cent of all students from states and territories and serve families from across the socio-economic spectrum who are highly attentive to the needs of their community. The EREA network of schools, the focus of this research project, is part of this system.

'Edmund Rice Education Australia (EREA) was the gift of the Christian Brothers to Catholic Education in the Australian Catholic Church. Following years of discernment, deliberation and planning, EREA was born on 1st October 2007 and the Christian Brothers handed over the management of their schools throughout Australia to this new entity' (White, 2018, p.8). EREA, as part of the mission of the Catholic Church, is charged with responsibility for the governance of more than 50 schools throughout Australia, serving almost 40,000 students. Each school has a separate character and history but all draw from the charism of Edmund Rice and from the gospel. EREA has been joined by a number of associate schools and is reaching out to the world through Edmund Rice Education Beyond Borders. The third Charter for Catholic schools in the Edmund Rice tradition assists schools to offer a *Liberating Education*, based on a *Gospel Spirituality*, within an *Inclusive Community* committed to *Justice and Solidarity*. The Charter uses these four Touchstones to describe the culture of a Catholic school in the Edmund Rice tradition which is striving for authenticity. Guided by the Touchstones, schools share in the prophetic mission of the Catholic Church to continue the work of Jesus, bring good news to the poor and be led by the Holy Spirit into the future.

1.8 Conceptual framework and research question

The aim of this research was to investigate the interrelationships between holistic learning, teacher pedagogy and individual differences. The context was workplace practice within the network of EREA schools located in Australia. Capturing the nature of learning was the primary goal. The central focus was to identify the interrelationships and to capture the characteristics of the conceptual framework (Figure 1.1). There was one major research question: What is the nature of learning regarding the interrelationships between holistic learning, teacher pedagogy and individual differences?

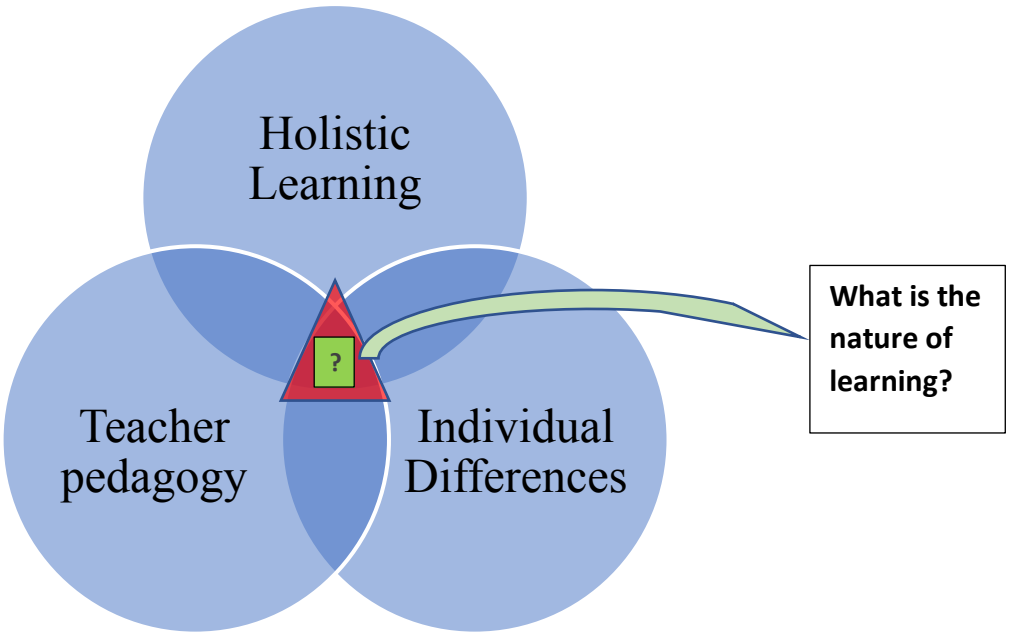


Figure 1.1 **Conceptual framework: The interrelationship between holistic learning, teacher pedagogy and individual differences**

1.9 Structure of the report

This report is divided into four chapters. Chapter 1 presents the issues and provides the overall structure. Chapter 2 outlines the methodology adopted to investigate prevailing cultural understandings about the need to address the nature of learning in EREA schools. The research aimed to reveal the lived experience of teachers and students. One-to-one interviews, conducted by the Director of Learning at EREA, aimed to ascertain Principals' views on the themes of holistic learning, teacher pedagogy and individual differences. Deputy Principal presentations were used to deepen the reflections on the way students were engaged with their teachers in the classroom. The Director of Learning at EREA led student focus group interviews, which were taped and then transcribed by a professional company. EREA College Leadership Teams completed the Educational Practices Inventory, produced by a professional psychometrician (see Appendix A, p. 144).

Chapter 3 presents the findings and recommendations of the research into the participants' perceptions of holistic learning, teacher pedagogy and individual differences. This chapter examines the extensive literature surrounding the complex nature of classroom dynamics. The findings are wide-ranging and have implications for the way in which EREA schools will prioritise their learning programs in the future. This chapter discusses the context in which learning evolves, the effectiveness of teacher pedagogy, and the way students engage in the classroom. The chapter also discusses the extent to which EREA schools are meeting the needs of the community in terms of providing an effective environment to successfully engage young people. The results, findings and recommendations are analysed and discussed in terms of how they shed light on the key concepts presented in the literature. The literature raises questions around how schools enable pedagogical change to occur. Which learning theories are best suited to young people? What were the Principals' and students' perceptions of holistic learning and individual differences? What are the elements that

make teacher pedagogy effective? The results, discussion and conclusion of this chapter are examined, and the participants' perceptions are presented.

Chapter 4 presents the conclusions of the study and a key recommendation related to the interrelationships between holistic learning, teacher pedagogy and individual differences. It outlines the level of student voice and the impact of teacher pedagogy. A pedagogical framework is presented, and the importance of teacher pedagogy supported by ongoing professional learning is argued. The existence of links between learning activities and an Edmund Rice education in Australia is proposed.

1.10 Summary

This chapter presented the focus of this research and the context in which it was conducted. It has outlined where EREA is placed in the system of Catholic Education and the nature of the research to be investigated. Some literature was discussed to demonstrate how this project may add to the existing bank of knowledge. The research question, the research design and the project structure have been summarised. The roadmap to this investigation is provided below.

How do EREA schools respond to the challenge of how to educate young people in a digitally disrupted environment?

a) digital devices

b) teaching and learning practices

c) personal development.

Do EREA schools have a model that can successfully respond to this challenge?

The next chapter outlines the research methodology that was adopted in order to investigate the research question related to holistic learning, teacher pedagogy and individual differences.

Chapter 2 Methodology

2.1 Introduction

The conceptual framework identified three major variables to consider in this investigation: holistic learning, teacher pedagogy and individual differences (see Figure 1.1). The intersection of these variables was of key interest. Hence, this research aimed to consider the complexities of teacher and student interactions, the disruption of digital technologies, and the professional learning and readiness of teachers to participate. In one-to-one interviews, Principals were asked to articulate their understanding of holistic learning, teacher pedagogy and individual differences. They were also asked about the impact of digital technologies in relation to learning and how young people make meaning in their lives, online. Deputy Principals were asked to make a presentation about learning, and student focus group interviews were conducted to capture the student voice. To complement this qualitative data, EREA College Leadership Teams completed the Educational Practices Inventory survey (Appendix A, p.144). Comparisons could then be made of the themes that emerged from this data. The assumption was that the professional learning of teachers is critical to contemporary pedagogy and understanding of the disruption of digital technologies to implement a personalised approach to student learning. The major research question posed was: What is the nature of learning regarding the interrelationships between holistic learning, teacher pedagogy and individual differences?

2.2 Research project approach

In this rapidly changing globalised environment the needs of the current generation of students are constantly changing. The complex world in which young people live today is cause to reflect on traditional teaching approaches and the disruption by digital technologies (Mahat, Grocott & Imms, 2017). In order to investigate this complexity, the research design adopted a pragmatic, mixed methods approach to gain insights into the reality of classrooms within EREA schools. This design was considered the most appropriate for gaining the perceptions of both students and leaders in EREA schools. It is acknowledged that each participant involved in the study perceives reality differently in that their perceptions are influenced by factors such as personality, background, age and experience. This basic assumption situates this study in the pragmatic paradigm. Gray (2009) explains that 'people interpret the meaning of objects and actions and then act upon those interpretations' (p. 22). The role of the researcher in terms of the pragmatic paradigm is to become submerged in the data. In this instance the researcher conducted the interviews, and read and coded the typed transcriptions. This gave the researcher the advantage of being immersed in the data.

2.3 Research methodology

In describing the theoretical perspective of pragmatism, Onwuegbuzie and Leech (2005) advocate 'integrating methods within a single study to utilise the strengths of both qualitative and quantitative

techniques in order to better understand a social phenomena' (p. 379). The benefit of this approach is that it is based on the principle that 'allows the researcher to be free of mental and practical constraints imposed by the forced choice dichotomy between post positivism and constructivism' (Feilzer, 2010, p. 8). Moreover, 'meaning results from the interpretation of data, whether represented by numbers or by words' (Onwuegbuzie & Leech, 2005, p. 379). Mackenzie and Knipe (2006) claim:

> The pragmatic paradigm provides an opportunity for multiple methods, different worldviews, and different assumptions, as well as different forms of data collection and analysis in the mixed methods study (p.5).

The decision to use the perspective of pragmatism constitutes an attempt to understand the many complex realities of the participants in a way that complements positivist objectivity and constructivist-interpretive subjectivity. Therefore, pragmatism was adopted as the pre-eminent theoretical perspective to underpin the mixed methods design adopted for this research project.

2.4 Research design

Following a review of possible methodologies, a decision was taken to adopt a mixed methods approach. Research does not have to be constrained to either a qualitative or quantitative perspective as they do not have to compete with each other. According to Mertens (2009), 'the use of mixed methods can provide breadth, depth, and numerical data that can give a more complete picture of the phenomena under study' (p. 229). This approach is particularly useful in studying human behaviour in the educational setting (Cohen, Manion & Morrison, 2011). It had the potential to illuminate the multiple perspectives of the participants as they immersed themselves in the data. Mertens (2009) states that the 'mixed methods approach seeks common understanding through collection of data from multiple sources' (p. 294). Multiple sources of data enable several perspectives to be applied to interpreting the results.

The mixed methods design aligned with the pragmatic paradigm. A mixed methods approach was adopted to gain a detailed understanding of the phenomenon and add richness to the study. Gray (2009) explains that the 'focus is to understand the ways in which people act and account for their actions' (p. 167). The aim was to allow trends to emerge from the data by categorising the comments made by participants into categories or themes. Realities could be teased out without anyone imposing his or her values on the findings. The students themselves were important participants, and protecting them from potentially intrusive observations and interviews, and maintaining ethical standards, were paramount considerations.

There is ongoing debate about the use of mixed methods in social research. For example, Cohen et al. (2013) warn that it is 'too early to judge whether the mixed methods approach is an effective way of interpreting data' (p. 26). They argue that mixed methods has not stood the test of time and has been criticised by researchers. Nonetheless, Gray (2009) claims that 'mixed methods allow researchers to generalize from a sample population to gain a richer and deeper understanding of what is being researched within the context of that research' (p. 204). A mixed methods approach was chosen to allow deeper insight into the lived experience of the participants, Principals, Deputy Principals/Heads of Campus, Leaders of Learning and students. This research collected data using a mixed methods approach, described in more detail in the next section.

2.4.1 Outline of research design

To gather the necessary data, the following methods were applied in this research project:

- **Surveys**: The Educational Practices Inventory survey, developed by a professional psychometrician, was administered during the project lifecycle to gather de-identified data about a range of contemporary issues in education (see Appendix A, p. 146). (*Quantitative*)
- **One-to-one Principal interviews**: Principals had the opportunity to respond to the themes of holistic learning, teacher pedagogy and individual differences. Conversations were taped. (*Qualitative*)
- **Deputy Principal/Head of Campus presentations**: Presentations were made during normal regional Deputy Principal network meetings about what learning might look like in an ideal world. (*Qualitative*)
- **Student focus group interviews**: The Director of Learning at EREA led focus group interviews with randomly selected students during the 12-month data collection period. (*Qualitative*)

These methods were employed to flesh out the lived experience of the participants and are discussed in more detail in the following sub-sections.

2.4.2 Surveys

The Educational Practices Inventory (EPI) is a series of measures that aim to capture participants' perspectives and attitudes about a range of contemporary issues in education. The survey was administered to Leadership Teams at EREA schools across seven different dimensions. The seven dimensions were: caregiving expectations, whole student development, technology in education, classroom management, differentiation, spirituality and vocational pathways. Responses related to education in general, as opposed to an individual school. Participants were asked to spend about 30 seconds on each item and if they were not sure about an item, could return to it later. Participants responded anonymously to a series of statements by indicating their level of agreement on a 5-point Likert scale. Each question required choosing one of five alternatives: *strongly agree*, *agree*, *neutral, disagree*, *strongly disagree* (see Appendix A, p. 146). The results for these dimensions are presented in Chapter 3. As part of this research project, the anonymous data from the Educational Practices Inventory were subjected to methodological analysis by a professional psychometrician to determine the survey's suitability for describing various perspectives of contemporary issues in education. The number of participants involved in this research project at EREA ensured that anonymity could be maintained and that reliable data could be gathered.

2.4.3 Principal interviews

Principals were asked to reflect upon the themes of holistic learning, teacher pedagogy and individual differences and participate in a taped one-to-one interview with the Director of Learning from EREA. The key question was: What is the nature of learning, at an EREA school, and what is at the heart of our intent as liberating educators? The use of a semi-structured research approach allowed the researcher to probe for more detailed responses when there was a need to clarify what had been said. Semi-structured interviews are often used in qualitative analysis where the interviewer has a list of issues or questions to be covered but may not deal with all of them. Additional questions may be asked, including some which were not anticipated at the start of the interview, as new issues arise.

The Director of Learning from EREA was the interviewer in this case and internal to the organisation. The research project was of interest to the Principals as there was potential pay-off for the future direction of the school they were leading. A total of 40 Principals participated in the one-to-one interviews. The interview process was a way to build rapport and trust; as such the interviews were conducted in a professional, relaxed and friendly manner. The use of a tape recorder was essential to allow the interviewer to concentrate on the process of listening, interpreting and refocusing the interview. The taped interviews were then sent to a professional company to be transcribed and uploaded into QSR International's NVivo 10.1.0 and coded. Principals were supplied with a list of key themes and sub-themes prior to the interview and these are listed below.

1. Holistic learning
    a) Spiritual
    b) Social
    c) Emotional
    d) Academic
    e) Physical
    f) Artistic
    g) Cultural
2. Pedagogy
    a) Curriculum knowledge
    b) Behaviour management
    c) Interpersonal relationships with students
    d) Digital technologies
    e) Emotional climate of the classroom
    f) 21st century/Post-millenial/iGeneration/Generation Z student
    g) Student voice
    h) Student engagement
    i) Learning spaces
    j) Personalised learning
3. Individual differences
    a) Individual learning plans for students with identified learning needs. Gathering data on how, and how often, teachers modify their classrooms, resources and assessment to specifically address those needs.
    b) Existing structures to support learning needs (withdrawal from classrooms for work in literacy and numeracy).
    c) Programs or opportunities for extension and enrichment for students identified as gifted and talented, or looking at what specific teachers do to extend students in classes.

d) Opportunities for off-campus study e.g. through distance education and perhaps supporting the study in school for testing etc. if the student needs to complete, say, a listening exam for a language in the school.

e) Any system of streaming classes and the structures that are used to support that.

f) Systems in place to offer support for non-ATAR students in terms of a pathway.

g) Support mechanisms for students studying for ATAR (study groups, online tutorials, face-to-face tutorials, exam prep etc.).

h) Intervention programs for students identified as requiring support after NAPLAN data review.

i) Use of ACARA's Literacy and Numeracy Progressions for students who need specified support and are not achieving the minimum national standard.

j) All the above pointing to pedagogy (What are the teachers doing in terms of their preparation for these needs? Do they have access to the data and are they using it in meaningful ways?), systems and structures and support.

Principals were also asked two specific questions about digital technologies that related to learning and how young people make meaning in their lives in this space. This may have the potential to skew the data. There was also one final question: If this was a radio interview and you had 25 seconds to sum up, what would you say?

As part of the member-checking component of the research Principals were asked to read and provide feedback on an interim report written by the Director of Learning at EREA. The process for producing the report was presented at a regional Principals meeting. Principals were divided into teams to focus specifically on some of the findings and recommendations. After an initial presentation there was an opportunity to work in a small team for about 20 minutes. After that, a team member was asked to provide feedback to the whole group on their insights into the findings and recommendations of their particular area of focus. The feedback from each team was no longer than five minutes. The aim was that, once the data had been collected from all EREA schools, an overarching report would be made available. This report would start to shape the direction of the EREA learning agenda. It would also be a catalyst for a learning framework that will announce the voice of EREA on a national stage.

2.4.4 Deputy Principal/Head of Campus presentations

The Deputy Principal/Head of Campus presentations were taped as a means of accurately capturing and recording perceptions and insights relating to student learning. The taped presentations aimed to seek opinions from Deputy Principals/Heads of Campus who were often leading the learning programs in their schools. Deputy Principals/Heads of Campus were asked to respond to the following question: In an ideal world what does learning look like? They were then asked to take 15 minutes to draw their understanding of learning in an ideal world and then talk for two minutes to the rest of the group. The presentations were made at one of the scheduled regional meetings during the 12-month data collection period. It was hoped that the Deputy Principals/Heads of Campus would feel comfortable providing open and honest responses to this question. For this to occur, taped presentations were conducted in an atmosphere of collaboration and collegiality, where rapport and trust were established among the participants. Cohen et al. (2013) suggests that accurate data may be obtained if the respondent is sincere and well-motivated when rapport has been established (p. 422).

2.4.5 Student focus group interviews

The purpose of the student focus group interviews was to elicit the students' perceptions of holistic learning, teacher pedagogy and individual differences. Students were selected, randomly, mostly from Year 7 to Year 12. The Director of Learning at EREA conducted the student focus group interviews, each with approximately six to eight participants. A total of 246 students from 54 EREA schools participated in the focus group interviews. The interviews were conducted over the 12-month data collection period. Students were asked a range of questions: What do you like about your school? What qualities do you like best in teachers? What is your understanding of holistic learning (explain holistic learning)? What does the teacher do when they give a great lesson? How does your school cater for individual differences between students? How do you like/prefer to learn? How does technology impact on your learning? Were there any other issues you would like to raise? It was hoped that the students would feel comfortable providing open and honest responses to these prompts. To encourage this, interviews were conducted in an atmosphere of collaboration and collegiality, where rapport and trust was established between the Director of Learning and the students.

The collaborative nature of the student focus group interviews offered participants the opportunity to engage in conversations. Thus, themes, topics and questions that were specified in advance were discussed. These were consistent for each of the focus groups; however, there was openness to a range of responses. The purpose was for students to experience an engaging conversation that would allow them the freedom to express their feelings in a spontaneous manner. Therefore, the interviewer adopted a less obvious, unobtrusive style to gather the most open and authentic answers. It was essential to seek the lived experience of students around the themes of holistic learning, teacher pedagogy and individual differences. An approach where students were gently facilitated in conversations was the aim of the focus group sessions. This is where themes or topics were discussed and probed. This approach aligned with the constructivist, subjective domain. The researcher aimed to flesh out the responses in order to gain valuable insights from the students. This was deemed an important component of ensuring the researcher was immersed in the data.

2.5 Data analysis and synthesis

In this research project, the mixed methods approach aimed to uncover a relationship between the phenomenon of the complexity of the classroom and the context in which the phenomenon was occurring. The context in this case was Catholic schools in the Edmund Rice tradition in Australia. Importantly, the data analysis involved exploring the conceptual framework and the research question: What is the nature of learning regarding the interrelationship between holistic learning, teacher pedagogy and individual differences? The aim was to examine information and describe participants' perceptions of learning. As the data were being collected, there was an opportunity to examine and compare links and patterns within categories. Therefore, with the wide and varied data collection methods, there was a chance to compare connecting threads and patterns across categories. As such, the data could then be compared and contrasted with themes from the literature. These layers enabled a synthesising process to occur.

2.5.1 Quantitative analysis

The EPI survey aimed to produce results to complement the qualitative research methodology. The aim was to determine whether there was any statistical significance in the results. It was imperative

to analyse the dependent variables and apply complex mathematical formulas to compensate for missing data. Therefore the analyses were outsourced to a professional psychometrician. The methodology and mathematical formulae applied to the statistical analysis are reported in Appendix B (p. 154). The results of this process are reported at the beginning of Chapter 3. Using SPSS (Cohen, Manion & Morrison, 2011) sophisticated MANOVA data analysis was applied by a professional psychometrician (see Appendix B, p. 154). The dimensions from the EPI survey were grouped. These were the participants' perspectives and attitudes about a range of contemporary issues in education including: teacher–student relationships, whole person, digital technologies, classroom management, differentiation, spirituality and student futures. These dimensions were related because each measured the participants' self-reported experiences within different EREA schools. These surveys were conducted during a 12-month data collection period from May 2018 to June 2019. The analysis endeavoured to determine if there was any statistically significant difference within the participants' self-reported perspectives and attitudes about a range of contemporary issues in education.

2.5.2 Qualitative analysis

A key to the data analysis in this research design was to read the material in depth at the appropriate time. Gray (2009) describes this as 'focused reading where key words or phrases are underlined' (p. 496). Qualitative methods can be more useful for identifying and probing questions such as: What were the key themes that were emerging from the various sources of data? What were the main cultural understandings that came to the fore and were contained within the data? Contemplating these questions provided an opportunity for reflective practice and the ability to capture the real world of EREA schools. Once the data had been collected and the role of the participants had concluded, the codes were reviewed and refined. It was possible at this point to combine some of the key themes that had emerged. Overarching themes and several sub-themes could be articulated at this point. Gray (2009) argues that a 'hierarchy may emerge at this point with one concept and many sub-categories' (p. 496). Therefore, connections and generalisations may occur. Mertens (2009) recommends that researchers immerse themselves in the data and contemplate the possible relationships and meanings.

2.6 Demographic information

The participants in this study were Principals, Deputy Principals/Heads of Campus, Leaders of Learning and students at EREA schools. Each participant had a unique identification number, which was known only to the researcher and was password protected. Participant data were handled and reported in such a way as to conceal identity. The names of participants were not recorded. All records stored on computer were also password protected. This study followed strict research protocols and guidelines. The demographic information presented in Table 2.1 outlines the profiles of the Principal participants. This is a representative sample that includes 32 out of 40 Principals interviewed for this research project. Data includes the participant code, pseudonym, number of years' experience as a Principal, the region, gender and age.

Table 2.1 Principal demographic information

Participant code	Pseudonym	Years' experience	Region	Gender	Age
1. Principal 1	Anthony	2	Eastern	M	56
2. Principal 2	Ken	15	Western	M	53
3. Principal 3	Jim	12	Northern	M	53
4. Principal 4	Jeff	3	Eastern	M	55
5. Principal 5	Tim	1	Northern	M	51
6. Principal 6	Mark	4	Eastern	M	49
7. Principal 7	Paul	2	Eastern	M	51
8. Principal 8	Mary	4	Southern	F	37
9. Principal 9	Fred	10	Northern	M	57
10. Principal 10	Mario	5	Western	M	56
11. Principal 11	Bruno	2	Eastern	M	52
12. Principal 12	David	11	Northern	M	60
13. Principal 13	Chris	10	Southern	M	53
14. Principal 14	Doug	25	Southern	M	69
15. Principal 15	Ruby	9	Western	F	57
16. Principal 16	Phil	7	Northern	M	61
17. Principal 17	Brendan	4	Eastern	M	56
18. Principal 18	Peter	7	Western	M	58
19. Principal 19	Andrew	10	Southern	M	55
20. Principal 20	George	11	Southern	M	50
21. Principal 21	Danny	1	Eastern	M	59
22. Principal 22	Brody	6	Northern	M	55
23. Principal 23	Matthew	18	Eastern	M	64
24. Principal 24	John	5	Western	M	62
25. Principal 25	Bill	5	Northern	M	52
26. Principal 26	Lance	16	Northern	M	62
27. Principal 27	Robert	12	Eastern	M	62
28. Principal 28	Stan	2	Northern	M	56
29. Principal 29	Darren	9	Northern	M	63
30. Principal 30	Anne	16	Northern	F	61
31. Principal 31	Nigel	16	Southern	M	63
32. Principal 32	Daniel	7	Western	M	62
n = 32				Female = 3 (10%) Male = 29 (90%)	

Table 2.2 outlines the profiles of the student participants whose direct quotations were used as representative of the themes that emerged. This is a representative sample that includes a cross-section of students from different year levels and regions. Pseudonyms have been used to protect the anonymity of the participants.

Table 2.2 Student demographic information: representative sample

Participant code	Pseudonym	Year level	Region	Gender	Age
1. Student 1	Max	12	Southern	M	18
2. Student 2	Michael	10	Eastern	M	16
3. Student 3	Joshua	8	Eastern	M	14
4. Student 4	Bill	11	Eastern	M	17
5. Student 5	Fred	7	Eastern	M	13
6. Student 6	James	8	Eastern	M	14
7. Student 7	Jack	11	Northern	M	17
8. Student 8	Adam	9	Northern	M	15
9. Student 9	Xavier	11	Southern	M	17
10. Student 10	David	11	Western	M	17
11. Student 11	Craig	12	Western	M	18
12. Student 12	Charlie	8	Southern	M	14
13. Student 13	Edward	7	Western	M	13
14. Student 14	Isaac	10	Northern	M	16
15. Student 15	Tim	11	Eastern	M	17
16. Student 16	Nick	10	Southern	M	16
17. Student 17	Peter	12	Southern	M	18
18. Student 18	Sam	11	Northern	M	17
19. Student 19	Ben	8	Eastern	M	14
20. Student 20	Mario	11	Northern	M	17
21. Student 21	Frank	10	Western	M	16
22. Student 22	Gerard	12	Southern	M	18
23. Student 23	Jeremy	11	Western	M	17
24. Student 24	Ethan	7	Northern	M	13
25. Student 25	Anthony	10	Western	M	16
26. Student 26	Simon	12	Northern	M	18
27. Student 27	Bruno	12	Eastern	M	18
28. Student 28	Phil	12	Eastern	M	18
29. Student 29	Brian	10	Western	M	16
30. Student 30	Wayne	10	Northern	M	16
31. Student 31	Ray	11	Eastern	M	17
32. Student 32	Clarke	12	Western	M	18
33. Student 33	Steve	11	Southern	M	17
34. Student 34	Shaun	12	Southern	M	18
35. Student 35	Mike	11	Southern	M	17
36. Student 36	Liz	11	Northern	F	17
37. Student 37	Kevin	10	Western	M	16
38. Student 38	Calvin	11	Northern	M	17
39. Student 39	Jacob	10	Southern	M	16
40. Student 40	Joel	11	Southern	M	17
41. Student 41	Andrew	10	Eastern	M	16
42. Student 42	Nick	10	Northern	M	16
n = 42				Female = 1 (2%) Male = 41 (98%)	

Table 2.2 does not include the profiles and pseudonyms of all students who participated in this study. The student participant information includes year level, region, gender and age. This information was sourced from the student focus group interviews. This demographic information provides an insight into the profile of the student participants.

The demographic information presented in Table 2.3 outlines the profiles of the Deputy Principal/Head of Campus participants. Data includes the participant code, pseudonym, number of years' experience as a Deputy Principal/Head of Campus, the region, gender and age.

Table 2.3 Deputy Principal/Head of Campus demographic information

Participant code	Pseudonym	Years' experience	Region	Gender	Age
1. Deputy/Head 1	Martin	15	Eastern	M	47
2. Deputy/Head 2	Denis	4	Northern	M	43
3. Deputy/Head 3	Neville	9	Western	M	40
4. Deputy/Head 4	Will	6	Western	M	50
5. Deputy/Head 5	Russell	3	Eastern	M	47
6. Deputy/Head 6	Ella	6	Northern	F	48
7. Deputy/Head 7	Sam	3	Eastern	M	37
8. Deputy/Head 8	Jacinta	3	Eastern	F	33
9. Deputy/Head 9	Maria	9	Western	F	57
10. Deputy/Head 10	Barry	9	Eastern	M	43
11. Deputy/Head 11	Cathy	4	Eastern	F	43
12. Deputy/Head 12	David	4	Northern	M	56
13. Deputy/Head 13	Damian	19	Northern	M	53
n = 13				Female = 4 (31%) Male = 9 (69%)	

2.7 Summary

This chapter introduced the research methodology and the approach taken for this project. It includes an introduction with an outline of the structure and a statement of the approach taken. A detailed overview of the paradigm, methodologies and methods available demonstrates the advantages and disadvantages of various options and justifies the mixed methods approach adopted for this research. The participants and the data collection methods are described in detail. The data analysis procedures are explained, including how the assessment of patterns, trends and relationships in the data were to be described.

The next chapter presents the findings and recommendations of the research. The project produced a broad range of data, providing a clearer understanding of the lived experience of the participants. The results are presented in three formats: direct quotations, smaller quotations and overall themes. The large proportion of the qualitative data were ordered, structured and summarised in a dependable and accurate manner. Chapter 3 also includes a summary of the conversations that were taped during one-to-one Principal interviews, Deputy Principal/Head of Campus presentations and student focus group interviews. The collated results of the EPI surveys are shown in tables. The qualitative and quantitative data have been cross-referenced to highlight the patterns that emerged.

EDMUND RICE EDUCATION AUSTRALIA

Chapter 3 Findings and Recommendations

3.1 Introduction

The purpose of this research project is to capture the nature of learning and to investigate the interrelationships between holistic learning, teacher pedagogy and individual differences within EREA schools. The results highlight the complexity of classroom dynamics. At the heart of this complexity is how teacher pedagogy endeavours to meet the individual needs of young people in a holistic way. This chapter aims to analyse the perceptions of EREA Principals, Deputy Principals/Heads of Campus, Leaders of Learning and student participants, and to uncover a deeper understanding of the synergy between holistic learning, teacher pedagogy and individual differences. The research literature considered most relevant for understanding these issues relates to applications of digital technologies as learning tools, and how these have an impact on how young people make meaning and communicate with others. It was acknowledged that the reality of the classroom is complex. As such, discovering how teachers might engage young people in a world of constant change, contemporary pedagogy and holistic learning is paramount. The research project highlighted that young people are rarely consulted when schools design and implement learning programs. Consequently, the insights gained from young people in this research project were instructive in furthering understanding of the complex dynamics of the classroom.

This research used a mixed methods approach to collect both qualitative and quantitative data. Surveys, one-to-one Principal interviews, Deputy Principal/Head of Campus presentations and student focus group interviews were all used as data collection methods. The data were then organised, analysed and coded, first according to the research question (What is the nature of learning regarding the interrelationships between holistic learning, teacher pedagogy and individual differences?) and then according to themes and sub-themes, guided by the conceptual framework. The conceptual framework, outlined in Chapter 1, is presented again in Figure 3.1 to highlight the interrelationships between holistic learning, teacher pedagogy and individual differences. For the purposes of this research, one major question was posed. The purpose of this chapter is to bring together the data collected over a 12-month period from March 2018 to April 2019 according to the major themes of holistic learning, teacher pedagogy and individual differences. As further themes emerged, the data were coded and placed in a hierarchy chart according to the amount of coding references (Figure 3.2). Each theme was then analysed and presented as sections in this chapter. Each section includes an introduction to the theme, a literature review, the results, discussion and a conclusion. These themes are brought together in the final section of this chapter.

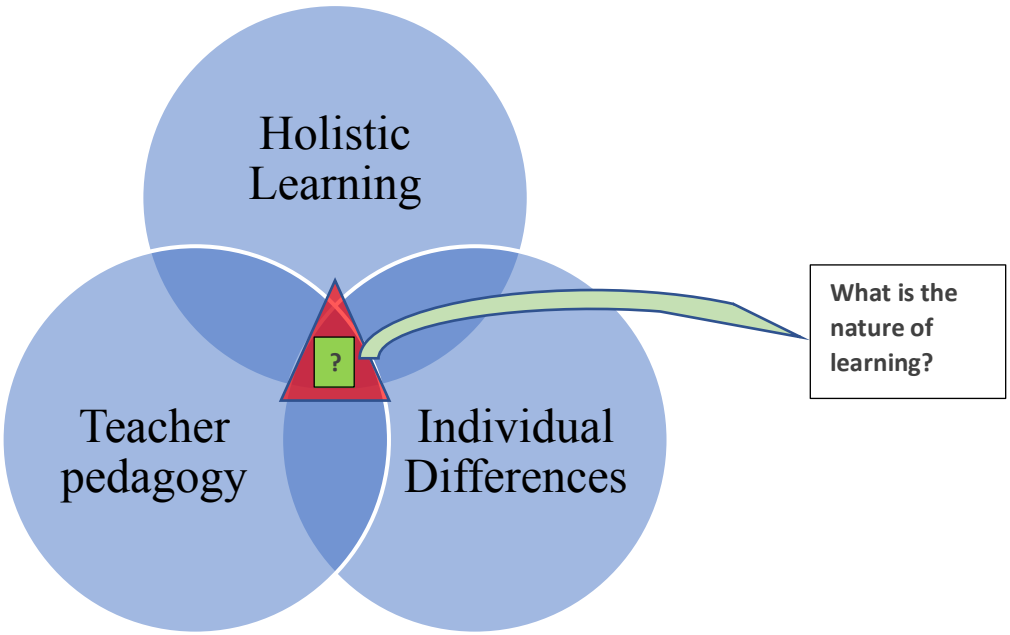


Figure 3.1 Conceptual framework: What is the interrelationship between holistic learning, teacher pedagogy and individual differences?

The first task in the qualitative analysis process was to analyse the data. The taped recordings from one-to-one Principal interviews, Deputy Principal/Head of Campus presentations and student focus group interviews needed to be typed. The taped recordings of conversations were transcribed into a Microsoft Word document by a professional transcription company. The data were then uploaded into QSR International's NVivo 10.1.0 and coded as it was being collected. The NVivo 10.1.0 software is a database where queries can be run to observe relationships and patterns in the data. It was imperative to reflect upon the information as it was collected because a time lapse could have resulted in the data being interpreted in a different manner. At this stage the aim was to become familiar with the data, rather than interpreting it. Interpretation would come at a later stage once all of the data had been collected. A common accusation levelled at qualitative data analysis is that the coding tends to fragment the data, losing the connection between the text and its context. However, this process enabled comparisons to be made with the amount of coding of themes, as some were more heavily coded than others (Figure 3.2).

The process identified the themes with the most coding references – for example, which themes contained the most coding references to *Pedagogy, Holistic Learning and Individual Differences*? The EREA Northern, Southern, Eastern and Western regions were coded separately. Once finalised, an interim report was presented to the Principals from each region as part of the member-checking process. During the member-checking component of the research, EREA Principals read the interim report and provided feedback. Principals were divided into teams to focus specifically on some aspects of the findings and recommendations. Once this process was completed for all four regions, the data were combined into a final hierarchy chart. Figure 3.2 presents the final hierarchy chart of themes. This assisted in identifying areas that needed further investigation or research.

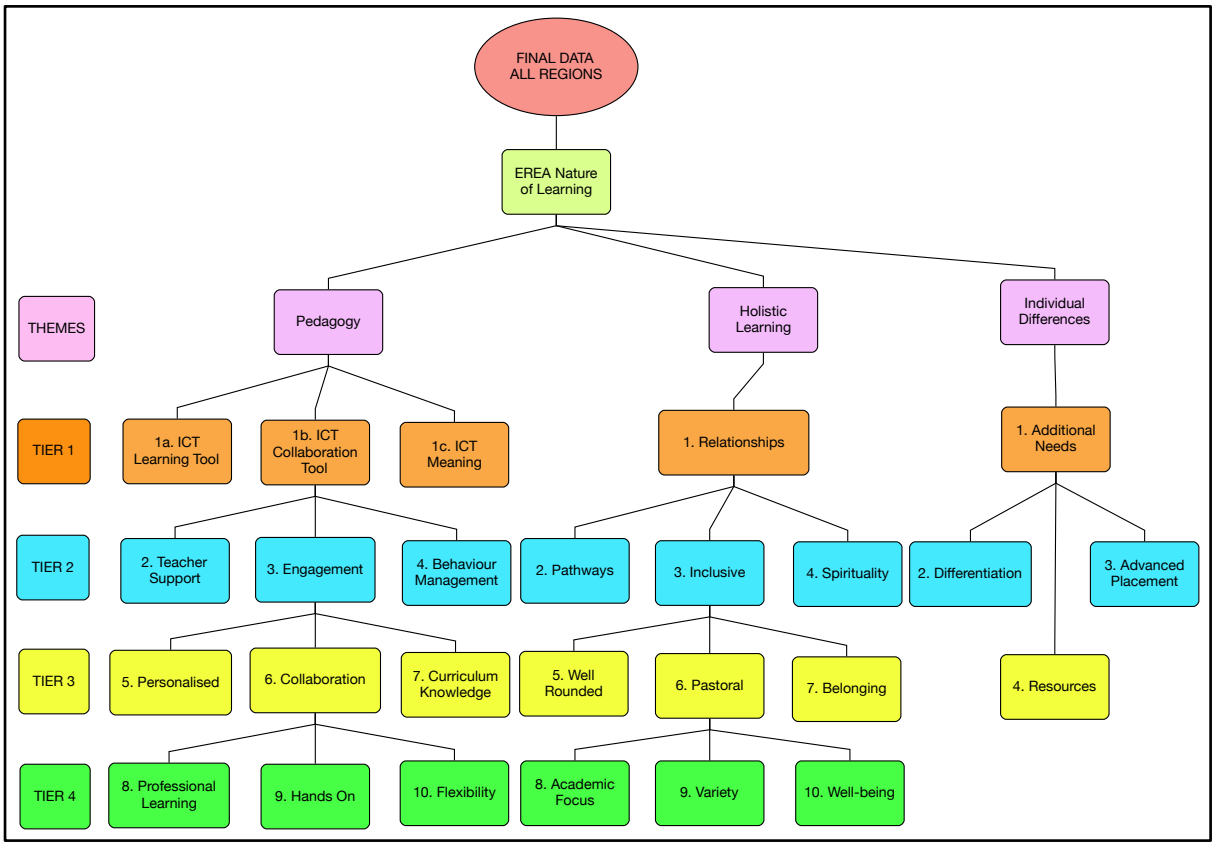


Figure 3.2 Hierarchy chart for all regions.

3.2 Educational Practices Inventory

The Educational Practices Inventory (EPI) is a self-report questionnaire designed to measure the views of educational leaders on contemporary issues in education. The EPI provides demographic information of respondents and consists of seven sub-scales:

1. Caregiving expectations scale: expectations of emotional engagement of teachers in the student–teacher relationship.
2. Whole student development scale: the role that schools play in developing the whole person.
3. Technology in education scale: the role of technology in learning.
4. Classroom management scale: teacher control and democratic practice.
5. Differentiation scale: catering for individual differences in mixed ability settings.
6. Spiritual scale: the role of teachers in developing spirituality of students.
7. Future pathways scale: the role of schools in preparing students for career and work.

A Rasch analysis was applied to each scale to ensure validity and reliability. A total of 197 EREA leaders completed the EPI and results are summarised below.

1. Caregiving expectations

Leaders had high expectations of their teachers as caregivers. They were not concerned about teachers becoming over-involved in student problems. Leaders uniformly endorsed the belief that teachers should make students feel safe and secure. They rejected the idea that students should

tolerate cold or abrupt teachers, and endorsed teacher awareness of, and sensitivity to, the individual emotional needs of students.

2. Whole student development

Leaders were least likely to agree with the view that classrooms should be warm and fuzzy places of self-discovery. They viewed teaching students the importance of 'the other' as less important than encouraging students to think critically about who they are as individuals. Leaders found it easy to agree that building resilience is just as important as building knowledge. Leaders endorsed the need for schools to teach ethics and take responsibility for the moral development of students.

3. Technology in education

The results on this scale revealed overall endorsement of how technology is used in schools, and relatively little concern about any negative effects of technology on students. However, there was widespread cynicism about the educational impact of technology. Responses indicated a relative cynicism about the impact of technology on learning and creativity. Leaders were most likely to indicate a lack of concern for the complexity of technology in schools or any negative effects of the technology. They were most concerned about whether technology served its purpose, that is, whether it improved learning.

4. Classroom management

Leaders strongly endorsed democratic, person-centered classroom management practices that encourage students to exercise internal control and personal responsibility. They did not think that teachers should have control of all students all the time. Leaders did not endorse the view that verbal aggression from teachers does not psychologically harm students. This indicates an aversion to authoritarian classroom management practices. They endorsed genuine student–teacher relationships as fundamental to good classroom management. Similarly, they endorsed classroom management based on democratic practices that are based on regular student–teacher discussions, mutual understanding and respect.

5. Differentiation

Differentiation was strongly supported by the majority of leaders. They expressed strong support for differentiated teaching practices. Leaders indicated that teachers had enough time to differentiate, and expressed very high expectations that this would occur in their schools.

The results for this scale are particularly interesting because they reveal a kind of internal struggle occurring in EREA leadership when it comes to differentiation. There was a reluctance to accept that teachers did not have the time to differentiate their practice, but there seemed to be some consternation about what differentiation actually *is* and its impact on teacher morale. There was strong endorsement for continued professional development on differentiation practices for teachers, and the educational importance of differentiation for students.

6. Spirituality

Leaders did not endorse the view that most schools have become increasingly disconnected from spirituality. They appeared to be relatively more conservative in their responses to the questions in this scale, indicating that, although schools have not become disconnected from spirituality, spirituality is not critical to a young person's path. It is possible that there was some level of socially desirable responding occurring here. There appear to be similarities in leaders' responses on this scale and the caregiving expectations scale. Specifically, EREA leaders held high expectations of their

teachers to be highly developed in their spirituality, while being less likely to endorse the view that spirituality was critical to a young person's path in life.

7. Vocational pathways

Leaders strongly endorsed the role of schools in providing opportunities for students to pursue their personal interests, and expressed the view that their schools were currently doing this well. They tended to support the resourcing of this area some time in the future, rather than seeing it as an immediate need. Leaders supported statements that recommended the development of vocational curriculum and pedagogies into the future, and generally endorsed uncontroversial development of these areas.

Summary

Leaders in EREA schools expressed very high expectations of their teachers. They indicated that their teachers should be emotionally engaged with their students, be capable of individualising instruction, be personally spiritually developed, and be highly democratic in their relationships with students. Leaders expressed the view that teachers had adequate support in place to meet these expectations. It would be interesting to explore whether teachers shared this view, given the high incidence of documented teacher stress.

Leaders recognised the need for an increase in professional learning about the use of technology as an educational tool. They also expressed the need for a clearer understanding of the meaning of differentiation, and how differentiation could be achieved in their schools.

Of interest was the focus of leaders on the development of the individual, relative to the development in students of awareness of the other. It would be interesting to explore this further to understand how leaders perceive individualism and its relationship to the common good.

3.3 Pedagogy

For the purposes of this report, pedagogy is defined as the 'relationships and interactions between teachers, students, their learning environments and the learning tasks' (Murphy, 2008, p. 35). These relationships and interactions are complex and suggest reciprocal transactions between teachers and learners (Bruner, 1999). Teaching is a craft that is deeply personal and is not immune from the emotions that exist in the classroom. This understanding of the term pedagogy moves beyond that established by Gage (1978) as the 'science and art of teaching'. In Bruner's definition, pedagogy is used to help the learner co-construct meaning. In this instance the learner is considered capable of thinking, analysing and synthesising complex concepts (Bloom, 1956). Teaching practices and pedagogy that place learners in cooperative situations and include knowledge of learners and their characteristics, contribute to positive student outcomes (Alexander, 2008). In addition, it seems all young people exhibit a preference for pedagogy that develops the emotional climate to assist in receiving and retaining information (Hinton, Miyamoto & della Chiesa, 2008). In today's world, problem-finding and problem-solving skills form part of the complex dynamic for teachers as part of their repertoire of sound pedagogy. Pedagogy is best summarised by Watkins & Mortimore (1999) as 'any conscious activity by one person designed to enhance learning in another' (p.17).

3.3.1 Digital technology as a learning tool

Finding 1
Young people demand access to myriad forms of digital content, multiple examples of interactive learning activities and time to collaborate with others.

According to Collins and Halverston (2018), there is an emerging generation of 'just in time learners' (p. 14). The modern learner demands simultaneous access to multiple forms of content and ways of communicating and collaborating with others. Their means of communication are capable of producing networks of learning (Elliott, 2015) and knowledge is increasingly created in a digital world (Duggan, 2017). Deming (2015) implores teachers to recognise that students learn by interacting with the world, technology and each other. It is through these shared experiences that networks become communities, and young people acquire essential social skills for the future job market (Deming, 2015).

The work of Newton (2014) described innovation as being pivotal to constructing pedagogy for the modern learner. Supporting this view, Beetham and Sharpe (2013) declare that pedagogy that embraces the digital world enables creativity. Most importantly, planning for integrated units of work can promote an atmosphere of collaboration and collegiality among teachers online (Jensen, Hunter, Sonnemann, & Cooper, 2014). Kolb and Kolb (2018) described how 'on-line learning platforms have become highly complex, sophisticated and integrated into our daily lives' (p. 24). Thus, a challenge for teachers and students is to make full use of the digital technologies and design curricula across learning domains more often. For example, inquiry-based learning activities, supported by digital technologies, may enable students to solve problems, consolidate previous experiences and discover new directions (Pedaste et al., 2015). An atmosphere of inquisitiveness might be encouraged and celebrated if this were the case. Much of the literature on real-world learning projects highlights how students can pursue learning opportunities from various digital sources, answer questions and develop understandings that are meaningful, with a philosophy of problem solving (Leadbeater, 2016; Savery, 2015; Oviatt et al., 2012). In Leadbeater's (2016) view, real-world projects are quality learning tools for this generation. When students are online at school, the aim is for pedagogy to enhance collaboration, research, analysis, synthesis, critique, and the creation of new knowledge. In summary, a result of the rapid changes in a digital world should make investment in the capabilities of young people a priority (Lucas, 2018).

Principals interviewed for this research project intimated that young people today live in a world of rapid change. The commodification of knowledge and availability of digital technologies anywhere and anytime have transformed the learning expectations of young people. Schools and classrooms are not divorced from this reality. Principals interviewed for this research project emphasised the constant struggle to discover the best possible environment for student learning. Anthony, a school Principal, outlines his vision for digital technology as a learning tool:

> *Digital technology should be something where every single lesson the first thing kids do is open their device and they're working in a digital environment. It's got to be suited to what content they've got at the time and to the intention of the lesson.*

The enduring belief from Principals is that every young person should graduate from secondary school as a creative, connected, and engaged learner with a growth mindset.

While these goals continue to influence Principals' thinking and planning, contemporary contexts reveal concern that schools are not meeting the future needs of young people. EREA Principals are

concerned with an over emphasis on curriculum content, traditional teaching methods and restricted access to technology as distractors for change. As a result, EREA schools are in constant 'catch-up' mode, endeavouring to create a set of skills that will be transferable to jobs that do not yet exist. 'Catch-up' mode can include a fixed mindset where access to technology can be restricted for fear of misuse. As Principal Ken illustrates:

> *My approach say with ICT is we wanted it as open and as fast and safe and reliable as we could so we pushed harder into that. So that means we turned the filters off YouTube because it annoyed teachers. The thing that I've found remarkable that doesn't get much press is that when you look at the statistics around poor use or inappropriate use of technology by young people in schools it's incredibly low. Incredibly low in terms of kids accessing the wrong sites, or the wrong thing.*

The challenge for EREA schools, and teachers, is to be responsive to this constant change. In the midst of this change is the constant yearning from Principals to develop a contemporary pedagogy that embraces digital technologies, collaboration, teamwork, mentoring, quality relationships and enabling student voice.

Undoubtedly digital technologies and their ubiquity in EREA schools have implications for teacher pedagogy. As such, professional-learning programs for teachers may enhance their skills and confidence. In addition, digital tools have the capacity to deliver high-level learning activities beyond entertainment. Principals explained that to be convinced of the benefit of digital technologies, allowing autonomy for teachers might ensure it is embedded within pedagogy. Principal Jim highlights the importance of supporting teachers in integrating digital technologies into learning:

> *I think it's really been challenging to the teachers now that there's three people in the learning relationship. The teacher, the student and the device. I've seen good examples where the teachers are able to manage that kind of triangular relationship very well, but I've also seen where the device is literally an impediment. I don't believe we've been really effective in helping teachers to conduct their classrooms and their learning experiences meaningfully with the device. I think we're still working with it.*

As Principals from the one-to-one interviews explained, technology tools alone do not transform students into independent learners; rather, a holistic approach is required for learners to benefit from technologies. Key to this is teachers acknowledging the differences in this generation of learners.

Forming a culture of innovation in classrooms is complex. Responding to these challenges requires different thinking. The use of multiple modes of creating connections to learning tasks, for instance, has a greater capacity to reach learners in class and enhance innovation. Therefore, lessons can become multifaceted. Recent attention has focused on inquiry-based learning and project-based learning, highlighting the benefit for young people to practise the interpersonal skills of discussion and stimulating talk. Student Max explains:

> *Being interactive, moving into that kind of age where it's less writing and it's more interactive. It's not just rote learning, where you're just doing the same thing over and over again. Which I think is really important, especially if they're taught that in younger years. So, you're not just blurting out content.*

Young people from the focus group interviews were appreciative of teachers who embedded group work with digital technologies. This contributed to the development of interpersonal skills and encouraged young people to take risks and learn from their mistakes. These digital skills seemed to thrive in the classroom when various modalities of learning were present and there was an opportunity for developing meaningful teams.

The data seemed to indicate that the approach to digital technologies in the classroom can sometimes operate out of a deficit model. Rather than open the possibility of the rich learning opportunities associated with digital technologies, there was a tendency to lock everything down and monitor student's behaviour. Table 3.1 captures the frustration expressed by students when their learning is not supported by fast and reliable digital technologies. These sentiments were consistent with student focus group interviews across all regions (see Table 3.1). It was only when software was explored, and teachers were comfortable with its variety of uses, that it was used by the students. This is foreign to contemporary learners and how they operate. Students in the focus group interviews highlighted their positive experiences of learning and socialising in a digital world. Learning and socialising for these young people must include not only face-to-face communication, but communication via technology. Teachers are being challenged to rethink pedagogy in a digital age and design learning activities that will extend and hold the interest of young people. To operate out of a deficit model in relation to digital technologies is to deny young people the opportunity for innovation, creativity and higher-order thinking to thrive.

Table 3.1 Summary of student comments about access to digital technologies

Comment	Pseudonym
There are lots of websites that are blocked in our school.	Michael
There's no way that the IT can block every single game and YouTube or whatever you want to do on devices and you can't really stop a kid getting a phone out of his pocket either.	Joshua
I don't think there's a space in the modern world we live in now, to try to take this stuff out of the learning environment because it's become so ingrained.	Bill
I had internet connection problems and logging off the server because too many people were trying to log in at the same time.	Fred
The app usually doesn't work and it usually gets bugs. It takes '600 years' to download and because we have touch screens, a lot of the touch screen doesn't work either.	James
It depends if the teacher allows that access. They can sometimes send it to you or put it on a site where we can reach it. But not all teachers may do that.	Jack
In the library, there's a computer space and there's two in fiction and non-fiction where you can get laptops and those laptops are pretty dodgy. Sometimes they don't connect and sometimes you can't log in. It's a waste of a lesson if you're in there.	Adam
Our school is sort of taking more of a disciplinary route where they've got trackers on the computers, they've got blocked sites and all that stuff. In other schools they teach you how to use technology because you're going to have all this stuff when you get out of school.	Xavier
We can get on to YouTube but there are lots of other resources which are unavailable. Even things as simple as scholarly articles. We can't use those because the school doesn't have licences necessarily.	David
With the internet, there's a bit of a limitation when it comes to it. If there was a bit more of a freedom when it comes to it – especially with the number of gigabytes dedicated to one student, which is very limited and can run out maybe within one to two days if you're doing heavy research.	Craig
…they don't understand how useful technology can be. For instance, I have my timetable on my phone. I've set that up. I use my diary on my phone. I use all sorts of resources on my phone. But if am to pull it out during class to access one of those resources, it's generally the older teachers that will pull me up on it.	David

Rather than restrict access and increase monitoring, schools could celebrate the learning possibilities that digital technologies provide. Technology has created the impetus to rethink how we define schools, teachers and learners. Technology links people in ways never before experienced. As a result

of this relentless change, it is recommended that pedagogy is increasingly collaborative and informed both by student interests and real-world problems.

Recommendation 1

Continue to implement comprehensive digital technology strategies to enable transformative teacher–student–parent interaction regarding student learning.

3.3.2 Digital technology as a collaboration tool

Finding 2

Young people have a desire to communicate using technology.

Young people have digital access to information on demand (Warf, 2017). They live in an online 'virtual world' and seem to have the capacity to juggle multiple devices and multiple thoughts simultaneously (Sterly, 2017). For this reason, adolescents have a desire to communicate using technology (Hampson, Patton, & Shanks, 2017), and this has implications for the classroom (Lodge, 2013). Students demand 'anywhere, anytime' learning; therefore, they do not want to be prevented from learning with technology by teachers who are ill-equipped to integrate these skills into classroom practice. Learners expect technology to work well and work fast. Mostly, technology can have a positive impact on student learning and enable them to acquire skills to thrive in the modern world (Torii & O'Connell, 2017). Young people prefer communicating and seeking information online (Storey, 2014). While this may seem daunting for teachers, it presents a great opportunity for innovation by allowing the parameters of the classroom to go beyond the four walls, thus enabling collaboration and imaginative learning prospects (Hampson et al., 2017).

Living in an increasingly connected and changing global community challenges school systems to be bold, flexible and creative in response (Wiggins, 2012). Project and problem-based learning that offers multiple modalities of inquiry shift the focus from teaching to learning (Savery, 2015). Problem-solving skills and real-world learning in a peer-to-peer inclusive community may equip the current generation with the skills required for an unknown and volatile future job market (Torii & O'Connell, 2017; Crump & Slee, 2015). A report conducted by The Foundation for Young Australians (2017) highlighted digital literacy, bilingual skills, creativity and critical thinking as the skills required of this generation to create a better future. Acknowledging the rapid rate of development of digital technologies, and delivering learning activities accordingly, prepares young people for an unknown yet exciting future (Inayatullah & Na, 2018). To ignite a passion in young learners and celebrate the many gifts and talents that they bring to the school environment, teachers need to be aware of these modern circumstances (Taneja, Fiore, & Fischer, 2015). Consequently, lessons that are interesting and relevant, and incorporate digital technologies can attract and hold the attention of students (Reichert et al., 2010).

Teachers are no longer preparing young people for a linear world of work. Recent reports have examined the impact of the enterprising skills required for graduates from today's secondary schools (McKinsey Global Institute, 2017; Foundation for Young Australians, 2018). The most recent literature has stressed the importance of digital literacy, creativity and collaboration as a means of preparing young people to cope with unyielding change (Kolb & Kolb, 2018). Teachers who are intuitive to a student-centric approach to learning that incorporates digital technology resources can establish a harmonious team atmosphere where young people engage positively with each other. As student Charlie highlights:

> *I like how the portal is structured and how you know it's there to help you. It has all your resources that you need during exam preparation and throughout the year so you can keep up to date with what's going on in your class even if you miss a class. You can always look ahead for what subjects you're going to be doing next, so you can always keep up to date, stay on top of what you're learning.*

During their interviews, Principals stated that students born this century require skills and qualities such as analytical thinking (for deciphering problems), teamwork, flexibility, initiative, inquisitiveness, creativity and collaboration. Charlie's point above lends an insight into the need for young people to learn in teams, use digital technologies and enable collaboration. Allowing students to collaborate in this manner helps to meet the future needs of young people.

Principals explained that teachers who are flexible and use various methods to deliver their message can promote innovation, creativity and collaboration. Innovation creativity and collaboration skills that students acquire may be transferable from discipline to discipline and ultimately across various job sectors into the future. Student Edward outlines the benefit of collaborating with his teachers online:

> *Basically, to sum up, what the portal is, it's basically a way to communicate with teachers and to have a look at your school life while you're not at school, especially for those that are going away on holidays. The teachers can set up assessments through the software. So, whenever you're on the internet you can – are always able to access it. Whenever you are lost you can always go on your phone and have a look at your timetable and see where you have to be.*

To integrate these collaboration tools teachers in EREA schools may need to engage with radical new thinking about how to teach. Their pedagogical skills will be tested and they are most assuredly in need of professional development and school support.

Teaching methods, digital technologies and the way the classroom is configured are linked in a complex manner. Principals in EREA schools want teachers to have high expectations of students and facilitate warm, supportive and engaging learning environments. Notably, the introduction of technology and flexible learning spaces does not enhance student outcomes unless a change in pedagogy complements these initiatives. Hall (2014) describes this as the 'intersection of pedagogy, space and technology' (p. 9). Principals and young people interviewed recognised that technologies are designed to be useful tools of communication. As student Isaac illustrates:

> *You've got all the factors of modern convenience. You've got technology, you've got everything to help you learn. I love being able to get on the document, type away at the work shared with you. You've got everything you need there. There is no problem with getting sent work. Everyone has the same documents, they're all shared, and especially if you organise them properly, it can all be extremely neat, organised and functional.*

For the young people in EREA schools, technology dominates how social communication takes place. Networked learning may therefore be a way to hold the interest of students. Harari (2016) asks, 'what will humans do with the immense powers that technology provides?' For EREA teachers, this is an extremely complex area and again highlights the nexus between pedagogy, technology and the desire for young people to collaborate online.

In light of contemporary developments in innovation, collaboration and collegiality, Principals acknowledge that teachers are being challenged to engage students and enable student voice. The traditional authoritarian model of teacher–student engagement is outdated and being replaced with a model of co-collaboration, mutual respect and facilitation. Young people interviewed were keen to convey how student voice can enliven classrooms and make school communities a vibrant place. Student Tim is appreciative of being able to collaborate with his teachers and access learning in a 'flipped classroom' style arrangement.

> *ICT is really handy for communication resources. Teachers can easily give you links to websites and can very easily communicate through email as opposed to having to come see you in class, take you out of class, that sort of thing. Every morning you check your announcements that tells you everything that's happening at school that day you need to be aware of. Like meetings, reminders and room changes.*

EREA schools of the future can produce positive student outcomes when cooperation and collective creative capacity permeate teaching practice. Accordingly, student voice contributes to self-discovery, as well as self-directed and self-regulated learning. In addition, encouraging a questioning and inquisitive nature among young people creates autonomy, as well as opportunities for joint decision-making with teachers.

Teachers need to have an appreciation of the modern world of young people and adjust their pedagogy accordingly. Digital technology is a tool that could meet these complexities. Contemporary society expects teachers to equip students for jobs that do not currently exist. This can only be achieved when the potential of digital technology is embraced to find answers to questions that have not been posed. Figure 3.3 presents the percentage of schools that are equipped with a learning management system (LMS), to collaborate with students about their learning, online. Sixty-one per cent of schools have an LMS that is hosted and developed by a third party. Thirty-nine per cent of EREA schools do not provide an LMS for their students and teachers to collaborate with each other. These schools are predominately from the Flexible Schools Network (FSN) which does not seem to have a perceived need for an LMS.

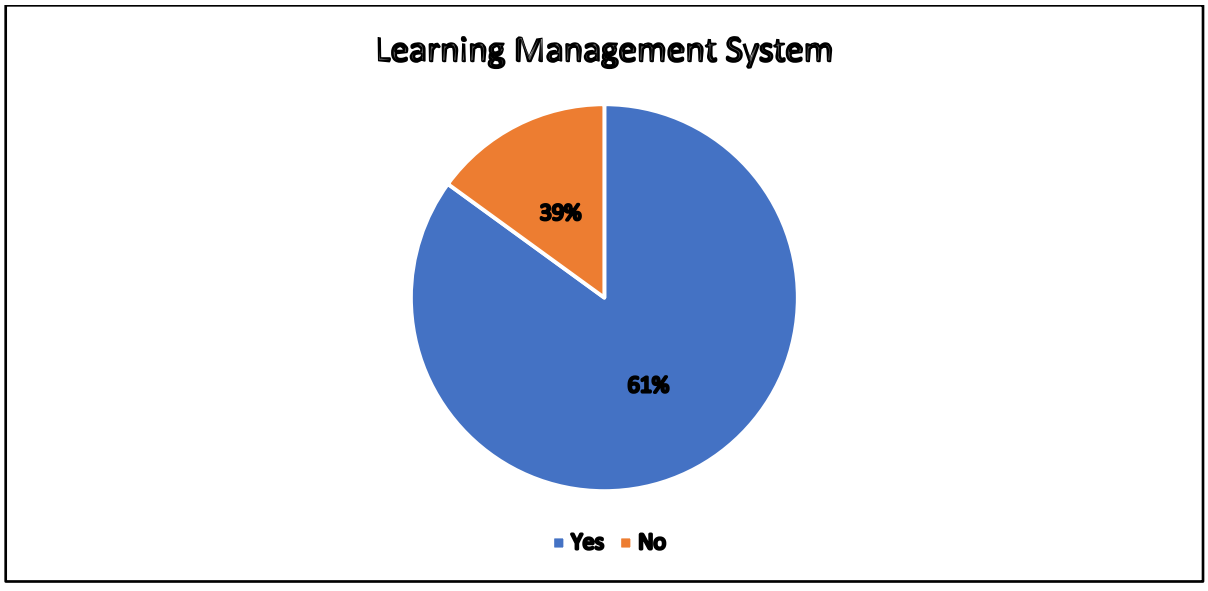


Figure 3.3 Percentage of schools with a learning management system

The evidence from this study suggests that, there is more to be done to ensure all young people are adequately equipped for a future imbued with digital technologies. The future professional learning needs of teachers require a major focus on digital technologies and this can be supported by a fully integrated and functional learning management system.

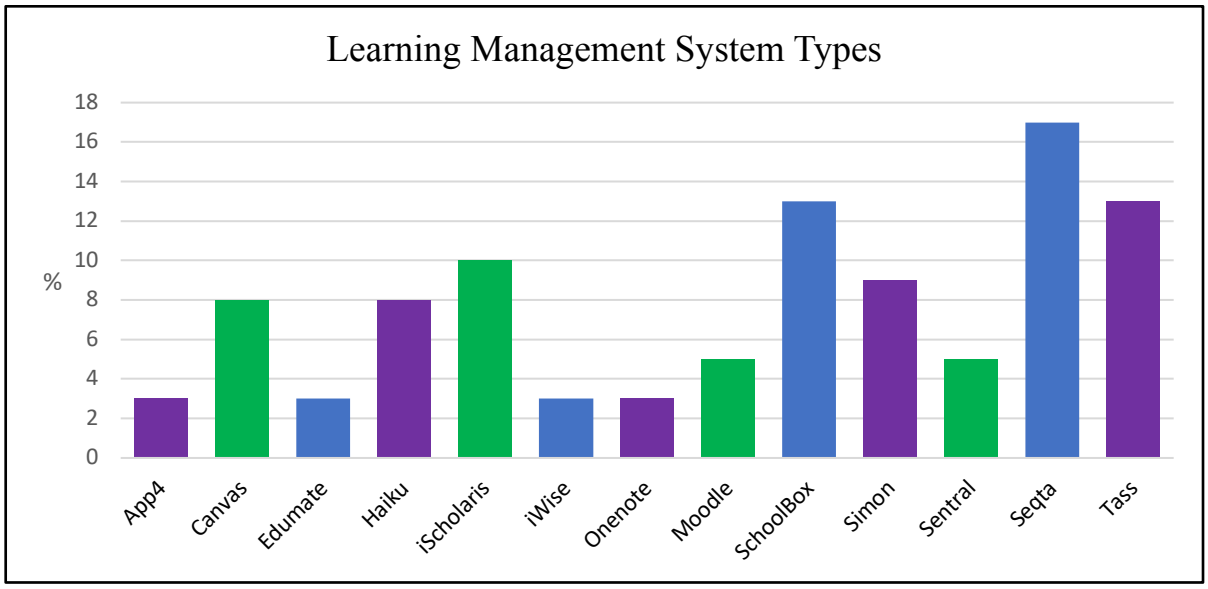


Figure 3.4 Percentage and type of learning management systems in schools

There are a variety of LMS across all EREA schools as highlighted in Figure 3.4. These tend to be influenced by the predominant system used by each state or territory. The LMS allows young people to access large volumes of content, on their own, which frees up time to collaborate with others during class. This research project argues for a shift from traditional schooling and passive learning to interactive, experiential, problem-based and 'flipped' learning pedagogies. Adopting approaches such as problem-based learning, 'flipped' learning, visible learning or cultures of thinking is the first step in leading young people towards becoming independent learners. Young people appreciated the opportunity to be in contact with their teachers online. An integrated LMS could be adapted to incorporate a variety of approaches which might enable more collaboration and teamwork.

Recommendation 2

Explore interactive classroom techniques where exploring content occurs at home; and teamwork, conversation, seeking clarification and a focus on teaching collaboration skills occur in class.

3.3.3 Digital technology and meaning making

Finding 3

Young people understand the need and value of digital technologies. They also understand the shortcomings.

Immersed in the complex world of globalisation and automation, the modern learner appears to be coping with the constant changes. However, their outwardly coping responses can disguise elements of self-doubt and anxiety associated with identity (Elliott, 2015). Digital technologies can have an unsettling effect on the wellbeing of this generation (Bentley, 2018). This was noted by Kross et al.

(2015) in relation to social media, such as Facebook, Instagram, Snapchat and Twitter. Other studies conducted on mobile phone use have found evidence of stress, sleep disturbances and depression in young people (Thomée, Härenstam, & Hagberg, 2011). An investigation by the American Psychological Association (2018), for instance, reported much higher levels of stress for millennials than previous generations. The constant use of technology, either by email or social media, can be a 'toxic source of stress' (Clarke-Billings, 2016).

Young people are living in a world of digital distraction which can lead to cyber-slacking in the classroom (Taneja et al., 2015). Teachers need to understand the impact of anxiety and stress caused by digital distraction, and the way the brain functions under these conditions (Sah, 2013). Emotions impact on the functioning of the brain. The amygdala, the emotion gland in the brain, when stimulated will dispense a flight or fight response (White, 2013). Situated in the hippocampus, the amygdala connects the left and right sides of the brain. When these are under stress, they obstruct the prefrontal cortex, where decision-making occurs. A failure to place boundaries around the use of digital technologies threatens positive, inclusive relationships, connectedness and a positive social–emotional climate (Reichert et al., 2010).

In EREA schools, young people can access technology at a time and a place that suits them. However, EREA schools have a responsibility to filter information and teach students about the dangers and risks associated with communicating in a digital space. Emerging from the young people interviewed is how they are able to create their own communities, online, without filters. Principal, Jeff, shares his concerns:

> *It's ironic that social media and the social world of young people … we've got kids who are lonelier than ever. I think kids have got more friends in inverted commas online than they have in the real world. Those blurring of lines of what actually constitutes a friend or what it means to be a friend and kids who feel more isolated, more alone, in a world where they're constantly connected. I am worried about the higher rates of suicides in Australia as well as anxiety and depression.*

Principals agreed that the key to combating this lack of filters is to customise tasks to suit the learner and to use technology for positive outcomes. EREA schools appreciate that young people are autonomous and web-connected learners, with technology providing opportunities for self-directed learning. Consequently, students can explore the impact of what it means to be part of an online community and learn how to be media savvy. Young people need to learn that there is a difference between communication and contact. Communication enhances opportunities for students to learn with peers, both locally and globally, while contact satisfies students' constant appetite to be in touch with one another socially.

To equip young people with the social skills required to be inclusive and accept difference, which is often missed in an online world of communication, EREA schools have a responsibility to set appropriate boundaries in relation to the use of digital technologies. The social–emotional climate of each EREA school needs to be inclusive of difference and diversity and show a commitment to positive social relationships, demonstrating reconciliation if relationships require mending. Commenting on his positive experience about boundaries and social interaction, student Nick highlighted that:

> *I've been to my other school and phones were used pretty often, particularly at lunch and recess. But here, with the absence of that, I think there's a bigger sense of community and people are more social and, in the moment, without that sort of distraction.*

This highlights the value of schools effectively managing relationships on behalf of young people that engender mutual respect. Notably, adolescents can be sometimes lost in a world of digital space, which is not conducive to harmonious social–emotional interaction. Principals agreed that establishing positive relationships with each other can show teenagers how to deal with conflict in an assertive, calm and respectful manner, thus preparing them for a complex social future.

In a rapid rate of global change, sound social–emotional *and* learning skills will be essential tools in order for schools and teachers to meet the future needs of young people. Overall, Principals are encouraging teachers to present technology as a learning tool for more student-centric, relevant, rigorous learning. Part of this learning is equipping young people with social skills that are safe, inclusive and accepting of diversity, and highlighting the positive learning outcomes when digital technologies are put to good use. Ethan, a student from a focus group explains this balance:

> *It just needs to be regulated. Some of the boys – it's created an anxious thing when the phone buzzes, you need to quickly check it. It keeps on buzzing because it's just – social media is so active. You keep checking your phone, everything like that. On the weekend I had trouble with a math thing, so I just sent a photo to a mate and he worked it out in his book and sent it back.*

This comment highlights a positive social climate to enhance emotional stability and produce an environment that is conducive to learning. As such, ongoing awareness of the emotional wellbeing of young people is an essential consideration for understanding the impact of digital technologies.

Digital technologies have changed all aspects of life, including education. Crucially, the digital world of students includes relationships, identity and a resolution of social issues, mostly online. This was also reflected in the following comments from Principal Tim:

> *The influence of social media is a problem, and I don't have any answers on that front because that's the disabler in the home environment. We've put technology in the hands of kids. They're taking it home and using it for other purposes. We have to accept the fact that that's what's going on in the home environment. We are constantly dealing with parents who are exasperated about their child's wastage of time and over-reliance on particular social media sites.*

For this reason, EREA classroom spaces that have the flexibility to enable students to work alone, in pairs, in small groups of two or three, or in lecture-type arrangements can help create meaning and better align with their learning preferences, and thus support the concept that learning happens everywhere. Breakout spaces, comfortable furniture, and warm and inviting aesthetics can complement pedagogy and technology. Again, the emphasis is on pedagogy, space and technology to drive the principles of sound classroom practice. These rapid advances in technology are challenging teachers and EREA schools to appreciate recent research and develop new approaches that draw on an evolving understanding of learning, and fully engage young people and their parents/carers in the process.

Principals agreed that it would be futile to equip classrooms with the most up-to-date technology if pedagogy were not to change. Teachers therefore could be sustained with more professional support to learn more skills and change the way they teach. Presentations from EREA Deputy Principals/Heads of Campus argued that bringing in digital technologies and creating contemporary learning spaces does not mean pedagogy will change. In order to meet the high educational standards that young

people deserve, the provision for teacher professional learning is paramount. Commenting on what learning might look like in an ideal world, Deputy Principal Martin highlighted that:

> *On this side, it's talking, there's a clock, and it's talking about anytime, anywhere learning. So that really emphasises the fact, not only through a device but even through the software that we use. And some of the pedagogies that we may employ that our boys or our girls can learn any time at home on the weekends and through different varieties of things like podcasts and so on, and flipped learning.*

EREA Deputy Principals/Heads of Campus argue that to support this, a growth mindset in the classroom creates optimism, hopefulness and a sense that each learner can become personally known and cared for as an individual. EREA schools are in a position of power and can embed values of hospitality, respect and inclusiveness. As such, optimal learning experiences are evident when schools provide a safe, secure, inclusive and emotionally stable learning atmosphere (Norden, 2015). Principals concurred that when students feel safe and have a sense of self-worth, they blossom and are liberated from any sense of negativity and this includes the digital world in which young people live. Therefore, when teachers are considering learning outcomes, acknowledging that young people live and will continue to live in a digital space is paramount. Learning outcomes might include the affective domain and reflect the principles of emotional intelligence and how to navigate this reality in a digital world.

Recommendation 3

Investigate the interrelationship between digital technologies, student wellbeing and how young people are making meaning in their lives.

3.3.4 Teacher support

Finding 4

Teachers who adopt a learner-centred approach can enhance interpersonal skills, teamwork, relationship management and consolidation of curriculum knowledge.

Young people are confronted with rapid change in regard to digital technologies, automation, online social identity and interconnection with others. These rapid advances have challenged traditional values and beliefs, and schools are not divorced from this reality. As such, curriculum frameworks are in constant catch-up mode to equip adolescents sufficiently as they transition into society. The future needs of young people reveal the responsibility of schools to produce well-rounded individuals. The responsibility of the teaching profession is to be agile enough to provide an innovative, collaborative and collegial environment (Breakspear, 2012). This requires an acknowledgement of the complexity of the classroom and the relationships that stem from this reality. It also requires an investment by schools to support the relationships between young people and teachers as they transition into adulthood.

Promotion of student voice enables young people to experience learning in an atmosphere of reciprocity with their teachers. Thus, a mutually relational model of teacher–student engagement enhances student voice and positive engagement for all (Freeman et al., 2014). When students experience being cared for and listened to they may feel that their opinions are being taken seriously (Friend & Bursuck, 2014). In addition, teenagers have a heightened sense of justice, and they will not necessarily cooperate with the teacher even if it is to their detriment (Lewis et al., 2013). According to Reichert et al. (2010), ‘teachers registered critical information through their physical presence,

youth or age, ease or tension, posture, tone of voice, and distinctive mannerisms. In minutes, if not seconds, students will sense a decidedly welcoming presence, or not' (p. 191). Adolescents have a 'sixth sense' for intuiting an incompetent, inauthentic teacher who stifles student voice (Goss et al., 2017). More specifically, without breaching the boundaries of professionalism, teachers might consider revealing themselves as real, human and authentic (Ingvarson et al., 2014). Students will perform better with an increased number of competent teachers who are able to implement contemporary learning pedagogies (Craven et al., 2014).

Teacher support refers to the way teachers and young people interact with each other in an atmosphere of mutual respect. The young people from the focus group interviews are rejecting an authoritarian model of teacher–pupil relationships based upon power and control. This requires a paradigm shift on behalf of the teaching profession who are being asked to relinquish power and adopt an agile mindset. Young people interviewed recognised and appreciated when teachers went the extra mile and made themselves available for learning opportunities. One student, Peter, observed:

> *There's plenty of times this year I've gone and seen teachers in their office or have gone to the study centre room and they have spent the time to just go over something I didn't quite get. Everyone is pretty much welcome to do that, so I just think the teachers are hardworking and willing to give up their personal time, just to help you out.*

The capacity of young people from EREA schools to have contact with teachers regarding their learning activities highlighted the concept of students and teachers as co-learners. The accessibility of EREA teachers for students offered the possibility of student voice and conversations about individualised programs. As Sam, a student from the focus group interviews, explained:

> *One quality I like is that the teachers here are very willing to help. They really – a lot of them go above and beyond to make the students' learning easier. Yeah. Just cater for everyone's needs from whether it be the A student to the C student. They've got to make sure – well, that's their job. To educate and to make that as easy as possible in whatever way possible.*

According to young people interviewed, moving from an authoritarian model of teacher–student engagement to a model that is mutually relational seems to work best. Student engagement was enhanced when teachers were prepared to enter into reciprocal and supportive relationships with young people. Overall, young people valued teacher qualities such as patience, understanding, devotion and persistence. Student Sam stated:

> *My favourite quality about teachers here as opposed to any school I've been to is the fact they're actually invested in what you want. And the best results that you can get. So, teachers will actually volunteer to stay behind after school, at lunch time, just be in the classroom with you to actually help you get good marks.*

Students responded positively and were engaged to a high degree when they received one-to-one access to teachers. In addition, productivity was high when teachers gave an equal distribution of time to each student. Highly able students were not favoured over others which engendered a high level of initiative, teamwork and collaboration. This was reflected in the following comments from student Ben:

> *I really like how the teachers are really helpful. They pay attention to every student's needs, they don't always pay attention to the more excelled or – like I'm assuming it's the same amount of attention. Also, they're always helping with any questions that you may need to ask.*

A number of studies highlight a high level of engagement among students and teachers when an atmosphere of collaboration and collegiality is embraced (Hampson et al., 2017; Leadbeater, 2016; Mulcahy et al., 2015; Savery, 2015). When engagement is high and relationships with teachers are mutual, students are more likely to participate in rich tasks and improve learning (Fullan et al., 2016).

Interpersonal relationships were evident when young people and teachers displayed warmth towards one another. When teachers admitted to making mistakes they enhanced student relationships rather than lost respect. According to young people interviewed this did not diminish the authority of the teacher in any way. Developing positive relationships between teachers and young people, and focusing on the quality of these, enhances interpersonal skills. Young people spoke about loyalty and would defend teachers under any circumstances if they admired and respected them. The capacity of young people to be intuitive, to interpret the behaviour of others and to reproduce this behaviour should not be understated. This point is best summarised by Goss et. al (2017):

> The best teacher–student relationships form when the teacher gives strong guidance, and shows clear purpose as well as concern for the needs of others and a desire to work as a team. Mutual respect is important; teachers should recognise students' rights to learn, to feel emotionally and physically safe, and to be treated fairly (p.22).

A positive EREA school community is one which establishes a culture of warmth, empathy, openness and forgiveness. When these characteristics are evident communities are enlivened and rich with learning possibilities. Student–teacher relationships have a positive effect when there is empathy, warmth and encouragement of higher-order thinking. Consequently, when young people and teachers are prepared to enter reciprocal relationships, teamwork can thrive. Equally, presence, acceptance and flexibility are key traits to establishing long-lasting positive relationships with young people. Giving of one's self as opposed to giving of one's time enables young people to behave enthusiastically and faithfully towards the teacher and subject matter. The capacity to listen, to care and exhibit patience are characteristics that establish positive relationships and interpersonal skills.

Recommendation 4

Establish ways for teachers to interact with students regarding learning, particularly in senior school, in one-to-one or in small group situations.

3.3.5 Engagement

Finding 5

Offering multiple modes of learning such as visual, auditory and kinesthetic is required to fully engage young people.

Engagement refers to the level of positive or negative emotions and behaviours observed in the climate of the classroom. Engagement is defined as the way students display enthusiasm for, interest in, involvement in and connectedness to learning activities (Goss & Sonnemann, 2017). Student

leadership programs in schools that become common practice may liberate adolescents from a once autocratic regime (Dweck, 2015). An atmosphere of inclusiveness where relationships are mutual and mistakes are welcomed can lead to a philosophy of strong student voice and engagement in schools (Goss, et al., 2017). It is only when teachers accept students as partners and as unique human beings that student voice flourishes (Moore, Fowler, & Watson, 2007). In essence, if students are in control of their learning in a nurturing, empathic, two-way communication, a culture of active student voice and engagement can be promoted (Bear, 2015).

Engaging students in their learning is complex (White, 2013). At the heart of managing this complexity is creating 'the right classroom climate for learning: raising student expectations; developing a rapport with students; establishing routines; challenging students to participate and take risks' (Goss et al., 2017, p. 3). The education system forces students into a chronological arrangement based upon age and presents copious content across several discrete disciplines. However, pedagogical innovation is far more complex than merely adhering to a set of study designs, deadlines and common assessment tasks (Marzano, 2007). Processing curriculum content is only one of the many complex tasks of which the brain is capable (della Chiesa, 2013). Schools of the future are to be places that inspire curiosity in young people where innovation, collaboration and collegiality abound (Stecher, 2017). This requires a paradigm shift for teachers to transition from seeing the classroom as a place of teaching to a place of learning. When teachers are prepared to relinquish power, they can empower students to become engaged, passionate and independent learners who invent, innovate, collaborate and learn from and with each other (King et al., 2015).

EREA Principals accept that contemporary pedagogies will help prepare secondary school students for the workplace, equipped for a wide range of industries. With this in mind, Principals from the interviews were able to describe how passionate, enthusiastic and innovative teachers may enhance positive student engagement. Principals were able to articulate their ideal teacher who promoted passion, curiosity and creativity. Mark, a Principal from one of the interviews highlights this passion:

> *You walk around the place, you can see students are actively engaged. They have a thirst for knowledge. They have a passion for learning and a real passion for collaborative learning. That's facilitated by the teaching because the learning is relevant and meaningful for them.*

When this type of passion and student voice permeated the school day, EREA school communities were able to learn from and with each other in far-reaching and varied ways. Principals described that students who seem bored at school require extra care, therefore a philosophy that is student centred is critical. For this reason, a nurturing, empathic philosophy of two-way communication may foster a community of learners and a team environment.

Young people from the focus group interviews wanted to experience teachers who were passionate about student learning. However, there was evidence to suggest that young people disengaged quickly if lessons were not interactive and meaningful. As student Mario explains:

> *Engaging. In my opinion teacher's will try best to make their lesson as engaging as possible and they have some interactive activities rather than just having serious classes all the time. Which has kind of worn out the students.*

Young people from the focus group interviews appreciated when teachers deeply knew the content they were teaching and were eager to pass that on. The term that young people used to describe their

ideal lesson was *interactive.* Student, Frank, from one of the focus group sessions best describes this sentiment:

> *I like an interactive teacher that not only uses verbal ways to describe it, also visual where they can. Using the board, different styles of teaching. Also, the group discussions. In a group with other students, talking things out. If someone has trouble, then you can explain it. It just helps you learn and remember things better.*

The young people from this research project were eager to immerse themselves in real-life situations that they often described as being 'hands-on'. In a typical 50-minute lesson they enjoyed five 10-minute fast-paced, well-structured activities that led to an ultimate point. This seemed to be most beneficial for young people and their learning. Young people were also acutely aware when teachers were not engaged with either their learning or the activities in the classroom. As student Gerard highlights:

> *I think in terms of the classroom it is important that the teacher is really engaging. It is so important for a teacher to be engaged and not just sitting at the laptop assigning you work. I think lots of group discussions. I think group discussions work so well because you're not only hearing from a teacher, but you're going further than just what they're saying, and you're questioning concepts. And I think it's really helpful.*

The conversations around group work were a consistent theme from the focus group sessions. While the young people did not name this specifically, it seems that project/problem-based learning activities could have a positive impact on student engagement.

Student focus group interviews were conducted over a 12-month period. The transcripts were coded into NVivo 10.1.0. As a result of this coding, *Engagement* was ranked the third most significant category under the theme of 'Pedagogy'. This engagement sub-theme was further analysed to ascertain the positive, negative and neutral comments. The percentages of positive, negative and neutral comments were then calculated, and these percentages are shown in Figure 3.5. A comment was considered positive if the student made an encouraging and direct link to their learning experience, event or activity. A comment was considered negative when the young person's experience of teaching impacted poorly on their learning or sense of enthusiasm. A comment was considered neutral when it was neither positive nor negative, or when it related to something that the student hoped would occur in their ideal learning environment.

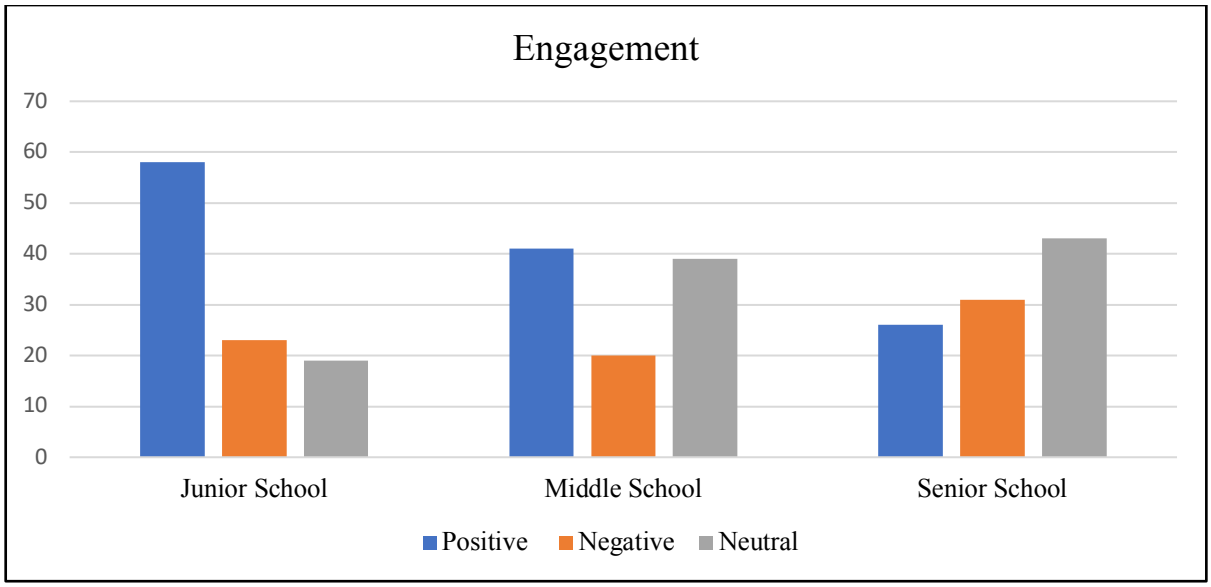


Figure 3.5 Engagement results of young people

The engagement results were broken down into junior school (Year 7 and 8), middle school (Year 9 and 10) and senior school (Year 11 and 12). Over half of young people in Junior School (58%) commented that they experienced engaging learning activities. Less than half (41%) spoke about engaging learning activities in Middle School. Interestingly, only 26 per cent of senior school students experienced engaging learning activities. An analysis of the neutral comments highlights that these had doubled by the time students had reached senior school. Nineteen per cent of young people in Junior School spoke about their engagement in an ideal learning environment (neutral comments). By the time they had reached senior school this had grown to 43 per cent. These results tend to suggest that the way in which a teacher delivers pedagogy influences the level of student engagement. There are many elements that contribute to the dynamics of positive student engagement. The skilled teacher is able to manage these elements in an attempt to provide young people with positive learning experiences.

Young people interviewed reported a heightened level of enthusiasm when teachers were enthusiastic about their lessons. This enthusiasm seemed to coincide with an anticipation from young people that learning activities would satisfy their curiosity and desire for innovation, stimulation and creativity. The young people in this research project spoke about a sense of enthusiasm, vitality and connection brought about by passionate teachers. What is concerning is the decline in this enthusiasm as young people move through the EREA schooling system (see Figure 3.5). When teachers adopted a student-centred, personalised approach to classroom activities, the interests and positive energy of young people increased. There was positive feedback from young people when classroom activities were designed around collaboration, communication and group work that included movement and mobility. In order to maximise student engagement, teachers understood the need to nurture self-motivated, robust, resilient and independent learners. This level of engagement was achieved when students had some choice about learning activities, choice about how they learned and choice about the space within which they learned.

What was evident from the focus group interviews is that young people who have a good relationship with their teacher tend to exhibit a higher level of engagement. This is particularly the case for younger students. It can be the difference between a student accepting or resisting classroom rules that enable learning. Teachers with good relationships with their students can more effectively intervene when

problems arise. The results also indicate the need for EREA schools and teachers to craft lessons that are interactive, meaningful and challenge learners to solve real-world problems.

Recommendation 5

Consider how EREA schools might implement programs that address the recent Gonski Report (2018), Priority 2: 'Equip every child to be a creative, connected and engaged learner in a rapidly changing world'.

3.3.6 Behaviour management

Finding 6

Schools should have a comprehensive Wellbeing Support Policy based upon the principles of social and emotional learning and common ground.

In an ideal world students, teachers and parents would form an equal partnership. This partnership would revolve around the principles of rights and responsibilities (Montuoro and Lewis, 2017). Showing compassion and understanding go a long way to opening the space for young people to learn (Biddulph, 2008, p.53). This is the balancing act required when working with adolescents. What is more, they must be listened to and know they are cared for as individuals, but at the same time they must be accountable for their actions (Pollack, 1999). Similarly, adults must be patient when dealing with young people, place appropriate support mechanisms in place, and allow them to grow and develop into responsible adults (Lashlie, 2007; Lingard et al, 2008; Woolner et al, 2008; Hattie, 2013; Montuoro and Lewis, 2017).

Providing structure, with clear boundaries, is recognised as a key principle of sound student engagement (Bear, 2015). Boundaries and structure are based upon the principles of fairness, consistency and justice, which is educative (Sullivan et al., 2014). Sometimes adolescents want to test the boundaries (Montuoro & Lewis, 2015). Therefore, it is imperative that teenagers experience consistency from one classroom to the next, from teacher to teacher, from subject to subject and from year level to year level (Montuoro & Lewis, 2015). A large and growing body of literature focuses on positive education that caters for students' individual and personal circumstances and may lead to authentic learning (White, 2016). Accordingly, it is preferable that classroom management procedures and protocol be negotiated with students and parents (Lewis, Montuoro, & McCann, 2013). Appropriate and negotiated consequences when young people are in breach of the code of conduct go a long way to maintaining structure and order (Montuoro & Lewis, 2015). A sound classroom management policy contains examples of levels of behaviour from least to most serious, with appropriate consequences for each level (Merry, 2008). Nonetheless, young people sometimes test these boundaries or make mistakes (Rogers, 2015). When this occurs, an explanation of the behaviour and the negotiated consequences become part of the natural educative process (Sullivan et al., 2014). In the context of adolescent education, energy levels, work tasks and relationships with teachers add to the complexity of classroom management (Reichert et al., 2010).

Much of the literature surrounding sound classroom practice supports the notion of structure and order. Principals agreed that young people need structure, order and routine. It was important for Principals that all teachers and young people understood the rules and that they would be fairly applied. It was recognised by Principals in this research project that structure is important for young people if they are to feel safe. Principal Mary, best captures this feeling:

> *Young people and staff overwhelmingly want boundaries and routine and rhythm. They want to know what to expect when they come to school.*

However, this concept of structure and order must not be extended to punishment. Principals concurred that punishment does not work. Punishing any young person, particularly in front of peers or other adults, is demeaning and has no place in an EREA school environment. What Principals and students were after is a balance between structure, order and routine which enabled lessons to be conducive to optimal learning. Commenting on this balance required in the classroom, student David highlighted that:

> *The teacher needs to be able to convey information without being interrupted, but at the same time they need to step back and allow the students to work productively in a quiet and efficient manner. They also need to provide insight that's needed and enforce all of the teachings that they have spoken during the lesson.*

Principals recognised that young people feel safe when the teacher is able to implement guided choices of classroom behaviour. Guided choices include being cooperative, showing courtesy to all, and being punctual. It was also acknowledged by Principals that teachers need to be equipped with the skills to negotiate a range of complex classroom behaviours with young people. Some of the structures in place at EREA schools to support school communities are operation by principles of respect, participation, honesty, safe and legal. This was often noted by the Principals. Jim, for instance, outlines:

> *The key principles of that are when children's needs are being met, they generally choose appropriate behaviour, and that behaviours can be taught and learned. Children need to develop the skills of living and learning together harmoniously so they can work out conflict together when it's experienced.*

Throughout the one-to-one interviews, Principals highlighted that sound classroom management is based on positive relationships where staff walk with and work alongside young people. Behaviours can be taught and learned and mistaken choices are opportunities to learn a more appropriate way of behaving. As Principal Paul suggested:

> *Common ground requires everybody to participate in the process of an agreement. This includes agreeing to a process if things go awry. Many classes do an agreement for every class, where people put down some key points about how they're going to be in this learning session and then they make a commitment to that.*

Table 3.2 outlines the paradigm shift required to move from traditional 'power over' responses to poor behaviour to a 'power with' position that flows from the principles of common ground. The EREA Flexible Schools Network (FSN) has adopted the principles of respect, safe and legal, participation and honesty to guide their group relationships. These principles represent broad directions and are useful in that they do not totally define what should happen in any particular situation but, rather, establish a common ethical framework that promotes relationships between people. In this way all members of the group, adults and young people, are asked to relate within the same standards, based on the group's understanding of these principles. The consequences of operating on common ground with a set of principles are that adults and young people are both accountable for their behaviour. Within this approach emphasis is placed on providing opportunities for articulation of issues that arise. Meetings become important as all are shaped and influenced by the same principles.

Table 3.2 Summary of behaviour management paradigm shifts

	Old paradigm	New paradigm
1	Behaviour management	Wellbeing support
2	Authoritarian	Mutually relational
3	Behavioural consequences	Negotiated consequences
4	Punishment	Guided choices
5	Power and surveillance	Mutual respect
6	Rigid rules	Structure, order and routine
7	Inflexible relationships	Common ground
8	Inconsistent	Fairness and justice
9	Rules and regulation	Care and compassion
10	Blanket policy	Individual circumstances

Resolution of conflict (which may include a restorative practices approach), negotiation about learning, recognition of rights and responsibilities and acceptance of consequences are modelled and explored both within the group and individually. This process is expected to occur equally for adults and young people. The skills necessary to engage in this process are:

- active listening (demonstrating you have heard another)
- open questioning (inviting people to speak - to tell their story)
- problem solving and decision-making (being strategic and conclusive)
- negotiation skills (agreeing on consequences).

The principles of common ground are not avoidance of conflict or issues but rather an acknowledgement of people's differing perceptions and feelings in finding the space to work together to resolve differences. Problems and conflicts are opportunities for personal growth and a lifting of a person's self-worth.

Recommendation 6
Review and communicate comprehensive wellbeing support policies and procedures based upon the philosophy of social and emotional learning and common ground. Ensure these policies have a degree of flexibility to cater for individual circumstances, with the view to guiding young people to responsible choices.

3.3.7 Personalised learning

Finding 7
Learning for young people should be profoundly personalised and sensitive to individual and group differences in terms of background, prior knowledge, motivation and abilities.

Learning for young people should be personalised and sensitive to individual and group differences in terms of background, prior knowledge, motivation and abilities (Organisation for Economic Co-

operation and Development, 2010). Knowing the learning capabilities of each student personally and presenting multiple learning options can cater for individual differences (Tomlinson, 2009). In addition, adopting a flexible approach can go a long way to catering for the individual needs of students (Bartle, 2015). By contrast, a learning program that is not personalised can exacerbate feelings of isolation for young people (Biddulph, 2018). Therefore, a goal for schools is to establish ways to provide teachers with comprehensive data on students, so as to implement an individual approach to student learning and achievement (Goss et al., 2015).

Matching data to appropriate learning tasks might mean that all students experience success in their learning (Yonezawa, McClure, & Jones, 2012). Tomlinson (2009) states, 'what we can and should do is to use instruction that offers a wide range of possibilities to address the wide range of needs our students inevitably bring into the classroom with them' (p. 29). As such, personalised teaching is responsive teaching. Personalised instruction stems from a teacher's solid and growing understanding of how teaching and learning occur, and responds to varied learner's needs for more structure or more independence, more practice or greater challenge, or a more active or less active approach to learning (Tomlinson & McTighe, 2016). Personalised learning may be a more authentic way to engage students.

Students from the focus group interviews demonstrated a positive emotional state when they were welcomed and felt they were personally known and cared for by the teacher. Positive relationships were built when teachers took an interest in young people and established rapport and trust. This rapport resulted in the students feeling happy about their schooling, which often enhanced learning. One student (Gerard) stated:

> *I think something as simple as knowing students' names, being able to call them by name, and having different methods of teaching. Being able to change it for different students, and a mixture of graphs and text and writing, that kind of thing.*

Studies have found that students increased their scores on academic tests when administered under friendly and warm conditions (Hattie, 2013b). The pastoral care extended to students was essential in regulating the emotional climate of the classroom. Some students brought emotional issues from home, the schoolyard or other classes, and these had to be addressed before the lesson could be productive. Young people need to have the opportunity to express their feelings in order to establish positive relationships. The data indicate that relationships were more positive when teachers adopted a personalised approach to learning.

Deep learning requires a foundation of information and knowledge organised in the context of a schema or conceptual framework. As the themes from the data collection period emerged, establishing rapport and trust via the interpersonal relationships a teacher has with his or her students was critical to positive student outcomes. Displaying warmth and empathy while delivering the content from an over-crowded curriculum requires a delicate balance. Social and interpersonal interaction between teachers and students can directly foster the interaction between content and instruction. One student, Jeremy, observed:

> *They go into detail and they really make sure that everyone around the class knows what they're trying to explain and they explain it a few different ways. That way, if you don't get it the first time, you can get it the second or third time and it can really seep in and you have a nice broad knowledge of the basics and you can really expand on it.*

Adopting a personalised approach to student learning is complex. While the novice teacher endeavours to acquire these complex skills, the most competent teachers will instinctively provide a high-quality personalised program. The young people interviewed were able to recognise teachers who could deliver a personalised program.

As the data collection phase continued, young people were able to appreciate personalised learning as a means to enhance student engagement. This included young people having a voice in the design of learning activities that were tailored to suit their needs. A consistent theme from the focus group interviews was that young people wanted to provide feedback about learning activities and the older students began to see themselves as co-learners with the teachers. This was reflected in the following comment from student Ethan:

> *I like when the teachers are tailored to the need of the individual sometimes, in different situations where they have learning – they might learn in a different way that those teachers can understand them – instead of just teaching them something else.*

The aim of a personalised learning approach is to have students develop as independent learners. In the feedback from the senior students there was evidence of learned helplessness after they had experienced six years of secondary schooling that had consisted of being instructed and lectured in a teacher-centred learning environment. This was evident in some comments by older students who were expected to think for themselves once they were in the senior school.

Personalised learning began with the learner and it allowed young people the autonomy to connect with their interests and passions. The genesis of personalised learning was observed when schools adopted this approach as an integral part of their vision for learning. As Principal Mark suggested:

> *Visible learning and using data to inform our practice. And again, we've got lots of data in the school, we do lots of assessment. So, it's pulling all of that data together to be able to have a look at a snapshot of the child and to see where they are and then adopting your teaching strategy accordingly.*

The vision for a personalised learning approach is highly aspirational. This is the final level for the expert teacher to attain. Students are enthusiastic and motivated, and they pursue their learning in a *free-ranging* manner. The expert teacher has sophisticated data describing his or her students and knows each one as a learner and as a person. The Principals in this study aspired for students to become independent, self-directed and involved in discussions with other classmates about their learning. With a personalised learning approach the expert teacher understands how his or her students learn, and adopts an individual and personal approach to their learning.

Free-ranging learners is a term that has emerged from this research project to describe positive aspects of personalised learning. Free-ranging learners are robust and resilient. They have the autonomy to select their pathway and are passionate about their learning program. Free-ranging learners are self-motivated and independent, and they demonstrate initiative when participating in learning activities. Challenging students to become actively engaged, independent, lifelong learners should be the integral aim of change in teaching strategies. Free-ranging learners can cooperate with others in a collegial and collaborative manner. They are curious, innovative and inquisitive, and they are prepared to experiment in order to learn new things. Schools and teachers have a responsibility to create a culture where free-ranging learners can be cultivated and nurtured. Free-ranging learners will flourish in an environment that is inclusive and participative and that celebrates diversity. Young

people in this research project were able to learn independently, interdependently and collaboratively, and more freely when teachers adopted a personalised learning approach. As young people graduate from secondary school, it is important that they leave feeling engaged and enlivened, equipped with the skills to pursue lifelong learning.

Recommendation 7
Establish ways to provide teachers with comprehensive data on students, so they can implement an individual approach to student learning and achievement.

3.3.8 Collaboration

Finding 8
A school community that is conducive to positive student outcomes establishes an atmosphere of collaboration, collegiality and teamwork.

Modern learners value working in teams (Lonsdale & Anderson, 2012). Team environments provide a safe opportunity for student engagement and allow the skills of collaboration, collegiality and negotiation to thrive (Norden, 2015). Moreover, these skills could be universally applied across a broad range of professions and industries that 'promote a learning culture of openness to new ideas' (Keppell et al., 2011, p. 40). Again, a mindset of collaboration is central to working together to solve problems (Han, Capraro, & Capraro, 2014). For instance, there is a sense of selflessness that comes with working in teams. There is capacity for greater accomplishment when adolescents are prepared to relinquish their personal power for the benefit of the whole (Walsh & Black, 2015). Competitions between teams in a classroom environment can benefit learning (Reichert et al., 2010). The benefits of learning from and with each other include the characteristics of listening, empathy, understanding, leadership and student voice (Bartle, 2015). Extensive research has focused on incorporating greater student involvement in decision-making, and ensuring teachers and students are viewed as partners to assist in schools catering for the unique learning style of individuals (White, 2013; Woolner et al., 2012).

An essential element of collaboration and student-centred learning is empowering young people to solve problems (Savery, 2015). Reichert et al. (2010) state that with project-centred learning, 'learners [are] on their feet and moving about, working individually, in pairs, and in teams to solve problems, create products, compose presentations to their classmates and … are held accountable for the material presented' (p. 2). Teachers who cater for various modalities of learning, such as project-centred learning, enable students to move seamlessly from one activity to another (Alterator & Deed, 2013; Barrett et al., 2013). Multiple activities are all examples of how a collaborative philosophy could encourage creativity in teaching methods (Henriksen, Mishra, & Fisser, 2016). Various studies support the use of collaboration designed to enable maximum student engagement (della Chiesa, 2013; Newton, 2014). In essence, all components of contemporary pedagogy could be supported within a collaborative mindset that maximises teacher–student interaction (Hampson et al., 2017). Students who experience contemporary pedagogy, such as project-centred learning from teachers, have the opportunity to experience a differentiated approach to learning (Hattie, 2013a).

Principals from the one-to-one interviews commented that enabling young people to work in a team can develop their interpersonal skills. The interpersonal skills that emerged in this research included collaboration, communication, problem-based learning and teacher–student relationships. Teachers needed to take the time to teach students how to work effectively in a team. When team tasks were

open-ended, without structure, young people reported that they were often off task. Commenting on his experience, student Anthony highlighted that:

> *I like learning in different ways, whether that's working individually or working in groups, because I think it's important that you are able to understand things by yourself and together with other people, especially when you leave school and start going into the real world. I think it's really important that you develop that understanding of talking and connecting with other people as well.*

Young people need to experience positive social relationships – interpersonal, open-ended and reflective forms of human interaction – to be prepared for futures-oriented lifestyles. The exposure to these skills provides young people with a supportive social climate in order to maintain their place in the world and develop a sense of self-worth. Simon, a student from the focus group interviews noted the importance of mentoring:

> *Something my grade's done this year is that within our year level, we'd actually start a peer tutoring thing. The boys who are going really well in maths and physics have actually also organised outside of the teachers and the old boys coming in groups, helping each other with the work. Especially in the assignments.*

Students from the focus group interviews enjoyed classes where small group work was encouraged. Students who reported that the discussion within a group was stimulating and the engagement was lower when the teacher was talking confirmed this. This feedback should give EREA teachers the confidence to include more learning activities based upon the power of positive relationships. As student Bruno said:

> *In group tasks, the teacher assigns you to do activities, for example debating or something and you get into groups and then you can talk about it, you can socialise, you can get different points of view and that teaches you life skills for your future. You have got to listen to other people, you've got to know how to socialise.*

The teachers endeavoured to extend a model of collaboration and collegiality to the classes they taught. Principals noted that teachers who experienced the benefits of collaboration with young people could therefore appreciate the advantages of its use in the classroom environment. Teamwork and collegiality were skills that needed to be taught by teachers to make the collaborative activities a success. Student Peter describes collaboration and communication with his teacher and other classmates:

> *I love it when the teacher and you can have a sort of two-way conversation discussing it, trying to understand it. Then opportunities where you can discuss with other classmates and help them with something that they might not understand, because teaching it to them can really reinforce your knowledge and vice versa if you don't quite understand.*

Productive relationships between students and teachers were evident across all EREA schools. Reciprocity was established between the teachers and young people, and the importance of developing positive relationships was central. A positive school culture promoted the notion of engagement, including offering a diverse program where the individual gifts of students were celebrated. The young people in this research project valued an atmosphere of inclusivity in the

classroom where each student is personally known, cared for and respected. Contemporary teacher pedagogy that maximises the use of collaboration, can foster an environment where students work cooperatively in teams.

This supports the findings of Keddie and Mills (2007a) that 'learning how to become a member of a democratic classroom does not, as with most academic and social dispositions, come naturally – such skills have to be explicitly taught' (p. 68). Principals, through their one-to-one interviews, observed that students exercised leadership more frequently when collaboration and teamwork were evident. Teachers open to positive student relationships enabled these activities to occur more readily. Teachers needed to relinquish power in order for co-leadership to thrive. For the shift in power to students to occur, teachers needed to step back and allow them to make mistakes without interference. The real relationship synergy occurred when teachers and students considered themselves in partnership, as co-learners. This supports Fullan et al. (2016) who highlight the positive impact of:

> Working interdependently and synergistically in teams with strong interpersonal and team-related skills including effective management of team dynamics and challenges, making substantive decisions together, and learning from and contributing to the learning of others. (p. 3)

Teachers might consider taking practical team-oriented activities into the classroom to enhance both staff and student motivation. Cooperation, collaboration and relevance should be the cornerstone of each lesson with opportunities to talk with peers and do group work to improve a student's achievement, interpersonal relationships and attitudes to learning. Some young people may not cope well with activities that do not have a clear role of engaging them in their learning. The evidence from this research suggests that young people are capable of working in a team environment and learning collaboration skills. Kagan (1989) devised a method called 'the three-step interview', in which 'each person produces and receives language; there is equal participation; there is individual accountability for listening, because in the third step each student shared what he or she has heard' (p. 13). With this method, students have no choice but to contribute. Young people from the focus group interviews appreciated the support for each other, as opposed to working individually and being singled out and 'shamed' for not producing an immediate response. Interacting with other people is a required skill for the contemporary learner. A culture of collaboration in EREA schools is inclusive of relationships between teachers, between students and between students to teachers.

Recommendation 8

Promote student growth in awareness of themselves and others in social and group interactions, and develop their skills to engage in highly effective small group work.

3.3.9 Curriculum knowledge

Finding 9

Learning is contextual and curriculum planning needs to cater for the individual circumstances of the school community.

A curriculum framework that offers a broad range of learning opportunities has the potential to provide for the future needs of young people (della Chiesa, 2013; Hattie & Yates, 2013). The curriculum prescribes what students will learn and what teachers will teach (Goss, et al., 2017).

Curriculum knowledge can include diverse learning areas. In Australia, the curriculum includes the 'general capabilities of: literacy, numeracy, ICT, critical and creative thinking; personal and social; ethical considerations and intercultural understandings' (Australian Curriculum, Assessment and Reporting Authority, 2014, p. 17). Rather than segregated faculties and learning by rote, student outcomes are clearly stated, and there are examples of flexible modes of delivery and practical suggestions for teachers to use (King et al., 2015). The cross-curriculum priorities include: Aboriginal and Torres Strait Islanders; Asia and Sustainability' (Australian Curriculum, Assessment and Reporting Authority, 2014, p. 18) and a pedagogy based upon the individual, brain-based learning, social learning, ICT and accountability (Hattie, 2015b; Timms, 2013). Much of the literature on curriculum continues to highlight the many variables that combine to make an effective classroom difficult to measure (Goss, et al., 2017).

In moving towards a student-centred approach to curriculum design it is also important for students to learn how to learn (Hall, 2014). However, the strong emphasis on content delivery in secondary schools could result in students learning little from merely listening to teachers (Hattie, 2013a). Therefore, teachers require a paradigm shift, which could be a foreign concept for the secondary school teacher who is heavily content oriented (Ithaca Group, 2016). In response, various student-centred models that equip students and teachers with the skills to transform current teaching styles are essential for reaching all learners (Hall, 2014). Rather than seeing these models as a threat, teachers might embrace this as a great opportunity for young people to reach beyond their potential in a team environment.

The Principals interviewed for this research project discussed elements of problem-based learning and the value of an integrated curriculum. One Principal observed that the current curriculum structure was very crowded and it was difficult to achieve in-depth student learning. As Fred, a Principal from the one-to-one interviews, explained:

> *The Queensland education system demands we focus on the national curriculum. We do that more in the capabilities, than focus on Key Learning Areas. We use a more thematic unit approach with integrated Key Learning Areas, but particularly focusing too on the general capabilities.*

A thematic unit approach enabled teachers to introduce real-life contemporary issues and to ask students to investigate and solve problems. This problem-based learning required teachers to structure the activity so that young people would be clear about their roles.

Towards the end of the data collection period, Principals offered a wide range of possibilities to address the diverse needs young people brought to the classroom. Many young people in the focus group interviews expressed their frustration with a teacher-centred approach and it was noted that inquiry/problem-based learning reduced the likelihood of this occurring. Inquiry learning allowed young people to experiment and explore topics at their own pace. The feedback from Principals and young people suggested that student engagement was higher when teachers adopted an inquiry/problem-based learning approach This was noted by the Principals. Jeff, for instance, observed:

> *I think that there's a great opportunity to further enhance and build on that sense of what good curriculum looks like. Broad-based across all of our states and territories that it doesn't have to be that specific, because good learning is good learning and good teaching is good teaching and one doesn't forget there's a symbiotic relationship between those two things that is necessary.*

Successful pedagogy included positive relationships with students, excellent curriculum knowledge, and the use of consistent behaviour management skills. A recommendation from these findings is that contemporary pedagogy could enhance the modern student, negotiate the global context and be intuitive to the emotional climate of the classroom. This pedagogy welcomes student voice and successfully integrates with the curriculum to enliven student engagement.

As the data collection period progressed, Principals were able to discuss the complexity of classroom dynamics. This complexity evolved as Principals pondered and explored the possibilities of an emerging pedagogy that highlighted the need for teachers to be passionate about their craft. EREA Principals strive to break new ground and establish a formula for others to follow. This view was echoed by young people who discussed the need for all teachers to deliver well-planned and well-researched pedagogy combined with a love of their subject area. Principals involved in this research project believed they were contributing positively to an evidence-based approach to effective pedagogy. One Principal, Mario, observed:

> *The teachers who do most well in the college are those who clearly have a passion for their subject. A passion for your subject and knowing your content really well is really one of the things that's high on the list of priorities.*

The results highlight the importance of positive teacher–student relationships. Young people want to experience teachers who are passionate about learning and facilitate interactive and meaningful classroom activities.

The term *caged learners* emerged from this research project to describe elements of negative student engagement. Caged learners refers to students feeling confined and constricted by an outdated curriculum. Young people are restrained and restricted by content that seems to have little relevance to their world. Over time, caged learners are disempowered, discouraged and stifled by the cumbersome and limited delivery of content. Caged learners have consistent experiences of authoritarian models of teacher–student engagement. They are perceived as passive participants in the classroom, and are impoverished by hierarchical mechanisms and control techniques. Student Phil laments:

> *A good class is when the students are interested and so they actually want to learn, rather than just stare out the window, or stare at the board.*

This method of control is in contrast to a personalised approach where young people become co-authors of their learning. Caged learners are impeded by an immobile and inflexible curriculum. The learning environment is sterile and stifling, which lends itself to industrial and robotic teacher–student relationships.

In the student focus group interviews, young people were afforded the time to express their views on learning. This seemed to be a liberating experience for the young people involved in the interviews. As a result, a focus on student-centred learning became a key ingredient in adopting a long-term view of change for those involved in this project. This point is best summarised by Hattie (2015a):

> Self-transforming schools can unleash greatness, can recruit, retain and reward the best education professionals, they focus on student centred learning, they knowledgably implement a responsive response and rich curriculum, and they use evidence to know about and plan for student learning (p. 8).

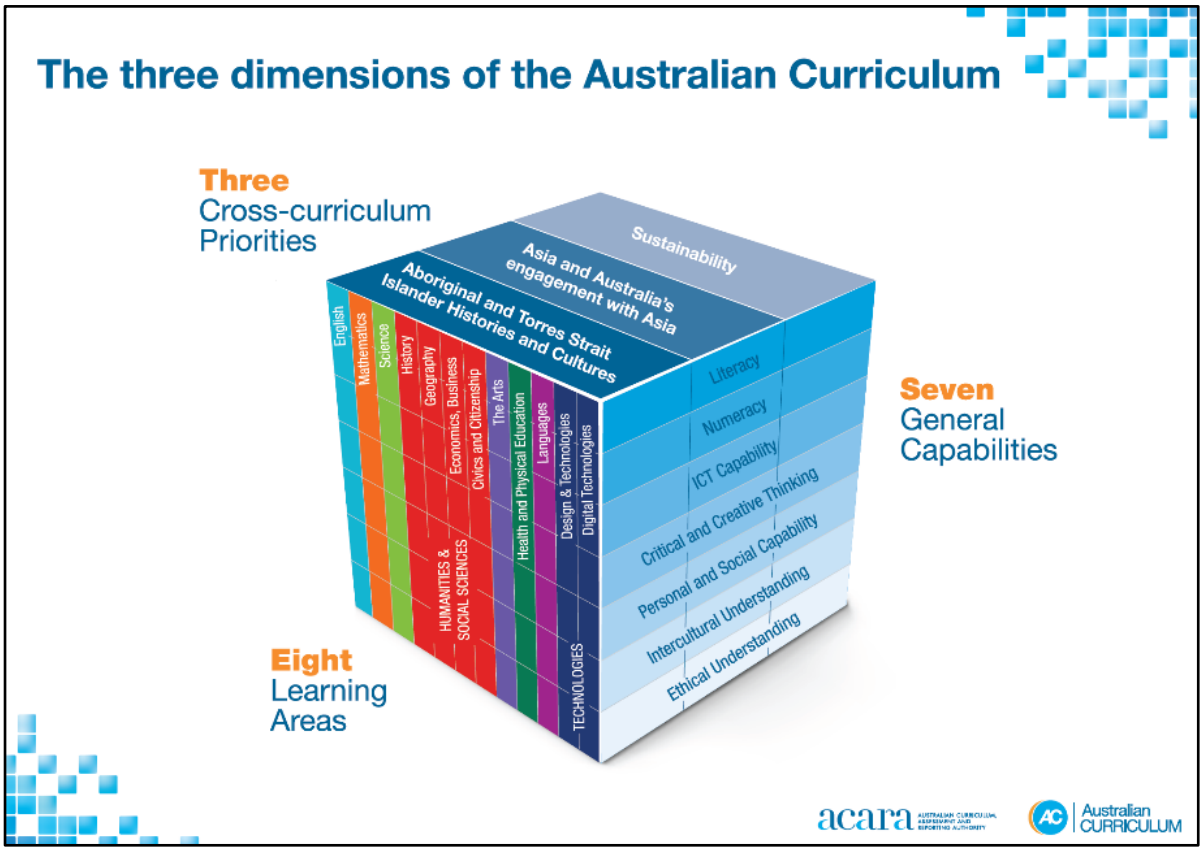


Figure 3.6 The Australian Curriculum

Figure 3.6 outlines the three dimensions of the Australian Curriculum. This supports the feedback from EREA Principals that cross-curriculum priorities and general capabilities should provide a framework for an integrated unit approach to curriculum design. However, too often in EREA schools, the focus is on the eight learning areas and a silo approach to curriculum delivery. The feedback from the Principals and student focus group interviews was that curriculum design needed to be combined with strong teacher–student relationships that were supportive. Each member of this relationship could voice opinions and experiences in an atmosphere of rapport and trust. This participative and inclusive style of teachers could result in a positive learning environment. Teachers who modelled effective collaboration were inadvertently teaching this to their students. Collaboration emerged from teachers who were passionate about their subject area, and some young people were surprised by their capacity to work together, something that had not been evident in the past.

Recommendation 9

Continue to review the state and national curriculum to ensure young people are equipped with the skills necessary for their successful transition into the workplace.

3.3.10 Professional learning

Finding 10

A focus on staff professional learning, by leadership teams in schools, establishes a culture of lifelong learning.

Schools are complex places where multiple interactions and encounters occur within the community on a regular basis. Wenger (2008) describes these interactions as relationships that can create learning opportunities or communities of practice. Integral to the school community are its teachers. Teachers are a precious resource in any school. When they are nurtured and given the opportunity for professional learning they feel valued (Caldwell, 2016). Taking risks and knowing that it is acceptable to make mistakes gives teachers confidence and autonomy to pursue innovative learning activities (Caldwell, 2016). When this culture exists in schools, innovation and creativity have the potential to thrive (Stiglitz & Greenwald, 2014). Furthermore, inclusive and participative leadership encourages innovation and enhances motivation (Australian Institute for Teaching and School Leadership, n.d.).

Enabling teachers with the time to work in teams requires considerable investment on the part of schools and careful planning by school leadership teams (Hattie, 2013a). To date, several studies argue for 'at least three extra school periods a week for professional learning' (Jensen et al., 2014, p. 3). The advantage of this, according to Wenger (2008), is that teachers 'act as resources to each other, exchanging information, making sense of situations, sharing new tricks and new ideas, as well as keeping each other company and spicing up each other's work days' (p. 47). Experienced teams require less time than inexperienced teams to plan each lesson, and this may allow them the freedom to mentor those teachers new to the profession. Weekly staff professional learning demonstrates to teachers that their time is valued (Freeman et al., 2014). This commitment from leadership in schools can clear the way for staff to reflect upon, discuss and improve their teaching practice. Accordingly, leadership teams have a responsibility to protect teachers from meaningless administrative tasks so that they can proceed with the core business of planning and implementing authentic learning (Gonski Report, 2018).

EREA Principals encouraged teacher professional-learning team conversations to enhance an atmosphere of collaboration and collegiality amongst staff. This atmosphere was crucial for the successful planning of lessons. It enabled teachers with the opportunity to research the most effective way of designing contemporary pedagogy. It also afforded teachers the chance to discuss problems and air frustrations in a trusting and supportive environment. In the initial data collection period, Principals were able to share observations of the teachers and the effectiveness of professional-learning teams. As Principal Bruno noted:

> *Each key learning area has adopted an area that they are focusing on as a faculty in professional-learning teams. They meet regularly around what they are doing, and engage in observations and research within their faculties. They accumulate information and we present information across the faculties on the three areas, to bring that constant improvement.*

The professional-learning team conversations supported teachers to cope with the increased demands of teaching by providing a forum for collaboration. Some of these demands include an expectation of greater accessibility by both parents and students, greater transparency of teaching practice and a willingness to collaborate and team teach.

EREA Principals who provide a supportive environment can help nurture the learning of teachers. A focus on staff professional learning, supported by leadership teams in schools, establishes a culture of lifelong learning, and this philosophy encourages growth and reflective practice. Principals who adopted a growth mindset provided a framework for renewal and engendered the belief that there is always a possibility to learn and improve student outcomes. This was reflected in the following comments from Principal David:

> *Teacher development is a real commitment we have. We're supporting our teachers, and so we've developed professional-learning teams for this target. Ongoing investment in teacher development is really important. We can throw money at schools but if it doesn't get to the classroom, if it doesn't get to making the teacher a better teacher, then it's a waste of resources.*

When Principals adopt the belief that everyone needs to improve, they can contribute to the vision and mission of the school in a meaningful and authentic manner. In their case studies of three schools, Goss et al., (2015) discovered that 'strong leadership, investment in teachers' skills and making time for teacher collaboration have been essential' for improved student outcomes (p. 25). This notion of collaboration and teamwork has the potential to improve staff morale and motivation.

All Principals commented on the need to enable teachers to carefully plan learning activities that embrace contemporary pedagogy. EREA Principals understood that teachers appreciated the support they received to work in a professional-learning team that enabled lessons to be planned around concepts of curiosity, imagination, creativity and higher-order thinking. Principals noted the advantage teachers had of drawing on the knowledge and experience of team members. This gave teachers confidence to learn from and with each other in a supportive environment. As Principal Ken suggested:

> *The professional curiosity and then the ability and a desire to be that reflective practitioner and continually refine what you're doing, adjusting what you're doing, based on the cohort – experience of you and the cohort together.*

Reflective practice was a major benefit of any professional-learning team conversations supported by EREA schools. Principals could absorb the energy generated by the discussions and reflect upon meaning. The concept of professional-learning teams helped to shape an understanding of teachers and students as co-producers of learning and enabled teachers to construct meaning. The construction of meaning was a practice that teachers cherished and that opened the space for reflective practice. The Principals in this research project developed a plan to use data for targeted teaching and to track student development over time. By targeting teaching in their classroom teachers were able to track the progress of their students and design programs to suit their individual needs.

The data collected so far from this research project has highlighted how young people can be conditioned to be passive receivers of information. It has also highlighted how teachers can return to default pedagogies if not supported by professional-learning opportunities. The impact of similar findings at St Bernard's College, an EREA school in the Southern Region, has been significant and has led to the establishment of a research centre for the ongoing professional development of its staff. Similarly, St Laurence's College, an EREA school in the Northern Region, implemented The Learning Exchange (LEX), an Institute for Excellence in Learning & Teaching. This institute employs a staff member to deliver professional learning in partnership with two other Catholic schools in Brisbane. The initial phase of the work involved high-level engagement with executive, senior and middle leaders from each school. The focus was on clarifying priorities for learning, and building a deeper understanding within staff teams of modern learning and modern learning environments.

The St Bernard's College Board unanimously agreed to establish a Centre for Professional Learning, Innovation and Research. The centre aims to develop a culture of learning at St Bernard's that is informed by current advances in educational best practice. It aims to investigate ways to develop higher-order thinking skills and to generate teacher research, reflection and strategies that improve

student learning. The centre uses data so that student learning is informed by evidence. The centre engages with local, national and international experts who have a deep knowledge of the science of learning and the art of teaching. Staff employed by the centre have established relationships with local universities and learning communities, as well as the local network of schools. Overall, the centre supports students to reach their potential.

The senior leadership of St Bernard's College agreed with the Board that the centre could have a significant impact on student engagement and learning outcomes. Figure 3.7 illustrates the significant capital outlay in the form of a physical location for the centre in school grounds. It was also agreed that significant investment in human resources be approved to engage three staff to work in the centre. These include a director, two researchers and administrative support staff. Senior leadership agreed that an increase in the capacity of staff to undertake action research, and the use of reflection as an analytical lens, would improve their day-to-day teaching practice. They supported the idea that a combination of team teaching, mentoring, the provision of constructive feedback and the enabling of teacher research could improve the effectiveness of quality teaching and lift school performance. The goal may be ambitious but centres of research and innovation have been established in many schools. All EREA schools could be part of an innovative movement that will ultimately serve students as they enter an exciting and challenging new world.

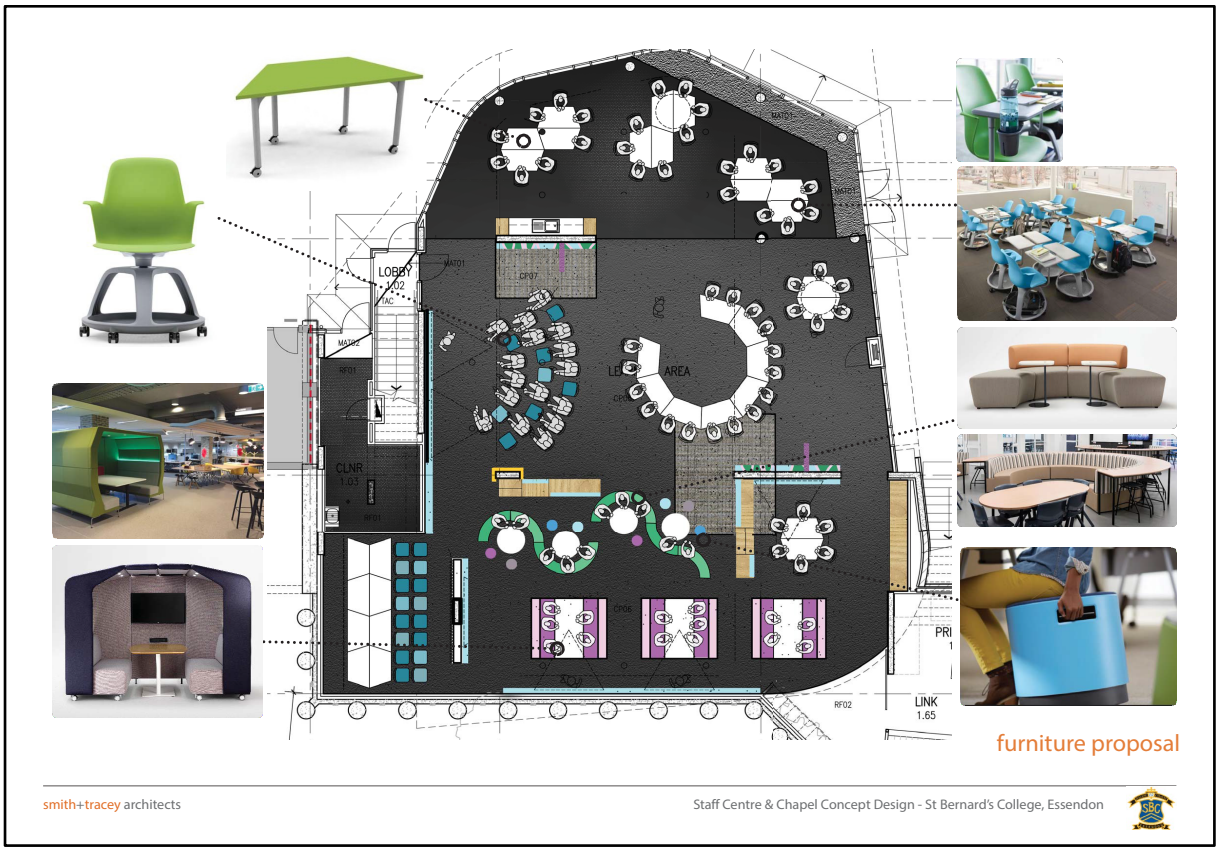


Figure 3.7 Centre for Professional Learning, Innovation and Research

Recommendation 10

Create a continuously improving profession through the provision of high-quality professional learning for teachers that is appropriate to their career stage, developmental needs and the changes rapidly occurring in society.

3.3.11 Hands on

Finding 11
Young people will disengage quickly if they are not exposed to a variety of innovative, hands-on learning opportunities.

There is a body of literature that suggests student engagement increases when teachers adopt a philosophy of collegiality and mutual respect, and provide multiple learning activities for curriculum content (Mulcahy et al., 2015; Cavanagh, 2016). Conversely, students tend to disengage quickly from a lesson if the pedagogy is teacher centred (della Chiesa, 2013; Hattie, 2013a). Offering visual, auditory and kinaesthetic modes of learning is required as part of a lesson to cater for the full range of abilities (Lucas, 2018). In addition, analysing, creating and evaluating form the pinnacle of curriculum design and expand upon Bloom's taxonomy (1956). In particular, adolescents tend to be tactile and enjoy lessons that enhance this style of learning. Similarly, they respond to fast-paced lessons that have a purpose (Reichert et al., 2010). This may involve some sort of hands-on component that embeds key knowledge and promotes long-term learning. Reichert et al. (2010) reason that a truism for learners is 'Tell me and I will forget it; show me and I'll remember it; involve me and I will understand it' (p. 161). For this reason, young people might perform best when they are given fast-paced, well-structured, hands-on activities that lead to an ultimate performance. An example of this is project-centred learning that enables movement, working in pairs or small teams, solving problems and composing presentations (Reichert et al., 2010).

Hands-on activities that focus on how to engage students allow lessons to be planned around the concepts of imagination, creativity and higher-order thinking, thus capturing the attention of young people (McClure, 2015). A number of authors have considered how lessons could include rich tasks that have real-world value and are significant in terms of students' local communities (Henriksen et al., 2016; Scholes & Nagel, 2011; Reichert et al., 2010). Researchers argue that rich tasks that require mastery of a range of knowledge and skills applied to real-life and high-relevance situations, enhance engagement (Goss et al., 2017). Importantly, the mastery of real-life situations and problems is transferable across many disciplines and work places (Mann et al., 2017). Otherwise, unimaginative, pointless and mind-numbing lessons have the potential to push students into an abyss of negative feelings towards school and learning (Masters, 2018).

EREA Principals agreed that lessons that have a clear purpose and involve students in designing their learning can potentially maintain enthusiasm. Principals went on to say that contemporary learners might disengage with inadequately planned lessons that are designed to fill in time or that are not aligned to long-term goals. During interviews, Principals were united in their vision for lessons that had a practical application to real life which could enliven the content to be covered in class. For instance, authentic learners enjoy resolving issues that have some relevance to their lives. One Principal (Chris) stated:

> *We need to give young people more than a vanilla experience. This includes pitching lessons for those who require extra support or extension. Teachers need to have a variety of pedagogy that can engage all students.*

Teachers can put technology to good use in this situation. Firstly, technology could put live data in the hands of young people for them to analyse. Secondly, the electronic media are a source of real-world issues, which hold interest and can assist in making theoretical connections. Thirdly, teaching methods that are hands-on and varied; include real-life tasks; demonstrate good relating skills, humour and

negotiation; and provide students with the sense that somebody cares about them; can promote positive student outcomes.

In this research project, during student focus group interviews, young people often preferred to attempt an activity, get it wrong and learn from their mistakes. This critical component of learning was often absent from their experience when teachers adopted a traditional style of teaching. At times, as the data collection period progressed, young people expressed their surprise at their capacity to engage in fruitful conversation when given the opportunity. Equally surprising was the ability of learners to shift their conversation about the weekend football scores to meaningful dialogue regarding the curriculum content or subject matter. Adopting a hands-on teaching methodology made this possible. Student Brian highlighted this sentiment:

> *I'm more of a hands-on learner. I prefer to learn by just getting the work and having a go at it, getting it wrong [and] if I do, then going back figuring out what I did wrong and just learning like that. That's how I like to learn.*

This collaboration was only possible when teachers began to appreciate the benefit of focused student conversations. These findings align with research by Newton (2014) who explains 'today, we look beyond this traditional template of learning to a more interactive, collaborative and inquisitive student-centred approach to learning' (p. 11).

The young people described practical learning activities as being stimulating. Young people mentioned how their mood was lifted when the learning activities were meaningful and had context. Students often entered the classroom in anticipation of something different, and this enhanced their level of arousal. The students appreciated how easy it was to learn if there was a problem to solve. Wayne, for instance, observed:

> *I really like when teachers have a practical experience in the subject that they're teaching because I find it really hard to learn something if I don't know the context and how we're going to use it in the future and what problems that's going to solve.*

This gave students the impression that teachers were taking a greater interest in their learning. In turn, students were encouraged to use their voice and seek and solve problems together. Personalised learning, tailor-made learning and multiple learning activities that accommodate different learning needs are the main themes emerging at this point of the data collection.

Young people reported positive feelings in a rich learning environment when the teacher played the role of facilitator and the activities were hands-on. This included student-centred activities that used multiple modes of delivery and allowed learners to work on their own, in pairs, in groups of three or four, or in whole-class discussions. Commenting on his experience regarding hands-on activities, student Ray highlighted that:

> *We do hands-on activities. We do mock trials and things like that rather than just taking notes. I think that's far more effective.*

Young people reported being more engaged in hands-on activities that allowed for movement and produced feelings of an evolving, exciting and dynamic atmosphere. Principals in this study reported positive feedback from students when learning activities were team-oriented, collaborative and encouraged conversation. This often led to shared problem solving, positive relationships and the notion of co-learning between students and teachers.

The Australian Institute for Teaching and School Leadership (2017) states that 'leadership is a team effort at all levels' (p. 2). When teachers affirmed the teamwork capacity of students they were able to create an atmosphere of initiative, collaboration and collegiality. Students felt enlivened when they were given the opportunity to exercise their teamwork skills and experience hands-on learning activities. Studies show that the best teacher–student relationships form when the teacher gives strong guidance, shows clear purpose, designs learning tasks that have a purpose as well as concern for the needs of others and a desire to work as a team (Bruner, 1999; Hattie, 2013a). This highlights the need for teachers to be afforded professional-learning opportunities when facilitating the complex dynamic of the classroom.

Recommendation 11

Create opportunities for teachers to participate in high-quality professional learning that addresses a variety of innovative, hands-on, pedagogical approaches.

3.3.12 Flexibility

Finding 12

Enabling a flexible team environment in the classroom allows the skills of collaboration, collegiality and negotiation to thrive.

The constraints of the classroom, where young people are expected to sit, listen and consume information as though they are sponges, is counterproductive to the flexibility required to collaborate, innovate and work in teams (O'Connell & Lucas, 2018). Newton (2014) states that 'many existing schools are still based upon the 18th and 19th century factory model of formal teacher-centred learning' (p. 4). This model emphasised teacher control, lecturing and a hierarchical model of leadership. Young people are often constrained by the lack of flexibility from teachers, which may cause frustration (Victorian Institute of Teaching, 2014). At times, schools can be fortresses where the teacher's desk is a symbol of surveillance and authority (Victorian Institute of Teaching, 2014). According to Byers et al. (2014), 'teachers are not trained in how to utilise the affordance of the space with both technology and pedagogy. As a consequence, they retreat to the safety of their default practice' (p. 3). However, when learning and relationships with teachers is flexible, students are no longer constrained by an outmoded pedagogy (Victorian Institute of Teaching, 2014).

Positive outcomes are possible when teachers learn from and with each other, and share intellectual property (Bentley & Butler, 2017). Various studies have assessed the support required for innovative teaching, and investigated emerging pedagogies that may assist in revitalising and fostering a team environment (Australian Institute for Teaching and School Leadership, 2014; Organisation for Economic Co-operation and Development, 2013). However, several aspects require consideration to ensure there is buy-in from teachers when attempting to change their practices. Firstly, teachers need exposure to contemporary educational literature that prepares them to proactively enhance student collaboration (Clinton et al., 2018). Secondly, the capacity to pre-plan and implement slowly would be essential before a whole-school change-process could take place (Griffin et al., 2017). Thirdly, team teaching is critical (Bentley & Cazaly, 2015). This notion of team teaching could be implemented gradually, with protocols and procedures developed and monitored at regular meetings. Goss and Hunter (2015) highlighted 'teachers who work together – in professional learning teams, for example – can draw on a broader range of experience and expertise, and test their interpretations and

approaches with each other' (p. 22). These professional learning teams may lead to a flexible approach to teacher–student relationships and pedagogy.

Most young people recognised the value of establishing rapport, trust and strong teacher–student relationships. The flexible nature of these relationships enabled young people to interact with teachers, either individually or in small groups. The young people interviewed often experienced an inclusive learning environment that was sometimes vastly different from the traditional learning practices. Some students who had experienced traditional teaching for six years were able to provide valuable insight. As student Clarke noted:

> *I think I like teachers who are flexible and easily approachable because of the relationships they form with students, particularly in the senior years, where you need a bit more guidance. They can link what you learn in class to maybe events that have happened in their life or something, just to give a real-life example. I think that's really good to connect on a deeper level.*

Young people who experienced this connection with their teachers could see the advantages and exhibited a mature approach to their learning. This paradigm shift in teacher practice was a major benefit to the young people interviewed for this research project.

During the focus group interviews, young people recognised the value of teachers who were prepared to be flexible because this heightened interest in learning activities. Students also appreciated having greater access to teachers and were able to relate to them. Teacher and student interaction encouraged conversations about the activities in the lesson. This interaction enabled teachers and students to establish harmonious working relationships based upon mutual respect. The data indicated that young people enjoyed working with teachers as they moved around the room. As student Bruno suggested:

> *When teachers are open and flexible to hear students' perspectives you become more of a peer level. Teachers are open to asking: How would you like to learn? What do you want to do next lesson? Especially approaching learning, because you have to consider what the student is struggling with and what they think is important. Those sorts of things help with the students' confidence in their own ability. When teachers are open to new ideas and when they're not stuck in their own ways, that really helps the student and teacher relationship.*

During the data collection period, a deeper understanding of the complex dynamics of the classroom evolved. The results indicated a deepening of student and teacher relationships. Students appreciated being listened to, knowing that they were able to share the learning journey with their teachers.

The young people demonstrated a heightened sense of enthusiasm when teachers presented a flexible pedagogy based upon mutual relationships. Many comments were made in anticipation of engaging and interactive learning activities. The positive energy, increased sense of happiness and connection to the teacher was immediate. For the young people, teacher–student relationships seemed more open and allowed for more flexibility in the senior years. This seemed to enhance students' self-efficacy as they described these relationships as dynamic and enjoyable. Steve from a student focus group explained:

> *When a teacher makes it interactive, so it's not just them writing at the board and you copying down. So, having questions, asking the students what they need more*

> *to hone in and learn more? Rather than just copying down. Sometimes you can just write it down, but it just goes out straightaway. So, making it something that you can sort of work on together, like with your partner, with the teacher, or as a class in general. You can learn in a better way, by having it more interactive, between the group and the teacher.*

There was evidence to suggest that students disengaged quickly if lessons were not interactive and meaningful. The natural curiosity and sense of a love of learning were apparent when lessons were well-planned and students observed teachers as co-learners. Young people were more inclined to take risks with learning activities when teachers were flexible and listened to their needs.

The evidence from this research project suggests that young people value a variety of learning activities that keep them stimulated and engaged. Interactive and hands-on were the descriptors that young people used in the focus group interviews when articulating their desired class. EREA Principals noted that catering for the needs of introverts, and their desire to work individually, can be problematic in a classroom with a number of students. It was critical therefore to encourage a questioning and inquisitive nature among young people which enabled joint decision-making with teachers to thrive.

Young people valued the flexibility of working in teams. They also appreciated a balance between teacher-directed (traditional) and student-centred (discursive) activities. A discursive approach to teaching and learning included working individually, in pairs or in groups of three or four. An appropriate balance needs to be struck between interactive, discursive teaching and direct instruction. Figure 3.8 illustrates the percentage of comments from each EREA region about *Flexibility*. The greatest amount of coding references about *Flexibility* came from the Southern Region (55%). The next highest amount of coding references about *Flexibility* came from the Northern Region (33%). At first glance it may seem that the notion of *Flexibility* was a strength from both of these regions. Another interpretation may be that there is a desire for teachers to be more flexible with their relationships with young people and their delivery of pedagogy from these regions. As Principal Doug explains:

> *You have to be enthusiastic and excited by the subject, and then you have to be able to be flexible. And if that happens, then pedagogy will be different from day to day.*

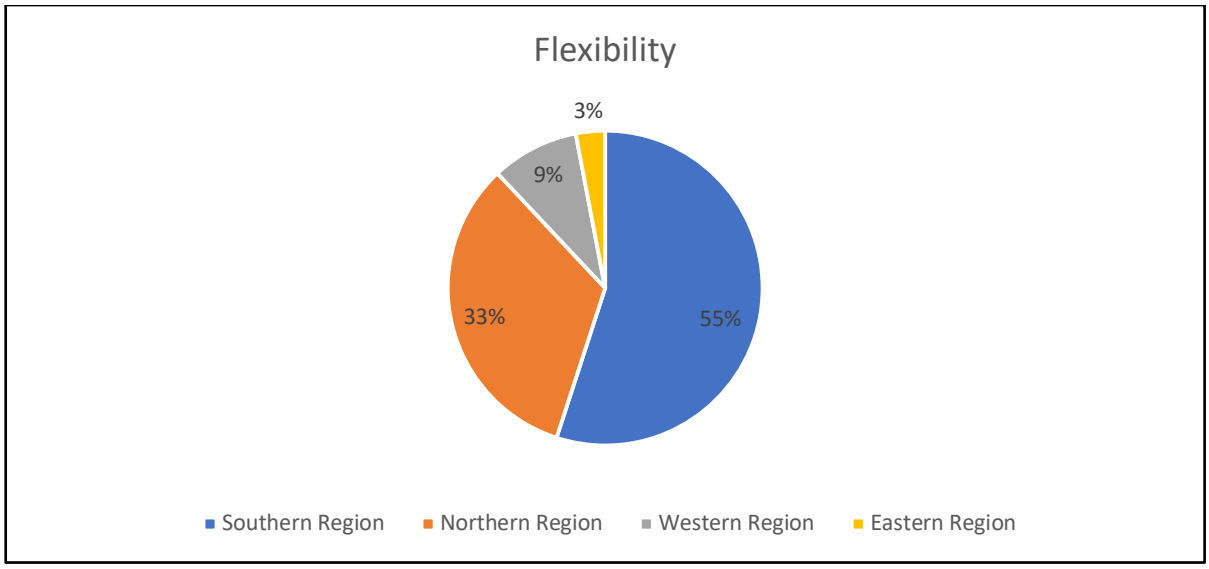


Figure 3.8 Percentage of comments about flexibility from each region

When teachers are flexible in their approach, student voice may flourish and contribute to self-discovery, as well as self-directed and self-regulated learning. An atmosphere of inclusiveness, where relationships are mutual and mistakes are welcomed, can lead to a philosophy of strong student voice and engagement in schools. It is only when teachers are flexible and accept students as partners and as unique human beings that student voice flourishes. Teachers need to adopt pedagogies that reflect contemporary learner principles, providing the opportunity for student voice. Contemporary pedagogy embraces collaboration, teamwork, mentoring, quality relationships and enabling student voice. If students are in control of their learning in a nurturing, empathic, two-way communication, a culture of active student voice can be promoted. Student voice can enliven young people and make school communities a vibrant place. Pedagogies that reflect the notion of flexibility and contemporary learner principles, provide the opportunity for student voice.

Recommendation 12

Enable ways for teachers to investigate, implement and receive feedback regarding emerging flexible pedagogies that may enliven, motivate and engage young people.

3.4 Holistic learning

Many of the students beginning secondary school today will ultimately work in jobs that do not yet exist (Elliott, 2015). Hence, EREA schools need to be agile to meet this challenge, positioning students to contribute meaningfully to the common good while giving them a well-rounded education in the moral and spiritual implications of changing modes of communication (Caldwell & Harris, 2008). The increasing economic dominance of countries with cultures that differ markedly from multicultural Australian society will be another complexity facing EREA graduates. According to Torii and O'Connell (2017), intercultural understanding, adaptability and creativity will become increasingly important to students' long-term career prospects. The strategic direction at EREA requires teachers to develop and implement programs that are holistic and driven by innovation, capacity building and developing a sense of social justice.

3.4.1 Relationships

Finding 13
Sound interpersonal relationships are evident when teachers display, and have the opportunity to show, warmth towards young people and one another.

The work of Bruner (1999) highlights the importance of the relationship between young people and their teachers and the importance of student engagement in today's world. In contrast, the authoritarian model of teacher–student engagement does not enhance collaboration. Bruner (1999) maintains that 'the child is not merely ignorant or an empty vessel, but somebody able to reason, to make sense, both on her own and through discourse with others' (p. 13). This mutual pedagogy presumes that, together, the teacher and the student can produce positive outcomes as co-learners (Bruner, 1999). When child and adult are allowed to have points of view, collaboration has the potential to thrive (Bruner, 1999). If the opinions of students and their insights are valued and sought after, an inclusive and participative atmosphere may exist. Bruner (1999) concurs that 'both child and adult have points of view, and each is encouraged to recognize the other's though they may not agree' (p. 13). Collaboration and collegiality form the foundation of a modern classroom. Therefore, for this atmosphere to blossom, a high degree of trust, warmth and compassion is required as opposed to forcing students to leave school in an oppressed state (Freire, 2000).

When working with young people, moving from an authoritarian model of teacher–student engagement to a model that is mutually relational seems to work best (Montuoro & Mainhard, 2017). Merry (2008) argues for interpersonal relationships of 'clear, unambiguous expectations of conduct, enforced without anger, and with a view to gaining cooperation as a management tool rather than compliance' (p. 51). Hobbs and Power (2013) argue that teenagers' engagement in school is dependent upon positive relationships with teachers. Hobbs and Power's premise represents a paradigm shift for the secondary teacher who entered a profession knowing the content of a discipline (Montuoro & Mainhard, 2017). Students will not learn if they perceive that the teacher in charge is not on their side (Norden, 2015). As such, Hobbs and Power (2013) argue that students need to be nurtured and encouraged. When this occurs, teachers model good practice in relation to interpersonal skills and personal interaction (Liberante, 2012). More recent attention that focused on modelling sound interpersonal skills requires teachers to demonstrate the art of empathy, warmth and negotiation (Hattie, 2013a; Montuoro & Mainhard, 2017). Teachers who model a calm response when adolescents are angry are influencing future generations and engaging students in a positive way (Montuoro & Mainhard, 2017).

Principals were asked about their perceptions of holistic learning. The themes that emerged from this conversation related to relationships with teachers, the interest and support teachers offer in relation to schoolwork, and a sense of wellbeing when at school. The results reveal that a young person's sense of social and emotional wellbeing is influenced by the quality of relationships they have with their teachers. As Principal Ruby said:

> *So, relationships become critical in all of that. And that's the message that we give to new teachers and are continuing, continually reminding staff about all the time. And the relationships are where you start. You won't get anywhere if you've not got a relationship.*

The results seem to indicate that young people experience positive social and emotional wellbeing when at EREA schools. This includes positive adult–child relationships, communicating high and realistic expectations, and opportunities for young people to be involved in decision-making.

Principals often expanded upon their perceptions of the importance and quality of relationships in the school. These themes included: activities after school and on weekends, relationships with a significant adult other than their parents, positive peer relationships and support networks. The findings tend to suggest that the school community contributes to student social and emotional wellbeing. Highly developed school-life experiences demonstrate a positive connection to youth-oriented programs at school. Principal Phil stated:

> *The first step may not be to go to learning – the first may be engagement and setting up a relationship where they trust you as an adult. They've often had breach of trust in many relationships and they won't trust you. Even though they think they do, they'll test you and will do things that question whether you really love them and accept them unconditionally, which is what we aim to do.*

The young people seem to experience a positive sense of connectedness to their EREA school. There are many extra-curricular activities that often use the school's facilities on weekends or after school which may enhance this sense of connection. This enables the students to maintain positive relationships and motivation.

Teacher–student relationships were prominent in one-to-one conversations with Principals. This included the sub-categories of interpersonal skills, collaboration, communication and problem-based learning. The two categories discussed in the greatest detail by Principals were collaboration and teacher–student relationships. Principals commented on the ability of teachers and young people to collaborate and communicate with ease, and how this related to success. One Principal, Brendan, concurred saying:

> *If we observe all our teachers and we look at those teachers who have success with their students, and not just academic success, but success in terms of their growth, in terms of their development as young men, you find it's those teachers who have a very positive relationship with them.*

When the pedagogy was delivered with positive interaction *and* authentic tasks, learners revealed their ability to establish mature relationships with both classmates and teachers. Authentic tasks incorporated working in small teams, student-centred activities, problem-based learning and group presentations. Teachers expressed their delight when they overheard conversations about the lesson content.

Pedagogy that continually engages students in their learning is complex. Principals in this study reported the need to establish positive relationships with young people before dynamic, stimulating and interactive learning could occur. This included establishing positive relationships with students in a warm and empathic classroom climate. Students responded positively to classroom activities that enabled choice, voice and relevance. Principals in this research project were excited when they observed motivated, enthusiastic students participating in self-directed learning activities. One Principal, Doug, commented that relationships are:

> *… setting up a whole range of potential relationships that's more than just the subject teacher and the student, or the homeroom teacher and the student. They're relationships among the students in the group, but also with the adults who are*

> *involved in the group. They know each other. They've developed that strong set of relationships with the adults in the process. And then, when they've moved off they still have a real sense of affinity with each other.*

These positive teacher–student relationships were more frequently observed where interaction with young people tended to be more intuitive, interactive, negotiated and free-ranging. Teacher–student engagement was higher when young people were able to communicate with each other, work in groups, share ideas and make presentations to the whole class. Potential new ground includes pedagogy based upon the power of positive relationships and that fosters curious, inventive, team-oriented, compassionate and courageous learners.

Young people appreciate being listened to and knowing that they are able to share issues with a significant adult. It is important for teachers to be in tune with the social and emotional needs of young people. The young people interviewed for this research project value being personally known and respected as an individual, and are in positive relationships with friendly and approachable teachers. Keddie & Mills (2007) best capture this sentiment:

> In developing positive and mutually supportive relationships, the importance of breaking down the traditional power imbalances between teachers and students is central.

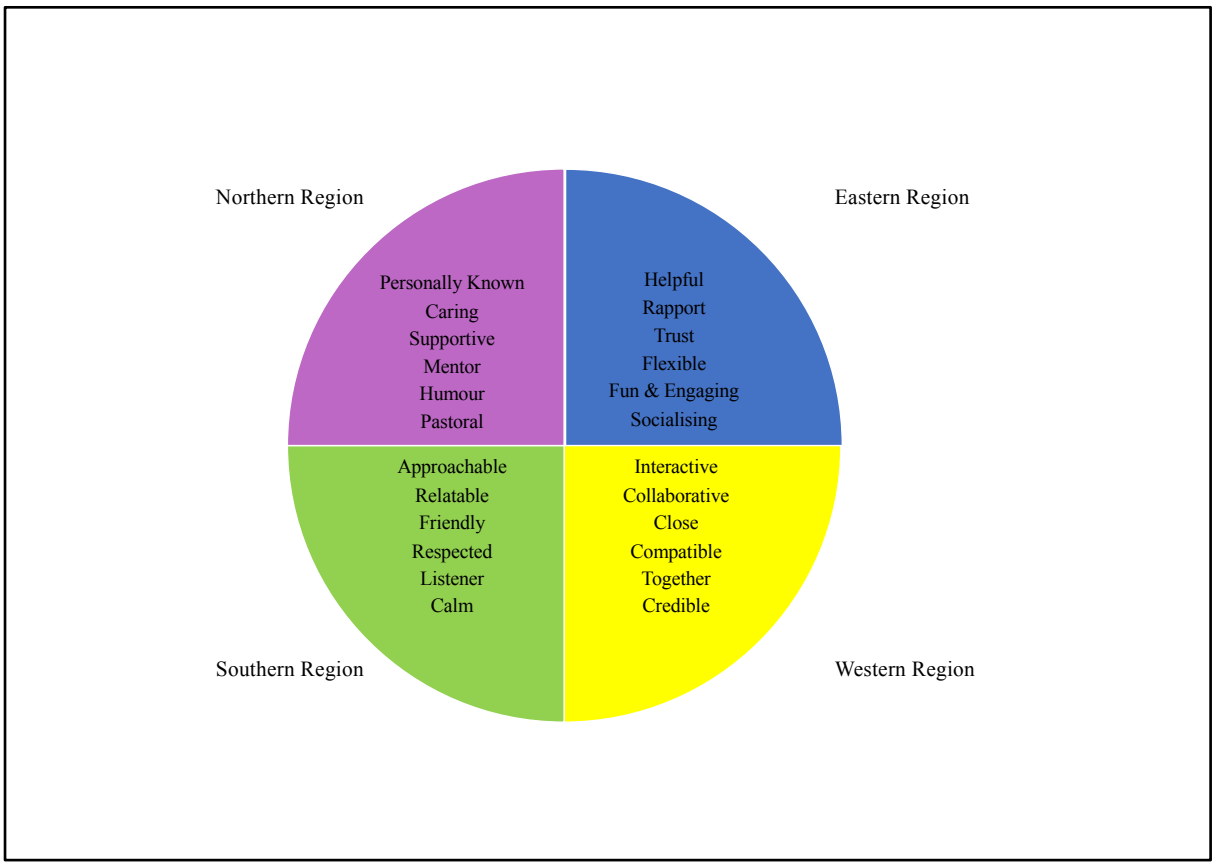


Figure 3.9 Student comments about relationships with teachers from each region

Figure 3.9 summarises the main themes that emerged when young people described their relationships with teachers. These themes are divided into four regions to demonstrate the slight

nuances emanating from EREA schools nationally. Young people from EREA schools agreed that co-curricular activities are an opportunity for teachers to establish positive relationships beyond the classroom. These relationships were highly valued as young people beamed when teachers took an interest in their personal interests and personality. In addition, it was noted that parents/guardians play a critical role in ensuring their child has positive relationships with their teachers. Young people like teachers who are flexible, understand their needs, know them personally and who respect them as individuals.

Recommendation 13
Implement a house structure, with reduced student numbers, to ensure the pastoral needs of young people are met and relationships with teachers are positive.

3.4.2 Pathways

Finding 14
A personalised and individualised school program that offers a diverse range of subject choices and pathways can prepare young people for an unknown future.

The Business Council of Australia (2017) states that, in order to meet the future needs of young people, teachers need to adopt teaching methods like enquiry-based learning. However, this would require a paradigm shift in education systems and schools to focus on skills, not scores (Hattie, 2018). The Ithaca Group (2016) suggests a closer integration between school and work-related, real-world learning. This includes the validation and equal celebration of alternative pathways to the traditional academic–tertiary passage to full-time employment (Mann et al., 2017). Autor and Price (2013) explain that employment in the future will involve abstract problem solving, adaptability and social interactions which are less likely to be replicated by technology. In light of these developments, the delivery and content of the curriculum is being challenged. The traditional method of the teacher delivering copious content to students is outdated and being replaced with a model of cross-curricular priorities and general capabilities (Australian Curriculum, Assessment and Reporting Authority, 2014). To address this, teachers and schools need to consider how contemporary pedagogy complements the rapid changes in digital technologies to meet the needs of young people (Freeman et al., 2014).

One aspect of maximising student pathways is how the curriculum is designed. This includes areas such as innovation, critical and creative thinking, experimentation and invention as opposed to the content taught and the way that information is delivered (Newton, 2014). It also refers to the way teachers are able to take risks, be creative with learning activities and teach ‘outside the box’ (Mengle, 2015). In Australia, which is the setting for this research project, the state and federal governments prescribe the curriculum through a series of consultative processes with teachers and educational researchers. It is a requirement that essential learning standards are adhered to by all schools from Foundation to Year 10. The majority of curriculum designed for Years 11 and 12 provides an Australian Tertiary Admission Rank (ATAR) to each student after completion of their studies. The Australian Curriculum, Assessment and Reporting Authority (ACARA) has endeavoured to address an outdated curriculum that was based on a hierarchy of subjects designed to maintain control (Westwell, 2013), by providing a framework around cross-curriculum skills and general capabilities (Australian Curriculum, Assessment and Reporting Authority, 2014). In addition, some states and territories offer alternative pathways which may lead to an apprenticeship or TAFE sector and include vocational training.

The Principals interviewed for this research attempted to provide the broadest curriculum possible to cater for the individual needs and interests of young people. However, many commented on how resources and the constraints of a traditional curriculum sometimes hindered such an approach. Offering alternative pathways was often not possible. Principal Ruby explains:

> *So many of them are very hands on, so being in the classroom five days a week is going to kill them. We've tried to come up with a group of courses and certificates that cater to the needs of the kids.*

A key detracting element in some EREA schools was the inability of the curriculum requirements to fit the local context. Principals reported that some of the senior students in their school would become disengaged if programs were not designed to suit their individual needs. A delicate art of balancing the public nature of academic results while celebrating, equally, alternative pathways was required by Principals in these cases.

Principals discussed the need to offer a broad curriculum. By offering a broad curriculum, schools were able to accommodate young people with a wide range of learning possibilities. Some Principals spoke about many successful stories that occurred when the enrolment policy was inclusive of all talents and interests. However, feedback from Principals described the limitations that a traditional view of learning placed on creative pedagogy and programs. The data suggest that traditional learning and a narrow curriculum were a hindrance to productive student engagement and hampered contemporary pedagogy. As Principal Tim suggested:

> *In terms of curriculum, for me breadth is really important. As soon as you narrow down a curriculum, you are actually saying, well, there's a certain type of boy that can come to this school. So, for me curriculum breadth is very important. We have about 30 per cent of our boys go through the vocational pathway. They're valuable outcomes. They get snapped up by employers at the end of their time here, because of their work ethic and who they are as people. A lot of time they've grown through the school.*

This hindrance included elements such as an inflexible and crowded curriculum that was sometimes difficult to adjust to suit individual needs. It also included a sense from school communities that the traditional learning pathway of gaining a high ATAR, which led to the tertiary sector, was the only way to measure success. Nevertheless, the level of commitment from EREA Principals was a further endorsement for offering a broad curriculum that celebrates all pathways equally.

Young people from the focus group interviews were amazed at the opportunities EREA schools presented, with new and exciting possibilities. There was a heightened sense of anticipation about these opportunities, which resulted in increased engagement. The students discovered the benefit of exploring their passion and trying the wide and varied subject electives on offer. One student, Shaun, concurred saying:

> *There are so many opportunities for people to express themselves through what they enjoy, what they want to pursue, the different subjects. There's that range where, even if we don't offer it here, we've got the school down the road that might offer that subject. Or you can just take the opportunities provided.*

This comment from Shaun summarises the lived experience of the young people in EREA schools. It seems the concept of learning that was broad, personalised and inclusive was something that

particularly the senior students appreciated. This feedback seemed to indicate that the breadth of curriculum and celebration of wide and varied pathways was paramount to successful learning outcomes.

Young people in this research project argued strongly that offering wide and varied pathways is critical to learning. At the same time, Principals in this research project expressed the need to implement pathways that embrace change and equip young people with the skills to navigate a modern world. There is evidence that the impact of student engagement is reduced if learning opportunities are narrow and traditional. In the same way, innovative pathways and student engagement can be stifled if the learning opportunities do not enable flexibility for a range of activities. Tim from the focus group explained:

> *The school caters for kids interests outside of school. They give us a lot of opportunity to find a pathway if it's not necessarily there. Heaps of boys have pursued apprenticeships outside of Year 10 and they're steadily going as Year 11 goes on because firstly, their reputation with the school, that it sits really highly with the sort of trades in the area and organisations and businesses within the area.*

The purpose of a broad curriculum is to enable multiple modes of delivery and a variety of activities for teachers and young people. Quality learning outcomes are more likely to occur when programs are flexible enough to enable multiple modes of learning. This study adds weight to the idea that students benefit from learning in multiple ways in a supportive environment. Consequently, students should be afforded the opportunity to work out their individual pathways based upon their passion and interests.

Table 3.3 Insights from Deputy Principal/Head of Campus presentations

Deputy/Head Pseudonym	Insight
Denis	*More choice for young people to design their own programs to an extent. Hopefully that will help them to get the motivation, energy that they need because they're picking things that they like to do.*
Neville	*We have to be future focused. At the end of the day, we've got to get our kids to point B. All our curricular offerings, all our structures, have to be future focused.*
Will	*My teacher knows me as a learner. I get to discuss problems and solve them with others. There's that whole sense of collaboration and team work. This has relevance. Students see why they're doing something and what it is going to mean to them.*
Russell	*Explore and let the learner determine what environment best suits them. We don't want to be just doing a certain syllabus. We want to be encouraging our graduates to be lifelong learners and critical thinkers.*
Ella	*I think that there needs to be a sense of learning that is hands-on, engaging and relevant and that were not bound or compromised by the Australian Curriculum. I think there's lots of creative ways that we can have learning in our schools.*

Table 3.3 illustrates a range of comments from the Deputy Principal/Head of Campus presentations. These presentations captured how young people expressed an interest in hands-on, skills-based courses. Deputy Principals/Heads of Campus recognised that there was a challenge in EREA schools to continually promote the arts, debating, music and other cultural pursuits. The data from this research project suggests that young people appreciated the wide and varied opportunities they received to pursue their interests at EREA schools. This resonates with the research from Torii and O'Connell (2017) who state:

> In a culture that privileges pathways to university, schools may also deprioritise VET [vocational education and training] in internal resourcing decisions. In many schools, alternative vocational subjects were considered to be less prestigious than an academic pathway.

It is critical that EREA schools continue to provide young people with a sense of choice where they can optimise their strengths and interests. This includes catering for a diverse range of student talent. The traditional means of an academic pathway from secondary to tertiary education does not cater for the needs of all students. A broad range of options from high academic to TAFE and pre-apprenticeship is optimal. When EREA schools offer multiple pathways for multiple skills, they are catering for an unknown futures-oriented lifestyle.

> **Recommendation 14**
> Cater for the individual needs of students by providing pathways that are varied and will prepare young people for future job markets.

3.4.3 Inclusive

> **Finding 15**
> Having varied learning opportunities for young people that are celebrated equally, enables them to feel safe and included.

A culture of inclusiveness, where the celebration and acceptance of a diverse range of talents is the norm, can lead to a positive school environment and student engagement (Norden, 2015). Inclusivity gives a sense of ownership (Caldwell, 2015). When displays of the visual and performing arts, cultural activities such as debating and public speaking, academic pursuits and sporting successes adorn the hallways and walls of schools, inclusiveness is enhanced. Therefore, schools that offer a broad curriculum and a diverse range of extracurricular activities can enable young people to find their passions (Blomfield, Barber, & Modecki, 2013). A broad curriculum includes offerings that cater for diversity and inclusiveness.

The narrow social construct that has long been the stereotypical male image, particularly in Australia, rejects sensitivity (Fine, 2008). Traits such as care, compassion, forgiveness, tenderness, love and understanding require good modelling from adults and genuine acceptance among young people. Graduates from schools where such traits are modelled can enter a work force that values social relationships, and interpersonal, open-ended and reflective forms of labour (Hattie, 2013a; Lingard et al., 2008). Importantly, schools have a responsibility to equip students for a workplace that is inclusive, collaborative, collegial, non-hierarchical and free from gender, racial or creedal bias (Lingard et al., 2008). The social construction of what it means to be a young person in the modern world can sometimes be narrow and restrictive (Lingard et al., 2008). Schools that embrace diversity and

inclusivity, and promote and defend marginalised groups can create an atmosphere where interpersonal skills can thrive.

Providing a diverse and inclusive range of activities tends to cater for all learning styles. If EREA schools are to focus on equality, embedding inclusiveness into the curriculum and educating for democracy will be essential. EREA schools that educate the whole person and focus on the type and nature of texts and curriculum content can promote inclusiveness. Principal Bruno highlighted this sentiment:

> *We have a whole range of students with all different gifts and talents and abilities, from those boys that are highly academic and get exceptional academic results, to a lot of boys who are doing a trade or performing creative artists. It is huge in the school and we've got to support that as well. You know, boys are coming to us from different schools even younger than twelve because of our diversity of curriculum.*

When a school considers the impact of a diverse curriculum as part of their culture, they are contributing positively to an inclusive community. By placing the young person at the centre of their work, EREA schools were able to appreciate the notion of inclusiveness to enhance student engagement. Many students from the focus group interviews supported these theories because they experienced positive energy and a happier environment with a flexible and inclusive curriculum. This positive energy also led to schools planning for a range of ability levels in the classroom rather than using a one-size-fits-all approach.

EREA schools, intuitive to the needs of young people, adopted a flexible and inclusive approach. This intuition included detecting when students were bringing emotional issues into the classroom that could have an impact on their learning. Principals commented that highly advanced teachers were adept at enabling student voice and accepting diverse perspectives. The Principals in this research project encouraged good teacher–student relationships so that young people could experience success. Principal Peter stated:

> *You've got to be open-minded and be a little bit flexible and you are going to get kids that are going to come from different backgrounds and perspectives and present different ideas. You have to be accepting of each young person, you have to value all of them.*

The most positive outcomes were achieved when young people were appreciated as co-learners, and their opinions respected. The data obtained from this project demonstrated the positive feelings the students had towards their teachers. These positive feelings gave them the confidence to experiment and attempt new learning activities with classmates.

The young people interviewed commented on how productive lessons were when they could work with fellow classmates. All young people appreciated the flexibility of working in an inclusive environment. This inclusive philosophy permeated the school day. Many students valued the opportunity to work with peers of their choice, which was possible with an inclusive and flexible culture. Mike, a student from a focus group, highlighted:

> *There are lots of activities and opportunities that enable people to find others who have the same interests. I suppose they come together, they build new friendships, and that incorporates everyone together to make them feel connected to the school and feel like a whole community together.*

Mike's comment highlights the importance of teamwork, shared vision and goals, a learning environment that concentrates on teaching, learning, positive reinforcement and a young person's rights and responsibilities. These capabilities contributed to an autonomous and inclusive team philosophy based upon positive relationships. This philosophy was embraced by young people in this research project.

When EREA teachers placed an emphasis on positive teacher–student relationships, increased student engagement was palpable. These positive, inclusive relationships and interactions could lead to improved student engagement in learning. However, these positive relationships were not confined to the curriculum and the classroom; young people described examples of positive relationships when teachers served their basic human needs. One student, Liz, concurred, saying:

> *They always care. Every morning they will all walk up to you and be like, 'How's your day? How have you been? How was your night?' They always make sure you've got food in your stomach. They're always supportive, no matter whether it's in school or out of school. They're not just a teacher, they're a mentor, and they're seen as being role models. And how great they're doing and how much time they put into us kids and realise it's just the little things like that that make a big difference in the world.*

This insight reinforces the power of inclusive relationships as the key ingredient for successful learning outcomes. Young people sensed the increased level of care available to them, and rather than abuse this reality, they exhibited mature leadership that reinvigorated their learning experience, particularly in the upper year levels. There is a need for inclusive relationships between young people and teachers. These positive relationships were highlighted in elements of this research and contributed to a positive emotional state in the classroom.

The results suggest that young people gained benefit from working in safe and inclusive teams and that this teamwork should be an integral component of sound pedagogy. During interviews, teamwork was highlighted as a real strength by both Principals and young people. Adolescents do not like to be singled out because this has the potential to embarrass them in front of their peers. Young people have a considerable fear of being ridiculed, being shown up by the teacher or being labelled. Teamwork alleviated these concerns because there was safety in numbers. Students who presented information to the rest of the class did so in teams of three or four. Team members, who were allocated specific roles, made a positive contribution to the tasks they were assigned. The majority of young people in this project commented on the value of working in groups and teams with their teachers. This is supported by the work of Norden (2016) who outlines:

> The importance of establishing and maintaining a safe and inclusive learning environment is critical to facilitating the intellectual challenge and personal growth of the students in our schools.

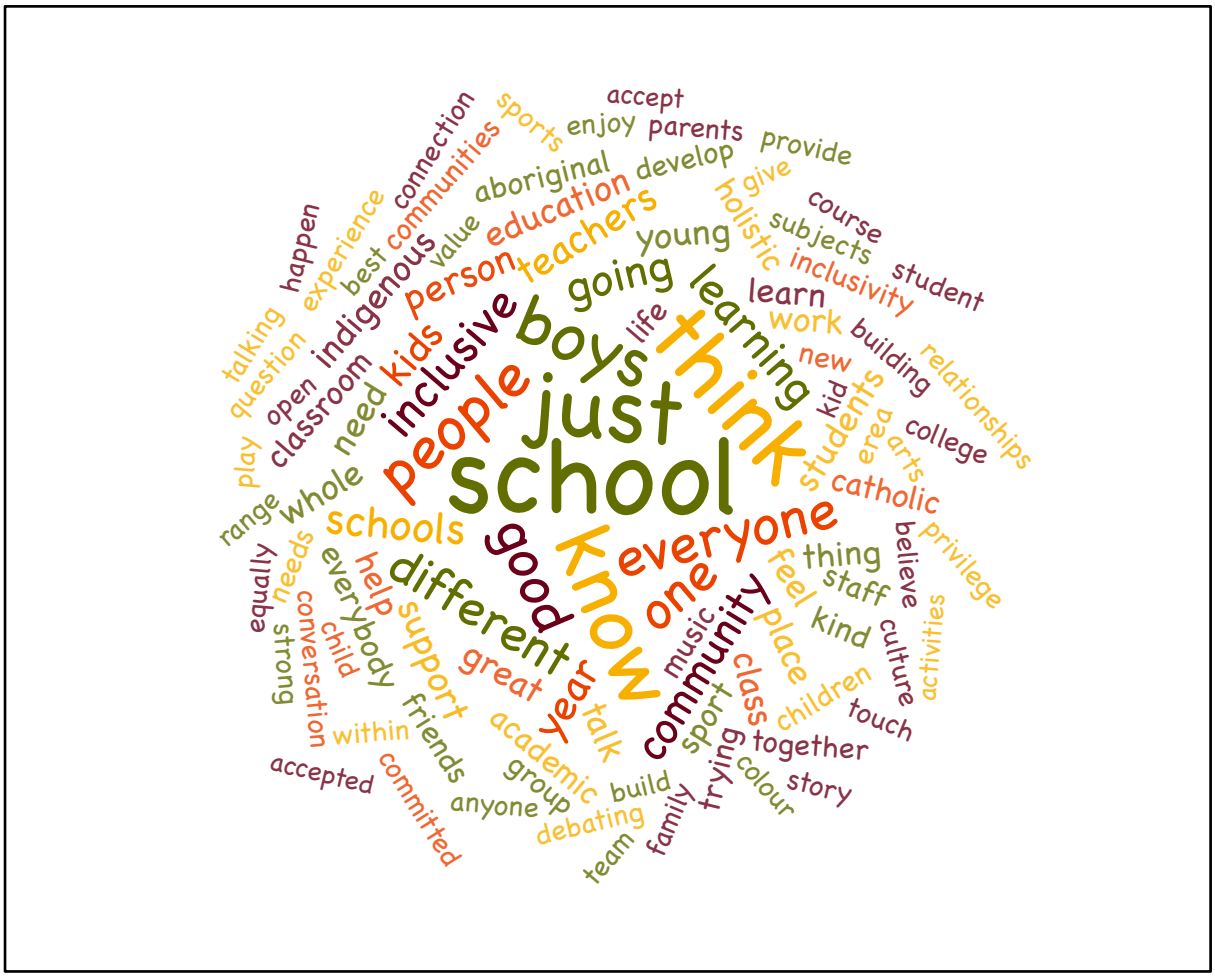


Figure 3.10 Inclusive word cloud

Figure 3.10 captures the main themes from Principals and young people in a word cloud. In this research project, young people appreciated the opportunity to provide insights into their lived experiences. Comments from the older students, who were often providing feedback about their learning for the first time, were insightful. An emerging theme from this project is that, through inclusive dialogue, young people can share information, exchange perspectives, challenge assumptions, test ideas and construct meaning with one another. These collaborative opportunities have the potential to be developed further so that teachers and students can forge meaningful relationships to enhance engagement, cooperation and inclusivity.

Recommendation 15

Ensure school policies and practices reflect safe and inclusive philosophies that embrace traditionally marginalised groups (such as same-sex attracted and gender questioning), visual and performing arts and cultural and religious diversity.

3.4.4 Spirituality

Finding 16
Linking the formal curriculum with real-life, social-justice initiatives is transformational for young people.

Core to the mission of EREA schools is evangelisation, where the message of Jesus Christ permeates the school day. Spirituality means to be uniquely human and encompasses our understanding of God, self, other, the universe, and the actions and relationships flowing from these understandings (NCEC, 2017). Spirituality enables teachers and young people to develop meaningful relationships with the community. One's intimacy with God provides a new way of looking at the world, in which the beauty, wonder, value and dignity are seen in every human person. When staff and young people allow their spirituality to permeate their relationships with others, shared vision, shared decision-making and the building of community are at the forefront, and power, privilege and personal ambitions are in the background (EREA, 2018). An authentic spirituality invites us to attend to the voice of the wider community, and particularly attend to the way the Spirit of Jesus moves in the faith community (Jesuit Social Services, 2018).

Spirituality refers not just to an aspect of life that is 'religious', but rather to the search for God's presence in every dimension of one's personal living (NCEC, 2018). Edmund Rice read and interpreted the Gospel of Jesus Christ, mindful of the moral, social and political realities of his day (Garvan, 1996). Edmund fostered and developed his experiential spirituality through daily attendance at mass, spiritual reading, prayer, reflection and service (McDonnell, 2001). In practical terms, he recognised the plight of the Catholic children of his town and looked to restore their dignity through a process of liberation through the curriculum and service (Rushe, 1995). Service carried beyond simply providing physical resources and an educational system for poor boys. Edmund's love of God was not found in anything he wrote, but in the interpersonal service he gave for the least of God's children, the poor, the hungry and the dispossessed (Normoyle, 1977). While at heart he was profoundly contemplative, in his actions he was full of apostolic zeal, so that he became a rare phenomenon – a contemplative in action (McDonnell, 2001).

EREA schools are places where people find meaning through relationships that are nourished by the curriculum and its spiritual life. Spirituality is experienced through the community that makes a Catholic school in the Edmund Rice tradition distinctive. EREA schools are driven by producing graduates who go on to make the world a better place. Young people need to be freed from the constraints of decades of standardised tests so that they find and solve complex problems and make a difference in their communities. When describing interpersonal spirituality in an EREA school, one Principal, Andrew, claimed:

> *Young people need an education about being decent human beings, about being relational with everyone they meet, in the workplace, in their own families. They need to be people of society who give everyone a fair go. They need to be humans who are kind to each other. That's just the stuff of a good civic society. As Catholics we put it in language of the gospel.*

Doing good for humanity and the relationships that stemmed from this was a consistent theme that emanated from the interviews with Principals. EREA Principals agreed that relationships are both the heart and soul of our very existence and that we must participate collaboratively with our co–creative

God. When Principals demonstrated this notion of interpersonal spirituality, they accepted others and empathised with the struggles of each individual.

The spirituality we foster, develop and present to our youth must be uniquely Australian. Principals articulated that EREA schools live in two worlds spiritually: the religion inherited from immigrant forebears, and this land. The recently developed EREA Reconciliation Action Plan (RAP) highlights a commitment to walking with and alongside Aboriginal and Torres Strait Islander People to create a contemplative spirituality that is uniquely Australian. As Principal Bruno explained:

> *We want boys to be really contemplative about their own sense of spirituality, and the relationship they have with God, or whatever that means to them. We really challenge them to explore their spirituality and what that means to them.*

With this in mind, we could learn much from the spirituality of Aboriginal and Torres Strait Islander People, who understand the sacredness of the land. The sacred will be at the heart of everything we do and feel, and God in Australia will not be proud, haughty or exalted but rather, everyday, horizontal and earthly.

As society becomes more competitive and adolescents are confronted with greater social pressures, the development of the spiritual in each person becomes even more relevant. As student Kevin identifies:

> *Christian service is such a big thing. We've had kids do 700 hours of Christian service in Year 10, 11, and 12, when studies become a priority. But they still see that it's much more important to help the people that are less fortunate than us.*

As EREA schools strive to have a holistic approach to education, leaders have a responsibility to promote the spirituality of students in their care. Through their programs, schools should endeavour to provide an opportunity for students to discover a sense of belonging or connection to a being greater than self. These can be enhanced through Christian service initiatives, social justice programs and the formal curriculum.

Young people interviewed for this research project prioritised the value of people. They were able to articulate compassion and love for those less fortunate than themselves. Young people understood that the holistic nature to being successful included intelligence, integrity, qualities of leadership, and especially an ability to get along with people. As student Calvin from a focus group interview highlighted:

> *To me holistic learning means not only learning through your traditional ways, so not just looking at a whiteboard and taking down notes, but it's also spiritual. What we have at our school is a program called the service program and that teaches boys to learn through engaging with others and learn more about the surrounding environment, how to communicate and problem solve in a more realistic environment, not so much just textbooks and laptops.*

These human qualities highlight the spirituality of young people. They have the capacity to make people feel good about themselves. During focus group interviews they spoke about the principles of fairness, justice and equality when dealing with others and were able to see the dignity and worth of each individual.

Principals spoke of the commitment to a gospel-centred approach as a way of communicating the values required for young people. Young people confirmed this gospel-centred approach by describing the positive experience they had when participating in social justice initiatives. Thinking about the needs of others and making a positive contribution to society are important for both Principals and young people. EREA Principals recognised the need for young people to be prepared for the workforce by instilling a love of learning and being imbued with the values of good citizenship. These values are inherited from schools, teachers, parents and guardians, and peers. Data gathered suggested that values such as authentic leadership, hope, joy, strength, loyalty, empathy, compassion, sharing, nurturing and a sense of community were some of the emerging themes. EREA schools are built around routines, rules, norms and structures. Within certain limits and frames of behaviour, they can guide the transformation of social action and these values can contribute positively to society.

Principals spoke extensively about service learning-programs in schools. Graduates who have a social conscience and who are prepared to make a difference in the world are important for EREA schools. Rituals, symbols and religious experience are significant experiential elements of EREA school life where young people may encounter God. Integrating social justice and spirituality into the formal curriculum is an important part of an intellectual culture of schools and an area that has potential for development. EREA Principals interviewed spoke about positive and supportive relationships with each other that are central to living out the Touchstone of Gospel Spirituality. They went on to explain that liberating actions have the capacity to make classrooms and learning spaces hope-filled and build a better world for all. The search for meaning, affirming our identities as human beings and liberating young people to build a better world, is central to an EREA education.

Recommendation 16
Continue to explore ways that integrate experiential, interpersonal and intellectual encounters that assist young people in their search for an authentic spirituality.

3.4.5 Well rounded

Finding 17
EREA schools have a responsibility to produce well-rounded individuals.

Schools that offer a well-rounded education tend to nurture the whole person. Namely, education that is holistic and broader than academic knowledge seems to equip students for the modern world (Caldwell & Harris, 2008). Parents, carers and teachers who work in partnership to execute a paradigm shift may shape a new way to envisage holistic educational excellence. Pollack (2008) reiterates the importance of how a young person is loved, nurtured, and shaped by his parents and by the context of the society within which they live. These elements are complex; however, when combined, they provide an environment conducive to the development of well-rounded individuals.

Outcome-based education and accountability continues to be a major requirement of all schools. As family and community structures continue to change, schools are even more responsible for the physical, social, psychological and emotional wellbeing of students in their care. In many cases the school will be the only constant structure in young peoples' lives. School leaders will have to strike a balance between serving the needs of their society and the needs of young people. In the midst of today's social pressures the role of the teacher in a young person's life is more significant than ever before. Croke (2000) explains teachers should be proud of the role they play in performing one of society's most important and valuable tasks. The role of the teacher is one of special ministry and

vocation. Croke (2000) declares teaching is a vocation. If teachers are able to embrace this concept of 'vocation', their interpersonal relationships with their students become ones of negotiation and care, offering young people a sense of meaning, connectedness and well-rounded education.

According to EREA Principals, the greatest changes to the world young people will experience are the result of technological changes and the extreme acceleration in the pace of change associated with communications. Many of the young people beginning at EREA schools today will ultimately work in jobs that do not yet exist. EREA schools will need to be agile to meet these challenges, positioning their graduates at the greatest advantage while giving them a well-rounded education in the moral and spiritual, and providing implications about the changing modes of communication. Principal George commented:

> *In all of those areas listed, that sense of the spiritual in motion with physical, cultural, social, academic and artistic. All of those things represent areas that we excel in, and we want to continue to do that well. So how do we bring the community together as one while providing opportunities for boys in each of those to grow as well-rounded individuals?*

EREA Principals and teachers make learning and young people the core business. Learning was not constrained to academic knowledge; rather, learning included educating the whole person. To educate, in this sense, was to draw out and nurture the spiritual, social, emotional, artistic, physical, interpersonal and intellectual aspects of students.

Another major shift in the global sphere is the increasing economic dominance of countries with cultures very different to Australia: intercultural understanding, adaptability and creativity will become increasingly important to EREA graduates' long-term career prospects. As Principal Danny noted:

> *The highlight of educating our young men is respect about the holistic nature of their learning experience. They have the opportunity to be engaged in a respectful learning environment. They can grow mentally, physically, emotionally, socially, and most importantly, spiritually, with a whole sense of social conscience. If our boys can transition to society with those skills, now it's an exciting future for all of us.*

In light of this, EREA schools need to continue to hold a holistic approach to learning and educating young people who have an interest in helping others and developing the whole person. Principals commented on the development of young people who can share the vision of Jesus, nurturing a deep sense of community and belonging while looking outward to implement strong social justice principles which are at the core of the Edmund Rice way of learning.

The Principals interviewed explained that critical reflection, personal engagement, experience-based learning and fostering of skills essential for young people to adapt to the changing world (such as emotional and social resilience) will continue to form the core of an EREA education. Principal Peter explains:

> *What do you want the 17 or 18-year-old walking across the stage, shaking your hand at the end of Year 12? What do you want them to look like? What do you want them to think? What attitudes and values do you want them to hold and so*

> *forth? And to do that, you can't be focused on one dimension of the human being. So holistic education is fundamental to our schools.*

Students graduating from secondary school are now entering a more complex world. Young people have always needed a well-rounded education but, in addition, they now need the ability to process information in varied ways and across a diverse global context. They must continue to decipher the information they receive and apply that to ethical decisions. This was also reflected in the following comments from Principal Brody:

> *A holistic approach to learning in regards to the responsibility to provide the space to grow spiritually, physically, emotionally, socially, and obviously academically. And giving the boys a measure of what they're like when they come out of an experience at an EREA school. We talk about strong minds, gentle hearts. We talk about rounded and grounded. And it's that holistic learning, and using the environment at this college and the opportunities to put forward to kids to grow across that spectrum.*

EREA schools are capable of building on their significant networks to reach within the community to form strategic partnerships, allowing young people and staff opportunities to deliver core competencies while giving students valuable connection to industry, higher education and the outside world. Innovation at EREA schools recognises that educational drivers are interconnected, whether that is research, technology or the changing environment. Young people will need to be equipped with an integrated and well-rounded body of skills to adapt to challenges and excel inside and outside the classroom.

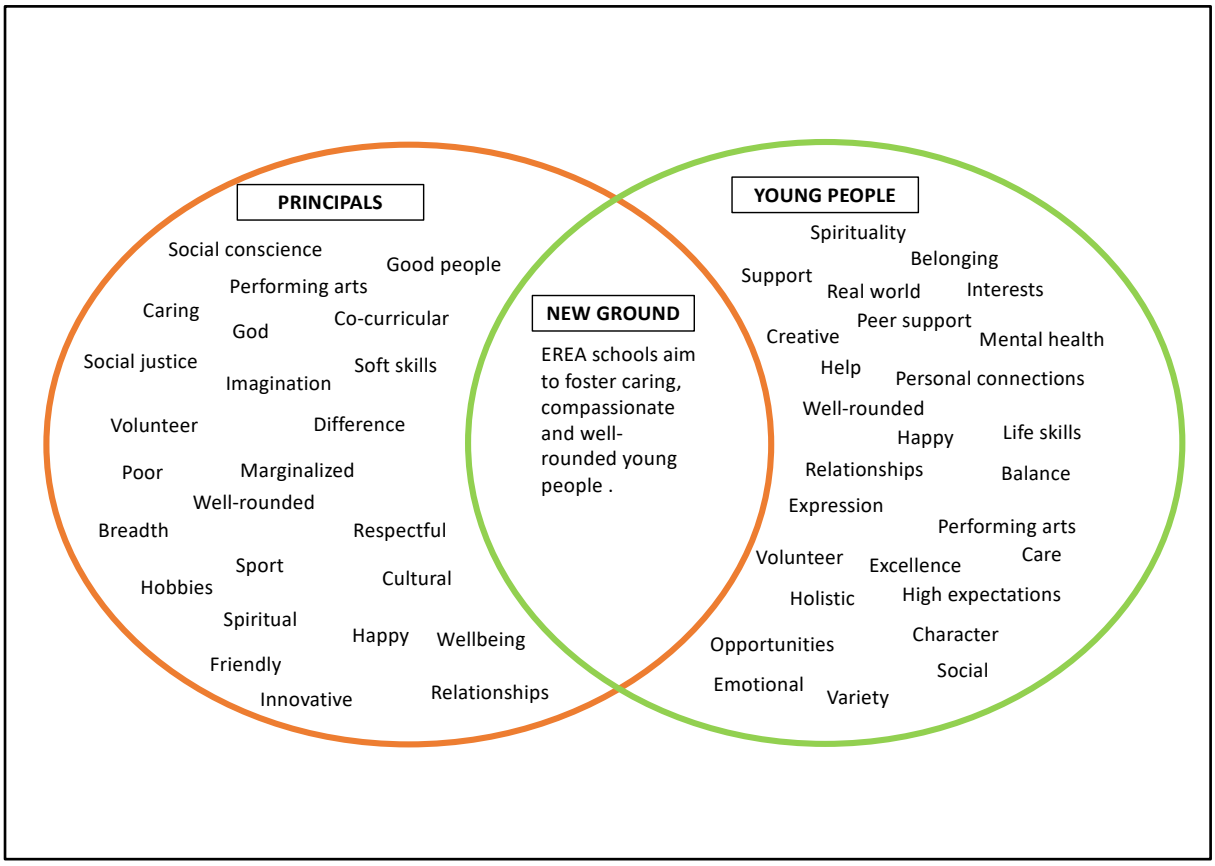


Figure 3.11 Interrelationships between Principals and young people and potential new ground

In this research project warm and respectful relationships between young people and teachers seemed to work best. Figure 3.11 emphasises the interrelationships between the views of Principals, young people and potential new ground. Some cultures in schools dictate that young people suppress all emotions and cover up the gentler, caring, vulnerable sides. Young people were able to describe positive experiences when a school embraces cultural diversity. Cultural values are inherited from schools, teachers, parents and guardians, and peers. Cultural values such as authentic leadership, hope, joy, strength, loyalty, empathy, compassion, sharing, nurturing and a sense of community were common themes among EREA schools. A positive school culture was one that promoted the notion of engagement, including offering a diverse program where the individual gifts of students were celebrated. Principals interviewed hoped that producing well-rounded graduates, who understood this diverse culture, could contribute positively to society.

The data from this research project suggests young people can articulate the importance of receiving a well-rounded education. This included a focus for schools on modelling sound interpersonal skills and demonstrating the arts of empathy, warmth and negotiation. Learning and growing as a person is fundamental to a sound Edmund Rice education. Principals were united in ensuring excellence was celebrated across all facets of school life. EREA schools that espoused a well-rounded education were intent on educating the whole person. Principals concurred that well-rounded individuals make a positive contribution to society. Principals spoke of the commitment to a gospel-centred approach as a way of communicating the culture required for young people. In a practical sense, care for the environment is a current issue where young people can appreciate a connection to something larger than self.

Thinking about the needs of others and being inclusive of all people is important for EREA communities. Young people will need to be prepared for a diverse workforce by instilling a love of learning and being imbued with the values of inclusivity and good citizenship. EREA schools are well placed to cope with these challenges, capitalising on the strength of teachers. The role of the teacher in fostering skills such as synthesising, criticising, writing and analysing information, as well as cultivating the emotional and social resilience and sense of responsibility is something EREA schools have long been known for.

Recommendation 17

Teach with the intent to produce well-rounded young people within classrooms and schools, that promote high levels of spiritual and social connection to help develop a sense of inclusivity and compassion for the poor and the planet, and outward-looking, responsible, global citizenship.

3.4.6 Pastoral

Finding 18

While the performance of young people in the areas of literacy and numeracy against national benchmarks is publicised widely, the social and emotional wellbeing of students is sometimes neglected.

As society becomes more competitive and adolescents are confronted with greater social pressures, prioritising a philosophy of pastoral care becomes even more relevant. As schools continue to embed a whole-school approach to pastoral care, leaders and teachers have a responsibility to promote the social–emotional wellbeing of young people in their care (White, 2013). Through pastoral programs, schools that provide an opportunity for young people to discover a sense of belonging or connection assist in nurturing positive relationships (Cuttence, et al., 2007). These can be enhanced through peer relationships, teacher–student relationships, relationships with schooling and spirituality (Falloon, 2011). As leaders in EREA schools search for inspiration for such ideals, they need not look any further than the example set by Blessed Edmund Ignatius Rice.

While the performance of young people in the area of literacy is publicised widely, the social–emotional wellbeing and pastoral care is sometimes neglected. Central to these concerns are Keddie's (2007) discoveries that schools need to be understanding of pastoral care and be more inclusive of difference and diversity. Adolescents often feel safe in numbers and may mask differences in ability to maintain their place with the 'in crowd'. In their empirical studies, Scholes and Nagel (2011) found 'promotion of the arts leads to creativity and a movement away from this being solely a feminine pursuit' (p. 973). It is for this reason that classrooms should recognise and value, rather than marginalise and belittle, diversity (Keddie & Mills, 2007b). An encouraging pastoral climate creates a 'general positive energy and a safe environment' (White, 2013, p. 71). It is difficult to imagine the pain a teenager endures when confronted with experiences of isolation, exclusion and rejection when talents and gifts are not acknowledged or accepted. This kind of pain may have a long-term detrimental effect on a young person's pastoral needs and sense of wellbeing (Cuttence, et al., 2007)

EREA Principals agreed that the quality of the classroom environment matters, to both student wellbeing and academic learning. Teacher expectations, behaviours, and interactions in the classroom all affect how well the students learn. In order to meet the demands of the fast-paced, complex world in which young people live, EREA Principals invested heavily in pastoral care programs that focused on positive relationships. As Principal Matthew noted:

> *The College has developed into a dynamic, data-informed, technologically savvy environment with strong pastoral care for each of our students where learning is transformational, formative and progressive, and prepares our young men for a life that equips them with values and skills to be relational and to make a difference in the world.*

There was consistent and overwhelming feedback from Principals that young people were more engaged in learning when teachers adopted a positive approach to pastoral care. The young people interviewed felt an emotional attachment to their teachers and became very protective of these learning relationships. They established routines in homeroom and pastoral care classes that enhanced their sense of connectedness. Sometimes this meant that the pastoral needs of young people were prioritised over other facets of school life.

Many EREA Principals, when speaking about pastoral care, emphasised the positive relationships between young people and adults that were based upon the principles of common ground. The processes used to uphold these principles require all who attend the program to commit to the belief that freedom, independence and self-reliance/self-responsibility can only be realised through individuals owning their behaviour. Resolution of conflict, negotiation about learning, recognition of rights and responsibilities, and acceptance of consequences are modelled and explored both within the group and individually. This process is expected to occur equally for adults and young people. One Principal, John, concurred, saying:

> *Thankfully the leaders of house and the leaders of learning use the common ground language all the time whether it's handing in work or whether it's behaving properly. This is what we're on about.*

The consequences of operating on common ground with a set of principles are that adults and young people are both accountable for their behaviour. Within this approach emphasis is placed on providing opportunities to articulate issues that arise. Meetings become important as all are shaped and influenced by the same principles.

EREA Principals have a responsibility to young people, parents, the school and the broader community to maintain a certain level of order and standards. In addition, there is the ethic of managing the learning environment so that young people can learn at their own pace and through their own experience. This means dealing with issues and concerns in a way that allows for constructive learning. This was noted by the Principals. Bill, for instance, observed:

> *Certainly, I think at our school we've had a really explicit focus on wellbeing, pastoral care and community. That is, I think, a really strongly developed part of the school which allows us to then get more value out of the work you do in pedagogy when that's in place.*

When relational dynamics in schools are enacted positively conflict can be negotiated and transformed. Learning is enhanced when educators and young people mutually co-construct meaning, negotiate relationships, learning choices and participation options. This innovative way of being and working in schools does not occur without a commitment from adults to challenge and transform traditional authoritarian relationships with young people – sometimes a default position. Through relational pedagogy and critical reflection, educators in schools are innovating in order to change the way education is offered.

The students in this research project responded positively to lessons that were conducted under warm and friendly conditions. The lessons often included support from teachers that catered for the full range of students' abilities. The teachers and students were able to develop positive relationships based upon the principle of common ground. These positive relationships were particularly evident when the pastoral needs of young people were a priority. Teachers began to design learning activities that supported the application and transfer of learning to new situations. They were able to tailor activities to suit the personal needs of each young person. Commenting on his experience in relation to pastoral care, student Jacob highlighted that:

> *The teachers overall are very friendly and approachable throughout the school. There're no teachers that just are only teaching and forget about you, or just don't care. They're all wanting to get the best out of you and really educating you. And I think that's a good thing about this school.*

Young people interviewed during focus groups recognised and appreciated the support and care they received from their teachers. They were encouraged to take responsibility for their own learning when a pastoral atmosphere existed in the classroom. The young people concluded by acknowledging that a unique classroom dynamic existed when activities were tailor-made to accommodate their individual needs in an ever-changing complex social dynamic.

Table 3.4 Insights from Deputy Principal/Head of Campus presentations – Pastoral care

Deputy/Head pseudonym	Insight
Sam	*The very first thing we do is build our relationship with the young people before we can engage them. If you don't have a relationship, you can't engage them and it is not really happening.*
Jacinta	*Learning involves being inside, outside, connected to our families and then the broader communities.*
Ella	*Multi-aging cross-curriculum choices with clubs and afternoon electives with fun days – we do that really well with most of our pastoral care systems across our schools. Let's expand out a little bit because we've learned so much from getting older students to mentor our younger students.*
Maria	*It has to be relational. Has to be strong relationships between the staff, between the students. Every child needs to know that they're cared for and I think that's really important.*
Barry	*At the centre of our work is a consistent feel of students feeling safe, happy, loved, and supported within their school and especially within their classroom.*

Table 3.4 captures some of the feedback from Deputy Principal/Head of Campus conversations relating to pastoral care. EREA Deputies/Heads of Campus play a pivotal role in striking a balance between the requirements of the formal curriculum and the pastoral needs of young people. Making pastoral care a priority has the potential to foster a teacher-growth mindset and allow student–teacher relationships to develop. Improved outcomes were evident when EREA schools provided a safe environment that fostered discussion around the pastoral needs of young people. This active collaboration between teachers and young people enabled them to learn from each other through team activities, joint projects and a stable emotional classroom climate. This in turn had a positive

impact on students. The lack of reference to student–teacher conflict by EREA Deputies/Heads of Campus suggests that pastoral care programs are working. If teachers are prepared to become learners themselves, and invest time in understanding the importance of pastoral care, they are giving students the best possible chance to become engaged learners. When teachers have a fixed mindset and are unaware or unwilling to adopt a pastoral approach in the classroom, the learning becomes redundant. Young people yearn to be personally known, cared for and respected as individuals – the very essence of pastoral care and connectedness.

Recommendation 18
Adopt a whole-school approach to the pastoral care of young people. This includes pastoral support, counselling services, pastoral programs, the formal curriculum and parent/community involvement.

3.4.7 Belonging

Finding 19
Safe, inclusive and warm school environments can provide young people with a sense of belonging and connectedness.

For young people to take risks in their learning and display student voice, Keddie and Mills (2007b) contend that schools should actively work at evolving from the 'misogynist, traditional, old boys' codes of masculinity' (p. 207) to a far more liberal, pluralistic culture that embraces diversity, and promotes and values success in an array of endeavours and styles. The traditional construction of the male gender, with its emphasis on competitiveness and its insistence on eschewing displays of emotion, has been detrimental for many young people in their pursuit of academic excellence (Connell, 2008; Merry, 2008; Robinson, 2000). To this end, Merry (2008) asks why it is 'considered acceptable to aim for goals on the sporting fields and miss, but not in the classroom?' (p. 16). The importance of accomplishment has consequences for young people, particularly in building a sense of belonging, resilience, efficacy and student voice in their learning. Sometimes young people could mask their academic talent for fear of ridicule from their peers; they 'tended to compete if they could win or withdraw from the field to circumvent failure' (Merry, 2008, p. 28). Importantly, this issue could be far deeper and far more destructive in schools when academic ability and performance is not celebrated as highly as sporting talents. A positive school culture is one where young people take pride and have a sense of belonging and accomplishment from their results. When they are entrusted to figure it out for themselves and control their own learning, positive school culture, centred on the notion of belonging, develops (Reichert et al., 2010; Lemke & Fadel, 2006).

A sense of belonging is essential to optimise student outcomes. This is possible when teachers form teams in the classroom. Tomlinson (2009) declared that group work is an area schools might consider in such a way that (during a school term) all students collaborate in a structured way with every other student in the class. The arbitrary mix of teams or groups within a classroom could add a sense of fun to classroom activities (Reichert et al., 2010). Teachers who change their mindset and expand their pedagogical repertoire demonstrate increased visibility and active teaching styles (Alterator & Deed, 2013; Wiliam, 2012; Blackmore, Bateman, Loughlin et al., 2011). Various groups could be formed within a classroom environment: knowledge-based groups, skills-based groups, interest-based groups, peer-to-peer groups, cooperative groups and sharing groups (Imms et al., 2017). When a culture of belonging exists, the classroom environment could be organised to achieve the best possible engagement and learning outcomes for students (Goss et al., 2017). Teachers who understand the

impact of belonging to a team can plan for more-effective lessons and take the opportunity to enhance student connectedness (Clarke & Hollingsworth, 2013).

A sense of school pride and school spirit can emanate from young people when they 'belong' to a school. Principals interviewed for this research project spoke of the need to create many opportunities for young people to engage in school life, particularly co-curricular activities. Principals understood the great benefit of creating a myriad of ways that young people could be connected with school. As Principal Doug suggests:

> *I think out of that comes a sense of belonging to that particular group, which if people are having good experiences there, overflows to a sense of real belonging to the school that won't happen as easily in your standard classroom setting.*

Data seem to reveal that young people at EREA schools feel safe, are respected and heard. Many EREA schools provide a sense of belonging and a welcoming inclusiveness by providing extra-curricular activities which extend beyond school hours and into various after-school and weekend events.

When students have a sense of trust and warmth they are more likely to engage in school life. An encouraging emotional climate that fosters a sense of belonging creates a positive energy and safe environment. Young people will demonstrate school spirit, pride and loyalty when they have a sense of belonging to a school. These observations appear to align with student Brian who said:

> *Something I like about this school is there is this kind of – the sense of mateship between everyone, where everyone is willing to help each other out. There is no real dislike. If someone asks for help, everyone is willing to put in and help him out which is something I enjoy about this school.*

Thinking about the needs of others and being inclusive of all people is important for EREA communities. Young people interviewed spoke of mateship as a sense of belonging and a way of including others in conversations or activities. Young people were able describe the positive experience they have in a school that embraces cultural diversity and belonging.

Young people will need to be prepared for a diverse workforce by instilling a love of learning and being imbued with the values of inclusivity, belonging and good citizenship. EREA schools have a chance to foster these cultural values inherited from teachers, parents and guardians, and peers. Cultural values such as authentic leadership, hope, joy, strength, loyalty, empathy, compassion, sharing, nurturing and a sense of community will be critical for EREA graduates. Student Adam was delighted to explain:

> *The brotherhood. Everyone just backs each other up. A lot of mateship and yes everyone just gets by on whatever's happening. Whether it be sport, music or any other activity.*

Data in this research project indicates that a positive school culture exists at EREA schools. This promotes the notion of engagement, including offering a diverse program where the individual gifts of students are celebrated. Diversity is a reality in EREA schools and is embraced as a fundamental core belief. When diversity goals are embedded into the curriculum EREA schools are able to educate for democracy.

A sense of belonging and a welcoming inclusiveness, by making provision for extra-curricular activities, was something that the Principals and young people interviewed spoke about extensively. These extra-curricular activities often extended beyond school hours and into various after-school and

weekend events. These activities help build social, emotional and physical skills; they teach independence, resilience and teamwork; they build initiative and creativity; they teach persistence, problem solving, communication and collaboration. This comment from student Michael is representative of how extra-curricular activities can evolve into a deeper connection with teachers and school:

> *What I like about the school are the extra-curricular things, but instead of things such as sport I prefer things like the history club, environmental group, philosophy club that runs on Fridays, the debating and public speaking, obviously. I like new subjects that we get to do.*

Evidence from this research project suggests that participation in extra-curricular activities, including creative arts and sports, leadership and culture, has a significant impact on a student's learning growth in the cognitive, affective and physical domains of learning. Young people from EREA schools who participate in a greater variety of extra-curricular activities have higher levels of academic and social self-concept, and general self-worth. Activities should be well-structured around clearly defined goals, run by capable adult leaders and focused on continuous skills development.

Table 3.5 Insights from authors relating to belonging

Author name	Insight
Peter Norden (2016, p.22).	The importance of establishing and maintaining a safe learning environment is critical to facilitating the intellectual challenge and personal growth of the students in our schools.
Richard Jenkins, (2014, p.110).	Without members relating to each other, and defining themselves as members, there would be nothing to belong to.
Sherry Turkle, (2017, p.172).	Today's adolescents have no less need than those of previous generations to learn empathic skills, to think about their values and identity, and to manage and express feelings. They need time to discover themselves, time to think.
Cordelia Fine, (2008, p.71).	The psyche is a structure of psychological processes that are shaped by and thus closely attuned to the culture that surrounds them. The mind cannot be understood without reference to the sociocultural environment to which it is adapted and attuned.
Celia Lashlie, (2007).	Connection and linkages to the past that show pathways to the future and it's about excellence, striving to be successful in order to honour those who have gone before. It's about loyalty, hard work and belonging.
Independent Schools Council of Australia (2018).	Studies have found that structured co-curricular activities are important for development and growth, especially during adolescence, and are associated with lower rates of anti-social and risky behaviour, lower rates of academic failure and lower dropout rates.

Table 3.5 lists some direct quotes from authors that resonate with EREA schools who encourage young people to be who they are naturally. This includes accepting cultural practices such as sharing your story and showing affection and vulnerability in public. A challenge for schools is to foster an inclusive community as part of the social and cultural norm. EREA schools that do not provide adolescents with

a safe learning environment do them a disservice and potentially hinder their engagement in class. Young people need to develop an understanding of how to use their creative and innovative talents for the common good. This requires reaching a high standard of maturity and being led by teachers who are prepared to expose them to developing a sense of belonging, character and knowledge. Young people need to be imbued with the values of tolerance and inclusivity. They need to be equipped with an education that expands the mind and reaches beyond the borders of their own worldview. EREA schools can provide an environment that best prepares young people for the world.

Principals interviewed for this research project explained the role and purpose of EREA schools today is to engender a capacity to relate to others, interpret the behaviour of others and communicate effectively. For young people, a sound learning environment is one in which tolerance, acceptance and positive relationships are the norm. An EREA school community, conducive to positive student outcomes, establishes an atmosphere of collaboration, collegiality and teamwork. The quality of the relationships among staff, parents and students is based upon the values of belonging, empathy, warmth, negotiation and flexibility. There is an emphasis on inquiry-based and problem-based learning pedagogies that have the capacity to enhance school relationships and cooperative learning opportunities. This learner-centred approach aims to promote the importance of interpersonal skills such as belonging, teamwork, relationship management and conflict resolution. These skills are paramount for young people to make a successful transition into the workplace. EREA schools aim to continue the engagement they have with staff, students, parents and the community, building on the powerful sense of belonging that has contributed to the outstanding educational experience thus far.

Recommendation 19
Continue to create various ways in which young people can be accepted, connected and celebrated within their school community.

3.4.8 Academic focus

Finding 20
Rich learning opportunities occur when young people are able to choose their learning program from a varied curricular program that emphasises growth and personal excellence.

Instilling a love of learning is paramount for the contemporary student (Bunting, 2004; Victorian Institute of Teaching, 2014). This can be a challenge for teachers in the current complex environment that validates academic results as the only mechanism for celebrating success in schools. It is often easier for young people to work below their best rather than to 'have a go' and fall short of their ultimate dream (Clymer & William, 2007). If young people do not try they receive an ordinary academic result, and thus the self-fulfilling prophecy comes to fruition. Conversely, if they receive a result that is beyond their expectations, they consider themselves a genius. This attitude from young people would appear to resonate with Lashlie's (2007) findings that 'fear of failure features regularly and was often given as a reason for not trying' (p. 62). This self-understanding of young people is symptomatic of a dearth of 'social, emotional and physical maturity' (Scott, 2008, p. 46). As a result, schools that endeavour to instill lifelong learning can create a culture where learning from and with each other is the norm rather than the exception (Falloon, 2011). If young people adopt this concept of lifelong learning they may be more inclined to develop strategies to combat the world of constant change in which they now live.

However, there seems to remain an over emphasis on academic disciplines, results and international and national comparisons of schools based upon test scores (Torii & O'Connell, 2017). The process of secondary school education is often associated with deadlines, timelines and administration, is heavily content-laden and often has teachers working in silos (Ithaca Group, 2016). Likewise, the education system has become competitive and 'public' with regard to academic performance, with league tables published that pit one school against another, and privileging university pathways (Polesel et al., 2017). This tends to stifle innovation and detracts from highlighting the capabilities required for survival in a modern world (Torii & O'Connell, 2017). Student engagement caters for multiple intelligences, personal interests and different modalities of learning, as opposed to attempting to maximise learning through the use of tests or examinations (Sahlberg, 2018). Considering this evidence the Australian Curriculum endeavours to cater for the future and equip young people with the 'general capabilities' (Australian Curriculum, Assessment and Reporting Authority, 2014) required in a modern world. One of these capabilities is 'critical and creative thinking' (Australian Curriculum, Assessment and Reporting Authority, 2014) or what might be commonly referred to as a taxonomy of higher-order thinking skills (Bloom, 1956). Above all, the Australian Curriculum encourages all students to be lifelong learners, with multiple and transferable skills, rather than simply becoming knowers and doers (Westwell, 2013).

Imparting knowledge continues to be a challenge for those involved in the education of young people. The education system forces young people into groups based upon their chronological age and presents copious content across several discreet disciplines. During interviews, EREA Principals spoke about the challenges that this presents to their school communities. Consequently, EREA schools that celebrate academic results alone do not tend to cater well for an inclusive approach to student learning. Principal Lance emphasises:

> *It's a challenge to how we develop a strong academic focus when you're trying to be an inclusive school. We've got both ends of the continuum, and that's, I think, where our greatest challenge and our energy has got to be around, in terms of it. And I'm fully committed to be authentic, but it's how you realise it.*

The results lend weight to the belief that the paradigm shift for teachers is to move from a teaching style that transmits knowledge to a contemporary pedagogy that is more collaborative and interactive. Principals interviewed for this research project agreed that it is essential to have a balance of learning activities. Principals explained that teachers who aspired to a personalised approach to student learning, recognised and provided for various modes of student engagement.

EREA Principals were adamant that it was imperative to equally celebrate the wide-ranging abilities and gifts of young people. This enabled student curiosity to flourish and, through social interaction, students could explore, examine, critique and synthesise information to make meaning. The flexibility and broad range of curriculum choices at EREA schools led to an evolving, engaging and rich learning environment. One Principal, Robert, argued that:

> *We value all of our students, and we provide them with an equal-status, well-resourced educational pathway regardless of their intellectual capacity.*

Young people appreciated holistic opportunities. EREA schools endeavour to create wide and varied opportunities. The challenge is to ensure that excellence is celebrated across the broad spectrum of school life.

Teachers sharing practice made learning and students the core business. Learning was not constrained to academic knowledge; rather, learning included educating the whole person. To educate, in this sense, was to draw out and nurture the spiritual, social, emotional, artistic, physical, interpersonal and intellectual aspects of the students. This was illustrated by student Edward's comment:

> *What I like about the school is that it has – not only has an academic and sport teaching program, it also has a service learning program which can teach life skills and help you with your character.*

Learning and growing as a person is fundamental to a sound Edmund Rice education. Curriculum authorities in states and territories tend to privilege pathways to universities and vocational subjects are considered to be less prestigious. EREA schools need to guard against a lack of consideration of capabilities such as personal and social capability, and critical and creative thinking, which can be outweighed by a strong focus on rating or ranking students to facilitate competition around university admissions.

Principals spoke of the commitment to a gospel-centred approach as a way of communicating the values required for young people. This was affirmed by young people who described the positive experience they had participating in social justice initiatives. Thinking about the needs of others and making a positive contribution to society is important for both Principals and young people. This is affirmed by student Joel's insight:

> *What I like about school is that it gives students a lot of opportunities. It gives us like a whole wide window; it's not just looking at the academic aspect. It's also sporting, spiritually and emotionally. It does give us so many opportunities for us to engage in and get the best out of ourselves and be recognised from a Christian values point of view.*

EREA Principals are united in ensuring excellence is celebrated across all facets of school life. Academic success that can lead to positions of influence is an important facet of EREA schools. The evidence from this research project suggests that the ATAR provides limited help to employers when assessing prospective candidates because it communicates little about specific skills, potential or learning growth and the holistic nature of the student.

Figure 3.12 highlights the percentage of Principals, Deputy Principals/Heads of Campus and young people that spoke about the category of 'academic focus'. Fifty per cent of Principals, eight per cent of young people and five per cent of Deputy Principals/Heads of Campus spoke about academic focus. This is not surprising given the responsibility Principals have for placing the academic performance of students into context. EREA Principals are unanimous in stating that a clear focus on educating the 'whole' person is imperative for young people in their schools. Rather than focusing solely on academic achievement, EREA schools endeavour to provide students with knowledge, skills and experience that can be used in other facets of their lives. Teachers and Principals believe and recent research indicates that, over time, attending to more holistic aspects of achievement – the physical, social and affective – is more likely to have greater educational and life benefits for individuals.

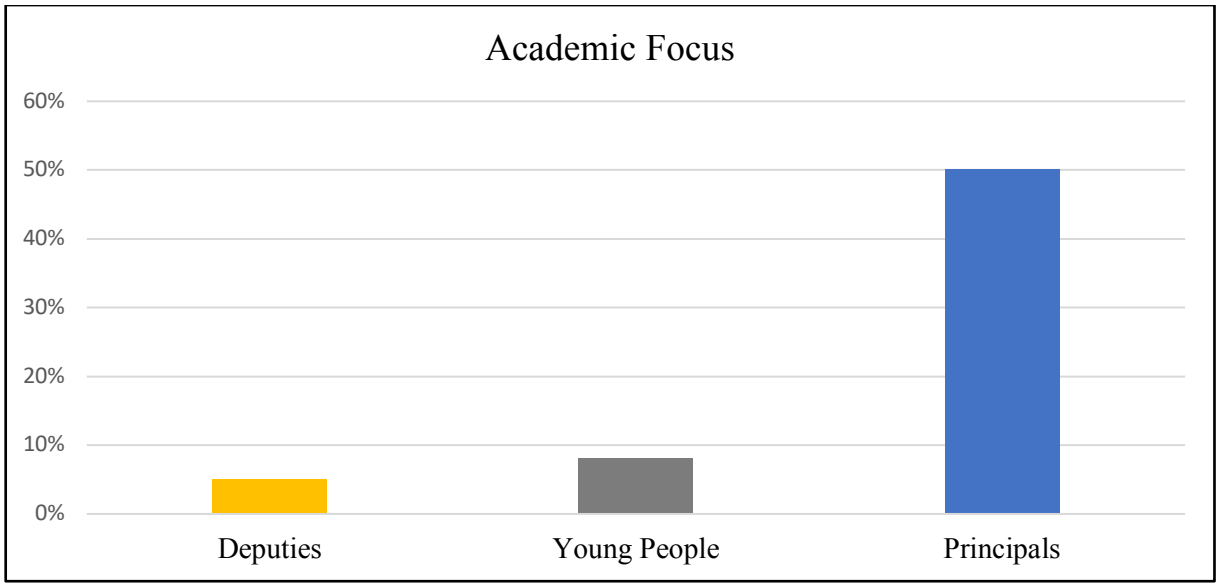


Figure 3.12 Percentage of Principal, Deputy/Head and young people responses to academic focus

The eight per cent of young people who spoke about academic focus during interviews also talked about the pressure they felt to perform well academically. This pressure seemed to detract from the love of learning a young person might acquire when pursuing their passion. Therefore, a curriculum framework that offers a broad range of learning opportunities has the potential to provide holistic education.

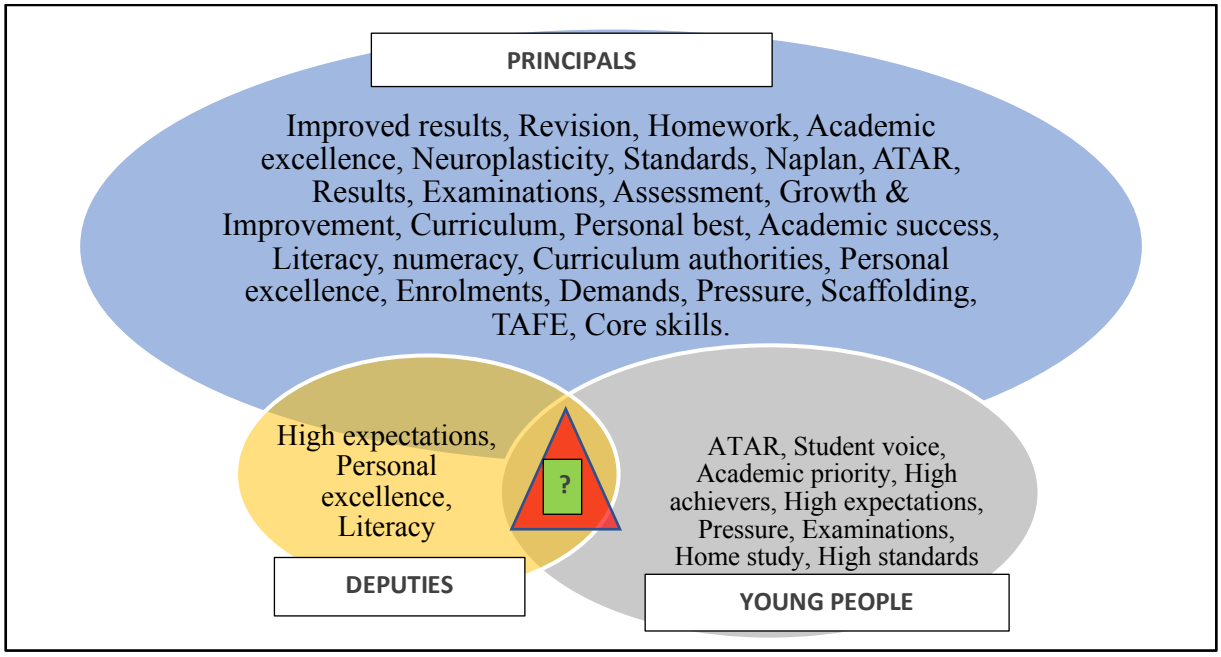


Figure 3.13 Principal, Deputy/Head and young people responses to academic focus

Figure 3.13 teases out the themes that Principals, Deputies/Heads of Campus and young people listed regarding academic focus. The themes suggest that an education that is holistic and broader than academic knowledge is an aim for EREA schools. Interestingly, the themes listed by the young people

are more centred around the demands of academic performance and achievement. This implies that they are not hearing messages about the holistic approach from their school community. Much has been written about the negative impact of anxiety and pressure associated with academic performance and results, particularly at the senior level. EREA schools have a responsibility to provide opportunities for all interests and abilities. Perhaps a way of combating this anxiety and stress is to encourage various curricular and co-curricular opportunities for young people to celebrate their wide-ranging and varied talents. This includes rich learning opportunities where young people are able to choose their learning from a wide and varied curricular and co-curricular program. EREA school communities need to ensure all young people receive wide and varied opportunities to have their individual gifts and talents nurtured and celebrated. There is a point in Figure 3.13 where the common ground of Principals, Deputies/Heads of Campus and young people overlap with a question mark. This question mark might be answered by applying the term 'personal excellence' to encompass learning activities beyond academic pursuits.

Recommendation 20
Provide all students with wide and varied curriculum opportunities and pathways to allow their individual gifts and talents to be nurtured and celebrated.

3.4.9 Variety

Finding 21
Young people appreciate a school that offers a variety of educational opportunities that cater for their passion and interests.

Having a love of learning can only happen when young people are engaged, enthusiastic and in control of their learning experiences (Hampson, Patton & Shanks, 2017). An extensive number of studies have described how silos of isolation are created when the curriculum is narrow and schools require adolescents to be passive (Byers et al., 2018; Mahat, Grocott & Imms, 2017; Imms et al., 2017; Hattie, 2013a). It is only when students take ownership of their learning that they progress at a rapid rate (O'Connell & Lucas, 2018). Activities that are interesting and challenging, and involve talking can stimulate meaning and memory (Davidson, 2013). Yet, in too many secondary schools, students sit quietly and passively for long stretches in rooms with little visual stimulation, primarily listening to teachers talk (Sousa, 2010).

Notably, schools that create a variety of curriculum choices, that are inviting, stimulating and interactive, encourage a team environment (Lippman, 2010; Newton, 2014). Team environments allow young people to learn the skills of collaboration, collegiality and negotiation. Walker, Brooks and Baepler (2011) discovered that 'when instructors adapted their pedagogical approach by intentionally incorporating more active, student-centred teaching techniques, student learning improved' (p. 1). To date, several studies have examined how curriculum variety and opportunities cater for various modalities of learning, and at the same time enable personal learning (Keppell et al., 2011). Numerous studies have attempted to explain how hands-on project-based learning, social–emotional learning, art-based learning and teacher teaming are all possibilities that enhance variety for young people (Leadbeater, 2016; Savery, 2015; della Chiesa, 2013; Hattie, 2013a). Essentially, curriculum that is flexible enough to allow for classes with multiple choices can benefit engagement (Breakspear, 2016). Imms et al. (2017) argue that 'more desirable teacher mind frames and more behaviour associated with deeper learning are linked with less teacher-centric classroom dynamics.' (p. 31).

Young people from the focus group interviews appreciated the opportunity to select their own programs and electives. Students commented positively on the variety of choices they had regarding their academic program, particularly in the senior years. Young people were conscious of utilising these opportunities and planned their program accordingly. They were also conscious of the need to select the subjects and programs that they were good at and liked. This often included reflecting on the choices and various activities available in the younger years. These were some of the reasons why young people made a smooth transition to secondary school. Student Oscar commented:

> *I like how school has so many options, especially when you're in the later years, once we have electives. Even in our younger, like the first couple of years – we experience everything, so all the things that are on display at our school.*

The variety of choices provided the young people with the opportunity to explore their passions. As the data collection period progressed, young people in this research project continued to highlight the positive experiences they had when a variety of curriculum choices were made available to them.

The young people interviewed appreciated the opportunity to choose from a variety of electives. They tended to gravitate towards the subjects that they liked. Young people were also appreciative of teachers and careers counsellors who gave them support when selecting their program. The selection of the programs was often part of a broader discussion around future pathways. As student Frank suggested:

> *The variety of electives that you get to choose from, so every person has their own thing, their strong point, they can choose that.*

When young people were involved in conversations about the variety of electives, student voice was evident. Discussion and conversation about the success or otherwise of programs became an essential element in the cycle of improving student voice. Young people were able to engage in dialogue with teachers and mentors about their program. EREA Principals resourced teachers with the latest thinking on careers and pathways for young people. While the variety of electives provide young people with greater opportunity for choice, this needs to be matched with diagnostic data on their ability to cope with their selected program.

EREA schools endeavour to offer the broadest variety of programs possible with the resources available to them. This includes the formal curriculum, alternative pathways and co-curricular activities. As young people matured they were able to take advantage of these opportunities presented by the school. This was also reflected in the following comments from student, Phil:

> *We have all this stuff going on, and going off that list, you begin to realise all the things that the school does offer. The amount of choice is like the school makes it so that you can find your place.*

The results seem to indicate that EREA students experience positive engagement with school life when there are a variety of choices available to them. This includes the school communicating high and realistic expectations and opportunities for students to be involved in decision-making. A positive sense of self-worth was evident when young people were able to find their passion and have the opportunity for student voice.

All EREA Principals were able to describe the importance of variety as the essential element in a broad curriculum that led to positive student engagement. Contemporary curriculum needed to be dynamic and personalised to hold the attention of students. A complex component of schools is to ensure a

personalised program that caters for the individual needs of each young person. Individual needs include social, emotional and intellectual needs. In addition, every young person needs to experience success with their learning program. This success includes positive and inclusive relationships where young people feel safe and supported at school. EREA Principals spoke about creating an atmosphere of inclusiveness where relationships are mutual and mistakes are welcomed. Programs that are wide and varied, inclusive and participative can encourage positive relationships and enhance motivation. This is highlighted by Tomlinson and McTighe, (2006):

> Developing a repertoire of instructional approaches helps teachers respond to academic variance in the context of promoting student success with essential learning goals.

Young people appreciate opportunities that ignite their passion. EREA schools endeavour to create these wide and varied opportunities. However, the challenge is to ensure that excellence is celebrated across the broad spectrum of school life. A significant outcome from this research project was that EREA schools endeavour to cater for the individual needs of young people. This level of service supported students to work with their teachers and mentors to compile a program to suit their needs. When young people made the most of their opportunities they were able to focus on learning and feel good about themselves. Young people commented that EREA schools were more than capable of providing a variety of programs to suit their needs. As young people matured they became more in tune with their preferred learning style, individual needs and passions. This was a glowing endorsement for EREA Principals and staff who try to meet the individual needs of each young person in their care. This includes providing multiple learning activities that are tailor-made to each student.

> **Recommendation 21**
> Implement a broad curriculum and personalised learning program that caters for the individual needs of young people.

3.4.10 Wellbeing

> **Finding 22**
> Adolescents may often mask differences in order to maintain their place with the 'in crowd' or avoid maltreatment from others.

In considering the promotion of student engagement, school communities might consider the social–emotional challenges some young people endure before they arrive at school (Brunzell, Stokes, & Waters, 2015). To address these challenges it is important that these students have role models who validate their interests and talents (Liberante, 2012). Adolescents who have been exposed to social–emotional challenges may be wary of expressing themselves freely in front of others (Morgan, 2013). In addition, they may be fearful of being asked questions by a teacher in a whole-class situation. Biddulph (2018) found that young people who have high social–emotional needs face ridicule or exclusion. On a positive note, the emotions of desire and passion allow young people to overcome moments of boredom and fatigue when it comes to learning new things. Doidge (2010) concludes:

> …our brains are modified by the cultural activities we do, be they reading, studying music, or learning new languages. We all have what might be called a culturally modified brain, and as cultures evolve, they continually lead to new changes in the brain.

In summary, student wellbeing can be best understood by distinguishing between hedonic and eudaimonic types of wellbeing. In order for optimal learning to occur young people need to feel safe and have a sense of self-worth. Hedonic wellbeing has to do with feeling well and eudaimonic wellbeing has to do with functioning well (Huta, 2015). In many cases schools place an over emphasis on the personal wellbeing and safety of young people. However, it is the eudaimonic form which stems from the students' self-motivated behaviour, which theory and subsequent research indicates induces feelings of school connectedness (McNeely, Nonnemaker & Blum, 2002). It is this sense of wellbeing that sustains a climate where student outcomes are positive and they are motivated to learn. This motivation aligns with the self-determination theory highlighted by Deci & Ryan (2002) which enables learners to feel free to be who they are and make their own choices. When students exhibit fully functioning levels of eudaimonic wellbeing, they are resilient, positive, balanced, self-regulated and are able to constructively face challenges (Huta, 2015).

EREA Principals spoke extensively during interviews about the wellbeing of young people. Principals explained that the emotional climate of the classroom enhances emotional stability and produces an environment that is conducive to learning. When students feel safe and have a sense of self-worth they blossom and are liberated from any sense of negativity. Principal Ruby highlighted this sentiment:

> *You need to look after their wellbeing before you can move to any curriculum or try to get them to sit at the desk.*

This positive atmosphere in the classroom was something EREA Principals aspired to and when this was evident it created optimism and hopefulness, and a sense that each learner could become personally known and cared for as an individual. When EREA teachers considered the dignity of the human person, learning outcomes included the affective domain and reflected the principles of emotional intelligence.

Principals highlighted that the emotional climate of the classroom should be inclusive of difference and diversity, and show a commitment to restorative practices that demonstrated reconciliation if relationships required mending. What is more, EREA teachers are required to understand the impact of anxiety and stress and how the brain functions under these conditions. Connectedness, self-esteem, confidence and friendly and warm conditions are all complex elements contributing to the emotional climate. One Principal, Bruno, stated:

> *If they're connected and they're happy and they're healthy they've got a much better chance of learning effectively and feeling good about themselves. And then being able to be a productive member of society.*

Consideration of the dignity of the individual person is conducive to a harmonious emotional climate that respects learners and their experience. Young people who do not conform to socially accepted norms of behaviour might have a challenging experience if teachers are not aware of their individual needs.

When young people were able to come out from behind their 'mask', they were more open about their feelings and emotions. There were positive reports from EREA Principals and young people regarding the increased level of opportunity for conversation and communication, particularly in the senior years. One student made the point that the key reason he came to school was to be supported by the wellbeing services at the school. This was the first time in his experience at this school that he had felt that way. Shaun, for instance, observed:

> *I haven't been through too many tough things in my life but hearing that people have been through some pretty hard stuff. And that was a big step for people to do. We've known people, these people in our year level, for six years and for them to open up, I just think it's a bit hard for that sort of step to occur in such a young age.*

It was an empowering experience for young people to open up and for their voice to be heard. It is important to take the time to stop and listen to young people. They have great insight into what works for them regarding their own social–emotional wellbeing and how to coordinate the dynamic between learning and complex relationships. The reaction of young people interviewed was positive, and their emotional state, for the most part, was reflected in a heightened level of enthusiasm.

The emotional state of the students determined their level of engagement. These emotions could be stimulated by an interesting activity. When students were feeling relaxed and comfortable they were more likely to experience success. Commenting on the social–emotional wellbeing of young people, Principal Stan highlighted that:

> *The emotional climate of the classroom. There's still a sense of, I'm a teacher and you're the learner. So, we have to move in terms of the sense of we're facilitating learning together, and that we're working in partnership in order to support the social–emotional needs of young people.*

It was possible for young people in EREA schools to be in an optimal emotional state and demonstrate productive levels of engagement. This required a high level of rapport and trust with teachers. Allowing time for personal growth and for developing insight into their wellbeing enabled teachers and young people to become a close-knit team. Learning from and with each other was paramount for these teachers and young people, and this practice extended to positive student outcomes.

During focus group interviews young people divulged that sometimes they have to deal with complex family issues before they come to school. Young people appreciated when support mechanisms were in place so that they could talk openly and confidentially about personal issues. This included homeroom teachers, teachers of subjects, counsellors, support staff or other significant adults. When this support was available to young people, the 'adolescent code' of masking problems or personal issues was reduced. Pollack (2018) best captures this sentiment:

> Some young people invest so much energy into keeping up their emotional guard and disguising their deepest and most vulnerable feelings, they often have little or no energy left to apply themselves to their schoolwork.

EREA Principals hoped that young people experienced positive social relationships, interpersonal, open-ended and reflective forms of human interaction, to be prepared for futures-oriented lifestyles. Figure 3.14 emphasises the interrelationships between the views of Principals, young people and potential new ground. Principals agreed that a stable social–emotional climate in schools was one that was inclusive, collaborative, collegial, non-hierarchical and free from racial, gender or creedal bias. One of the dangers associated with the wellbeing of young people is that they will shelter themselves rather than display who they really are. Building a sense of resilience, efficacy and student voice into daily routines was deemed to be an important response to this challenge. EREA Principals stated that it was important for young people to know that they were loved and cared for as cutting off affection and support, in order to let them stand on their own two feet, could cause trauma and anxiety.

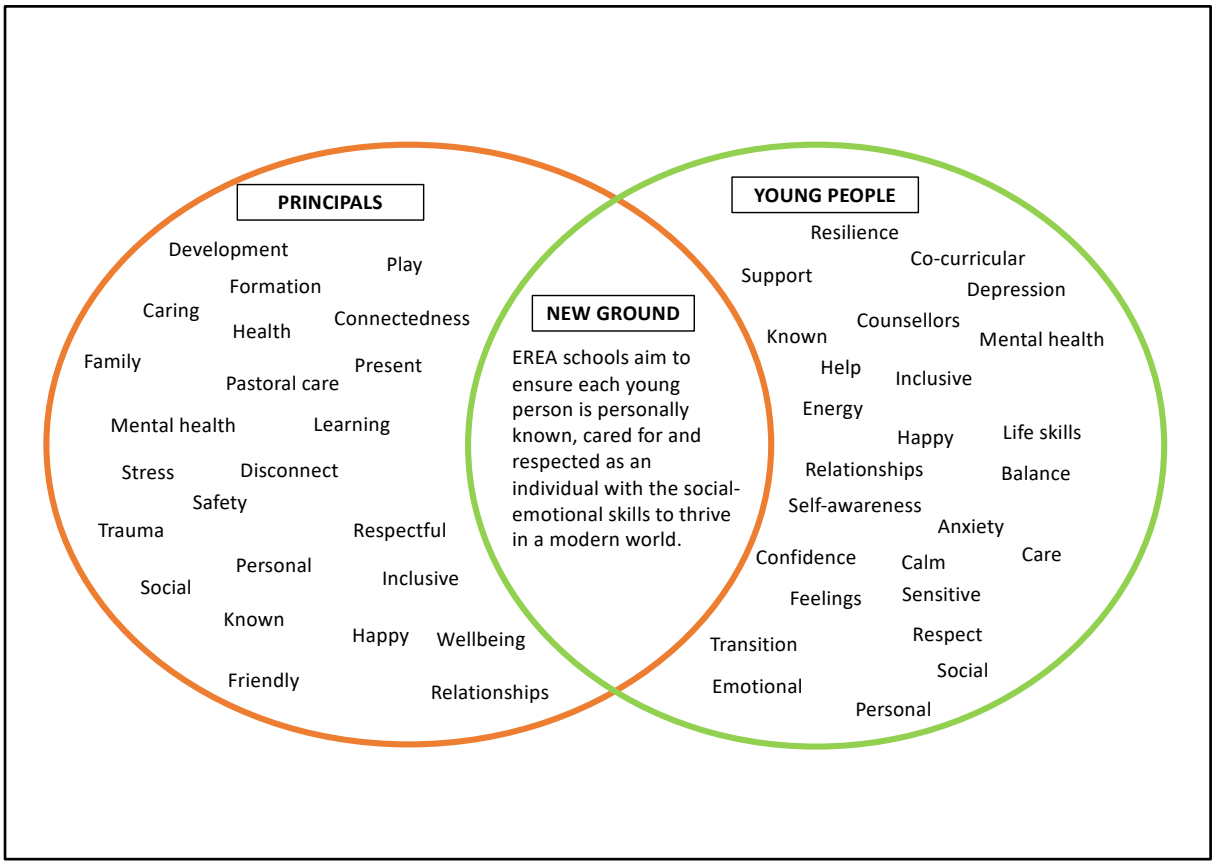


Figure 3.14 Interrelationships between Principals and young people and potential new ground

In considering the promotion of a balanced emotional climate, EREA Principals were keen to highlight and promote the restoration of right relationships. Above all, teachers attuned to the wellbeing of young people attempted to apply restorative practices principles that involved the student, and separated the deed from the doer, to reconcile broken relationships. In addition, effective teachers empowered young people to deal with conflict in an assertive, calm and respectful manner. The data from this research project suggests that mutual relationships will flourish if teachers relinquish power and move to the role of facilitator. Such pedagogy of mutuality presumes that all human minds are capable of holding philosophies and concepts, which, through discussion and interaction, could be moved toward some shared frame of reference (Bruner, 1999). Without crossing professional boundaries, teachers in EREA schools need to let young people know that all of their attributes and yearnings are not only acceptable but cherished. When we let young people know that they are personally known, cared for and respected as individuals, we discover sides of them that we never knew existed.

Recommendation 22

Pursue development of culture, language and wellbeing philosophy that promote student growth in awareness of their own emotional experience and their capacity to articulate that.

3.5 Individual differences

The process of secondary school education is often linked to deadlines, timelines and administration, and is heavily content-laden. The system has become competitive and 'public' regarding academic performance where league tables are published, pitting one school against another. Vygotsky (1978), argues that the learning process is more complex than memorising and regurgitating volumes of content. Recent research in neuroscience declares all people capable of intelligence and lifelong learning (Doidge, 2001). This gives hope to young people who may have been unable to keep pace with the high demands of content and timelines. Therefore, secondary schools need to cater for individual differences. Australian research shows that achievement can be spread over five to eight year-levels within a single class. A Year 7 class may have students working at a Year 1 level, while others have mastered concepts from Year 8. Schools and teachers have long understood this challenge but have struggled to respond effectively.

The clear majority of young people are working in isolation in class (Biddulph, 1998; Hattie, 2002; Dufour and Eaker, 2006). This experience of isolation only exacerbates a sense of remoteness, loneliness and segregation when learning tasks become difficult to understand. Furthermore, classroom management techniques reveal that young people are being expected to sit for long periods of time (Lingard et al, 2008; Tyre, 2008). What is more, young people are not going to reveal in front of their peers that they are struggling to understand content or are bored with it. They would much prefer gaps in their learning to 'save face'. Again, knowing the learning capabilities of each student personally and presenting multiple learning options caters for individual differences (Tomlinson, 2009). Individual differences include catering for the broad range of ability in a typical class. There is literature to suggest that a typical class can include achievement that is spread over five to eight year-levels (Hattie, 2013). The teacher therefore is assigned the complex task of catering for those with additional needs, high ability and differentiating the curriculum. In addition, Principals are faced with the daunting prospect of how best to apply limited resources to young people with individual differences.

3.5.1 Additional needs

Finding 23
In most cases, young people with additional needs should be included with students from their year level.

Many teachers report difficulty catering for all students, particularly for learners with additional needs (Leadbetter, 2004). Teachers can also struggle within increasingly demanding school environments to implement effective interventions that address the academic and social needs of students. While some students with additional needs require access to specialist teaching, collaboration with allied health professionals, and different settings in order to master the knowledge and skills they need, all students benefit from teachers doing their jobs well – presenting effectively designed lessons, utilising a range of well-organised resources, providing appropriate learning interventions tailored to students' learning needs, and giving feedback that enhances students' future learning outcomes (Graham et al., 2015). Some key issues related to additional-needs instruction include diversity, intervention, collaboration and educational outcomes (Graham et al., 2015). The focus on additional needs asks schools and teachers to reflect on the necessity and complexity of understanding what learning interventions can best support vulnerable students and how these can be selected and implemented

in systematic and sustainable ways as part of whole-school and classroom-focused practice (Graham et al., 2015).

Supporting young people with additional needs ranks as one of the most important challenges facing governments and educators throughout the world (Hopkins & Craig, 2015a). Understanding the notion of additional needs recognises that learners have diverse abilities and interests, and that they come from diverse ethnic and social backgrounds. Mitchell (2008) explained that students with additional needs could be supported by a philosophy of 'inclusive education', defined as 'education that fits'. In other words, education must fit the diversity of learners we find (or should find) in every school, in every classroom, in every country. Expressed another way, an inclusive school is 'a school for everyone' (Mitchell, 2008). UNESCO acknowledged that 'inclusive education is an ongoing process aimed at offering quality education for all while respecting diversity and the different needs and abilities, characteristics and learning expectations of the students and communities, eliminating all forms of discrimination' (UNESCO, 2008). Mitchell (2008) goes on to say that there are three main arguments in favour of inclusive education for learners with additional needs. Firstly, if it is handled properly, all learners will gain academically and socially and will improve their self-esteem. Secondly, given the expense involved in transporting and accommodating learners with additional needs in special schools, especially in rural areas, inclusive education is more economically viable. Thirdly, research into the effects of inclusive education shows that if it is properly implemented, not only does it benefit learners with additional needs but it also provides positive outcomes for other learners. Fourthly, and most importantly, inclusive education should be seen as a fundamental right, not just for learners with additional needs, but for all learners (Mitchell, 2008).

EREA Principals highlighted that supporting young people with additional needs requires a multidimensional attack. Successful additional-needs programs require a commitment from educators at all levels of the system. Mostly, EREA Principals argued for young people with additional needs to be placed in classrooms as a necessary requirement for inclusive education. Principal George from the one-to-one interviews explained:

> *We've got a multi-prong attack to be able to care for and cater for young people, with a variety of learning needs. And I think there is a complexity of student issues these days. It just puts so much pressure on a school to be able to look for different ways of supporting each and every individual in all of the varying areas of need.*

Support for young people with additional needs can vary from school to school. The barriers that sometimes exist include social and cultural beliefs, economic factors, a lack of mechanisms to ensure compliance, conservative attitudes among teachers and teacher educators, parental resistance, a lack of skills among teachers, rigid curricula and examination systems, fragile democratic institutions, inadequate educational infrastructures (particularly in rural and remote areas), large class sizes, the dominance of the medical model of disability, and a top-down introduction of inclusive education without adequate preparation of schools and communities (Mitchell, 2008).

EREA Principals interviewed for this research project suggested various teaching strategies that could be effective for learners with additional needs. These include: cooperative group teaching; peer tutoring; supportive classroom climate; social skills training; cognitive strategy instruction; self-regulated learning; memory strategies; phonological awareness and phonological processing; behavioural approaches; functional, behavioural assessment; direct instruction, review and practice; formative assessment and feedback; assistive technology; and augmentative and alternative communication (Mitchell, 2008). Most of these strategies have been shown to be effective for all learners. One Principal, John, concurred saying:

> *We've got a really good team led by a teacher who is an (additional needs) coordinator and five or so support staff who work in the classroom. We don't remove kids. We get the support staff to come in and help. One of the beauties is that it's no big deal having support staff in classrooms. In fact, the kids [would come by] occasionally, go, okay, hang on, can I have some of that time with you? So that sort of stuff here is just generally accepted – which is good.*

The EREA Touchstone of 'Inclusive Community' relies on educators, learners and their parents accepting the right of learners with additional needs to be educated in general education classrooms and to receive equitable resourcing.

According to young people from the focus group interviews, inclusive community for learners with additional needs requires support from a team of professionals in addition to regular classroom teachers. These would include such people as teacher aides or assistant teachers, specialist advisers, appropriate therapists and counsellors. As student Andrew suggested:

> *There is a lot of support for the people that have special needs and a lot of people who excel in their subjects for curricular, non-curricular activities. For the young people who really need the support, the teachers really do push themselves to interact and to socialise with other people so they could excel their learning to actually push them into the middle range or even excel them to the higher, top end.*

Clearly, supporting young people with additional needs requires adequate levels of funding. To bring all of the above elements together, leadership is required from government, national and local education authorities, Principals, classroom teachers and support staff.

Young people observed that supporting learners with additional needs involves more than just placing them in regular classes and hoping for the best. It really means that schools have to re-examine what they teach, how they teach and how they assess learners' performances. In short, it requires a paradigm shift in education – for the benefit of all learners. One student, Nick observed:

> *With the people in classrooms that need some help, there are teacher aides that come in and specialise and help them understand it a bit easier and work with them individually throughout a few classes. Then there's the learning support room as well for the younger boys to go in that need just that bit more guidance and help with their work.*

There are a variety of approaches that schools adopt to cater for students who require additional needs in the classroom. Catering for individual needs requires specific data to be placed in the hands of the teacher to assist young people with their learning. EREA schools are catering for an increased number of students with additional needs.

Some young people are being withdrawn from class to receive additional learning support from school officers. Some young people are segregated from their peers, socially and emotionally, when they are withdrawn from class. Feedback suggests that in the area of additional needs, EREA schools are adopting a wide and varied range of practices. As such, EREA schools need to establish valid and reliable data on young people based upon evidence of learning needs.

Figure 3.15 Inclusive word cloud

Figure 3.15 captures the main themes from Principals and young people in a word cloud. EREA schools are constantly striving to find ways of how to best serve the needs of young people who require additional learning support. Many programs have been established in response to this challenge. It was noted by EREA Principals that the numbers of students presenting with additional needs is increasing. It was also noted that their school's deeply held commitment to equality and justice required a response that provided authentic learning opportunities for every student. Tomlinson (2009) explains:

> What we can and should do is to use instruction that offers a wide range of possibilities to address the wide range of needs our students inevitably bring into the classroom with them.

Some EREA schools have responded by adopting programs where those with additional needs worked in a separate classroom where the focus was to individualise learning. The purpose of these programs was to offer an inclusive experience for students with additional needs within the framework of a regular school setting. Additional needs could include one or more of hearing and severe language disorders, vision impairments, social and emotional disorders and physical constraints. Evidence of an intellectual disability would include an assessment by an accredited educational psychologist using the Wechsler Intelligence Scale for Children (WISC-111). Some students might have other learning

difficulties that relate to poor organisation, lack of interest and motivation, and behavioural or emotional difficulties.

In attempting to locate best practice in the area of additional needs, the first step is to have comprehensive standardised assessments of learning aptitude and achievement that are available via organisations such as Allwell Assessment Services. The Allwell data supports and adds value to existing enrolment data, NAPLAN results, and observations from parents and teachers about the learning and wellbeing of young people. This means that identification of student learning and wellbeing needs will be better informed for all students. Second, is developing transition programs for the inclusion of young people with additional needs into mainstream classes. This includes homerooms and classes in the same building as their year level peers. Third, establish open and positive communication between support staff and Key Learning Leaders so that curriculum design and development is transparent and a shared responsibility. Finally, establish open and positive communication between teaching staff and learning support staff so that services are delivered to young people at the point of need.

Recommendation 23
Review existing policies, procedures and protocols surrounding support for young people who require learning enhancement.

3.5.2 Differentiation

Finding 24
Differentiation should mostly be experienced by students in mainstream classes.

Based on concerns that the changing needs of young people are not being met, differentiation influences the pedagogy of teachers and the engagement of students (Blackburn, 2018). Imms et al. (2017) highlight 'evidence of a relationship between the types of learning environments, teaching practices, teacher mind frames and student deep learning' (p. 6). Thus, the effective use of current research provides opportunities to differentiate learning, support ownership of programming and interventions, and create common understanding. Differentiation is an approach that ensures that the content, process and products of student learning are altered according to students' abilities, interests and learning (Munro, 2013; White, 2013; Tomlinson, 2009; Vygotsky, 1978). Therefore, a flexible differentiated program can enable students to work with those who are like-minded or have similar ability. Differentiation, when applied creatively by teachers, has the potential to produce a relaxed, safe and stimulating environment (Mahat, Grocott & Imms, 2017).

School leaders have a responsibility to provide teachers with the opportunity to explore current educational theories. One of these theories is differentiation. This is a practice that could be investigated by all teachers in schools. The practice of differentiation is designed to respond to the individual needs of students entrusted to the care of the teachers. White (2013) describes this as 'the holy grail of education: the capacity to cater for the unique learning styles of every student in a complex and diverse classroom environment' (p.71). This might help teachers if they are given the opportunity to gain more confidence in planning for the unpredictability of the classroom. Teachers should be encouraged to immerse themselves in the mire of a differentiated classroom. Tomlinson (2009) states, 'differentiation is developing the kind of rich, authentic curriculum, we often restrict to our most able learners, then differentiating to lift the majority of students' (p.30).

EREA Principals encouraged teachers to respond to the individual needs of students rather than one-size-fits-all. This included planning for the unpredictability of a classroom. Principals explained that

differentiating instruction means 'shaking up' what goes on in the classroom so that students have multiple options for taking in information, making sense of ideas and expressing what they learn. Differentiation is a sequence of commonsense decisions made by teachers with a *student first* orientation (Tomlinson & McTighe, 2016). Differentiation is not a set of strategies, but rather a way of thinking about teaching and learning. Principals discussed the importance of differentiation in the classroom. Ken stated:

> *In terms of individual differences then in mainstream classes, I think that's the big challenge in schools. I think most teachers feel terribly guilty that they can't meet the needs of the kids in their classrooms, and I don't know that as school administrators, employers, we've always – I don't think we've really appreciated the complexity that's facing teachers and being prepared to resource that well enough.*

Tomlinson (2009) explains that students who have a growth mindset (learning oriented) accept feedback readily, embrace challenge, grow more academically, persist longer and work harder. Whereas fixed mindset learners cheat more, get angry with feedback, resist challenge, grow less academically, give up faster and reject hard work.

Teachers with a growth mindset believe that students are capable of achieving anything, according to EREA Principals. Fixed mindset teachers give up on students and limit their progress. Teachers discover that they need to develop and maintain relationships with the students they teach – because for most students, meaningful interaction with a teacher is the precursor to academic learning (Tomlinson, 2009). EREA Principals reflected on the adjustment required in order to implement effective differentiation in the classroom. Darren stated:

> *First, we have to say we're adjusting work at quality differentiated learning or teaching practice. Then the work has to be supplemented and demonstrate substantial and extensive levels of adjustments. We actually have to be able to prove it so you've got to have all the documentation that underpins all that.*

Persistently knowing where students are along the way includes the use of pre-, formative and summative assessment for learning. Adjusting teaching to make sure each student arrives at the destination and, when possible, moves beyond it means that teachers have addressed the readiness, interest and learning profile of young people.

As EREA Principals explained, differentiation comprises modifications to the curriculum, teaching structures and teaching practices in combination to ensure that instruction is relevant, flexible and responsive, which leads to successful achievement and the development of students as self-regulated learners. This was also reflected in the following comments from Principal Robert:

> *I know it's a lot of work and I think once again, if you are committed to differentiating you have to be committed to an extensive diverse learning centre. Now, by diverse learning I mean the whole range from gifted and talented to those kids who need extra help. We might be doing an activity and if these students get to this stage we are going to celebrate that as an achievement.*

This approach benefits all students. The approach explained by Principal Robert includes a blend of whole-class, group and individual instruction; and, in addition, curriculum, instruction and assessment that is carefully designed to meet the needs of all students. Teachers need to adopt multiple

approaches to content, process and product as a way of thinking about and organising instruction. When differentiation is effective all young people are engaged in respectful and challenging tasks that are student centred.

Having a consistent approach to differentiation is one of the most difficult things that schools do, according to EREA Principals. Some schools have high-ability classes that are separate from those with normal distribution. Some students are withdrawn from class or excluded from others (e.g. Languages) in order to receive additional learning support. EREA Principals were unanimous however in ensuring individual learning plans were produced for young people requiring additional-needs support. As Chris suggested:

> *We gather the evidence around student learning and adjust accordingly, then that goes on the portal. Then we roll that into an individual learning plan, and then a team-teaching opportunity. So those – the nine teachers would all meet. This is what we've done for this young person, how is it working? Let's come up with some really good strategies around how to better personalize learning.*

It is a priority for EREA Principals to find ways to support the broad range of talent and interests of young people. Effective differentiation occurs when the content, process and products of student learning are altered according to students' abilities, interests and learning. This includes providing student choice around a diverse range of activities and ability levels. Table 3.6 emphasises some of the feedback from Deputy Principal/Head of Campus conversations relating to differentiation. EREA Deputies/Heads of Campus play a pivotal role in championing best practice in teaching and learning as this can impact heavily on the wellbeing of young people.

Table 3.6 Insights from Deputy Principal/Head of Campus presentations – Differentiation

Deputy/Head pseudonym	Insight
Sam	*We do a lot of that and the pedagogy that the staff use, habitualised learning and differentiation in a flexi setting, that happens every day.*
Cathy	*There's differentiation which might be based on student interests. Also, there's lifelong learning skills that are developed as part of an ideal environment. This includes different modes of learning.*
Jacinta	*There are three different parts that lead to the same outcome. That comes back to differentiation and there's that one outcome or skill or whatever it might be. It could be individualised or met in different ways.*
David	*We need more staff. It's not just teaching staff, it's support staff in the classroom and just so that we can break them up into groups with different levels in their classroom.*
Damian	*Teachers need to be skilled in differentiation of work for different students. They also need to be flexible, energetic and passionate. They have to be able to facilitate work for students to achieve personal excellence.*

Munro (2012) explains differentiation is particularly important for gifted or highly able students because of the traits they share. These include:

1. They can retain information more easily.
2. They have more elaborated conceptual networks.
3. They can interpret new information rapidly, broadly and deeply, and see big-picture patterns and rules in information.
4. They retain knowledge more efficiently in working memory.
5. They can see more under-the-surface general relationships and principles and infer more broadly.
6. They can learn a topic by linking simultaneously several aspects at a time.
7. They can transfer and apply their knowledge across content-area boundaries, and make unusual and far links and generate outcomes that are creative and novel.

Teachers have an equal responsibility to cater for young people with high ability and can achieve at a higher level than their age peers.

Sometimes, in catering for the needs of young people, EREA schools will adopt the practice of streaming. Tomlinson and McTighe (2016) point out that student learning is enhanced through the differentiated classroom rather than having segregated classes or streaming. According to Tomlinson (2009) this was all about mindset. The research has shown that students, and teachers of students, come to classes with an expectation according to their assigned class. Students in lower streamed classes have low expectations placed on them and have low expectations of themselves and this is generally reinforced by teachers. Tomlinson, (2003) captures the essence of differentiation:

> Differentiated teaching is responsive teaching. It stems from a teacher's solid and growing understanding of how teaching and learning occur, and it responds to varied learner's needs for more structure or more independence, more practice or greater challenge, or a more active or less active approach to learning.

It is a priority for EREA Principals to find ways to support the concept of differentiation. In order for differentiation to be successful, the teacher needs to be clear about what is important, and know what students need to know, do and understand. Assessment and explicit teaching happen in a complementary way. Importantly, the teacher adjusts the lesson in response to student readiness, interests and learning preferences. When differentiation is working well the teacher understands, appreciates and builds upon student differences. The goal is maximum growth and individual success. In summary, flexibility and responsiveness are necessary skills. It is imperative that differentiation and catering for a diverse range of abilities occurs in mainstream classes.

Recommendation 24

Consider how EREA schools might address findings 4 and 5 from the recent Gonski Report (2018), which states: 'Teaching curriculum based on year or age levels rather than levels of progress leaves some students behind and fails to extend others. Reporting against year-level achievement standards hides both progress and attainment for some students and does not amount to a diagnostic assessment of real learning needs….'

3.5.3 Advanced placement

Finding 25

Meaningful student data needs to be accessed to inform teachers about the capacity of high-ability learners.

The term 'advanced placement' is used to describe young people who are gifted, talented or have high ability in some discipline. These learners understand, think and know in ways that differ remarkably from how regular learners perform these activities. Recent research that has examined the neuropsychological processes engaged by these learners provides insights into how they process information, convert it to knowledge and make links (Munro, 2013). It also assists in understanding the creative activity they display. These findings, in turn, assist in understanding how these students learn and think and how they can be taught. The phenomenon of high-ability learners is usually associated with high-level outcomes, whether on a measure of general ability, responses to achievement task, a performance or a production (Munro, 2013). These students also differ in how they think. Some young people with high ability learn faster. They are very easily programmed by the teaching information; they internalise it and form the intended understanding much faster than their peers (Munro, 2013). Their understanding comprises the network of concepts that are coded in the information. Young people with high ability can do this because their more elaborated and differentiated networks allow them to process the teaching information in larger chunks and deal with more information at a time (Munro, 2013). They do not wait to be programmed in a bit-by-bit way. They infer, see the big picture, select, link and organise the main and subordinate ideas in unintended ways (Munro, 2013b).

Young people with high ability can think in 'larger chunks' of knowledge at a time. They retain and 'keep track of' more knowledge in their short-term memories or thinking spaces for the domain or domains in which they are gifted (Hermelin & O'Connor, 1986). They form a personal, intuitive 'semantic theory' understanding of a topic they are learning (Schwitzgebel, 1999). This understanding is organised in a 'big picture' hierarchical way that has the characteristics more of an expert versus a novice understanding (Munro, 2013). They infer subjective patterns and personal rules for information and organise their meaning networks in a 'big picture' way that can be described as an 'expert +' understanding (Munro, 2013a). Young people with high ability can interrogate, test and validate or modify their theories (Munro, 2013). They easily generate possibilities and questions for doing this and can add this new personal understanding to their existing knowledge. This becomes their more elaborated network of meanings for the topic (Munro, 2013). On subsequent occasions they can search what they know more rapidly and more easily recognise situations in which the information does not match, or clashes with what they know (Munro, 2013b). They can 'see' problems, inquiries, uncertainty or inconsistencies in the links between the teaching information and what they know, and see how to frame intellectual challenges, problems or questions (Munro, 2013a). High-ability students generate this understanding in part through their selective and spontaneous use of higher level, more complex thinking strategies that differ from those used by average students (Muir-Broaddus, 1995). They more ably manage and direct their thinking activity, set learning goals, plan, rehearse, monitor or self-check, focus and persist with difficult tasks (Alexander, 1996; Alexander, Carr & Schwanenflugel, 1995). When beginning an unfamiliar task they know better why particular strategies work, use them more efficiently and learn new strategies more easily (Annevirta & Vauras, 2001; Schwanenflugel, Stevens & Carr, 1997). They often operate as 'intuitive philosophers' and form personal theories of intelligence (Hsueh, 1998).

EREA Principals spoke about young people with high ability and the traits they share. Some of these traits include the capacity to retain information more easily and have more sophisticated neural networks. Young people with high ability can interpret new information rapidly, broadly and deeply, and see big-picture patterns and rules in information. As the data collection period continued, Principals endeavoured to describe the complexity of catering for high-ability students. Peter explained:

> *You are still going to have the elite, academic elite, and you need to have a specialised program for them. You need to provide opportunities, you don't need to have specialised programs, you need to provide opportunities within the curriculum for them to be extended. Now there are many ways of doing that and schools are pretty good at that.*

Youd (2013) explains young people with high ability can retain knowledge more efficiently in working memory. They can see more under-the-surface general relationships and principles and infer more broadly. They can learn a topic by simultaneously linking several aspects at a time. They can transfer and apply their knowledge across content-area boundaries, and make unusual and far links, and generate outcomes that are creative and novel (Youd, 2013).

Young people with high ability have distinct learning needs which require tailored learning strategies, according to EREA Principals. Failure to meet these needs may result in significant negative impacts, such as underachievement and mental health issues. The role of the teacher is critical to providing appropriate academic challenges. Principals agreed that because of their advanced intellectual capabilities, young people with high ability may be even more dependent upon the teacher to provide for their specific academic needs. Principals understood that catering for young people with high ability was the key element to productive learning. Anne described:

> *We wanted to have a deeper understanding of what were some of the gifted traits. This will enable us to not only understand what the children may need and what additional support they need during their early academic development, but will give them more awareness of challenges the children may have. All staff are more aware of the challenges to be able to better support their social and emotional development, and to see those challenges as actually normal stages of what we called gifted children rather than potential behaviour problems.*

In EREA schools, the majority of young people with high ability are educated within mainstream regular classrooms. A small proportion of schools provide separate programs for young people with high ability. This includes having elite classes that are separate from mainstream. In order to ensure that all young people with high ability enjoy equitable access to an education that meets their needs, advanced placement education must be available in every classroom in every EREA school. This means that differentiation must be a part of the regular classroom if they are to have the same exciting and challenging learning experiences as their classmates.

When a teacher tries to teach something to the entire class at the same time, 'chances are, one-third of the kids already know it; one-third will get it; and the remaining third won't'. So, two-thirds of the children are wasting their time. It is important to match teaching and learning experiences to learner needs and levels of mastery. 'Two motivational states interfere with learning. One is anxiety; the other is boredom. Anxiety occurs when teachers expect too much, boredom when they expect too little' (Csikezentmihalyi, 1991). One Principal, Chris, commented that:

> *The real challenge then, with the learning experience, is how do we then extend those kids that need extending?*

Young people with high ability should be taught at a faster pace with less repetition and possibly from a different starting point. According to Youd (2013) they also need: an emphasis on understanding concepts rather than memorising facts; content with greater depth and higher levels of complexity

and abstractness; a discovery or enquiry approach that encourages them to explore concepts; a focus on solving complex, open-ended problems and real word solutions; and opportunities for interdisciplinary connections.

EREA Principals spoke at length about how best to meet the needs of young people with high ability. The consensus was that modifications had to be made to content and the way it is delivered. Some examples included grouping young people with high ability together so they have the freedom to work at their own level and with peers of similar ability; and providing young people with independent projects inside and outside the classroom, with a structured learning environment and project-based learning tasks. Research shows that ability grouping for specific instruction is effective for all students including young people with high ability but only if the curriculum has been differentiated. One Principal, Jeff, concurred saying:

> *There is good evidence in our research to suggest that bright students do better from working with like-minded peers and that doesn't necessarily mean a gifted class or an extension class. It might mean that their grade skill or a particular subject or subjects or for everything so that they do have like-minded peers.*

Highly able students require high but specific expectations and depth of learning tasks. According to Youd (2013) learning tasks should encourage some of the following:

1. Higher-level reasoning skills.
2. Varied expectations and requirements of student response.
3. Real-world authentic learning tasks.
4. Variety of production requirements and alternatives.
5. Open-ended learning alternatives that encourage creative responses.
6. A reason for sharing their findings.
7. A real audience.
8. Realistic corrective feedback.

These strategies could benefit learners of all ability levels in mainstream classes.

EREA Principals were divided in how best to meet the needs of young people with high ability. Sometimes EREA schools are slow to identify young people with high ability. Figure 3.16 emphasises the interrelationships between the views of Principals, young people and potential new ground. Most Principals agreed that the best way to cater for highly able students was to adopt the philosophy of differentiation in mainstream classes. However, the term acceleration was used to describe young people who required extension, particularly in mathematics. Some schools place high performing students in a class separate from the rest of the cohort, and gifted or talented students are offered elective or special interest activities.

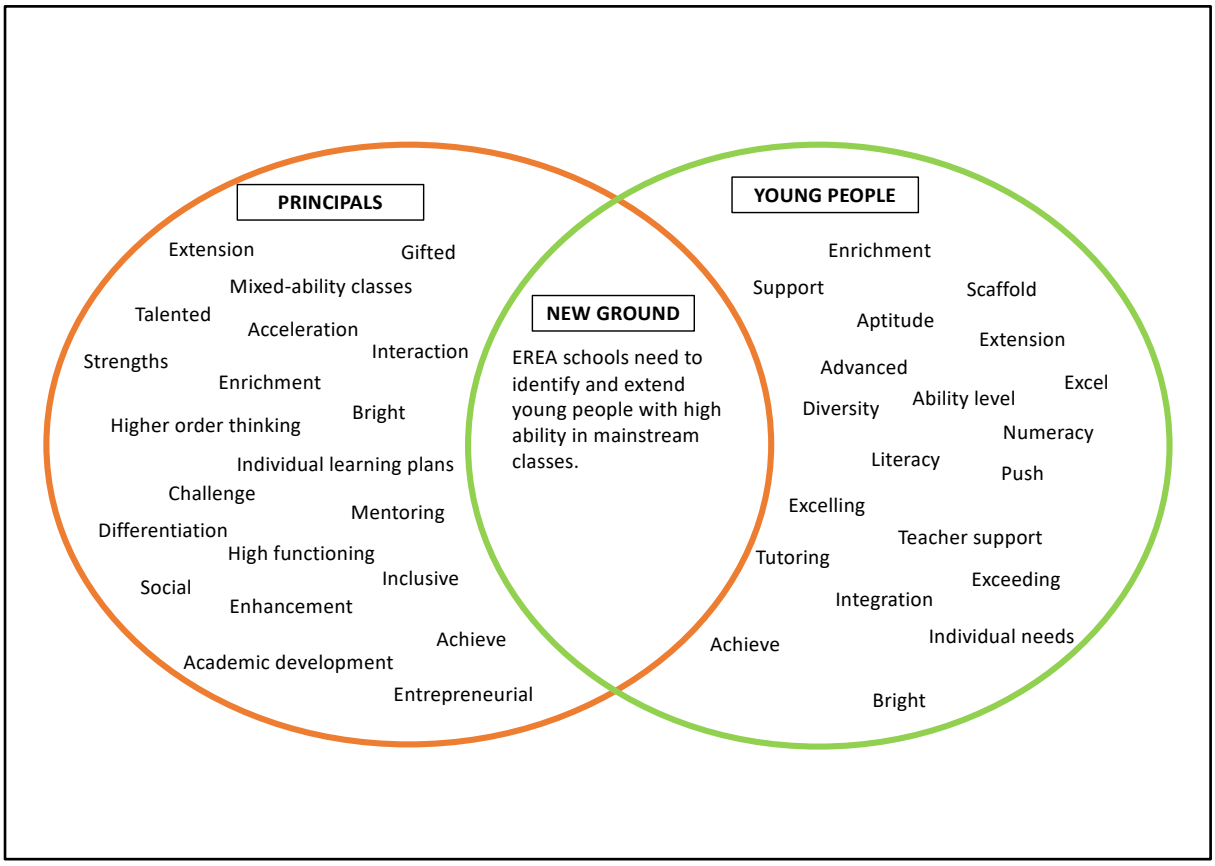


Figure 3.16 Interrelationships between Principals and young people and potential new ground

Munro (2013) best summarises the sentiment captured by Principals and young people during interviews:

> For gifted learners, educational implications include protocols for identifying instances of gifted knowing and strategies for differentiating the curriculum and pedagogy.

Engaging young people in their learning requires having high expectations. Some young people with high ability are not being identified and therefore are not reaching their full potential. EREA schools and Principals are looking for ways for high-ability students to excel. Teachers in EREA schools are trained to deliver lots of content which is often pitched to the middle range of ability. Identifying and catering for young people with high ability requires further investigation to find best practice to this complex issue.

Recommendation 25

Review the way in which high-ability students are identified and select a model that responds to their needs.

3.5.4 Resources

Finding 26

The resources required to meet the individual needs of students are stretched.

The purposeful and practical allocation of resources to support equitable access to high-quality learning opportunities is a major component of education policy at the federal, state and local levels. Leaders at all levels of education are charged with making decisions about how to effectively distribute and leverage resources to support teaching and learning. Resource allocation consists of more than assigning dollar amounts to particular schools or programs. Equally, if not more importantly, is the examination of the ways in which those dollars are translated into actions that address expressed educational goals at various educational levels. In this respect leaders are concerned not only with the level of resources and how they are distributed across schools and classrooms, but also with how these investments translate into improved learning. Resources necessary to operate a successful school cannot be confined to dollars alone. The resources needed to actively and fully support education are inherently complex and require an understanding that goes far beyond assessing the level of spending or how the dollars are distributed. Educational leaders must be able to examine the ways in which those dollars are translated into action by allocating time and people, developing human capital, and providing incentives and support in productive ways.

The inclusion of more students with learning difficulties into mainstream classes means that teachers are required to understand and respond to a range of learning needs and medical conditions. We cannot all be experts but we can make sure we have a good understanding of learning difficulties, how they may manifest at school, and what practical strategies to adopt. Most schools are resourced with specialists with expertise in identifying students who need support. In partnership with these specialists, classroom teachers are expected to develop learning experiences that give all their students access to the curriculum, and the opportunity to achieve personal success and growth. This entails development of individual learning plans tailor-made for a particular student, considering their individual needs and interests. It is important that individual learning plans reflect three or four relevant, achievable targets, together with an acknowledgment of the student's strengths so that these may be fully utilised and affirmed.

Everyone involved in the education of the student must be aware of, and refer to, the individual learning plan, and whatever approaches are used need to be reviewed frequently in order to assess success. Teachers must be brave enough to change and try something new when the situation requires it, remembering that no single approach will work with all students, even if they experience similar difficulties. As Principal Nigel explained:

> *The tougher [task] is getting the support and individual differences right for the young person who has come here that we've accepted. We probably have more than doubled the need for individual differences support, particularly in middle years. So, that's an issue of resourcing. It's also letting staff know how they can best teach those young people and then it's looking at the programs that you put in place for them. And then I think the challenge is to find how you keep these kids engaged in school.*

Individual learning plans are working documents that have a specific life span. Consultation with parents, relevant staff and, whenever possible, the student is essential. If everyone shares the same goals success is more likely.

EREA Principals are grappling with how best to use human resources within budget constraints. The allocation of human resources has an impact on student wellbeing and the development of close relationships between students, staff and parents. This was recognised by Principals as a positive aspect of supporting young people with additional needs. The allocation of financial and physical

resources is an ongoing reality for Principals when prioritising future programs and initiatives. As Principal Daniel highlights:

> *We're actually employing a special education teacher to help us because our teachers, as skilled as they are with the young people, this is an area that we need to develop. Our welfare officer is actually not a teacher, but [is] doing a lot of individual learning plans, has done all the research, provided that all to the teachers. But we're still looking at ways we can do that better.*

Some young people are being withdrawn from class to receive additional learning support from school officers. In addition, some young people are segregated from their peers, socially and emotionally, when they are withdrawn from class. The data from this research project suggests that in the area of additional needs, EREA schools are adopting a wide and varied range of practices.

It is very difficult for EREA schools and teachers to cater for all needs, given the time and resources available. In addition, teachers are required to understand the impact of anxiety and stress, and the way young people respond under these conditions. This presents challenges of providing high-quality curriculum and instruction that works for each learner, according to EREA Principals. EREA schools are often stretching resources when it comes to providing personalised support for each and every young person. As Principal Darren identifies:

> *Fortunately, we've got a good bank of teacher aides who assist in the classrooms, so that makes life a lot easier. That particular aspect has been a huge impact in the school. It's basically supporting teachers to get the job done. And I'm not sure how that's going to work in terms of teacher workloads.*

How to best serve the needs of young people who require additional learning support is a real challenge for Principals. EREA Principals are striving to investigate creative ways to increase support for both teachers and young people with their learning needs in the classroom. Fundamental to this support is the need for EREA schools to establish valid and reliable data on young people, based upon evidence of learning needs.

All Australian schools are required to participate annually in The Nationally Consistent Collection of Data on School Students with Disability (NCCD). The NCCD reflects and supports the ongoing work of schools. The NCCD draws on teachers' professional judgements and practices throughout the year in supporting students with disability to access and participate in education on the same basis as other students. Under the NCCD model, teachers and school staff use their professional, informed judgement, based on evidence, to determine the level of adjustment students with disability receive, in both the classroom and whole-of-school context, as well as the broad category of disability that relates to the adjustments. This is best summarized by Goss and Hunter (2015):

> Governments & system leaders should invest in assessment tools & related resources that help teachers collect and use high quality data about individual student learning. They should, as a priority, evaluate existing resources and make sure schools understand and can use what is already available.

The NCCD is used by the Australian Government to calculate the students with disability loading in recurrent funding for schools provided by the Commonwealth to states and territories. The quality and reliability of information gathered for the NCCD is critical. School Principals are responsible for verifying the accuracy of their school's NCCD data and validating that there is evidence at the school

to support the inclusion of a student in the NCCD. This is a key responsibility given that the NCCD data will be used to inform funding provided by the Australian Government to states and territories and may be the subject of audits or compliance activities. The NCCD does not replace existing state or territory or sectoral requirements that are linked to funding and/or reporting. For EREA Principals this means that providing resources for young people with additional needs will continue to be an ongoing, complex issue to manage.

Recommendation 26

Consider whether the objectives of learning support programs are realistic in terms of resourcing and how each component could improve the program.

3.6 Bringing it all together

The data collected between March 2018 and April 2019 highlighted the links between pedagogy and the impact of digital technologies. Pedagogy is defined as the relationships and interactions between teachers, students, their learning environments and the learning tasks. This includes problem-finding and problem-solving skills that form a complex dynamic for teachers as part of their repertoire of sound pedagogy. Young people communicate and are capable of producing networks of learning online. Knowledge is increasingly created in a digital world. Thus, a challenge for teachers and students is to make full use of the digital technologies and design curricula across learning domains more often. Every young person should graduate from secondary school as a creative, connected and engaged learner with a growth mindset. Combining group work with digital technologies can contribute to the development of interpersonal skills and encourage young people to take risks and learn from their mistakes. Learning and socialising for these young people must include not only face-to-face communication, but communication via technology. Communication enhances opportunities for students to learn with peers, both locally and globally, while contact satisfies students' constant appetites to be in touch with one another socially. However, the constant use of technology, either by email or social media, can be a toxic source of stress. This highlights the value of schools in effectively managing relationships on behalf of young people that engender mutual respect. Optimal learning experiences are evident when schools provide a safe, secure, inclusive and emotionally stable learning atmosphere.

The responsibility of the teaching profession is to be agile enough to provide an innovative, collaborative and collegial environment. This includes a mutually relational model of teacher–student engagement that enhances student voice and positive engagement for all. This type of teacher support refers to the way teachers and young people interact with each other in an atmosphere of mutual respect. In addition, an atmosphere of inclusiveness where relationships are mutual and mistakes are welcomed can lead to a philosophy of strong student voice and engagement in schools. These principles of common ground are an acknowledgement of people's differing perceptions and feelings in finding the space to work together to resolve differences, as opposed to avoiding conflict or issues. What we can and should do is use instruction that offers a wide range of possibilities to address the wide range of needs our students inevitably bring into the classroom. The interpersonal skills that emerged in this research project included collaboration, communication, problem-based learning and teacher–student relationships. Participants in this research project acknowledged that young people might perform best when they are given fast-paced, well-structured, hands-on activities that lead to an ultimate performance. This requires teachers to focus on student-centred learning, a rich curriculum and evidence so that they know about and can plan for positive student outcomes. When these interactions and relationships thrive they can create learning opportunities or

communities of practice. The flexible nature of these relationships enabled young people to interact with teachers, either individually or in small groups.

This mutual pedagogy presumes that, together, the teacher and the student can produce positive outcomes as co-learners. Connected to this mutual pedagogy was the level of commitment from EREA Principals to offer a broad curriculum that celebrated all pathways equally. Importantly, EREA schools understood the responsibility to equip students for a workplace that is inclusive, collaborative, collegial, non-hierarchical and free from gender, racial or creedal bias. This incorporated both staff and young people allowing their spirituality to permeate their relationships with others, where shared vision, shared decision-making and the building of community were at the forefront, and power, privilege and personal ambitions were in the background. Principals interviewed hoped that producing well-rounded graduates such as these could contribute positively to society. EREA schools were understanding of the need for pastoral care and being more inclusive of difference and diversity. This quality of relationships among staff, parents and students was based upon the values of belonging, empathy, warmth, negotiation and flexibility. In addition, rather than focusing solely on academic achievement, EREA schools endeavoured to provide students with knowledge, skills and experiences that could be used in other facets of their lives. Young people commented positively on the variety of choices they had regarding their academic program, particularly in the senior years. In turn, EREA Principals hoped that young people experienced positive social relationships, interpersonal, open-ended and reflective forms of human interaction to be prepared for futures-oriented lifestyles.

Learning is a sequential, developmental process. Attainment of skills, understanding in different domains of knowledge, and strategies for solving problems are all acquired gradually, and in sequences that are more or less predictable. There are substantial differences in learning status and learning rates among individuals of any given age. Individual differences characterise both the rate of development (i.e. general intelligence) and the acquisition of specific skills (e.g. reading), and even in the earliest years of school we can note a remarkable spread of achievement in reading or number skills among children in the same class. Effective teaching must involve a sensitive assessment of the individual student's status in the learning process, followed by the presentation of problems that *slightly exceed* the level already mastered. Tasks that are too easy produce boredom; tasks that are too difficult cannot be understood. Vygotzky (1976) called this 'target area' the zone of proximal development which underpins the practice of differentiation. Differentiation is an adjustment of the learning experience to match the learning characteristics of the student. EREA schools are responsible for the development of individual learning plans tailor-made for a particular student, considering their individual needs and interests. EREA is equally responsible for students who demonstrate, or show the potential to demonstrate, thinking abilities and skills that are beyond what is expected for their age or year level.

3.7 Summary

The purpose of this chapter was to review the findings to gain insights into the lived experiences of the participants. Initial conclusions have been drawn based on the results gathered from the various aspects of the research: surveys, one-to-one Principal interviews, Deputy Principal/Head of Campus presentations and student focus group interviews. The interrelationships between holistic learning, teacher pedagogy and individual differences have been fully described. The complex reality of the classroom has been presented as integral elements to a research project such as this. Other themes have also begun to emerge, such as the need for more embedded and contextualised professional

learning for teachers. The next chapter concludes the discussion of the research findings and includes a recommendation from this research study.

Chapter 4 Conclusion

4.1 Introduction

The purpose of this research project was to investigate the interrelationships between holistic learning, teacher pedagogy and individual differences. The conceptual framework (see Figure 1.1, p. 6) presented in Chapter 1 illustrates these interrelationships and seeks to describe the nature of learning in EREA schools. By the end of the data collection phase there was a sense that the participants in this project were aspiring to transition from a place of teaching to a place of learning. When these three components of the classroom are in harmony, students and teachers experience a fluid dynamic. The conclusions presented in this chapter draw together the findings and the emergent themes as outlined in Chapter 3. The conclusions focus on four areas: (a) student voice (b) teacher manifesto (c) pedagogical framework and (d) Edmund Rice research centres in Australia. This discussion is followed by what an Edmund Rice education in Australia means and a final reflection.

4.2 Major findings of the research

The major findings are presented in the sections below. These include an overall synthesis of the findings, describing how holistic learning, teacher pedagogy and individual differences are successfully integrated. The first major finding is that positive student–teacher relationships are an enabler to contemporary pedagogy, which in turn enhances student engagement. In order to maximise student engagement the data suggests the need to present contemporary pedagogy. Engagement is optimal when well-researched and contemporary pedagogy is presented to students. Contemporary pedagogy requires teachers to know their students as people and as learners. Principals cited examples of students who were self-reliant, resilient and independent learners. This resonated with Deputy Principals/Heads of Campus who could see the benefits of these qualities for students in terms of their ability to work in a team and successfully transition to adulthood. A second major finding is that teachers obtain data on students that includes performance and ability levels, which enables teachers to plan effectively for each individual. Diagnostic testing at Year 6 is critical to provide data on students as they transition to secondary school. The testing should include aptitude, performance, social and emotional information. This information would then give secondary school teachers the opportunity to build a profile of each student and so be able to place them with other students with whom they can connect.

The participants concluded that a focus on student wellbeing was the third major finding for successfully delivering a learning program that enhanced student engagement and effectively utilised digital technologies. Digital technologies enabled online collaboration, communication and exploration. In addition, students were more engaged in learning when the pedagogy was interactive and personalised. These elements were significant in forming a plan for contemporary pedagogy that served as a framework for EREA schools to follow. Many young people reflected upon the successful pedagogy that occurred in an atmosphere of positive teacher support. They were also sustained when

the pedagogy complemented a sense of belonging, resulting in positive engagement and positive feedback from students.

The fourth major finding of this research project was the need to equip teachers with the capacity to identify the best learning programs for students with different learning needs. One measure of the success of learning programs was the degree to which teaching and learning changed and developed, was responsive and differentiated to accommodate the individual differences in learning of EREA students. Team teaching plays a role in drawing teachers together so that holistic professional judgements are made in the interests of student learning and engagement. The recommendation from this finding is that schools develop a consistent approach to differentiation. Quality teaching practice needs to be responsive to the individual needs of young people. The data suggest that it is essential to provide student choice and voice around a diverse range of activities and ability levels. As a result of this research, modified or tailored programs are more likely to become a reality for all students.

4.2.1 Student voice

Much has been written about the power of student voice. The insights of young people are an invaluable source of information when designing programs or organising events in schools. Most EREA schools have a process whereby elected school leaders represent the student body at each year level. This would often extend to senior school captains and senior student leadership teams. The students would often work closely with school principals and members of the senior leadership team. In addition, these elected students are supported with leadership development, mentor programs and public speaking, and are invited onto various sub-committees. However, student voice is available to all young people in EREA schools. Student voice extends to the relationships young people have with their teachers on a day-to-day basis. These encounters are critical to the positive light in which students see themselves and their learning. Student voice has a potential to create a positive learning culture that is extended beyond the chosen few. For EREA schools the hope is that student voice becomes a philosophy of teaching permeating through each and every classroom.

Teachers in EREA schools are in the midst of a paradigm shift where they are not solely transmitters of knowledge, but co-learners with their students. The classroom becomes a place therefore where passionate teachers want to learn from and with their students. Allowing students to have this type of control over their education helps them to feel valued, to have a stake in their school and take ownership of their learning. Teachers have a responsibility to use the strengths and interests of learners to co-design motivating learning experiences. Feedback from the student focus group interviews in this research project suggests that the opportunity to share ideas with teachers is something that young people value. Cooperation, collaboration and relevance become the cornerstones of each lesson, not only among students but with teachers. In addition, this level of cooperation is inclusive of relationships between teachers, between students, and between students and teachers. When given the opportunity young people can take responsibility for their own learning when an atmosphere of collaboration is created in the classroom. This concept of teachers and students as co-learners is the first step in a paradigm shift of student voice as a philosophy of teaching.

Teachers who embrace student voice as a philosophy of teaching understand that it is always dynamic. Learning is dynamic when we combine new information with what we already know, thus creating a new understanding. This style of learning dynamic is not possible if teachers maintain that they are the only authority who can tell students what, how and when to learn. Co-constructing knowledge, starting with literacy and numeracy, moving on to core content and then higher-order thinking to challenge, question and adapt, enables student voice. Students are at their best when they are able

to design activities that explicitly support the application and transfer of learning to new situations. Students in this research project used the term *interactive* to describe their favourite lessons when they could negotiate a range of learning strategies with their teachers. In these circumstances teachers gave students the space to structure complex valid arguments. In addition, young people could explain and apply a range of technologies to test the validity within and between arguments. This gave students complete ownership of their learning program.

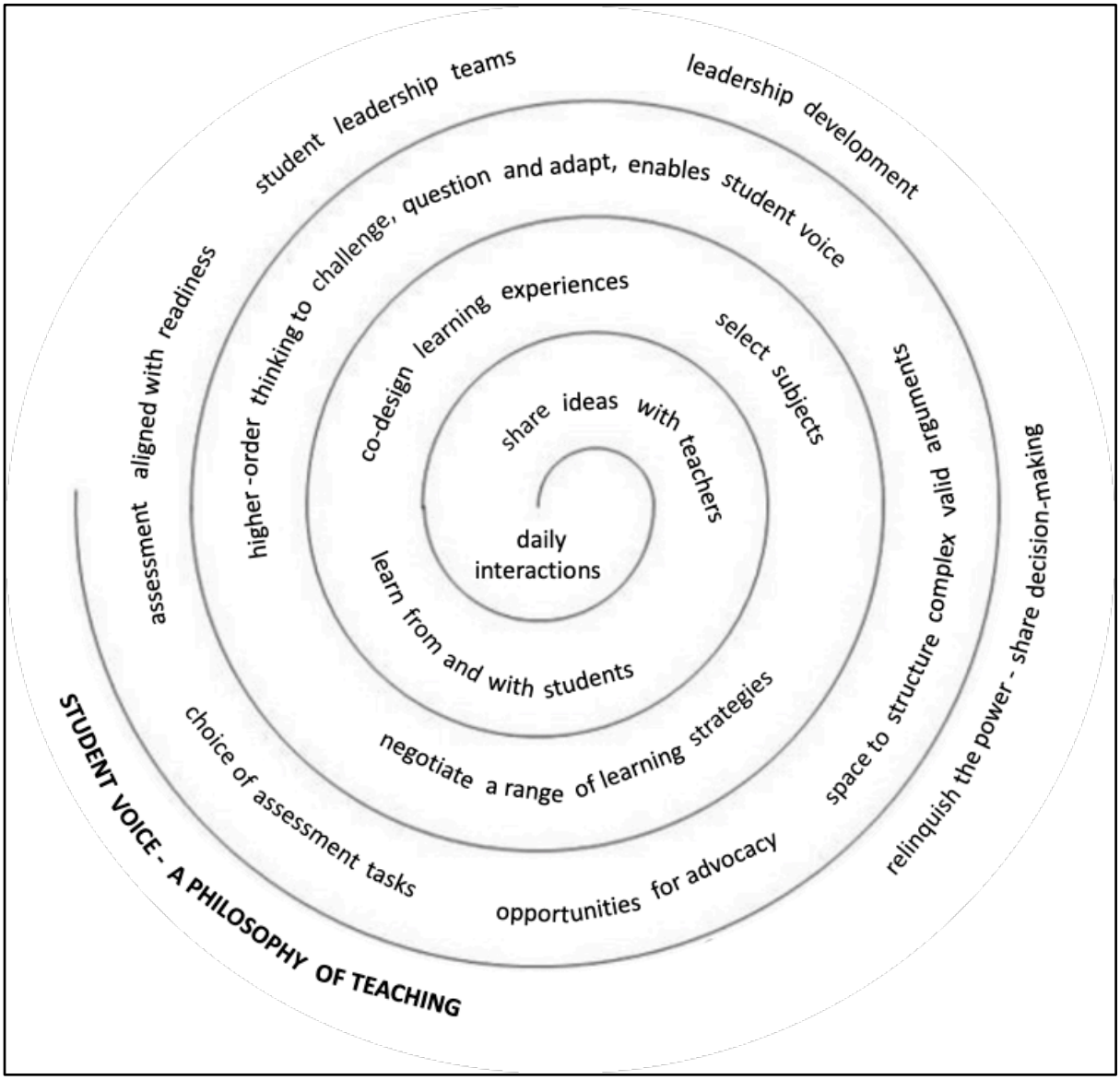


Figure 4.1 Student Voice – A philosophy of teaching

Adopting student voice as a philosophy of teaching is challenging and complex (Figure 4.1). The theory illustrated thus far has practical applications for teachers. The practical implications are the initial time it will take to adopt such a philosophy. The benefits however could include self-motivated and self-directed learners. Designing rich tasks with students is the first step in enabling student voice. Rich tasks include those that:

- have multiple representations that are concrete, pictorial and abstract

- allow students more than one way to complete the task
- have links to real life
- have more than one right answer
- involve creativity and engage students in discussion.

Teachers need to spend time analysing data that tells them the level at which students are capable of learning. This should include verbal, non-verbal and general reasoning and wellbeing data. Once this is understood by teachers, asking students to choose from consolidate, build or stretch tasks on a particular topic, enables their voice. Consolidate tasks are designed for students *below* their current year level, build tasks for students *at* their current year level and stretch tasks for those *beyond* their year level. Curriculum is structured as continual across the levels of learning achievement, not as years of schooling, to support this concept of consolidate, build and stretch learning tasks.

Student voice as a philosophy of teaching (Figure 4.1) is an opportunity for EREA schools to lead the way in contemporary pedagogy. This would complement and build upon existing structures that enable student voice in EREA schools. The challenge is to expand existing structures to every class, every learning experience and every learning encounter teachers have with their students. This student voice philosophy considers the flexibility required for young people who are experiencing issues of social or emotional wellbeing and trauma. It opens the door for students to design their learning program, to select subjects they are passionate about and to have flexibility about choice of assessment tasks. It would also give students choice about due dates for assessment tasks to align with their readiness to learn. Student voice, as a philosophy of teaching, will be controversial and requires teachers to relinquish the power they hold over learning programs. However, if implemented gradually and courageously we may come to see young people as thinkers that allow space for a meeting of minds.

4.2.2 Teacher Manifesto

The *Teacher Manifesto* (Figure 4.2) is an attempt to capture the views of students who were interviewed for this research project and declare what it means to be a teacher in an Edmund Rice school in Australia. A manifesto is a set of beliefs or views that challenge us to reflect or rethink a particular way of operating. More than 40 EREA schools were involved in the research project, involving 246 students (*n*=246). Three questions were used from the student focus group interviews to capture the attributes of an EREA teacher: What qualities do you like best in teachers? What does your teacher do when they give a great lesson? How do you like/prefer to learn? Table 4.1, Table 4.2 and Table 4.3 present the data captured from the student focus group interviews. Section A of each table lists the question. Section B names the emerging themes. Section C presents the raw data articulated by the students in the focus group interviews. Section D combines this information into a sentence to form part of the *Teacher Manifesto*. The *Teacher Manifesto* is proclaimed in Figure 4.2.

Students interviewed for this research project were asked to respond to the question: What qualities do you like best in teachers? This question is collated and the emerging themes are listed in Section C, Table 4.1. The young people interviewed were keen to have a personal relationship with their teachers. They want their teachers to take an interest in them. This, they believed, helped them to commit to learning in a friendly and warm atmosphere. The overarching themes of *loving and tailor-made*, listed in Section B, seem to best capture this sentiment. This then led to the first critical element of being a teacher in an EREA school: 'Respect the dignity of each young person entrusted to my care and commit myself to knowing their story as a person and a learner', outlined in Table 4.1, Section D.

Young people want their teachers to be *flexible and passionate*. This flexibility relates to the way lessons can be adjusted if something is not working. It also relates to empathising with a personal situation encountered by a young person that may be having an impact on their learning. Young people recognise when their teachers are passionate about their subject area and teaching. This attitude is infectious and motivates students to learn. The second part of the *Teacher Manifesto* (Figure 4.2) is: 'Create a friendly, happy and flexible classroom environment and exhibit an engaging, interactive and positive mindset'.

Young people appreciated teachers who were *organised and knowledgeable* (Table 4.1, Section B). When teachers are organised they have planned lessons well and there is a logical sequence to activities that relate directly to the learning intention. This gives students a sense that their teachers are dedicated and there is structure and rhythm to the learning program. This level of organisation includes teachers having high expectations of young people which contributes to classroom order and control. Students also like teachers who are knowledgeable about their subject area. They are experts in their field and students are eager to get to class to learn from them. In this type of classroom students are able to explore topics in depth and can apply this learning to real-life situations. This leads to the third component of the *Teacher Manifesto*: 'Dedicate myself to planning, preparing and designing each lesson with a view to reaching and engaging each young person in their learning'. Young people are most comfortable in a classroom environment that is warm, compassionate and welcoming. In this environment the relationship between teachers and students is strong and based upon mutual respect, rapport and trust. In these types of relationships it is obvious that teachers care deeply about their students, that they are approachable and personable, and that there is a deep sense of connection. The overarching theme for these qualities is *caring and supportive*. This leads to the fourth idea of the *Teacher Manifesto:* 'Provide an atmosphere of care, support and willingness to help, based upon relationships of mutual respect, rapport and trust'.

Table 4.1 Teacher qualities

A	What qualities do you like best in teachers?			
B	**1. Loving and tailor-made**	**2. Flexible and passionate**	**3. Organised and knowledgeable**	**4. Caring and supportive**
C	Personal Choice Interested in students Success criteria Teacher knows you Student perspective Student voice Personal interest Understanding Personal story Invested Tailored Differentiated Understanding me Accepting Connection Guidance Known as a person	Flexible Discussion Friendly Happy Energetic Active Humour Laugh Joke Enjoyable Motivated Enthusiastic Engaging Positive mindset Passionate Cohesive Compromise Interactive	Subject knowledge Organised Structure Order Class control Communication High expectations Hands-on Interesting In-depth explanation Interactive Real life Variety Well-planned Different techniques Prepared Dedicated Engaging	Help/support/care Connection Relationships Approachable Listener Mutual respect Rapport/trust Work together Empathy Available Personable Patient/forgiving Kind/polite Down-to-earth Role model Mentor Loyal Bond
D	Respect the dignity of each young person entrusted to my care and commit myself to knowing their story as a person and a learner.	Create a friendly, happy and flexible classroom environment and exhibit an engaging, interactive and positive mindset.	Dedicate myself to planning, preparing and designing each lesson with a view to reach and engage each young person in their learning.	Provide an atmosphere of care, support and a willingness to help, based upon relationships of mutual respect, rapport and trust.

The second question students were asked was: What does your teacher do when they give a great lesson? The results for this answer are shown in Table 4.2. Students want lessons that are *interactive and creative* (Table 4.2, Section B). For students interviewed, *interactive* means an exchange of ideas with their teacher. It also means lessons that are hands-on and involve some sort of physical activity as opposed to reading and summarising volumes of content from a textbook. One student named 'death by PowerPoint' as a way of describing boring lessons that were teacher centred. Students also want lessons that are *creative* and involve problem finding, problem solving and the use of digital technologies. The fifth attribute outlined in the *Teacher Manifesto* is: 'Construct interactive and creative learning activities that include active participation of young people and digital technologies'. *Engagement and enjoyment* is the sixth emerging theme. Students like lessons that are fast paced, interesting and fun. Productive lessons are ones where teachers demonstrate a passion and enthusiasm for learning that involves active participation of students. The sixth section of the *Teacher*

Manifesto (Figure 4.2) is: 'Generate a vibrant classroom culture that encourages engagement, enjoyment and love of learning'.

Having high expectations of students and designing tasks that are just out of their reach is an important feature of an EREA teacher's repertoire. As such *thinking and learning* is the next emerging theme. Challenging young people to think and work things out for themselves helps to deepen their learning. Young people interviewed appreciated teachers who are able to intervene at the right time and provide explicit and direct explanation of the learning tasks. The seventh quality of the *Teacher Manifesto* is: 'Structure lessons that challenge young people to think independently and use a variety of techniques to help them to synthesise information'. It emerged during student focus group interviews that *collaboration and group work* is something for which young people yearn. This enabled young people the chance to work together, relate to one another and share ideas. This group work needed to be supported with appropriate boundaries. Therefore, it is imperative that teachers take the time to teach young people how to work in a team. Creating a dynamic of mutual respect and understanding went a long way to producing positive learning outcomes, according to students. The eighth segment of the *Teacher Manifesto* is: 'Teach young people the skill of working in a team through the use of conversation, collaboration and group work'.

Table 4.2 Great lessons

A	**What does your teacher do when they give a great lesson?**			
B	**5. Interactive and creative**	**6. Engagement and enjoyment**	**7. Thinking and learning**	**8. Collaboration and group work**
C	Experiment Hands-on Interactive Activities Quizzes Active Puzzle Fun Creative Problem finding Drawing Practical Digital technologies Real life Variety	Engagement Communication Productive Help Comfortable Confident Excited Involved Enjoyment Humour Mixture Interesting Positive Motivated Passionate	Thinking Learning Understanding Explaining Depth Talking Discussing Knowledge Inference Synthesis Feedback Language Bridge the gap Writing Concentrating	Groups Class discussion Collaboration Teams Boundaries Respect Structures Teacher interaction Different opinions Relating Work together Conversation Productive Scenarios Combined
D	Construct interactive and creative learning activities that include active participation of young people and digital technologies.	Generate a vibrant classroom culture that encourages engagement, enjoyment and love of learning.	Structure lessons that challenge young people to think independently and use a variety of techniques to help them to synthesise information.	Teach young people the skill of working in a team through the use of conversation, collaboration and group work.

The third question asked of students in focus group interviews was: How do you like/prefer to learn? Students interviewed were consistent with positive comments about learning that is *hands-on and active*. Table 4.3, Section C, lists the feedback from young people in this regard. Many students spoke of the frustration of sitting in rows in a classrom, which fosters a teacher-centred approach to learning. A combination of movement, walking around and teacher movement is important for a dynamic and interactive lesson. The ninth trait of the *Teacher Manifesto* is: 'Lead learning that is hands on, activity based and fosters positive student–teacher interaction'. Young people like learning activities that are both *verbal and visual* (Table 4.3, Section B). *Verbal* activities allow young people to discuss, talk, connect, understand, construct and create. Many young people commented on their desire to have their *verbal* activities align with real-world problems. Students interviewed also made comments about the value of *visual* learning activities. This includes reading, writing, videos, presentations, drama and drawing. Providing multi-modal activities is an important element of being a teacher in an EREA school. The tenth characteristic of the *Teacher Manifesto* is: 'Prepare lessons that enable young people to engage with verbal and visual learning opportunities'.

The next themes to emerge were *social and reflective*. Young people enjoyed working with others in small groups or teams which resulted in presentations to the whole class. Students believe that this is a valuable learning opportunity and helps them to understand content by viewing different presentations. Working with people and completing group assignments is an important part of the *social* side of learning. Equally, working individually or in one-to-one situations with either peers or teachers is regarded by students as an integral aspect of learning. Many young people commented on their desire to work on their own and then check their understanding in small group or whole-class situations. This reflective component of learning requires a quiet classroom or, at the very least, a quiet space. The eleventh feature of the teacher manifesto is: 'Appreciate that there are varied personalities in my classroom and that I need to cater for social and reflective learning styles'. The final themes that emerged from student feedback were *logical and experiential* (Table 4.3, Section B). A number of students commented on their desire to have lessons that are logical and sequential. These students appreciated structure and order and liked lecture-based lessons, answering questions, the use of textbooks and exams. In addition, many students wanted the opportunity to experiment and put the many theories they learnt to the test. In this instance practical approaches such as discovery, online, puzzle, problem-solving and digital technologies best served the needs of young people. The final piece of the *Teacher Manifesto* is: 'Cater for multiple modes of delivering information and curriculum knowledge that are both logical and experiential'.

Table 4.3 Learning preference

A	How do you like/prefer to learn?			
B	**9. Hands-on and active**	**10. Verbal and visual**	**11. Social and reflective**	**12. Logical and experiential**
C	Learning Teacher movement Interactive Hands-on Movement Engaging Standing Explanation Comfortable Enjoyable Student–teacher Passionate Walking around Helping Explaining Teacher directed	Discussion Writing Reading Videos Construction In the classroom Visual Quiz Real world Talking Connecting Understanding Creative Presentation Revision Note-taking	Group work People Individual work Quiet classroom Whole class Group assignments Small groups Demonstration Mixture Balance Different Point of view Partners Friends Self-discovery One-to-one	Digital technologies Experiment Practical Collaboration Problem solving Puzzle Skills-based Listening Textbook Lecturing Online Discovery Conversation Exams Story Answering
D	Lead learning that is hands-on, activity based and fosters positive student–teacher interaction.	Prepare lessons that enable young people to engage with verbal and visual learning opportunities.	Appreciate that there are wide and varied personalities in my classroom and that I need to cater for social and reflective learning styles.	Cater for multiple modes of delivering information and curriculum knowledge that is both logical and experiential.

The *Teacher Manifesto* highlights that teaching young people is complex and dynamic. At the heart of this are teachers who recognise this complexity and work hard to accommodate the individual learning needs of young people. The *Teacher Manifesto* also highlights that there is not an either/or approach to teaching and learning nor 'one size fits all'. Shifting information via multiple modes of delivery is the art of good pedagogy. This fluid movement of information enables young people the opportunity to make connections and synthesise concepts for deeper learning. The *Teacher Manifesto* is the first of its kind for Edmund Rice Education Australia. The most critical aspect of the 12-point document is the power of student voice. Central to student voice is the need for teachers to empathise with the complex world in which young people live and to know them as a person and a learner. During focus group sessions all young people were able to talk about teachers who had a profound impact on them. It is hoped that the *Teacher Manifesto* may be used as a guide and support for teachers in all EREA schools. The *Teacher Manifesto* aims to complement the high quality of teaching that has been established in EREA schools and maintain a culture of teaching excellence for existing and new staff.

TEACHER MANIFESTO

EDMUND RICE EDUCATION AUSTRALIA

As a teacher in a Catholic School in the Edmund Rice Tradition and in the spirit of Jesus as a liberating educator, I vow to…

1. Respect the dignity of each young person entrusted to my care and commit myself to knowing their story as a person and a learner.
2. Create a friendly, happy and flexible classroom environment and exhibit an engaging, interactive and positive mindset.
3. Dedicate myself to planning, preparing and designing each lesson with a view to reaching and engaging each young person in their learning.
4. Provide an atmosphere of care, support and a willingness to help, based upon relationships of mutual respect, rapport and trust.
5. Construct interactive and creative learning activities that include active participation of young people and digital technologies.
6. Generate a vibrant classroom culture that encourages engagement, enjoyment and love of learning.
7. Structure lessons that challenge young people to think independently and use a variety of techniques to help them to synthesise information.
8. Teach young people the skill of working in a team through the use of conversation, collaboration and group work.
9. Lead learning that is hands-on, activity based and fosters positive student-teacher interaction.
10. Prepare lessons that enable young people to engage with verbal and visual learning opportunities.
11. Appreciate that there are wide and varied personalities in my classroom and that I need to cater for social and reflective learning styles.
12. Cater for multiple modes of delivering information and curriculum knowledge that are both logical and experiential.

EDMUND RICE EDUCATION AUSTRALIA

Figure 4.2 Teacher Manifesto

4.2.3 Pedagogical Framework

Many EREA schools (76%) have an existing pedagogical or learning framework. There are also global and national learning frameworks to support schools in their aim to capture the evolving nature of education. Some of these include: Habits of Mind, De Bono's Thinking Hats, Learning Power, OECD Framework, Partnership for 21st Century Learning, New Pedagogies for Deeper Learning and Ruby's 7Cs to name a few. The pedagogical framework (Figure 4.3) has emerged from the data in this research project. This pedagogical framework aims to capture the nature of learning in EREA schools and be broad enough to support alternative futures. It is not designed to replace similar existing frameworks or be a universal educational panacea. EREA schools may integrate or adopt this pedagogical framework to complement their local context and demographic.

The pedagogical framework (Figure 4.3) has five fan-like features, known as generators. These generators, like learning, are designed to be fluid, dynamic and flexible. They can initiate, fan and fuel young people to be excited about their learning program. It is no coincidence that students are placed at the centre of the generators. Surrounding the students is a focus on four attributes that young people from an EREA school might graduate with: *Curious, Creative, Compassionate* and *Courageous.* These are known as the *4 Cs* and outlined further in Section 4.3. Much has been written in this research project about the power of student voice as a teaching philosophy. The five generators are a dynamo converting energy into positive student outcomes. The pedagogical framework is designed to represent that learning is not linear but is in fact a bespoke dynamic. However, the first generator is *inspire* and begins with the teacher igniting a passion for learning in young people. This in turn converts to how students *engage* in learning and *collaborate* with others. When these generators are instigated students are willing to *learn* and *create* for the benefit of others. The generators are in perpetual motion and are moved by the spirit of the EREA Touchstones. These Touchstones are foundational to how EREA schools transform the hearts and minds of young people to reach new horizons. The final icon in Figure 4.3 is a book signifying that each EREA school has a unique story to tell, of its history, patron and values.

Schools of the future are to be places that nurture energised, galvanised and spirited teachers who have the ability to stimulate, arouse and *inspire* young people. This requires a paradigm shift for teachers, from thinking of the classroom as a place of teaching to thinking of it as a place of learning. The greatest influence on student progression in learning is having highly expert, inspired and passionate teachers and school leaders working together to maximise the effect of their teaching on all students in their care (Hattie, 2011). Teachers and students who are actively engaged in the learning process lead to the production of inspired learners. Inspired learners are robust and resilient. They have the autonomy to select their pathway and are passionate about their learning program. Inspired learners are self-motivated and independent, and they demonstrate initiative when participating in learning activities. Inspired learners can cooperate with others in a collegial and collaborative manner. They are curious, innovative and inquisitive, and they are prepared to experiment in order to learn new things. As young people graduate from secondary school it is important that they leave feeling engaged and enlivened, equipped with the skills to pursue lifelong learning.

Young people will *engage* with learning in passionate, interactive and meaningful classrooms. This includes an integrated curriculum that addresses real-world problems with teachers and young people as co-learners. When students are engaged in class, they learn more. Therefore, it is vital that teachers create the right classroom climate for learning: raising student expectations; developing a rapport with students; establishing routines; challenging students to participate and take risks. These all affect how much their students engage and learn. We do not know exactly what causes students to

disengage. It could be problems at home, subject matter that is too hard or too easy, or poor-quality teaching. But disengagement matters. Disengaged students are one to two years behind their peers. Students who are quietly disengaged do just as badly as those acting out, and reduce how much other students learn (Goss & Sonnemann, 2017). Effective teachers recognise that student motivation, engagement and self-belief can drive student achievement. Students who have a good relationship with their teacher tend to succeed at school. It can be the difference between a student accepting or resisting classroom rules that enable learning. Teachers with good relationships with their students can more effectively intervene when problems arise. Flexible modes of delivering and offering curriculum content to include project/problem-based learning activities can have a positive impact on student engagement and collaboration.

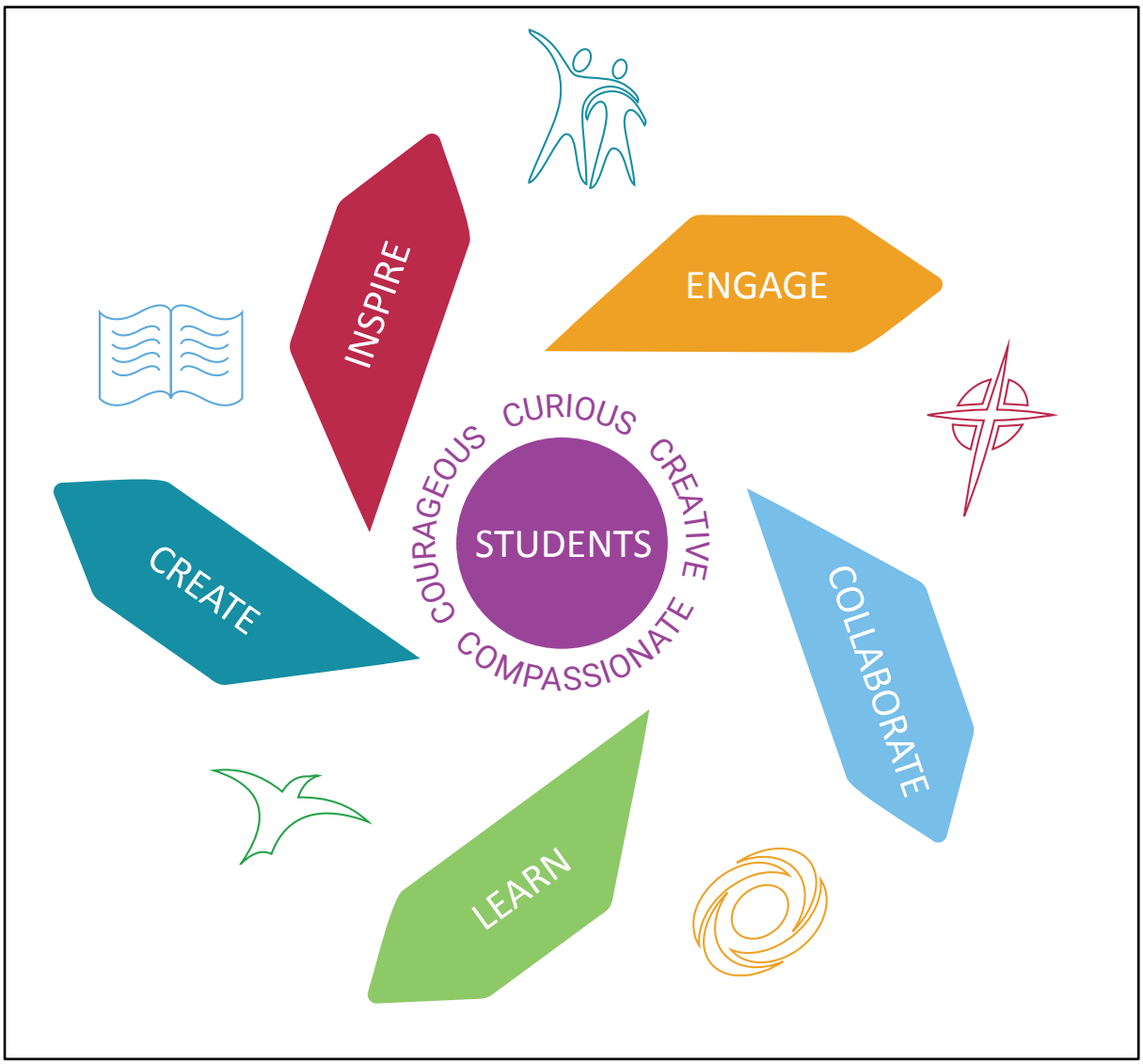


Figure 4.3 Pedagogical Framework

EREA schools aim to foster empathic and inclusive team environments where members learn from and with each other and *collaborate*. Collaboration is the sharing of effort, knowledge and resources to pursue shared goals. There is growing interest in collaboration within formal education that coincides with a much broader shift, driven by changing social values and digital technology. There is

an ongoing shift away from the idea of an individual teacher being largely responsible for their own practice, working alone in front of a class. More and more, schools emphasise team structures through, for example, subject faculties. Schools are experimenting with team teaching in which pairs or small teams of teachers jointly run lessons with shared classes that they can then subdivide into smaller, more flexible groups of learners. The opportunity to share ideas is something that young people value. Equally, young people are capable of working in a team environment and learning collaboration skills. Collaboration is inclusive of relationships between teachers, between students, and between students and teachers to enable learning to thrive.

EREA schools are encouraged to produce critical, courageous and compassionate young people who are willing to *learn*. The data from this research project suggests learning and doing, solving problems with empathy while working with others seems to work best for young people. Every EREA graduate should emerge from schooling as a creative, connected and engaged learner with a growth mindset. They should also gain the right mix of knowledge, skills and understanding for a world experiencing significant economic, social and technological change. Emotion is fundamental to learning. Brain research suggests that it would be best to have schools provide a positive learning environment that is motivating to students, and teachers trained to teach children emotional regulation skills. Because emotion is fundamental to learning, it is valuable to support research that considers emotional dimensions of learning, such as research on anxiety. EREA schools will need to provide activities that give students a strong sense of agency, so that they learn how to turn knowledge and ideas into action, and see that they can make a difference to the world. Good learning draws dynamically from a combination of sources, employing a variety of methods. Combining new information, we have been introduced to with what we already know, creates a learning dynamic and new understanding.

EREA schools endeavour to produce curious, innovative and imaginative thinkers who are able to *create* and invent new things. To support a young person's curiosity, teachers use a variety of spoken, written or multi-modal texts in print or digital form. Responding effectively to environmental, social and economic challenges requires young people to be creative, innovative, enterprising and adaptable, with the motivation, confidence and skills to use critical and creative thinking purposefully. Thinking that is productive, purposeful and intentional is at the centre of effective learning and the creation of new knowledge. Young people require explicit support to develop the breadth and depth of their thinking and to take intellectual risks. Developing critical and creative thinking capability is an essential element of developing successful, confident and innovative members of the community. Creative people take risks and hold up their products for others to judge, and seek feedback in an ever-increasing effort to refine their technique. Almost by definition creative work means that the final design is not necessarily known at the outset, so users must be encouraged to explore. This exploration needs to include support for collaboration. In all projects, in EREA schools and in the 'real world', the most creative work is done in teams.

4.2.4 Edmund Rice research centres in Australia

The final major finding is to establish four research centres – one in each EREA Region – to support teachers with the complex demands of teaching. The quality of teachers has been shown to have a significant impact on student learning. Reports on high performing schools identify positive gains in student achievement when professional learning is embedded and contextualised. There is a case being made for self-improving education systems in which teachers become research literate and have frequent engagement in research and enquiry. This requires schools to become research-rich environments in which to work. The EREA Strategic Directions reflect a strong commitment to teacher

development. The aim of the research centre model is to enhance this learning culture by systemically developing teacher capacity.

The Touchstones, in articulating an approach to educating for liberation and possibility, could not better represent the mission of a 21st century Catholic school in the Edmund Rice tradition. Schools are facing a challenge to their identity and relevance. We are educating for uncertainty as young people move into a post-industrialist society in which work is fluid and competitive. Schools and tertiary institutions are being compelled to rethink and reimagine their roles. Providing students with the capabilities required to adapt to this world is an increasingly complex task. The need to develop skills and competencies beyond literacy and numeracy is pronounced.

This has implications for the teaching profession, whose pre-service training has not necessarily equipped them for this challenge. The pace of change, largely due to the digital democratisation of information, has resulted in a lag in learning for many teachers. Technology continues to advance at an exponential rate and the pace of uptake by young people far exceeds the expertise of most of their teachers. Teachers are facing unrelenting demands to do more, faster, while under pressure from a standards-driven accountability. They are being asked to reflect on their personal and professional capabilities and to grow these to better meet the needs of their students. This is not an easy task. In fact, it challenges their professional identity.

Without evidence of what works teachers are vulnerable to adopting the newest fads and practices in the hope that improved outcomes will be achieved. Alternatively, they stubbornly cling to the status quo in the hope that the storm will pass and the tried and true practices of the past will win out. Here is the key to the research centres' work: connecting teachers with research that is undertaken by scholars, introducing them to teacher research methods that are applicable in their own settings, and facilitating a shared understanding of what is right and best for EREA young people.

The goal is ambitious, but it has begun in many schools and so EREA will not be alone. There is a conversation to join that will ultimately serve young people well as they enter an exciting and challenging new world.

Research centre vision

The centres engage with educational best practice to develop thriving, contemporary, evolving, innovative learning communities that empower teachers to learn, thereby increasing their impact on student growth and development.

Objectives

- Establish a shared culture of teacher and student learning that is informed by current advances in educational best practice.
- Generate teacher research, reflection and thinking that improves student learning.
- Use data to provide personalised measures of progress of student learning.
- Encourage innovation in teaching and learning.
- Establish and maintain relationships with learning communities within and external to each school community.

Initiatives

- Comprehensive assessment of existing professional-learning culture.
- Integration of centre objectives into existing EREA culture and strategic directions.

- Development of a communication strategy for the implementation of the centres' objectives.
- Establishment of learning teams within and across formal organisational structures (e.g. Liberating Education Reference Group).
- Alignment of teacher evaluation, goal-setting and professional growth-planning processes within the EREA system of schools.
- Creation of effective teacher mentoring and coaching structures, including leadership programs.
- Development of comprehensive transition plans for incoming students that incorporate analysis of diagnostic testing in addition to documentation and communication with parents and partner schools.
- Construction of learning laboratories and shared spaces that communicate the work of the centres.

Measurable outcomes

- Increased capacity of teachers to undertake action research and use an analytical lens to reflect on and improve their day-to-day practice.
- Shared language and documentation of peer review, appraisal and coaching processes.
- Development of a culture that values the professionalism of teachers and empowers them to take the lead in directing and growing their own learning.
- Improved student outcomes.

Benefits

- The recruitment of high-quality staff attracted by the learning and leadership opportunities in EREA schools.
- Greater alignment of existing staff to the strategic directions of EREA.
- Potential learning partnerships with one or more universities.
- Research facilities that resource learning for teachers and schools in their regions.
- Professional requirements for teacher registration and AITSL standards are met.
- Reduced expenditure on current professional learning.

Structure

One Centre will run in each of the four regions, governed by the Executive Director of EREA and supported by the EREA Leadership Team.

An advisory committee will be established to:

- identify opportunities for research and teacher education
- strengthen networks that may benefit the EREA system
- promote contact, provide information and facilitate the exchange of ideas with educational organisations beyond the EREA school environment.

Staff appointed to the centres will include a director, an administrative assistant and two research personnel with existing or developing skills in data analysis and teacher research. Centre staff could

be recruited from within EREA schools, or externally. A contemporary, interactive website will be developed to communicate the purpose, reach and activities of the centres, showcasing the work of EREA teachers and students, and highlighting relationships with local, national and international communities.

Location

The centres will be constructed in a location central to each region (Figure 4.4), in school locations that intersect with the daily work of teachers and students. The centres will include a learning laboratory equipped with technology related to the observation and study of learning and teaching in classrooms.

Services

A range of professional-learning programs will be developed that bring together, and meaningfully connect, teachers across each region. These programs will include leadership development to future-proof the EREA system of schools, with the aim of attracting and retaining the highest quality teachers and future leaders. The centres will run or host seminars, workshops and conferences. External groups will be encouraged to use the facilities and parent forums will be hosted by the centres.

Figure 4.4 Edmund Rice research centres in Australia.

4.3 An Edmund Rice Education in Australia

Young people today live in a world of rapid change. The commodification of knowledge and availability of digital technologies anywhere and any place have transformed societal values. EREA schools operate within this reality. The historical accounts of the Christian Brothers in Australia emphasise the constant struggle to find the best possible outcomes for young people. EREA schools are constantly challenged to meet the future needs of young people, particularly with an emphasis on curriculum content and traditional teaching methods. Through the School Renewal process, schools are prioritising programs in line with the EREA Strategic Directions to create a set of skills for young people that will be transferable to jobs that do not yet exist. EREA schools, in particular teachers, are continuously challenged to be responsive to this world of constant change that is occurring both in society and in the education sector. Part of the solution to this is the development of liberating actions that consider non-intellective factors through an integrated curriculum, tailor-made to suit the learning needs of young people and help produce graduates who are curious, creative thinkers, who are compassionate and courageous (Figure 4.6). It is the responsibility of teachers to create these conditions in the classroom. The only way to create a continuously improving EREA system of schools is through high-quality professional learning. This needs to be provided in the context of the school community, making links with tertiary institutions and the local community, and grounded in an authentic Australian spirituality.

Liberating Actions: An Edmund Rice education in Australia is asking school communities to bring liberating actions into the daily life of the classroom. Jesus was a liberating educator. The Gospels portray a teacher who interacted with a range of learners in a variety of contexts. He challenged contemporary structures. The dignity of the person was at the heart of his mission. As a member of an Edmund Rice school, the way we teach liberates. The way in which we plan and facilitate learning liberates. Therefore, liberating education can thrive in a school where the learner is freed to find their passion and has the confidence to express this and be accepted. The teacher is freed to take risks and experiment and has the confidence to learn from their mistakes. Liberating actions can be found in the ordinary and everyday routines of the classroom. Some examples of these actions include: allowing young people time to collaborate, designing five fast-paced 10-minute activities in a typical lesson, enabling student voice and ensuring spaces are flexible enough to complement learning activities. When this culture exists in schools, relationships between teachers and young people are strong. Liberating education in this sense is accessible to all and in everyday situations of school life. This gives schools the freedom to choose primarily through relationships and have the confidence to embrace the dignity of each young person. These liberating actions support young people to make meaning in their lives as they search for an authentic spirituality.

Authentic spirituality: Edmund Rice schools in Australia are committed to providing opportunities to help young people make meaning in their lives. Providing these opportunities is critical to enable young people to come to terms with the complexity of their changing world. Edmund Rice schools are in constant search of an authentic spirituality that might nourish that meaning-making journey for young people. The Catholic Tradition provides a rich framework for this search for meaning. Ritual, symbol, sacred texts, practice in different forms of prayer, and contemplation and celebration of the Eucharist are part of the spiritual experience of young people in Edmund Rice schools. Each of these, and Christian Service and Formation programs, invite participants into a search for meaning relationally. In a practical way, Christian Service and Formation programs are an expression of the Catholic Tradition and aim to bring to life the sacred stories of the Gospels. The intellectual domain is the third element that aims to enhance the spiritual life of young people, in particular the religious education curriculum. Although each of these three domains has its own characteristics and forms,

they are very much interrelated. However, sometimes in EREA schools these elements of spirituality that support young people in their meaning-making journey operate in silos. The conceptual framework in Figure 4.5 is an attempt to illustrate how these three domains might come together to invite young people into an exploration and experience of authentic spirituality that invites depth and is engaging and contemplative. The conceptual framework offers a broader definition of what it means to be Catholic and asks young people to explore how they are going to live and engage with the reality of living in today's world.

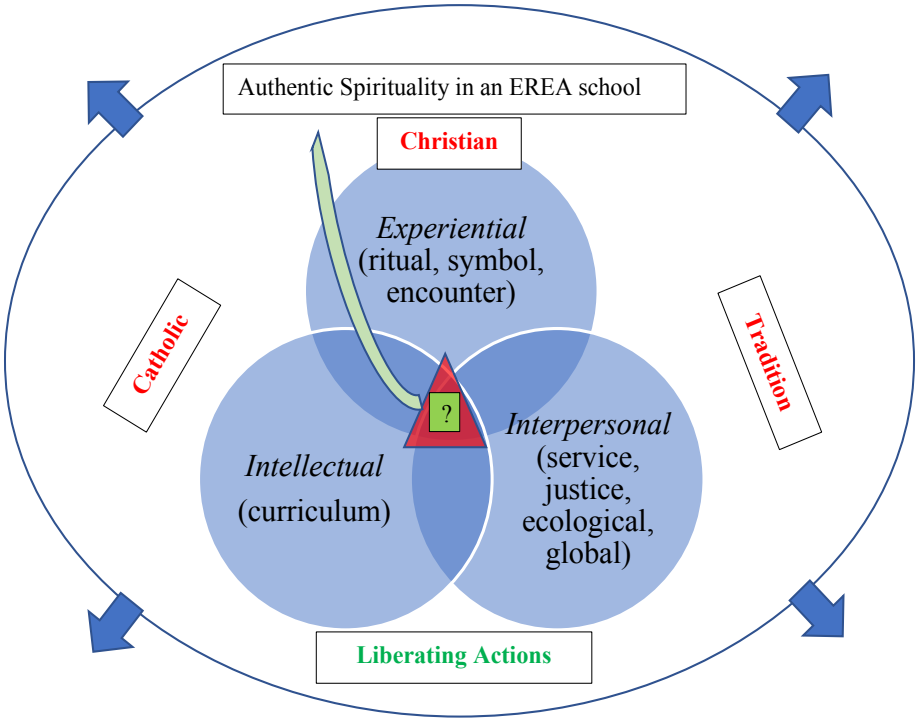


Figure 4.5 Authentic spirituality

Non-intellective factors: In a society that often measures educational success by raw scores and academic results, Edmund Rice schools in Australia celebrate and promote the holistic nature of learning. Society's narrow construct of what it means to be successful is in conflict with EREA schools which view young people and their learning in a more comprehensive way. Offering an enriched curriculum and celebrating equally what that might bring can ignite a passion for learning in young people. Tannebaum (1983) broadened the definition of learning to include 'non-intellective factors' that were 'the result of a complex web of innate characteristics and environment'. Non-intellective traits that influence learning include: social– emotional wellbeing, behavioural characteristics such as motivation and commitment, belief in oneself, sound mental health and confidence. Personal idiosyncrasies and meta-learning orientation contribute to the learning journey of young people. There are also environmental factors in EREA schools that influence learning. These include cultural tradition, socio-economic status, peers, family, teachers, school structures and chance. As a system, EREA schools are in constant battle with a society that often reduces successful learning to exam results, NAPLAN and ATAR scores. Nurturing the whole person and understanding the non-intellective factors that contribute to the complex nature of learning, enables an Edmund Rice education in Australia to thrive.

Integrated curriculum: EREA schools are immersed in dynamic changes in the global and Australian community, the economy and work futures of young people. EREA schools have a responsibility to ensure young people transition into adulthood with the skills to cope with these changes. The traditional methods of teaching, teacher–student interaction, discrete learning areas, an over emphasis on scores and ATAR, and content heavy curriculum are being challenged. To combat this an integrated curriculum is designed to assist young people to make links with topics and themes across learning areas. The Australian Curriculum attempts to address this by outlining three cross-curriculum priorities and seven general capabilities. An example of the general capabilities is the approach to literacy and numeracy as an integrated and interconnected set of knowledge, skills, behaviours and dispositions that apply across learning areas. A practical example of this is the STEM education strategy that encourages an integrated approach in the learning areas of Science, Technology, Engineering and Mathematics, and helps develop problem-finding, problem-solving and critical analytical skills in young people. In order to assist young people to thrive in an ever-changing world, EREA schools might consider other examples of an integrated approach to curriculum design with leadership structures that would help support this philosophy.

Tailor-made learning: A philosophy of tailor-made learning asks teachers to know each student as a person and a learner. In this environment, teachers co-design learning tasks that suit the ability and interests of young people. In order to do this it is critical to obtain sophisticated data on students. Teachers and schools are adept at analysing performance-based data on young people and reporting this to parents, students and education authorities. However, in order to shift the focus on young people from performance to growth, ability-based data is essential. Ability-based data would include verbal reasoning, non-verbal reasoning, general reasoning and social–emotional wellbeing. This type of information would help teachers to understand how students learn and to adopt an individualised, personalised and tailor-made approach. It would enable teachers to design challenging tasks that are just beyond the comfort zone of young people. In this environment each young person would participate in individual stretch tasks for future learning. A philosophy of tailor-made learning encourages tailored teaching to move each student to the next level of achievement. A major constraint to a philosophy of tailor-made learning is the current rigidity of curriculum delivery, assessment and reporting models. However, in accepting this challenge, EREA schools would be leaders in a paradigm shift of the language in education from performance and scores to individual strengths and growth.

The 4 Cs (curiosity, creativity, compassion, courage): To thrive in an ever-changing and complex world, EREA graduates will need to be curious, creative, compassionate and courageous. These attributes, listed as the *4 Cs*, have emerged from the data in this research project. Young people are innately curious. In order to satisfy this innate curiosity the opportunity to problem find and problem solve is fundamental to all teaching and learning programs. Graduates of the future will be required to apply this curiosity, explore, invent and be lifelong learners. This will require creative ways of navigating the rapid change in digital technologies, automation and artificial intelligence. Creative ideas, critical thinking skills and innovation, once acquired, will need to be taken to application. Human skills such as compassion are critical to complementing technological change. Interpersonal interaction, communication and the capacity to be a productive member of the team will be essential. Young people will benefit from a well-rounded education, that includes the capacity to empathise with the needs of others and to have a global outlook. Once these qualities are evident young people will need the courage to make a difference. This will require character attributes such as resilience, perseverance, self-efficacy and self-regulation. EREA schools are hopeful and optimistic about the future of young people. This optimism is grounded in a holistic education that promotes authentic

spirituality and the responsibility of global citizenship and concern for how to build a better world for all.

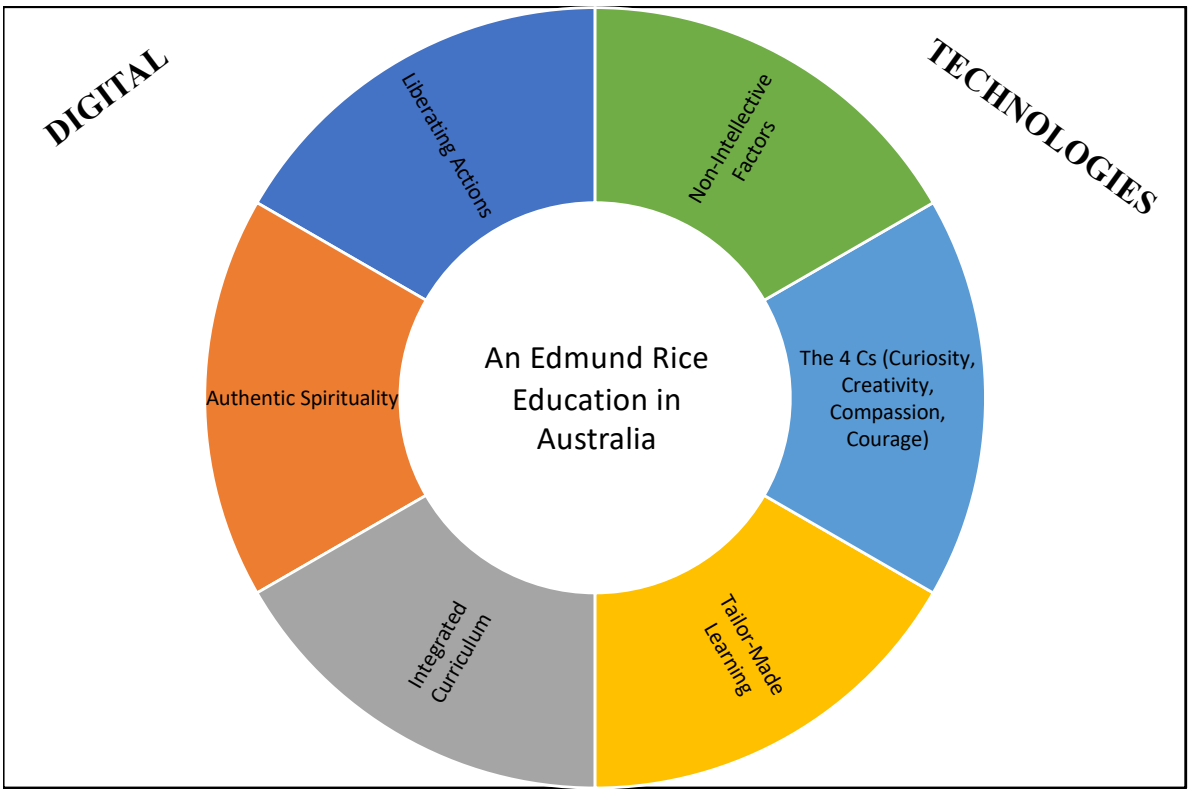


Figure 4.6 Edmund Rice Education in Australia.

4.4 Summary

The purpose of this research project was to investigate the interrelationships between holistic learning, teacher pedagogy and individual differences. While the discussion in this chapter takes into consideration the findings and recommendations in Chapter 3, it is intended that the outcomes from this research will be available to EREA schools, and also be applicable to a wider audience. While the results highlight the complex nature of teaching and learning, data from all sources indicate encouraging directions for future successful outcomes for young people. Figure 4.7 attempts to illustrate a possible outcome of the question: What is the nature of learning in an EREA school? The conceptual framework presented in Chapters 1 and 3 asks to investigate the interrelationships between holistic learning, teacher pedagogy and individual differences. When these interrelationships are in sync, an Edmund Rice Education in Australia is possible. An Edmund Rice Education in Australia is inclusive of liberating actions, authentic spirituality, non-intellective factors, integrated curriculum, tailor-made learning and the 4 Cs (curiosity, creativity, compassion and courage). This framework has emerged from the data in this research project and has the potential to complement, support and enliven EREA schools in the future.

This chapter clarifies the findings of the research and presents conclusions and recommendations. For successful learning outcomes to occur, the interaction between EREA schools' receptiveness to pedagogical change – particularly in the context of individual differences, along with student voice –

is fluid and complex. The interrelationships of teaching and learning are a bespoke dynamic. This chapter has presented a discussion of the major conclusions drawn from this research, followed by recommendations and a final reflection which have relevance for the future of EREA schools and the wider educational community. The concept of research centres to support teacher professional learning and innovation was proposed as an initiative that could implement the recommendations of this research project.

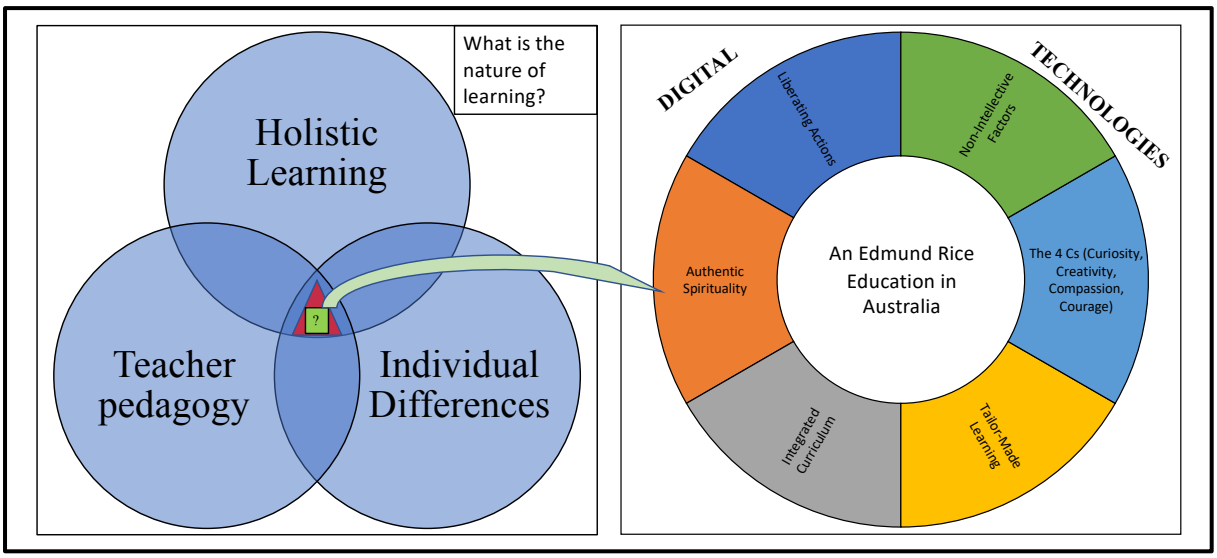


Figure 4.7 Final summary.

EDMUND RICE EDUCATION AUSTRALIA

References

Alexander, R. (2008). Essays on pedagogy. Abingdon, Oxon: Routledge.

Alexander, J. M., Carr, M., & Schwanenflugel, P. J. Development of metacognition in gifted children: Directions for future research. *Developmental Review* 15.1 (1995): 1-37.

Alterator, S. & Deed, C. (2013). Teacher adaptation to open learning spaces. *Issues in Educational Research 23*(3), 315-330. Retrieved from http://www.iier.org.au/iier23/alterator.pdf

American Psychological Association, (2018). *Stress by generation*. Retrieved from https://www.apa.org/news/press/releases/stress/2012/generations

Annevirta, T., & Vauras, M. (2006). Developmental changes of metacognitive skill in elementary school children. *The Journal of Experimental Education*, *74*(3), 195-226.

Augé, M. (2008). *Non-places: An introduction to supermodernity*. London: Verso.

Australian Council of Learned Academies. (2013). *Australia's progress in the twenty-first century. Measuring the future we want.* Retrieved from https://acola.org.au/wp/ap21c/

Australian Curriculum, Assessment and Reporting Authority. (2012). *The shape of the Australian Curriculum: Version 4.0.* Sydney, NSW: Australian Curriculum, Assessment and Reporting.

Australian Curriculum, Assessment and Reporting Authority. (2018) *Personal and social capability continuum*. Retrieved from https://www.australiancurriculum.edu.au/media/1078/general-capabilities-personal-and-social-capability-learning-continuum.pdf

Australian Government. (2016) *Quality schools, quality outcomes.* Retrieved from: https://docs.education.gov.au/system/files/doc/other/quality_schools_acc.pdf

Australian Institute for Teaching and School Leadership (2014) *Disciplined collaboration in professional learning.* Melbourne, Victoria: AITSL.

Australian Institute for Teaching and School Leadership (2017) *Australian guidelines for school leadership development*. Melbourne, Victoria: AITSL.

Australian Institute for Teaching and School Leadership (n.d.) *Increasing our impact: AITSL strategic plan 2017-2020*. Melbourne, Victoria: AITSL.

Banks, J. A. (2017). Failed citizenship and transformative civic education. *Educational Researcher 46*(7), 366-377. doi: 10.3102/0013189X17726741

Barrett, P., Zhang, Y., Moffat, J., & Kobbacy, K. (2013). A holistic, multi-level analysis identifying the impact of classroom design on pupils' learning. *Building and Environment, 59,* 678–689.

Bauder, M. (2017). Using social media as a big data source for research: the example of ambient geospatial information (AGI) in tourism geography. In *Geographies of Digital Culture* (pp. 51-63) New York: Routledge.

Bartle, E. (2015). *Personalized learning: An overview*. The Institute for Teaching and Learning Innovation, Queensland University. Retrieved from https://itali.uq.au/files/1279/DiscussionpaperPersonalised_learning_an_overview.pdf

Bear, G. G. (2015). Preventive and classroom–based strategies. In E. Emmer & E.J. Sabornie (Eds.) *Handbook of classroom management* (2nd ed., 15–39). New York: Routledge.

Beetham, H. & Sharpe, R. (Eds.) (2013). *Rethinking pedagogy for a digital age: Designing for 21st century learning*. New York: Routledge.

Bentley, T. (2018). *The responsibility to lead: Education at a global crossroads.* Issue 57 of ACEL monograph series. Retrieved from https://books.google.com.au/books?id=nT9RuwEACAAJ

Bentley, T., & Butler, S. (2017). Collaboration in pursuit of learning. In T. Bentley & G. Savage, (Eds.), *Educating Australia* (196-206). Victoria: Melbourne University Publishing.

Bentley, T. & C. Cazaly (2015). *The shared work of learning: Lifting educational achievement through collaboration.* Melbourne: Mitchell Institute for Health and Education Policy and the Centre for Strategic Education.

Biddulph, S. (2018). *Raising boys: Why boys are different and how to help them become happy and well-balanced men* (4th ed.). Berkeley, CA: Ten Speed Press.

Blackmore, J., Bateman, D., Cloonan, A., Dixon, M., Loughlin, J., O'Mara, J., & Senior, K. (2010). *Innovative learning environments research study*. Melbourne, VIC: DEECD/Deakin University.

Blackmore, J., Bateman, D., Loughlin, J., O'Mara, J., & Aranda, G. (2011a). *Research into the connection between built learning spaces and student outcomes: Literature review* (Paper No. 22). Melbourne, VIC: Department of Education and Early Childhood Development. Retrieved from http://www.eduweb.vic.gov.au/edulibrar/public/publ/research/publ/blackmore_learning_spaces.pdf

Blackmore, J., Bateman, D., O'Mara, J., & Loughlin, J. (2011b). *Centre for research in educational futures and innovation.* Retrieved from https://www.northmelbourneps.vic.edu.au/assets/Uploads/documents/Article-Learning-Spaces-Literature-Review-Deakin-Uni.pdf

Breakspear, S. (2012). *The policy impact of PISA: An exploration of the normative effects of international benchmarking in school system performance.* (OECD Education Working Paper No. 71). New York: OECD Publishing.

Bruner, J. (1999). Folk pedagogies. In J. Leach & B. Moon (Eds.), *Learners and Pedagogy* (4–21). London, England: Paul Chapman and Open University.

Brunzell, T., Stokes, H., Waters, L. (2015) Trauma-informed positive education: Using positive psychology to strengthen vulnerable students. *Contemporary School Psychology, 20*(1), 63-83. doi.org/10.1007/s40688-015-0070-x

Bunting, A. (2004). Secondary schools designed for a purpose: But which one? *Teacher: The National Education Magazine, 2004(Dec.),* 10–13.

Business Council of Australia (2017) *Future proof: Protecting Australians through education and skills*. BCA: Melbourne.

Byers, T., Imms, W., & Hartnell-Young, E. (2014). Making the case for space: The effect of learning spaces on teaching and learning. *Curriculum and Teaching, 29*(1), 5–19.

Byers, T., Mahat, M., Liu, K. & Knock, A. & Imms, W. (2018). *Systematic review of the effects of learning environments on student learning outcomes*. Melbourne: University of Melbourne, LEaRN. Retrieved from: http://www.iletc.com.au/publications/reports

Caldwell, B. (2015). Feeling overwhelmed? It is time for serious innovation. *Australian Educational Leader, 37*(1), 14–17.

Caldwell, B. (2016) *The autonomy premium: Professional autonomy and student achievement in the 21st century*. Melbourne: ACER Press.

Caldwell, B., & Harris, J. (2008). *Why not the best schools?* Camberwell, VIC: ACER Press.

Carr, M., Alexander J., and Schwanenflugel, P. Where gifted children do and do not excel on metacognitive tasks. *Roeper Review* 18.3 (1996): 212-217.

Catholic Education Commission of Victoria (2016). *Victorian Catholic schools at a glance.* Retrieved from http://www.cecv.catholic.edu.au/getmedia/64081c91-cd5b-4f6d-b81d-2e2b3d720d95/At-a-Glance-2016.aspx?ext=.pdf

Catholic Education Melbourne (2019). *School improvement framework*. Retrieved from https://www.cem.edu.au/Work-in-our-schools/SIF/School-Improvement-Framework.aspx

Cavanagh, S. R. (2016). *The spark of learning: Energizing the college classroom with the science of emotion*. USA: West Virginia University Press.

Clarke, D., & Hollingsworth, H. (2013). Challenges and opportunities for neuroscience: How to explain the connection between sociocultural practices and cognition? In Australian Council for Educational Research (Ed.), *How the brain learns: What lessons are there for teaching?* (130–140). Camberwell, VIC: Australian Council for Educational Research.

Clarke-Billings, L. (2016, January 2). Psychologists warn constant email notifications are toxic source of stress. *The Telegraph*. Retrieved from https://www.telegraph.co.uk/news/2016/03/22/psychologists-warn-constant-email-notifications-are-toxic-source/

Clinton, J.M., Aston, R., & Quach, J. (2018). *Promoting evidence uptake in schools: A review of the key features of research and evidence institutions*. Report prepared for, Education Excellence Review Secretariat, Department of Education, Australian Government. University of Melbourne.

Clymer, J. B., & Wiliam, D. (2007). Improving the way we grade science. *Educational Leadership, 64*(4), 19-20.

Cohen, L., Manion, L., & Morrison, K. (2011). *Research methods in education.* (7th Ed.). London: Routledge.

Collins, A. & Halverson, R. (2018). *Rethinking education in the age of technology: The digital revolution and schooling in America*. (2nd Ed.). Columbia University: Teachers College Press.

Connell, R. (2008). Masculinity construction and sports in boys' education: A framework for thinking about the issue. *Sport, Education and Society, 13*(2), 131–145. doi.org/10.1080/13573320801957053

Craven, G., Beswick, K., Fleming, J., Fletcher, T., Green, M., Jensen, B., Leinonen, E. & Rickards, F. (2014). *Action Now: Classroom Ready Teachers.* (Final Report). Canberra, Australia: Teacher Education Ministerial Advisory Group.

Crump, S. & Slee, R. (2015). *School transitions for vulnerable young people: Re-engaging students through local initiative*. Retrieved from http://vuir.vu.edu.au/30822/1/school_transitions_for_vulnerable_yp_full_report.pdf

Csikszentmihalyi, M. (1991). *Finding flow: The psychology of engagement with everyday life*. New York: Basic Books.

Deming, D. J. (2015). *The growing importance of social skills in the labor market*. Retrieved from http://scholar.harvard.edu/files/ddeming/files/deming_socialskills_august2015.pdf

della Chiesa, B. (2013). Our learning/teaching brains: What can be expected from neuroscience, and how? What should not be expected from neuroscience, and why? In Australian Council for Educational Research (Ed.), *How the brain learns: What lessons are there for teaching?* (3–7). Camberwell, VIC: Australian Council for Educational Research.

Duggan, M. (2017). 5 The everyday reality of a digitalizing world. In *Geographies of Digital Culture* (71-83) New York: Routledge

Dweck, C. (2015). Carol Dweck revisits the growth mindset. *Education Week 35*(5), 20-24. Retrieved from https://www.stem.org.uk/system/files/community resources/2016/06/DweckEducationWeek.pdf

Edmund Rice Education Australia (2018) *With Head, Heart, Hands & Feet*. Richmond, Victoria.

Education Council. (2015). *National STEM school education strategy. A comprehensive plan for science, technology, engineering and mathematics education in Australia*. Retrieved from http://www.educationcouncil.edu.au/site/DefaultSite/filesystem/documents/National%20STEM%20School%20Education%20Strategy.pdf

Elliott, A. (2015). *Identity troubles: An introduction*. New York: Routledge.

Falloon, G. (2011). Exploring the virtual classroom: What students need to know (and teachers should consider). *Journal of Online Learning and Teaching, 7*(4), 439–451. Retrieved from https://researchcommons.waikato.ac.nz/handle/10289/7238

Feilzer, M. (2010). Doing mixed methods research pragmatically: Implications for the rediscovery of pragmatism as a research paradigm. *Journal of mixed methods research 4*(1): 6-16. doi: org/10.1177/1558689809349691

Felgenhauer, T. & Gäbler, K. (Eds.) (2017). *Geographies of Digital Culture*. New York: Routledge.

Fine, C. (2008). Will Working mothers' brains explode? The popular new genre of neurosexism. *Neuroethics, 1*(1), 69–72. doi: org/10.1007/s12152-007-9004-2

Freeman, C., O'Malley, K., & Eveleigh, F. (2014). *Australian teachers and the learning environment: An analysis of teacher response to TALIS 2013*. Final Report, Melbourne: ACER.

Freire, P. (2000). *Pedagogy of the oppressed* (M. Bergman Ramos, Trans.). London: Bloomsbury.

Friend, M. & Bursuck, W. D. (2014). *Including students with special needs: A practical guide for classroom teachers*. (8th Ed.). The University of North Carolina: Pearson.

Fullan, M., McEachen, J., Quinn, J. (2016). New pedagogies for deep learning. *NPDL Global Report. (1st ed.).* Retrieved from http://npdl.global/wp-content/ uploads/2016/12/npdl-global-report-2016.pdf

Gage, N. L. (1978). *The scientific basis of the art of teaching.* Teachers Coll Press.

Garvan, F.B. (1996) *Give To The Poor In Handfuls*. Sydney.

Gonski, D., Arcus, T., Boston, K., Gould, V., Johnson, W., O'Brien, L., Perry, L-A., & Roberts, M. (2018). *Through growth to achievement: The report of the review to achieve educational excellence in Australian schools*. Canberra, Australia: Commonwealth of Australia.

Goss, P., Hunter J., Romanes, D. & Parsonage, H. (2015) *Targeted teaching: How better use of data can improve student learning*. Grattan Institute.

Goss, P., Sonnemann, J., & Grifuths, K. (2017). *Engaging students: creating classrooms that improve learning.* Grattan Institute.

Graham, J. W. (2009). Missing data analysis: Making it work in the real world. *Annual Review of Psychology, 60,* 549–576. doi: org/10.1146/annurev.psych.58.110405.085530

Gray, D. E. (2009). *Doing research in the real world.* (2nd Ed.). London, England: Sage.

Griffin, P., Graham, L., Harding, S., Nibali, N., English, N. & Alam, M. (2017) The changing role of the teacher in a knowledge economy. In Bentley, T. & Savage, G. (Eds.), *Educating Australia* (31) Melbourne University Publishing Limited: Victoria.

Hall, C. (2014). *The impact of new learning spaces on teaching practice: Literature review*. Melbourne, VIC: RMIT University.

Hampson, M., Patton, A., & Shanks, L. (2017). *10 ideas for 21st century education*. London: Innovation Unit.

Harari, Y. N. (2016). *Homo deus: A brief history of tomorrow.* London: Harvill Secker.

Harvey, D. (2016). *The ways of the world.* Great Britain: Profile Books.

Hattie, J. (2002). *21st learning environments*. Washington DC: Partnership for 21st Century Skills.

Hattie, J. (2013a). Understanding learning: Lessons for learning, teaching and research. In Australian Council for Educational Research (Ed.), *How the brain learns: What lessons are there for teaching?* Camberwell, VIC: Australian Council for Educational Research.

Hattie, J. (2013b*). Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. (1st Ed.). New York: Routledge.

Hattie, J. (2015a). Can Australian education become self-transforming? *Australian Educational Leader, 37*(1), 8–12. Retrieved from https://search.informit.com.au/documentSummary;dn=877915203751421;res=IELAPA> ISSN: 1832-8245

Hattie, J. (2015b). *What works best in education: The politics of collaborative expertise*. London, England: Pearson.

Hattie, J., & Yates, G. C. R. (2013). *Visible learning and the science of how we learn.* London, England: Routledge.

Hattie, J., (2018, March 13). We need to change the conversation around NAPLAN - let's talk about progress*,* in *Education HQ Australia.* Retrieved from https://au.educationhq.com/news/45236/ exclusive-we-need-to-change-the-conversation-around-naplan-lets-talk-about-progress/#*.*

Henriksen, D., Mishra, P. & Fisser, P. (2016). Infusing creativity and technology in 21st century education: A systemic view for change. *Journal of Educational Technology & Society, 19*(3), 27-37. Retrieved from https://www.jstor.org/stable/jeductechsoci.19.3.27

Hermelin, B., & O'Connor, N. (1986). Spatial representations in mathematically and in artistically gifted children. *British Journal of Educational Psychology*, *56*(2), 150-157.

Hinton, C., Miyamoto, K., & Della-Chiesa, B. (2008). Brain Research, Learning and Emotions: implications for education research, policy and practice1. *European Journal of Education, 43*(1), 87-103.

Hsueh, W. *A cross-cultural comparison of gifted children's theories of intelligence, goal orientation, and responses to challenge*. (1998): 3416-3416.

Huta, V. (2016). An overview of hedonic and eudaimonic well-being concepts. *Handbook of media use and well-being: International perspectives on theory and research on positive media effects*, 14-33.

Imms, W., Mahat, M., Byers, T., & Murphy, D. (2017). *Type and use of innovative learning environments in Australasian schools ILETC Survey 1*. Melbourne, VIC: Innovative Learning Environment & Teacher Change, LEaRN, University of Melbourne.

Ingvarson, L., Reid, K., Buckley, S., Kleinhenz, E., Masters, G. N. & Rowley, G. (2014). *Best practice teacher education programs and Australia's own programs*. Canberra, Australia: Department of Education.

Ithaca Group (2016) *Everybody's core business: Research into the non-technical capabilities needed for successful participation in work or further study (Final Report),* Ithaca Group.

Jenkins, R. (2014). *Social identity*. (2nd. Ed.). London: Routledge.

Jensen, B., Hunter, J., Sonnemann, J., & Cooper, S. (2014). *Making time for great teaching.* Melbourne, VIC: Grattan Institute.

Jesuit Social Services. (2018). *Foundation Document*. Retrieved from http://jss.org.au/wp-content/uploads/2018/07/Foundation_Document_-_web.pdf

Kagan, S. (1989). The structural approach to cooperative learning. *Educational Leadership, 47*(4), 12. Retrieved from http://www.ascd.org/ASCD/pdf/journals/ed_lead/el_198912_kagan.pdf

Keddie, A. (2005). A framework for gender justice: Evaluating the transformative capacities of three key Australian schooling initiatives. *Australian Educational Researcher, 32*(3), 83–102. doi: org/10.1007/BF03216828

Keddie, A. (2007). Issues of power, masculinity, and gender justice: Sally's story of teaching boys. *Discourse: Studies in the Cultural Politics of Education, 28*(1), 21–35. doi: org/10.1080/01596300601073085

Keddie, A., & Mills, M. (2007a). *Teaching boys: Developing classroom practices that work.* Crows Nest, NSW: Allen and Unwin.

Keddie, A., & Mills, M. (2007b). Teaching for gender justice. *Australian Journal of Education, 51*(2), 205–219. doi: org/10.1177/000494410705100208

Keppell, M., Souter, K., & Riddle, M. (2011). *Physical and virtual learning spaces in higher education: Concepts for the modern learning environment*. Hershey, PA: Information IGI Global.

Kneuer, M. (2016). E-democracy: A new challenge for measuring democracy. *International Political Science Review 37*(5), 666-678. doi: org/10.1177/0192512116657677

Kolb, A. & Kolb, D. (2018). Alice Kolb and David Kolb. *Australian Educational Leader 40*(2), 22.

Kross, E., Verduyn, P., Demiralp, E., Park, J., Lee, D.S., & Lin, N. (2015). Facebook Use Predicts Declines in Subjective Well-Being in Young Adults. *Plos one 8*(8). doi: org/10.1371/journal.pone.0069841

Lashlie, C. (2007). *He'll be OK: Growing gorgeous boys into good men* (2nd Ed.). Australia: Harper Collins.

Leadbeater, C. (2016). *The problem solvers*. London: Pearson.

Lemke, C., & Fadel, C. (2006). *Technology in schools: What the research says.* Culver City, CA: Metiri Group for Cisco Systems.

Lewis, R., Montuoro, P., & McCann, P. (2013). Self-predicted classroom behaviour without external controls: Imagining a 'Lord of the Flies' scenario. *Australian Journal of Education, 57*(3), 270–291. doi: org/10.1177/0004944113496175

Liberante, L. (2012). The importance of teacher–student relationships, as explored through the lens of the NSW Quality Teaching Model. *Journal of Student Engagement: Education Matters, 2*(1), 2-9. Retrieved from http://ro.uow.edu.au/jseem/vol2/iss1/2

Lingard, B., Martino, W., & Mills, M. (2008). *Boys and schooling.* Basingstoke, England: Palgrave Macmillan.

Lippman, P. C. (2010). *Can the physical environment have an impact on the learning environment?* Paris, France: OECD.

Lodge, J. (2013). From the laboratory to the classroom: Translating the learning sciences for use in technology-enhanced learning. In Australian Council for Educational Research (Ed.), *How the brain learns: What lessons are there for teaching?* Camberwell, VIC: Australian Council for Educational Research.

Lonsdale, M. & Anderson, M. (2012) *Preparing 21st century learners: the case for school-community collaborations*. Melbourne: ACER.

Lucas, B. (2018). *Capabilities in context: A snapshot of historic and global approaches*. Retrieved from http://www.mitchellinstitute.org.au/wp-content/uploads/2018/06/Capabilities-in-context.pdf

Mackenzie, N., & Knipe, S. (2006). Research dilemmas: Paradigms, methods and methodology. *Issues in Educational Research, 16*(2), 193–205.

Mahat, M., Grocott, L., & Imms, W. (2017). In the real world: Teachers' perceptions of ILEs. *ILETC phase 1 teacher workshops.* Melbourne: University of Melbourne. Retrieved from http://www.iletc.com.au/publications/reports/

Marzano, Robert J. (2007). *The art and science of teaching: A comprehensive framework for effective instruction*. Virginia, USA: ASCD.

McClure, L. (2015). *10 ways to teach creativity in the classroom*. TEDEd. Retrieved from https://blog.ed.ted.com/2015/05/08/10-ways-to-teach-creativity-in-the-classroom/

McDonnell, A. (2001) The spirituality of Edmund Rice. Unpublished paper.

McKinsey Global Institute (2017). *Jobs lost, jobs gained: Workforce transitions in a time of automation* (December 2017). McKinsey Global Institute.

McNeely, C. A., Nonnemaker, J. M., & Blum, R. W. (2002). Promoting school connectedness: Evidence from the national longitudinal study of adolescent health. *Journal of school health*, *72*(4), 138-146.

Merry, M. (2008). Building a boy friendly school: The educational needs of boys and the implications of school culture, a case study (Unpublished EdD thesis). Melbourne, Australia: La Trobe University.

Mertens, D. M. (2009). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods*. (3rd Ed.). Thousand Oaks, CA: Sage.

Montuoro, P., & Lewis, R. (2015). Student perceptions of misbehaviour and classroom management. In E. Emmer & E.J. Sabornie (Eds.), *Handbook of classroom management* (2nd ed., 344–362). New York: Routledge.

Montuoro, P., & Mainhard, T. (2017). An investigation of the mechanism underlying teacher aggression: Testing I3 theory and the general aggression model. *British Journal of Educational Psychology, 87*(4), 497–517. doi: org/10.1111/bjep.12161

Moore, A. H., Fowler, S. B., & Watson, C. E. (2007). Active learning and technology: Designing change for faculty, students, and institutions. *Educause Review, 42*(5), 42–61.

Morgan, A. (2013). Different ways of being an educator: A sociocultural exploration of educator identity and development in practice, in a system of non-traditional flexi schools. (Unpublished doctoral dissertation). Brisbane, Australia: Griffith University.

Muir-Broaddus, J. E. (1995). Gifted underachievers: Insights from the characteristics of strategic functioning associated with giftedness and achievement. *Learning and Individual Differences*, *7*(3), 189-206.

Munro, J. (2013). High-ability learning and brain processes: How neuroscience can help us to understand how gifted and talented students learn and the implications for teaching. In Australian Council for Educational Research (Ed.), *How the brain learns: What lessons are there for teaching?* (103–111). Camberwell, VIC: Australian Council for Educational Research.

Murphy, P. (2008). Defining Pedagogy. In K. Hall, P. Murphy & J. Soler (Eds.), *Pedagogy and practice: culture and identities* (pp. 28 – 39). London: SAGE publications.

National Catholic Education Commission (2017) *A Framework for Formation for Mission in Catholic Education*. Sydney, NSW.

National Catholic Education Commission (2018) *Framing Paper. Religious Education in Australian Catholic Schools*. Sydney, NSW.

Newton, C. (2014). *Future proofing schools: 21st century learning*. Melbourne University. Retrieved from http://www.futureproofingschools.com/content/21st-century-learning

Norden, P., (2015). Not so straight: Engaging same-sex attracted students in Catholic secondary schools – an Australian study. *Australian Journal of Human Rights, 22,* (1) 179-201. doi: org/10.1080/1323-238X.2016.11882163

Normoyle, M.C. (1977) *A Tree is Planted.* Christian Brothers Private Circulation.

O'Connell, M. & Lucas, B. (2018) *What if young people designed their own learning?* Retrieved from https://theconversation.com/what-if-young-people-designed-their-own-learning-59153

Onwuegbuzie, A. J., & Leech, N. L. (2005). On becoming a pragmatic researcher: The importance of combining quantitative and qualitative research methodologies. *International journal of social research methodology 8*(5), 375-387.

Organisation for Economic Co-operation and Development (2013) *Key findings from the Teaching and Learning International Survey (TALIS).* Paris: OECD Publishing.

Organisation for Economic Co-operation and Development (2016). *Education at a glance 2016.* OECD Indicators.

Organisation for Economic Co-operation and Development (2014). *TALIS 2013 results: An international perspective on teaching and learning.* Paris: OECD Publishing.

Organisation for Economic Co-operation and Development (2010). *Innovative learning environments.* Retrieved from https://read.oecd-ilibrary.org/education/innovative-learning-environments_9789264203488-en#page1

Oviatt, S., Cohen, A., Miller, A., Hodge, K. & Mann, A. (2012) The impact of interface affordances on human ideation, problem solving and inferential reasoning. *ACM transactions on computer human interaction, 19*(3) 1-30. doi: 10.1145/2362364.2362370

Pedaste, M., Maeots, M., Siiman, L.A., De Jong, T., van Riesen, S.A.N., Kamp, E., T., Manoli, C.C., Zacharia, Z.C., Tsourlidaki, E. (2015). Phases of inquiry-based learning: Definitions and the inquiry cycle. *Educational Research Review 14* (February 2015) 47-61. doi: org/10.1016/j.edurev.2015.02.003

Pollack, W. (1999). *Real boys: Rescuing our sons from the myths of boyhood*. New York: Henry Holt.

Rawding, C. (2014). The importance of teaching holistic geographies. *Teaching Geography, 39*(1) 10-13.

Reichert, M., Hawley, R., & Tyre, P. (2010). *Reaching boys, teaching boys: Strategies that work—and why*. San Francisco, CA: Jossey-Bass.

Robertson, M. & P. Montuoro (2017). The emerging hegemony of cybernetic class n realities: The non-place of Generation Z. In *Geographies of Digital Culture* (96-108) New York: Routledge.

Robinson, K. (2000). 'Great tits, miss!' The silencing of male students' sexual harassment of female teachers in secondary schools: A focus on gendered authority. *Discourse: Studies in the Cultural Politics of Education, 21*(1), 75–90. doi: org/10.1080/01596300050005510

Rogers, B. (2015). *Classroom behaviour: A practical guide to effective teaching, behaviour management and colleague support*. Los Angeles: Sage.

Rushe, D. (1995). *Edmund Rice The Man and His Times.* Dublin: Gill & McMillan.

Sah, P. (2013). Learning, remembering and forgetting in the mammalian brain. In Australian Council for Educational Research (Ed.), *How the brain learns: What lessons are there for teaching?* (111–116). Camberwell, VIC: Australian Council for Educational Research.

Sahlberg, P. (2018). PISA in Finland: An education miracle or an obstacle to change? *Center for Educational Policy Studies Journal 1*(3), 119-140. Retrieved from https://ojs.cepsj.si/index.php/cepsj/article/view/418

Savery, J. R. (2015). Overview of problem-based learning: Definitions and distinctions. *Essential readings in problem-based learning* (5-15). West Lafayette, Indiana: Purdue University Press.

Scholes, L., & Nagel, M. C. (2011). Engaging the creative arts to meet the needs of twenty-first-century boys. *International Journal of Inclusive Education, 16*(10), 969–984.

Schwanenflugel, P. J., Stevens, T., & Carr, M. (1997). Metacognitive knowledge of gifted children and nonidentified children in early elementary school. *Gifted Child Quarterly*, *41*(2), 25-35.

Schwitzgebel, E. (1999). Children's Theories and the Drive to Explain. *Science & Education, 8*(5), p.457-488.

Scott, C. (2008). Boys and girls, and stereotypes. *Teacher: The National Education Magazine, 2008*(Oct.), 44–47.

Sousa, D. (2010). Brainy teaching: Educational neuroscience and classroom practice. *Teacher: The National Education Magazine, 2010*(April), 24–26.

Stecher, B. (2017*) Educating the future*. Retrieved from https://tmrwedition.(Stecher, 2017)com/2017/03/01/educating-the-future/

Sterly, H. (2017). Regionalization revisited: Mediatization of translocal social practices and the spatial reconfiguration of life in rural–urban Bangladesh. In *Geographies of Digital Culture* (64-80) New York: Routledge.

Stiglitz, J. E. & B. C. Greenwald (2014). *Creating a learning society: A new approach to growth, development, and social progress*. New York: Columbia University Press.

Storey, J. (2014). *From popular culture to everyday life*. London: Routledge.

Sullivan, A. M., Johnson, B., Owens, L. & Conway, R. (2014). Punish them or engage them? Teachers' views of unproductive student behaviours in the classroom. *Australian Journal of Teacher Education 39*(6)*,* 43–56.

Taneja, A., Fiore, V., & Fischer, B. (2015). Cyber-slacking in the classroom: Potential for digital distraction in the new age. *Computers & Education, 82*(March), 141-151. doi: org/10.1016/j.compedu.2014.11.009

The Foundation for Young Australians. (2018) *The new work reality*. Retrieved from https://www.fya.org.au/wp-content/uploads/2018/06/FYA_TheNewWorkReality_sml.pdf

Timms, M. (2013). Measuring learning in complex learning environments. In Australian Council for Educational Research (Ed.), *How the brain learns: What lessons are there for teaching?* (53–62). Camberwell, VIC: Australian Council for Educational Research.

Tomlinson, C. A. (2009). Intersections between differentiation and literacy instruction: Shared principles worth sharing. *New England Reading Association Journal, 45*(1), 28–33.

Tomlinson, C. A. & J. McTighe (2006). *Integrating differentiated instruction & understanding by design: Connecting content and kids.* Alexandra, VA: Association for Supervision and Curriculum Development.

Torii, K. and M. O'Connell (2017). *Preparing young people for the future of work: Policy roundtable report.* Paper No. 01/2017, Melbourne: Mitchell Institute.

Turkle, S. (2017). *Alone together: Why we expect more from technology and less from each other*. UK: Hachette.

Tyre, P. (2008). *The trouble with boys.* USA: Crown Publisher.

United Nations Educational, Scientific and Cultural Organisation (2015). *Incheon declaration and framework for action for the implementation of sustainable development goal 4*. Retrieved from http://unesdoc.unesco.org/images/0024/002456/245656e.pdf

United Nations Educational, Scientific and Cultural Organisation (2014). 37 C/4 2014-2012 *Medium-term strategy*. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000227860

Victorian Institute of Teaching (2014). *The effect of the physical learning environment on teaching and learning.* Retrieved from http://thequohaslostitsstatus.weebly.com/uploads/5/4/2/3/54231535/_the-effect-of-the-physical-learning-environment-on-teaching-and-learning.pdf

Vygotsky, L. (1978). Interaction between learning and development. In M. Gauvin & M. Cole (Eds.), *Readings on the development of children* (34–41). New York: Scientific American Books.

Walker, J. D., Brooks, D. C., & Baepler, P. (2011). Pedagogy and space: Empirical research on new learning environments. *Educause Quarterly, 34*(4), 4.

Walsh, L. & Black, R. (2015) *Youth volunteering in Australia: An evidence review*. Report prepared for the Australian Research Alliance for Children and Youth. Canberra: Australian Research Alliance for Children and Youth.

Warf, B. (2017). 8 Digital divides in the twenty-first century United States. In *Geographies of Digital Culture*. New York: Routledge.

Wenger, E. (2008). *Communities of practice: Learning, meaning, and identity*. Cambridge United Kingdom: Cambridge University Press.

Wenzlhuemer, R. (2017). Telegraphy and global space. In *Geographies of Digital Culture* (21-38) New York: Routledge.

Westwell, M. (2013). When educational neuroscience meets the Australian curriculum: A strategic approach to teaching and learning. In Australian Council for Educational Research (Ed.), *How the brain learns: What lessons are there for teaching?* (43–53). Camberwell, VIC: Australian Council for Educational Research.

White, D. (2013). A pedagogical decalogue: Discerning the practical implications of brain-based learning research on pedagogical practice in Catholic schools. In Australian Council for Educational Research (Ed.), *How the brain learns: What lessons are there for teaching?* (68–79). Camberwell, VIC: Australian Council for Educational Research.

Wiggins, G. (2012). *On assessing for creativity: Yes you can, and yes you should*. Retrieved from https://grantwiggins.wordpress.com/2012/02/03/on-assessing-for-creativity-yes-you-can-and-yes-you-should/.

Wiliam, D., (2012). SSAT National Conference 2012. In *SSAT (The Schools Network),* viewed on 3 February 2018. https://www.youtube.com/watch?v=r1LL9NX1hUw&feature=youtu.be&a.

Woolner, P., Clark, J., Laing, K., Thomas, U., & Tiplady, L. (2012). Changing spaces: Preparing students and teachers for a new learning environment. *Children, Youth and Environments, 22*(1), 52–74.

World Bank Group Flagship Report (2016). *Global Economic Prospects, Divergences and Risks* (June, 2016). Washington: World Bank Group.

Youd, D. (2013). *Empowerment through recognition of difference: Differentiated instruction in the classroom*. Victorian Association for Gifted and Talented Children. EmpowerED for Giftedness Conference Melbourne, VIC.

Yonezawa, S., McClure, L., & Jones, M. (2012). *Personalization in schools*. Retrieved https://www.researchgate.net/profile/Makeba_Jones/publication/265060024_Personalization_in_schools/links/564df6c108aefe619b0f2ce6/Personalization-in-schools.pdf

Appendices

Appendix A

The Educational Practices Inventory (EPI-100)

The Educational Practices Inventory (EPI) is a series of measures that aim to capture your perspectives and attitudes about a range of contemporary issues in education. Your responses should relate to education in general, not just your own school. You should spend about 30 seconds on each item. If you are not sure about an item, return to it later. The EPI is anonymous. Please rate the following statements from 1 (Strongly Agree), 2 (Agree), 3 (Neutral) 4 (Disagree), and 5 (Srongly Disagree).

THE TEACHER–STUDENT RELATIONSHIP SCALE (TSRS)

The statements below focus on teachers' emotional role in the student–teacher relationship.

1. Good teaching happens when teachers see students as individuals.

2. It is concerning when teachers become over-involved in student problems.

3. Teachers should be warm, affectionate and caring towards students.

4. Teachers should have stable and predictable personalities.

5. Teachers should make students feel safe and secure.

6. It is understandable if some teachers are emotionally distant, but they *must* be professional.

7. Some teachers are cold and abrupt; it's reality and students should get used to it.

8. Learning cannot happen if the student–teacher relationship is fractious.

9. Teacher training should focus more on teacher self-discovery – teachers must know themselves in order to know their students.

10. The best teachers are intuitive; they just seem to "get" young people.

11. Teachers should care for, and nurture, the next generation.

12. Students should be able to discuss their personal problems with teachers.

13. It is not a teacher's job to understand every student and their needs.

14. Teachers should not reveal their true selves to students.

EDMUND RICE EDUCATION AUSTRALIA

THE EDUCATIONAL TARGETS SCALE (ETS)

The statements below focus on the role that schools play in developing the whole person.

1. Schools should foster the development of student social skills.

2. Schools cannot help students develop their emotional intelligence.

3. Good teachers understand the importance of the moral development of students.

4. Schools should teach students ethics.

6. Empathic understanding should be taught in schools.

7. Schools need to teach students the importance of *the other*.

8. Teachers should encourage students to think critically about who they really are.

9. Too many students leave school without a sense of civic responsibility.

10. The classroom is not a place for warm and fuzzy self-discovery.

11. Building resilience is just as important as building knowledge.

12. Experiences such as camps are integral to self-discovery.

13. School should be a place where students can discover who they are as individuals.

14. Good teaching is about guiding the development and growth of the whole person.

THE TECHNOLOGY IN SCHOOLS SCALE (TiSS)

The statements below focus on technology in the classroom. Unless otherwise stated, the term technology refers to technology commonly used in contemporary classrooms, including computers and tablets, the internet and Wi-Fi, and projection tools such as smart TVs.

1. Too much technology in the classroom compromises good teaching.

2. Teachers do not truly understand the technology in their own classrooms.

3. Technology has improved the learning process.

4. Mobile phones should be utilised, not banned in the classroom.

5. Technology gets in the way of good teaching practices.

6. Technology discourages students from thinking critically.

7. Students do not truly understand the technology they use in the classroom.

8. From an educational perspective, it would be better if schools removed all technology.

9. Technology facilitates creativity.

10. Schools place too much trust in technology.

11. Technology should be used more creatively in the classroom.

12. Technology has made it more challenging for teachers to seize "teaching moments".

13. Technology in schools is not a fad.

14. The complexity of most technologies confounds the teaching and learning process.

15. Not enough is known about how children and adolescents learn when using technology.

16. The true opportunities and threats of technology in schools continue to remain unknown.

EDMUND RICE EDUCATION AUSTRALIA

THE CLASSROOM MANAGEMENT SCALE (CMS)

The statements below focus on student behaviour and classroom management.

1. Teachers should have control of all students all the time.

2. Every teacher should develop their own classroom management style.

3. Students should be encouraged to manage their own behaviour.

4. Genuine student–teacher relationships are fundamental to good classroom management.

5. Classroom management should be based on democratic practices that are based on regular student–teacher discussions, mutual understanding, and respect.

6. Sometimes verbal aggression is a necessary part of successful classroom management.

7. It is normal and acceptable for some teachers to be authoritarians.

8. Teachers who place too much value on the appearance of orderliness compromise true learning.

9. Authoritarian classroom management strategies prevent students from developing their own sense of personal responsibility.

10. Verbal aggression from teachers does not psychologically harm students.

11. School-wide positive behaviour management strategies are too prescriptive.

12. Most teachers are not sufficiently trained in classroom management.

THE TEACHING DIFFERENTIATION SCALE (TDS)

The statements below focus on differentiation. Here, the term differentiation refers to providing different students in the same classroom with different ways to learn. In this way differentiation aims to allow all students to learn effectively, regardless of ability.

1. When implemented correctly, differentiation works.

2. Teachers do not have the time to differentiate their practice.

3. Differentiation is difficult to implement, but schools must use it to effectively cater for different learning needs.

4. Differentiation is just another fad.

5. Differentiation is revolutionary; widespread adoption will require an educational paradigm shift.

6. The demanding nature of differentiation has a detrimental effect on teacher morale.

7. The best teachers intuitively differentiate their practice.

8. Differentiation can only be truly performed by the student; it requires self-knowledge as well as understanding when to collaborate, when to work independently, and when to ask for help.

9. Differentiation risks incorrectly labelling students (e.g., as low proficiency learners).

10. Real differentiation occurs when schools strategically use open-plan learning and team teaching to create dynamic, responsive teaching practices.

11. Differentiation cannot happen until a common understanding of the concept is established.

12. Currently, most teachers do not know how to effectively differentiate their teaching practice.

13. Teachers need ongoing professional development to know how to successfully differentiate their teaching practice.

14. Unfortunately, schools continue to accommodate for only a narrow band of learning styles.

THE TEACHING SPIRITUAL SCALE (TSS)

The statements below focus on spirituality. Here, the term spirituality refers to the modern emphasis on subjective experiences of the sacred dimension. Therefore, in the TSS, spirituality may refer to any religious experience, the search for sacred meaning, or encounters with the "inner dimension", personal growth, or belief in the supernatural (i.e., phenomena beyond what is observable).

1. Spirituality should be an important part of every student's school experience.

2. The exploration of spirituality should be restricted to religious studies.

3. The truth is, even the most scientific learning is a spiritual pursuit.

4. The best teachers critically examine their own spirituality.

5. Adolescents who do not explore their spirituality risk losing their way.

6. Spiritual development in childhood and adolescence is critical to locating oneself in the universe.

7. Unfortunately, too many students leave school without spiritual direction.

8. When a student is spiritually lost, nothing can have true meaning.

9. Schools who ignore spirituality, ignore a fundamental part of the human experience.

10. Spirituality in schools is stigmatised in Australia.

11. Most students seek spiritual discovery, even if they don't consciously realise it.

12. Most teachers lack a deep sense of spirituality.

13. There needs to be more of a focus on the deep personal and spiritual development of teachers.

14. Unfortunately, most schools have become increasingly disconnected from spirituality.

15. As society becomes more secular, it is becoming more difficult for schools to foster spirituality.

16. Schools should move away from hard-nosed professionalism and towards teacher self-knowledge and spirituality.

THE STUDENT FUTURE SCALE (SFS)

The statements below focus on students' future directions and post-school pathways. Here, the term future directions refers to the exploration of hopes and dreams for further education and work, while the term post-school pathways refers to the more specific planning and arrangement of further education and work.

1. Excursions provide important real-world learning opportunities.

2. Schools should expose students to more real-world, community-based programs.

3. Schools do not provide enough opportunities for students to pursue their personal interests.

4. Schools place too much emphasis on the ATAR.

5. Long-term off-campus retreats are an educational distraction.

6. The curriculum is implemented in a way that is disconnected from the real-world.

7. Schools should do more to guide students in their post-school pathways.

8. In schools, the perception of success is too narrowly confined to academic success.

9. Too many secondary school graduates lack a sense of career direction.

10. Schools are not equipped for the changes and uncertainties in work and careers.

11. The curriculum and pedagogical practices must change as the nature of work changes.

12. Teachers should always facilitate student interests, no matter how marginal or obscure those interests are.

13. Teachers need to be more aware of what the future of careers and work holds.

14. For many students, school is not a place where they can explore their educational and career interests.

Appendix B

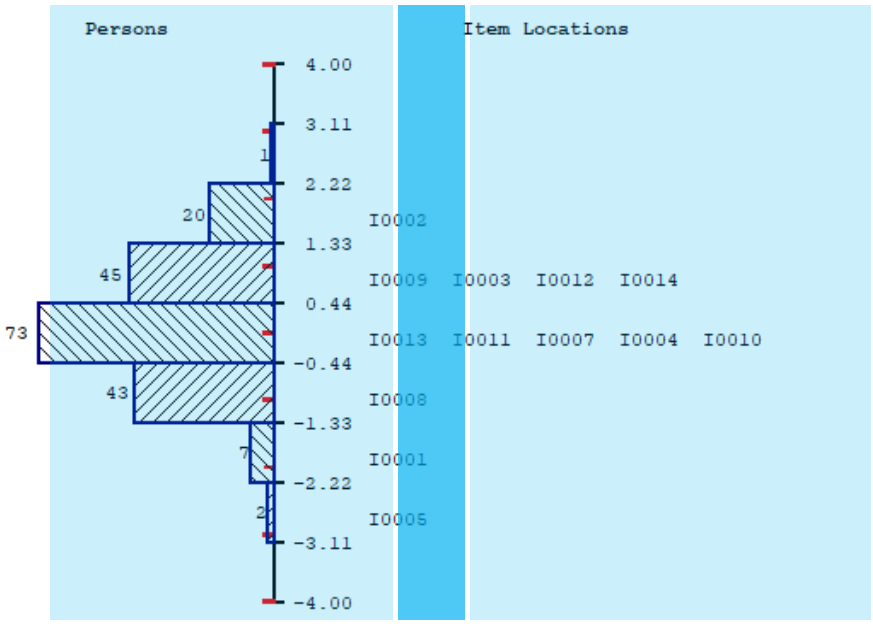
Survey analyses conducted by psychometric professional services

The Educational Practices Inventory (EPI-100)

The following report is a review of the seven questionnaires that form the EPI-100. All items began on a Likert-type scale but almost all items had to be restructured because of very strong support in most of the questionnaires. Each review includes an item map and a threshold map. The item map is an effective way of visualizing the distribution of items and persons on a common scale. The item map below has been divided into three sections for explication. The central blue section is the interval-level scale on which items and persons are measured. This means that the attitudinal strength of items (rightmost section) is measured on the same scale as the attitudinal position of persons (leftmost section). The interval-level scale is measured in "logits". A one logit difference anywhere along the scale increases the odds of observing the event by a factor of 2.718.

1. The Caregiving Expectations Questionnaire

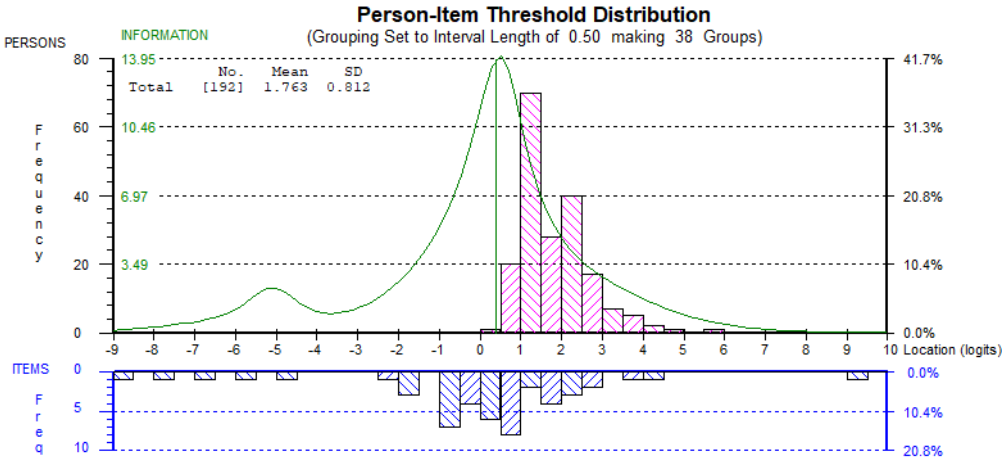
As can be seen in leftmost section of the item map most persons were located between -0.44 logits and 0.44 logits (i.e., 0 logits). And as can be seen in the rightmost section, most items were centred around 0 logits, with one particularly low attitudinal item (Item I0005, which simply refers to Item 5). This item is considered to be a "low attitudinal item" because even individuals who were low on the interval-level scale scored highly on this item.



Item I0002 was the highest attitudinal item and it stated, "It is concerning when teachers become over-involved in student problems". Therefore, overall persons were unlikely to agree with this item,

endorsing teacher over-involvement with students[1]. Item I0005 was the lowest attitudinal item and it stated, “Teachers should make students feel safe and secure”. Therefore, overall persons were likely to agree with this item, endorsing high levels of teacher caregiving.

Other items included I0013. This item was reverse-coded and it stated, “It is not a teacher's job to understand every student and their needs.” Item 7 was also reverse-coded and it stated, “Some teachers are cold and abrupt; it's reality and students should get used to it.” Finally, Item I0001 stated, “Good teaching happens when teachers see students as individuals”. Item I0006 was removed because it did not contribute to the measurement of the latent trait. In the next six analyses a selection of items will be provided so that the reader can understand the attitudinal tone of the questionnaires.



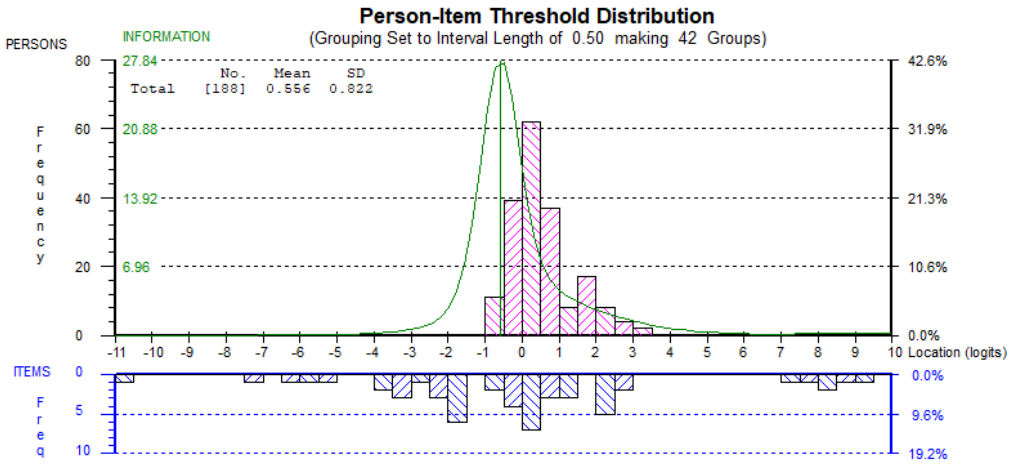
It is important to note that after several Rasch analyses were performed the structure of The Caregiving Expectations Questionnaire needed to be changed substantially. This is because most persons scored very highly on this particular attitudinal scale, expressing a strong belief in teacher caregiving. Many of the persons answered “agree” or “strongly agree” to items. Therefore, the questionnaire was transformed from a 5-point Likert-type scale into a combination of 2-point and 3-point Likert-type items. This means that the apparently even distribution of items and persons in the item map above should be interpreted with care because most items *really* asked persons whether they “agreed” or “strongly agreed” with the statements. Even though categories 1-3 were collapsed into category 1, very few persons selected categories 1-3 in the questionnaire. The strength of person attitudes to the original structure can be seen in the person-item threshold distribution above. In summary, the results of this questionnaire reveal a very strong endorsement by persons to the questionnaire of role of teachers as caregivers.

2. The Whole Student Development Questionnaire

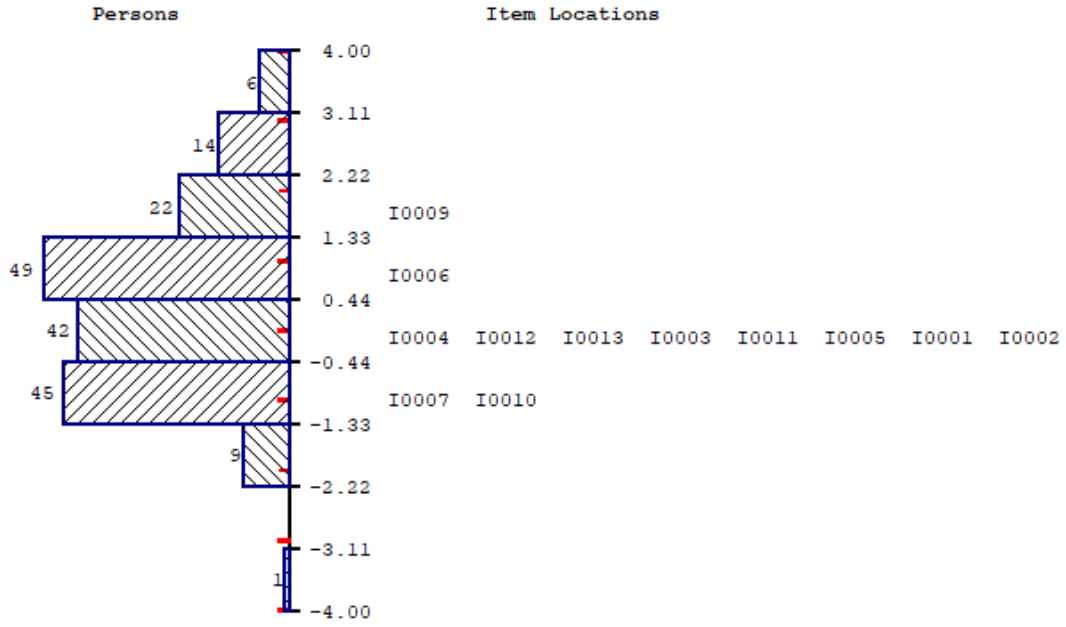
The Whole Student Development Questionnaire performed in much the same way as the Caregiving Expectations Questionnaire. Most persons “agreed” or “strongly agreed” to most statements, so the questionnaire was poorly targeted (see original person-item threshold distribution below). The

1 It is interesting to note the high endorsement of teacher caregiving in this questionnaire. This is especially true considering most teachers have insecure attachment styles. This indicates that there is a disconnection between leadership expectations of teachers in EREA schools and actual teacher caregiving styles.

scoring structure of all items had to be altered substantially. Items that did not fit the model were removed.



As can be seen in the item map most persons were located between 0.44 logits and 1.33 logits (i.e., 0.89 logits), and most items were located lower at between -0.44 logits and 0.44 logits (i.e., 0 logits). This is significant because after the item rescore most statements strongly endorsed moral development.



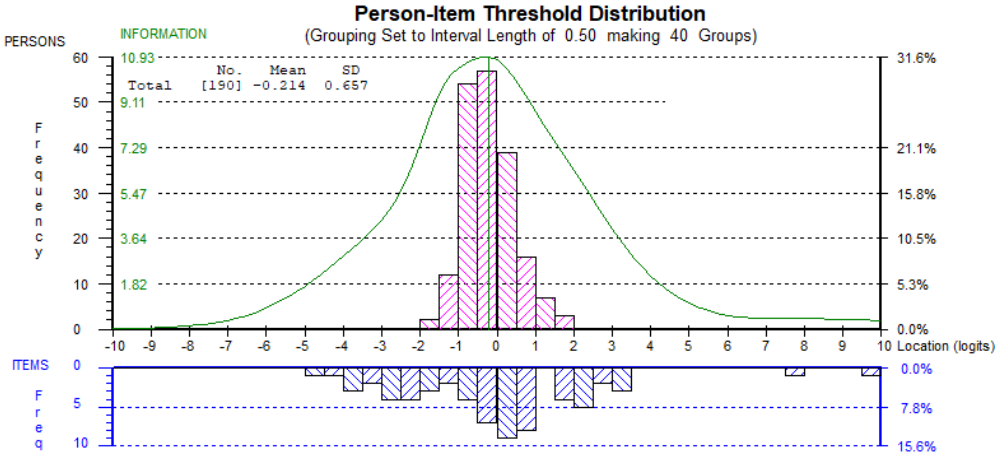
Item I0009 was the highest attitudinal item. This item was reverse-coded and stated, “The classroom is not a place for warm and fuzzy self-discovery”. This means that persons were least likely to agree or strongly agree with the view that classrooms are warm and fuzzy places of self-discovery. Item I0006 was also a high attitudinal item and it stated, “Schools need to teach students the importance of the other”. Alternatively, Item I0007 was the lowest attitudinal item and it stated, “Teachers should encourage students to think critically about who they really are”. Item I0010 was also attitudinally low and it stated, “Building resilience is just as important as building knowledge”. Overall persons were more likely to strongly endorse independent and “hard-nosed” approaches to whole student

development (i.e., knowing the self and building resilience) compared to more interdependent and holistic approaches (i.e., warm and fuzzy self-discovery and knowing the other).

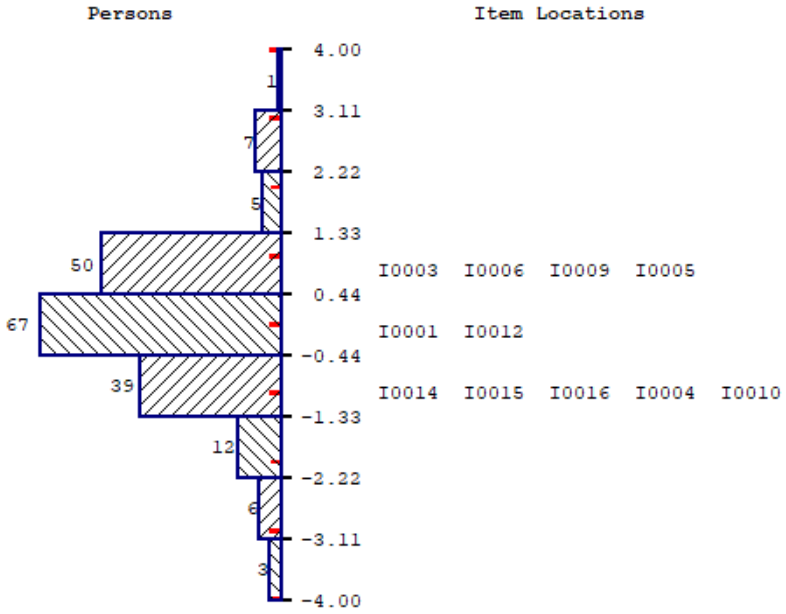
Additionally, mid-level attitude items included item I0004 which stated, “Schools should teach students ethics”, and Item I0003 which stated, “Good teachers understand the importance of the moral development of students”.

3. The Technology in Education Questionnaire

The Technology in Education Questionnaire accurately targeted person attitudes (see original person-item threshold distribution below). The results of the questionnaire revealed overall endorsement of how technology is used in schools and relatively little concern about any negative effects of technology on children. However, there was widespread cynicism about the educational impact of technology. Five items had to be rescored but only minimally. Five items were removed because they did not fit the model.



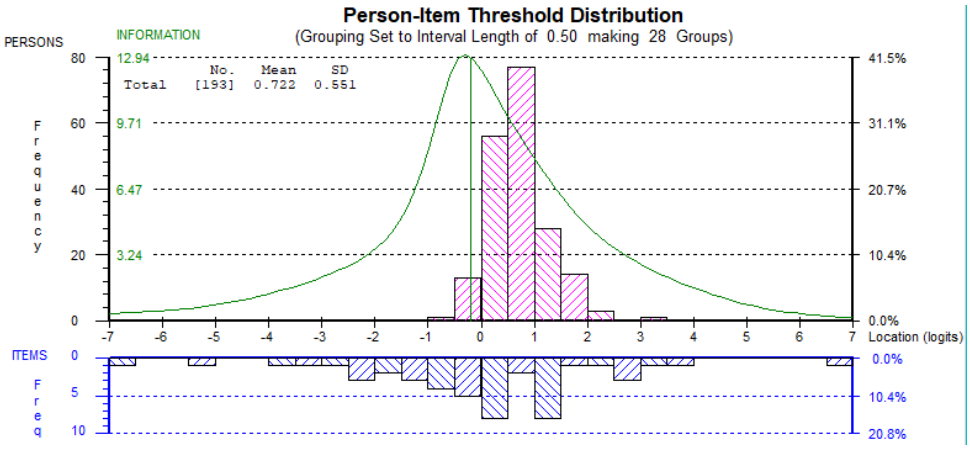
As can be seen in the item map most persons were located between -0.44 logits and 0.44 logits (i.e., 0 logits), and most items were located lower at between -1.33 logits and -0.44 logits (i.e., -0.89 logits). There was a clear distinction between high attitudinal items that focused on the educational outcomes of technology and low attitudinal items that focused on teacher use of technology and the potential negative effects of technology on children.



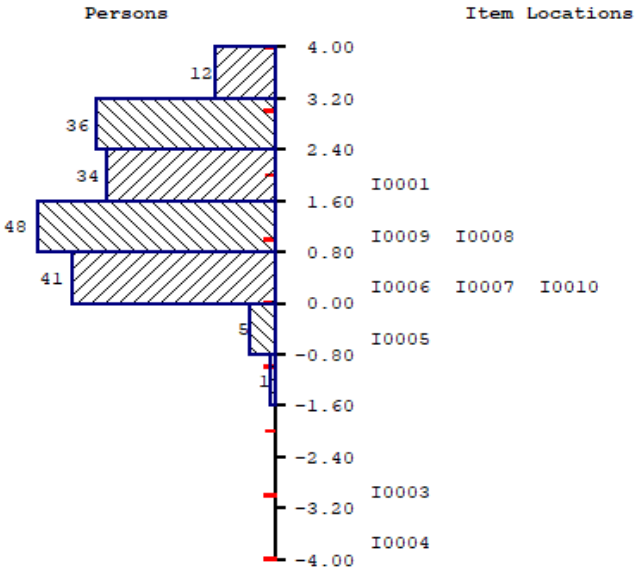
Item I0003 was the highest attitudinal item. This item stated, “Technology has improved the learning process”. Item I0006 was a high attitudinal item and it was reverse-coded, “Technology discourages students from thinking critically.” Therefore, persons were least likely to endorse these items indicating a relative cynicism about the impact of technology on learning and creativity. Alternatively, Item I0014 was the lowest attitudinal item. This item was reverse-coded and stated, “The complexity of most technologies confounds the teaching and learning process”. The next lowest attitudinal item was Item I0015. It was also reverse-coded and stated, “Not enough is known about how children and adolescents learn when using technology”. Additionally, Item I0016 was another low attitudinal item. It was also reverse-coded and stated, “The true opportunities and threats of technology in schools continue to remain unknown”. Therefore, persons were most likely to support these statements indicating a relative lack of concern for the complexity of technology in schools or any negative effects of technology on children. Therefore, the results of this questionnaire indicate most concern for the educational effectiveness of technology.

4. The Classroom Management Questionnaire

The Classroom Management Questionnaire inaccurately targeted persons (see original person-item threshold distribution below). This should not come as a surprise because overall persons strongly endorsed democratic, person-centered classroom management practices that encourage students to exercise internal control and personal responsibility. Nevertheless, this questionnaire measured attitudes with low precision. Three items were removed because they did not measure the latent trait. The remaining nine items were all rescored.



As shown in the item may most persons were located between -0.80 logits and 1.60 logits (i.e., 1.20 logits), and most items were located between -0 logits and -0.80 logits (i.e., 0.40 logits). There was pronounced leftward skew in the distribution of persons because most persons endorsed most items.

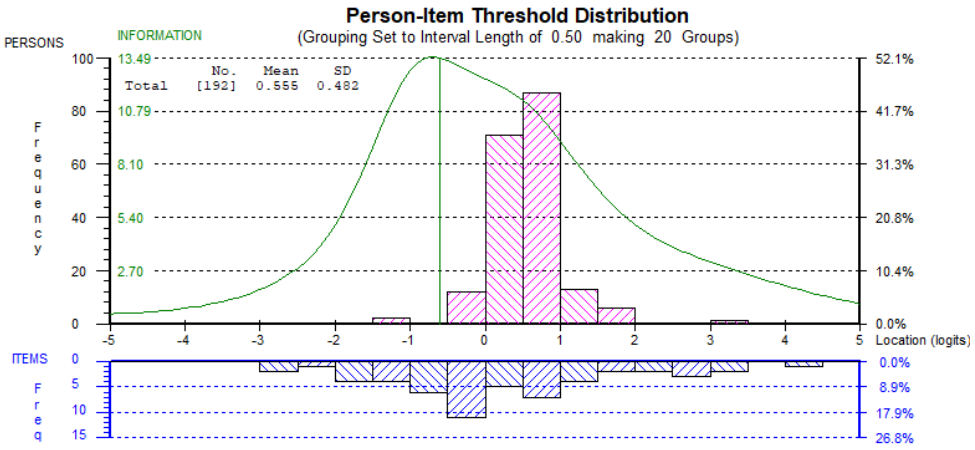


Item I0001 was the highest attitudinal item. This item was reverse coded and it stated, “Teachers should have control of all students all the time”. Item I0010 was also a high attitudinal item. It stated, “Verbal aggression from teachers does not psychologically harm students”. Therefore, persons were particularly unlikely to endorse these statements (i.e., these items were “difficult” to endorse), indicating an aversion to authoritarian classroom management practices. On the other hand, item I0004 was the lowest attitudinal item. It stated, “Genuine student–teacher relationships are fundamental to good classroom management”. Similarly, item I0005 was also a low attitudinal item that stated, “Classroom management should be based on democratic practices that are based on regular student–teacher discussions, mutual understanding, and respect”. These items were very “easy” for respondents to endorse; particularly item I0004 which was located at -4.00 logits is on interval scale.

5. The Differentiation Questionnaire

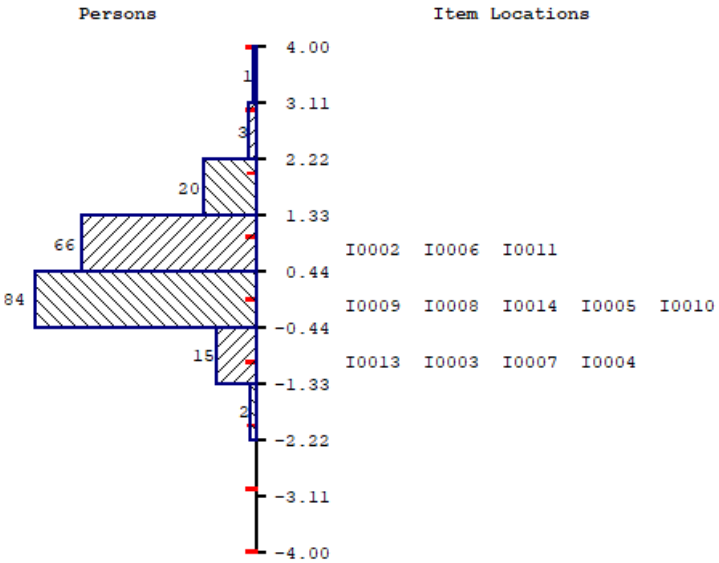
The Differentiation Questionnaire also inaccurately targeted persons. This is because differentiation was strongly supported by the majority of persons (see original person-item threshold distribution

below). The questionnaire measured attitudes with low precision. A total of three items were removed because they did not measure the latent trait. Finally, all of the remaining items had to be rescored.



Most persons were located between -0.44 logits and 0.44 logits (i.e., 0 logits), and most items were located slightly lower at just below 0 logits. It is important to note here that this apparently precise targeting of persons and items is deceiving because all of the items in the questionnaire had to be rescored because of the strong support for differentiated teaching practices.

Item I0002 was the highest attitudinal item. This item was reverse-coded and stated, “Teachers do not have the time to differentiate their practice”. Item I0006 was also a high attitudinal item. It was also reverse-coded and stated, “The demanding nature of differentiation has a detrimental effect on teacher morale”. Finally, item I0011 was also a high attitudinal item. It was also reverse coded and stated, “Differentiation cannot happen until a common understanding of the concept is established”. On the other hand, Item I0013 was the lowest attitudinal item. This item stated, “Teachers need ongoing professional development to know how to successfully differentiate their teaching practice”. Finally, item I0003 was also a low attitudinal item which stated, “Differentiation is difficult to implement, but schools must use it to effectively cater for different learning needs”.

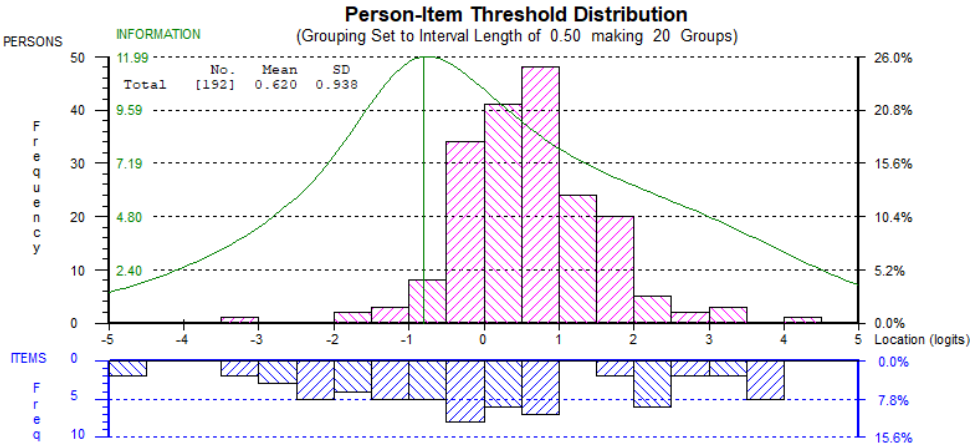


The results of this questionnaire are particularly interesting because they reveal a kind of internal struggle occurring in EREA leadership when it comes to differentiation. There was a reluctance to

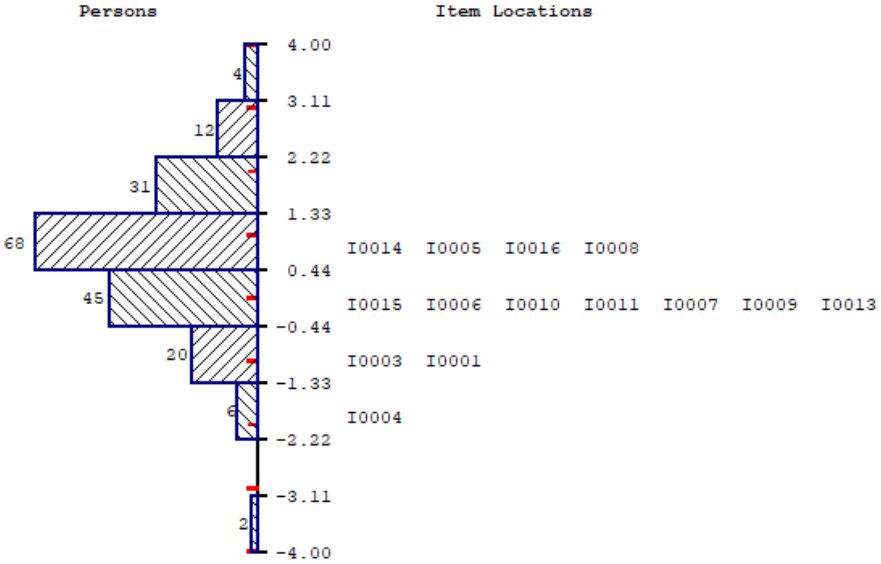
accept that teachers have the time to differentiate their practice and there seemed to be some consternation about what differentiation actually *is* and its impact on teacher morale. However, on the other hand, there was strong endorsement for continued professional development in differentiation practices for teachers and the educational importance of differentiation for students.

6. The Spirituality Questionnaire

The Spirituality Questionnaire was moderately well targeted (see original person-item threshold distribution below). Two items were removed because they did not measure the latent trait, however relatively few changes had to be made to the scoring structure of the remaining items.



As shown in the item map most persons were located between 0.44 logits and 1.33 logits (i.e., 0.89 logits), and most items were located between -0.44 logits and 0.44 logits (i.e., 0 logits). There was some minor leftward skew in the distribution of persons because persons endorsed most items.

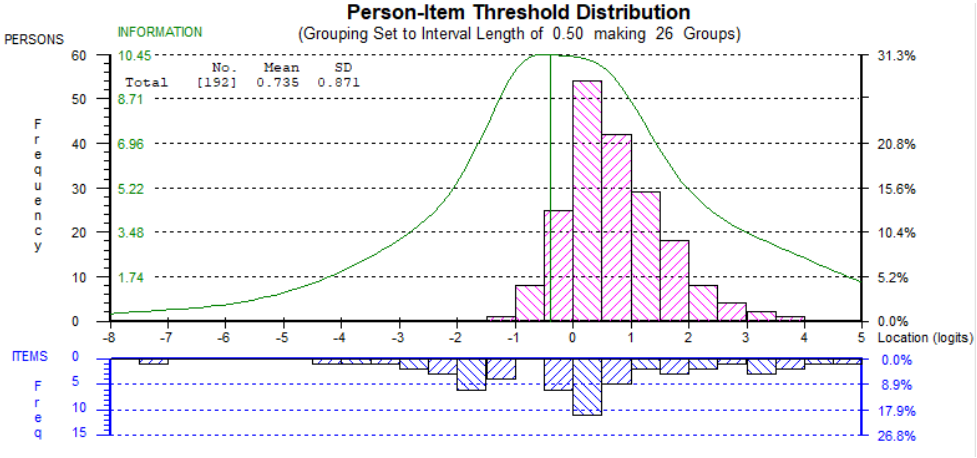


Item I0014 was the highest attitudinal item. It stated, “Unfortunately, most schools have become increasingly disconnected from spirituality”. Item I0016 was also a high attitudinal item that stated, “Schools should move away from hard-nosed professionalism and towards teacher self-knowledge and spirituality”. Finally, Item I0005 was an equally high attitudinal item and it stated, “Adolescents who do not explore their spirituality risk losing their way”. Therefore, persons appeared to be conservative in their responses to this questionnaire, indicating in their responses that schools have

not become disconnected from spirituality but also that spirituality is not critical to a young person's path. It is possible that there was some level of socially desirable responding occurring here. On the other hand, the lowest attitudinal item was item I0004. This item stated, "The best teachers critically examine their own spirituality". There appear to be similarities in person responses to this questionnaire and The Caregiving Expectations Questionnaire. Specifically, there was further indication here that EREA leaders held high expectations of their teachers. Finally, Item I0003 was also a low attitudinal item and stated, "The truth is that even the most scientific learning is a spiritual pursuit". This is more evidence that socially desirable responding tending towards secularism occurred in this questionnaire, with persons feeling more comfortable endorsing Item I0003 than the more controversial high attitudinal items described earlier.

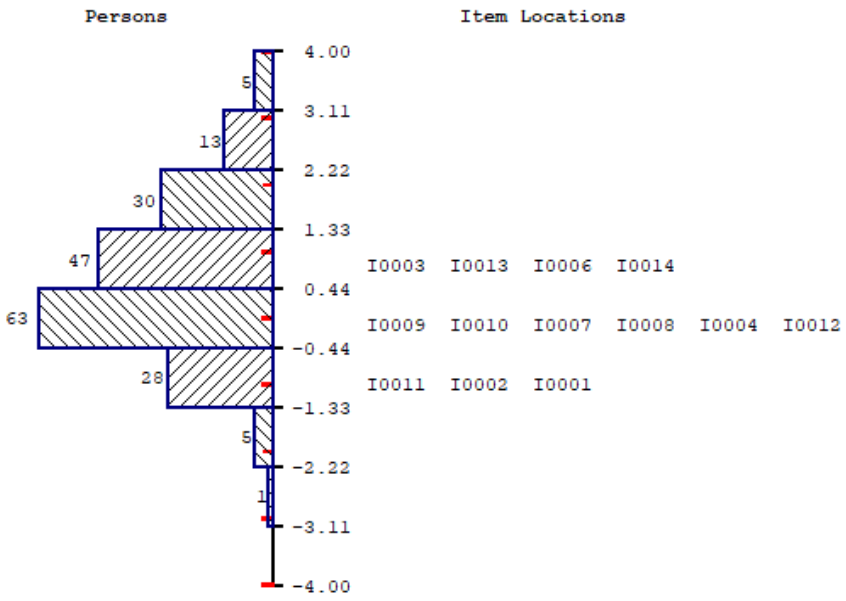
7. The Future Pathways Questionnaire

The Future Pathways Questionnaire was also relatively well targeted (see original person-item threshold distribution below). All items except for one had to be rescored but this was most often because the option for "neutral" was not selected by persons. Only one item was removed because it did not measure the latent trait.



As shown in the item map most persons were located between -0.44 logits and 0.44 logits (i.e., 0 logits), and most items were located at the same point on the portable-level scale. There was a very minor leftward skew in the distribution of persons.

Item I0003 was the highest attitudinal item. The item stated, "Schools do not provide enough opportunities for students to pursue their personal interests". Item I0013 was also a high attitudinal item and it stated, "Teachers need to be more aware of what the future of careers and work holds". Finally, Item I0006 was also a high attitudinal item and it stated, "The curriculum is implemented in a way that is disconnected from the real-world". Therefore, persons were reluctant to endorse these statements which were generally quite critical of teachers and curricular. Once again, it appears that there may have been some socially desirable responding occurring here. Item I0011 was the lowest attitudinal item. It stated, "The curriculum and pedagogical practices must change as the nature of work changes." Item I0002 was also a low attitudinal item that stated, "Schools should expose students to more real-world, community-based programs." These two items were more future-directed and less controversial in nature. It is therefore not surprising that persons appeared to be more likely to strongly endorse these items.


Persons
Item Locations
5
13
30
47
63
28
5
1
4.00
3.11
2.22
1.33
0.44
-0.44
-1.33
-2.22
-3.11
-4.00
I0003 I0013 I0006 I0014
I0009 I0010 I0007 I0008 I0004 I0012
I0011 I0002 I0001

EDMUND RICE EDUCATION
AUSTRALIA

EDMUND RICE EDUCATION
AUSTRALIA

Edmund Rice Education Australia offers a liberating education, based on a gospel spirituality, within an inclusive community committed to justice and solidarity

For further information please contact:
Edmund Rice Education Australia
9 The Vaucluse (PO Box 91) Richmond VIC 3121 Australia
t +61 3 9426 3200 **e** info@erea.edu.au **erea.edu.au**