The Separated Accelerated: a study of the perspectives of gifted primary students attending withdrawal acceleration options in schools.

Submitted by

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Declaration of Authenticity

This thesis has been composed solely by me and has not been submitted, in whole or in part, in any previous application for article publication or degree. Except where it is stated otherwise, by reference or acknowledgment the work presented is entirely my own. No other person's work has been used without due acknowledgment in the main text of the thesis.

I acknowledge that I have read and understood the Australian Catholic University's rules, requirements, procedures, and policy relating to my higher degree research award and to my thesis. I certify that I have complied with the rules, requirements, procedures, and policy of the University (as they may be from time to time).

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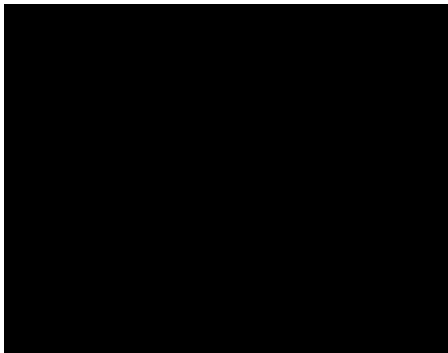
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Abstract

This study investigated perspectives on Withdrawal Acceleration Options (WAOs), a form of teaching intervention provided by some primary schools to cater to children displaying exceptional academic abilities. The notion of schools supporting intellectually advantaged students brings a unique range of strategic considerations for teachers, parents, researchers, and the gifted students central to this investigation.

Case study research and Grounded Theory explaining these considerations is not keeping pace with strategies such as WAOs, leading to a gap in the field of giftedness research. Acknowledging the dominance of US literature in this field, this study sought to generate knowledge of perspectives on this teaching strategy from an Australian context for the first time, with international implications. The importance of this study is seen to add literature that primary schools can access when considering or reinforcing WAOs for gifted students.

To raise awareness of WAO experiences, this thesis examined the perspectives of gifted children selected to this teaching option via the research question, *what are the perspectives of gifted primary students attending acceleration options in schools?* The aim of this research project was to explore observations, reactions, and predictions by gifted primary children of withdrawal accelerations and generated theories and recommendations to inform educational policies, practices, and further research in the field of giftedness.

Twenty-one primary school children attending WAOs in six schools provided almost 700 responses to an electronic questionnaire and semi-structured interviews between July 2019 and April 2020. Schools providing the participants in this study augment the efforts of their class teachers by funding personnel to withdraw gifted primary children from classes, who then deliver tasks targeting the advanced range and speed of those students.

Analysis of the data revealed indications of participants' confusion, their observation of others' ambivalence and wanting involvement in the planning, resourcing, and provision of their withdrawal acceleration options. These findings had not previously been interconnected in the literature when investigating accelerations for gifted students and validate the importance of this study. When seeking to contextualise the gifted students' perspectives, an examination of contemporary theoretical frameworks revealed one model, the Education Situation/Quality model (Domenech-Betoret, Gomez-Artiga and Abellan-Rosello, 2019) informed the design of a unique, unifying conceptual model proposed by this thesis, which will be introduced as the Doorway model.

This research project advocates the Doorway model as a significant contribution to knowledge of gifted primary school experiences in withdrawal accelerations. The Doorway model depicts a 6-stage system mapping when influences on the perspectives of gifted children in WAOs occurred. Each stage impacts a subsequent stage and respondents indicated the perspectives were influenced before and after WAO lessons, a significant difference with other theoretical frameworks, further validating the importance of this investigation and the findings.

Analysis of the data and subsequent discussion resulted in a set of recommendations for primary schools developing WAOs. Wider policy and research implications are discussed addressing professional policies and research to widen this field further. Implications for the practices of class teachers selecting gifted students for accelerations and the WAO teachers providing these programs are discussed. The thesis advocates that an awareness of the perspectives of gifted children on Withdrawal Acceleration Options, mapped by the stages of the Doorway model makes is plausible for schools to reinforce professional policy, practices, and knowledge of interventions for the gifted to influence improved academic, affective, and creative outcomes.

Dedication

This thesis is proudly dedicated to the significant intellectual and personal support from a group of people that served as an inspiration. To these people I owe a tremendous debt and hope the outcomes reflect the investment they have placed in time, patience, and respect.

Anita, Holly and Harry

Carole-Ann and Rob

Phillip McConchie

Professor Amanda Telford

Associate Professor Mellita Jones

Emeritus Professor Tania Aspland

Professor Jim Watters

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List of Tables

Consistent with APA 7th edition[1] formatting styles, all types of visual displays other than tables are considered 'Figures'. Common types of figures include line graphs, bar graphs, charts (e.g., flowcharts, pie charts), drawings, maps, plots (e.g., scatterplots), infographics and other illustrations. Note that tables and figures have the same overall setup.

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[1] https://apastyle.apa.org/style-grammar-guidelines/tables-figures/

Key words

Giftedness; gifted; exceptionality; precocity; primary school students; child perceptions; child perspectives; child motivations; mapping learning; instructional models; student agency and voice; school experiences; academic acceleration; teacher interventions; student withdrawal

Overview

I have organised this thesis into six chapters. The first chapter, Introduction, contextualises the field of gifted education and presents the context of this research. To familiarise the reader with the field of giftedness in some primary schools, Chapter 1 will begin by introducing a hypothetical scenario illustrating the experiences of Jesse, a gifted student chosen by a class teacher to attend a type of lesson specifically provided for gifted and other highly capable students. I will introduce a summary of the giftedness field through the lenses of policy, research, and pedagogical knowledge from international and Australian contexts that explain the phenomenon central to this investigation, a Withdrawal Acceleration Option (WAO). The concluding sections of this chapter will be dedicated to outlining the organisation of this thesis. The statement of the research problem, explanation of the significance of the study and the methodological underpinnings of the research will be presented.

The Literature Review forms Chapter 2 of this thesis, critiquing international literature on giftedness, and in particular the experiences that influence the perspectives of primary gifted students. The chapter presents research on the identification of giftedness and how observations and professional knowledge of educators leads to some schools developing additional acceleration options for the gifted, such as WAOs. The objective of the Literature Review is to uncover gaps that do not resolve the research question.

Chapter 3 will explain the investigative approach to generate knowledge in that lacuna and validate the importance of this research project. Chapter 3 introduces the qualitative methodology in the study and establishes the Grounded Theory (Charmaz, 2000) approach used to develop the research strategy and the data analysis techniques. The methods used to collect data formed a multi-phase strategy. An electronic questionnaire and scenario response task generated an initial level of responses which then informed semi-scripted questions for the interviews. Chapter 3 will also provide information on the participants, details regarding their attendance in their school's acceleration program and criteria by which they were invited to this research project.

The purpose for Chapter 4 is data analysis. The data collected in this investigation included Likert-scale responses, written responses, and spoken replies that were recorded and then professionally transcribed for analysis. Uniquely for a qualitative investigation on giftedness, the questionnaire phase required participants to comment on a hypothetical scenario that will be presented in Chapter 1 to generate perspectives from the respondents on their experiences in WAOs. The analysis of the data generated three interpretations that connected the responses and represent a significant discovery in the field of primary school giftedness. Each interpretation was critiqued against the literature to establish the validity of the findings and reinforce the significance of this study.

Chapters 5 and 6 presents the implications for policy, research, and educator knowledge based on the data and suggests recommendations to address those implications. One of these recommendations will be the contribution of a new theoretical instructional model, based on an established instruction/motivation framework as an important addition to knowledge of giftedness. A new theoretical model is then introduced to accommodate the findings of this study and ultimately this thesis will discuss directions for this field and other issues that support further research.

Objective for the Research Project

The objective of this research project is to raise awareness of researchers, educators, and parents of the perspectives of gifted primary school students attending a content-based acceleration pathway, a *Withdrawal Acceleration Option* (WAO) as a way of helping to determine whether this type of support program is being used effectively to further their use in primary schools as a supportive option for gifted children. Other international educational systems term this teaching intervention as a 'pull-out' program (Colangelo, Assouline & Gross, 2004; Kitsantas, Bland & Chirinos, 2017; Kulik & Kulik, 1992), which collectively describes situations when children from any learning level of ability and any school level are withdrawn for targeted teaching. This research project will establish that WAOs are uniquely characterised by catering only to gifted and/or academically exceptional primary school students temporarily removed from the class cohort by a dedicated WAO teacher. Described in the hypothetical scenario below, after their withdrawal to another classroom gifted students are provided learning experiences requiring advanced speed and complexity significantly beyond the capability of similarly aged peers. This separation of gifted students from their classes provides the key connection underpinning the title of this investigation; *The Separated Accelerated.*

To introduce and contextualise the topic of this inquiry, this hypothetical situation introduces 'Jesse', a gifted primary school child attending primary school in Melbourne, Australia. Jesse attends the Withdrawal Acceleration Option at a primary school. The observations underpinning the scene are an amalgam of case studies reviewed in the literature and illustrate my professional teaching experiences as a WAO teacher. This scenario was also used to elicit responses in the investigation, to validate the scene's authenticity and similarity as students compared the scene to their WAO experiences. The name of the protagonist, Jesse, was chosen to reflect a non-gender specific identity to curate interest and commonality with the participants.

Scenario

> *Jesse began primary school at the age of 5 in Year 2, instead of starting school*
> *at Prep/Foundation level. Jesse was diagnosed by a psychologist at the level of*

'Highly Gifted' range of intelligence upon enrolment to primary school, with an Intelligence Quotient (IQ) score of 146 using testing methods professionally applied to filter for intellectual precocity. Now in Year 3, Jesse's aptitude for mathematical problem solving has advanced substantially and compares to children 24 months, or more than two grade levels older.

Jesse is not alone in this situation. Other children in Foundation (or 'Prep') and Years 1 and 2 also demonstrate advanced capabilities and always require tasks several grades beyond the ability of the rest of the class in Literacy, Mathematics, and sometimes other subjects. In those subjects, these gifted students are observed always finishing tasks correctly and very rapidly. This means each day this advanced group consistently spend long periods of time waiting for the teacher's attention and any follow-up tasks… if there are any tasks prepared by the teachers to complete. Consequently, Jesse's Year 3 class teacher finds it difficult to manage Jesse's academic needs as well as the planning and teaching for the range of other student abilities in the grade.

Noting Jesse's cognitive development and academic needs, a new Principal appoints a learning specialist to assist these students and instigates a novel learning program for the primary school. Knowing of this option at the school and how it might assist Jesse, the teacher selects Jesse to attend lessons with the specialist educator. This person visits the room each week to withdraw Jesse from the grade's Maths and English classes with other gifted and highly capable students across the school for advanced tasks at a different classroom, beyond the capability of almost all of Jesse's peers. Sometimes this group comprises only advanced Year 3 students like Jesse. At other times, Jesse attends with students from older and sometimes younger levels. This 'withdrawal' teacher provides the group with complex mathematical or reading and writing tasks that are often more complex than the tasks Year 6 students complete.

This means during the school year Jesse's group competes in national mathematics competitions, problem solving and logic contests and submits compositions to writing competitions each semester, as a condition of their participation in this acceleration program. Other non-gifted children, even those at older grade levels are not invited to participate in these lessons, which seem to be limited exclusively to this group, but this never gets discussed by anyone. Jesse's classmates, teacher and parents almost never show interest in

Jesse leaving the class for advanced lessons, and often forget to ask Jesse about them.

Curiously, Jesse has never been asked to share input, opinions, or other perspectives of being selected for lessons that might assist the school to deliver improved outcomes for Jesse and other gifted primary students. Should Jesse's educators and parents choose to investigate withdrawal acceleration options, they might note the limited quantity both of research documenting the perspectives of gifted primary children in these programs, and how schools design and support these interventions.

Context

It is inaccurate to consider every person with advanced cognitive, creative, or affective capabilities as presenting *gifted* behaviours. The label of 'giftedness' is applied socially as an observed psychology of extraordinary and ongoing standard of excellence (Gagné, 2021; Heyder, Bergold & Steinmayer, 2018; Stephens et al., 2018; Ziegler & Stoeger, 2017) which can be measured against medical criteria for memory, forms of intelligence, and behaviour.

Whilst some people can demonstrate excellence, significant capability, and advancement, few may be labelled *gifted* accurately. Gagné (2021) suggests student achievements at the top 5%-15% of any class cohort as can be considered gifted and maintained this position since the 1980s to the present era. Gagné's research has become a cornerstone for influencing international giftedness policy, professional teacher development and research and serves to emphasise the quality of teaching strategy culminating in catalysts that both attract and respond to gifted behaviours. In this chapter, literature will be presented to explain the interaction between gifted children and their teachers, and how this interplay can result in gifted children being selected for accelerated options that happen away from the classroom.

Provisions in state and federal Australian policies cater for the inclusion of children with special needs. Gifted children, despite displaying intellectual attributes that may be seen as advantages over neurotypical peers, require differentiated provisions based in policy to develop their talents in inclusive learning environments.

Policy, Rights, and School Inclusion

Australian state and federal government initiatives focus mainly on advocating for gifted students through curricular enrichment and differentiated teaching in mixed-ability classrooms (Gross & Sleap, 2001). These initiatives reflect an adherence to inclusion-themed policy positions of the Melbourne Ministerial Council of Education Employment Training and Youth Affairs (MCEETYA)

(2008) and Alice Springs/Mparntwe (Education Council, 2019) declarations on Australian educational goals which emphasised the needs for state education systems to guarantee equity and equality for all students. A comparison of these policies with similar US education reforms in the modern era reveals the growing body publication of gifted and talented literature indicating an acceptance and growing advocacy for giftedness interventions globally. This could be attributed to withdrawal acceleration research being a comparatively niche/new field of study when compared to recent literature on inclusivity and differentiation for the gifted published locally. VanTassal-Baska (1992) tied the commitment government bodies make to inclusive practices for the gifted to elevated societal understanding and acceptance that this student subgroup has additional learning and environmental needs at school, stating:

> Acceleration and grouping are the lightning rod issues that test the level of acceptance that gifted programs enjoy in a local school district. The greater the commitment to serving gifted students, the greater the acceptance of advancing and grouping them appropriately.(VanTassel-Baska, 1992, p. 68)

Upon reflection, this statement considered that the state and national information is dependent on schools desiring, not being directed, to update state authorities with details of their differentiated programs. Later, it will be proposed this situation limits a coordinated approach to developing pedagogy and theory in this field. Confirmation with US, UK, European, Asian, and Australian departmental information to be provided in the next chapter holds this to be true; governments rely on schools to provide inclusive, differentiated programs (it was noted, particularly for the gifted) without conspicuous government oversight. The motives behind the provision of information about gifted and talented programs signify schools' and state commitment to gifted policies and practices and possibly to elevate attention as a competitive advantage between schools or state bodies.

International investigations (Colangelo et al., 2004; Gross & Sleap, 2001) on interventions schools employ for the gifted revealed 18 strategies proven by empirical research to offer optimal learning outcomes. No subsequent audit of where these strategies have permeated Australian schools has been conducted to this date. This information would be of great interest to the field by providing data on the types of WAOs available nationally that could potentially assist school funding, providing coordinated approach to gifted and talented policy, research and practices and knowledge of gifted and talented formats that include WAOs.

On this point, no Australian state or federal policy has documented differences in the needs of primary and secondary gifted students, to initiate discussion and programs for these in schools. Information was located available on online government sources that listed early entry gifted

behaviours and learning options for pre-school students, indicating an unequal distribution of information to inform parents and educators. It will be discussed in an upcoming section in this chapter that the failure to acknowledge the developmental differences between these age/schooling levels evidenced in theoretical learning models provides an opportunity for future research of the gifted in schools.

History, Policy, and Rights. Provisions for Australian children to an inclusive education can be dated to original Victorian state legislation (Victorian Government, 1872), one of the first jurisdictions to enshrine protections for the education of children globally. This superceded the Common Schools' Act (1862), which restricted entry to schools based on religious, intelligence and ethnic criteria to exclude indigenous children, the handicapped and non-Anglo/Celtic children (Deery & Kimber, 2022). National Museum Australia archives (2022) notes the influence of the 1872 legislation on commonwealth actions to establish a uniquely centralised model for school education when compared with nations sharing similar societal and industrial growth of those times, such as the UK, USA, and Canada. The 1872 Act enabled free, secular education to be accessed by all children, compulsory between the ages of 6 and 15 years, as an alternative to faith-based schools which dominated the number of schools in the colony to that date. Much of the original tenets of inclusive education were established prior to the 20th century, based on students meeting academic and age-based criteria, though access to indigenous children, the handicapped and non-Anglo/Celtic children largely persisted well into the second half of the 1900s.

Victoria's state-based approach was then adopted by the education policies of New South Wales, Western Australia and other states and territories. Federal oversight of education began with capital grants to science laboratories in 1964 and libraries in 1968 via the *States Grants (Primary and Secondary Education Assistance) Acts (Cth)* and largely remained as a conduit for the states to share resources until the establishment of the Australian Curriculum, Assessment and Reporting Authority (ACARA) in 2008 (Shorten, 1996).

Shorten's (1996) research of historical records found that whilst the different state Education Acts directed the attention on inclusive public schooling, the manner in which schools allocated resources and funding to secure the widest ethnic, religious and ability range was not regulated. Public or 'state' schools in the local vernacular (as this is how these bodies were funded) could allocate their human and material resources within minimal regulatory oversight. Primary schools could determine standards by which students matriculated through each grade level, which were not bound by research-supported curriculum standards until the 1970s. As this report will now explain, this situation created concerns for the inclusion of gifted children in primary schools that partially remain in the common era.

Karmel's Senate report to the Commonwealth Government (Karmel et al., 1973) was the first wide-ranging analysis of schools that found Australian schools were not distributing funds to support students equitably and failing to provide teachers of vulnerable students with adequate training to cater to intellectual, mobility and Non-English Speaking Background needs. Essentially, the Australian government's lack of oversight of the states and their schools, to whom they had provided significant funding, revealed resources were not producing equitable results for the national student population.

Considering the adoption of inclusive education legislation in Australia a century earlier, this is an astounding finding which will be revisited in the Literature Review and Implications chapters of this thesis. This thesis suggests the rights for children with disabilities to enrolment in mainstream schools, which also accounts for the gifted, has emerged as an educational priority only within the most recent era, despite original declarations for the provision of education to Australian children being made almost 150 years earlier.

Policy Developments. Literature (Anderson & Boyle, 2015; Dixon, 2018) cites the importance of three documents advocating for the rights of children in Australian schools during the modern era. Each specifies protections for students requiring different teaching adjustments by schools and guarantees, with some exceptions, inclusion to public schooling.

The Commonwealth Disability Discrimination Act (Australian Government, 1992) directs schools to accept a child's enrolment on their right to a school education, placing the onus on schools to make teaching and administrative (i.e., access to facilities, emergency exits) adjustments for disabled students to receive schooling equitable to non-disabled students. The Commonwealth Disability Standards for Education (Australian Government, 2005) extended the obligations of schools made under the DDA regarding the standards for the education of the disabled and the training of their educators. The DSE therefore made schools responsible for generating achievable learning programs differentiating for the needs of disabled children as well as training their teachers to cater for the intellectual, physical, and other needs of disabled students when at school.

The Melbourne Declaration on Educational Goals for Young Australians (Ministerial Council of Education, Employment, Training and Youth Affairs (MCEETYA), 2008) articulated a position statement for future development of Australian schools by directing schools to offer equitable opportunity for all students to pursue their potentiality as "successful learners, confident and creative individuals, and active and informed citizens" (p. 19). It was noted (Gross & Sleap, 2001) that when examining the oversight of inclusion-themed government statements the term *position statement* is

a philosophical stance, not a statement of action defined as *policy*. By offering the Melbourne Declaration as a position statement, the Commonwealth provided a flexibility for the states to use this declaration as a broad recommendation rather than a policy with mandated guidelines. Through the promotion of the Melbourne Declaration and its 2019 amendment, titled *Mparntwe* (Education Council, 2019), the Australian government continues to reinforce school accountability for reducing disadvantage, but does not elaborate on specific adjustments schools that must apply to the training of teachers, funding and timetable changes, nor the consistency with which they should be administered.

Identifying and Advocating for Giftedness

At the time of writing this thesis, no universal definition of *giftedness* binds research of this field. This research project employs Gagné's definition featured in the Differentiating Model of Giftedness and Talent (2021), that giftedness is potential (natural aptitude or ability) that is significantly beyond what might be expected for one's age, in any area of human ability including intellectual, creative, social and physical. Sometimes giftedness is tightly related to measuring recall, physical prowess, creativity, and logical processes in attempts to catalogue different types of intellect. Gardner (2011), Renzulli (1986) and Stanley and Brody (2001) suggested a range of domains in which intelligence can be observed, whilst Gagné (2021) stated gifts require catalysts to flourish, for instance, sophisticated teaching strategies and inspiring learning environments. Cultural, historic, and artistic contexts have their own conceptualisations of this term, and different psychometric tools identify levels of giftedness differently.

Teacher/Gifted Student Dynamic. When examining the socio-behavioural and other learning needs of gifted students, it is clear teachers play a vital role in the development of situations where giftedness is observed. Conceptually, the choice to consider accelerative teaching strategies is determined by the interplay (or 'dynamic') of two interdependent parties: the teacher and the gifted student. The Literature Review will appraise research on giftedness identification (Munro, 2005, 2013; Rogers, Wormald & Vialle, 2011; Vialle, Ashton, Carlson & Rankin, 2001), literature profiling the behaviours of the gifted (Betts & Neihart, 1988; Neihart, 2016) and pedagogy focused upon Gifted students' needs (Matheis, Kronborg, Schmitt, Preckel, 2017; Kronborg & Cornejo-Araya, 2018; 2017; Rogers, 2007).

This dynamic centres on the choice of whether accelerations are desired by both protagonists (teacher and/or student) and if so, which types of acceleration should be provided to gifted primary students. Namely, there is an interplay between the self-knowledge of the gifted student and how they perceive their own and their teacher's skills and knowledge, and the co-existing perspectives of the educator of their professional aptitude to recognise and cater to the learning needs of high-achieving students.

This was illustrated in the introductory scenario, when the teacher recognised Jesse and other students had superior knowledge in some areas but were then restricted to options that further challenged their capabilities consistently. From the scenario, it was stated:

> In those subjects, these gifted students are observed always finishing tasks correctly and very rapidly. This means each day this advanced group consistently spend long periods of time waiting for the teacher's attention and any follow-up tasks…Jesse's Year 3 class teacher finds it difficult to manage Jesse's academic needs as well as the planning and teaching for the range of other student abilities in the grade... Knowing of this option at the school and how it might assist Jesse, the teacher selects Jesse to attend lessons with the specialist educator.

The hypothetical teacher, in recognising this situation, was supported by the school to select Jesse and others to attend the WAO. This element to the scenario is supported by reports on WAO studies (Kitsantas et al., 2017; Kulik & Kulik, 1992), though information on similar Australian studies does not appear in the literature. Gifted students at these schools then receive a targeted intervention (i.e., WAO) to meet their academic or socio-behavioural needs with complex tasks in homogenous ability groups. The Literature Review will critique professional knowledge, practices, and educational policies integral to this field, and suggest gaps in the literature that will be met by the research question.

Opportunities for Gifted Students. In exchange for being identified as Gifted, research (Gross & Sleap, 2001; Walsh & Jolly, 2018; Watters & Diezmann, 2003) revealed that gifted individuals face the social and academic expectations they place on themselves, and by others. Parents, teachers, and peers react to the gifted with expectations they will perform exceptionally in school and into their professional years, continuing to strengthen their talents in fields in which they demonstrate dominance. In ideal learning situations discussed later in this thesis, students demonstrating gifted behaviours may receive special benefits such as fast-tracking subjects, curriculum modifications or grade-skipping. Gifted students may be placed in classes taught by specialised teachers, be offered scholarships and early placement to schools on-the-whole often not afforded to non-gifted peers.

Amongst the information shared by the US and Australian research (Colangelo et al., 2015; Gross & Sleap, 2001) are descriptions of strategies schools employ to broaden the learning and teaching opportunities for gifted and talented students and their teachers in schools. One of these options, *acceleration*, seeks to advance students identified by with high-functioning cognitive, creative, or affective behaviours through educational programs at a more advanced speed and with greater task

complexity than conventional students of the same age. Research on acceleration will be presented in the Literature Review.

Rationale for the Research Project

This investigation is significant for four reasons. These underpin the importance of raising parental, educator and researcher awareness of a teaching strategy employed by some schools attempting to meet optimal learning conditions for the gifted. This investigation is justified on the grounds (i) the findings will provide Australian-based research to the field, (ii) provide insights into the perspectives on WAOs to raise awareness of this strategy and encourage further investigation and use in primary schools, (iii) as the gifted and talented population in Australia grows, the significance of meeting the needs of this large subgroup may require schools to investigate established approaches to meeting gifted needs, and (iv) Australia is a founding signatory to several international agreements binding its support for equity and equality in schools, and social contexts through the development of options to assist vulnerable students.

       Provide Locally Sourced Data. First, this investigation adds to the literature from an Australian context, as giftedness research is heavily influenced by US and European publications. These present different research priorities that are preferred currently to studies of WAOs and feature school structures (legislations, curricula, pedagogy, school charters) that differ to the Australian system of schooling. The Literature Review will show there are limited examples of case study analysis of WAOs to assist the duplication of successful primary school versions.

       Update Professional Gifted and Talented Knowledge. Second, initial Australian studies of teacher knowledge of giftedness in 2012 (Victorian Government, 2012) reported between 1-5% of early years, primary and secondary teachers had undertaken giftedness identification training at university or via professional learning at schools. No corroborative data from similar teacher studies was located. This information supports my view that a significant teacher population, based on the Victorian statistics, possess a limited understanding of how giftedness is presented and how to cater to these students in the classroom. The review will examine established instruction/motivation models to identify which, if any, theory informs schools about gifted primary student experiences in withdrawal acceleration options, as this information would be crucial to schools endeavouring to offer or reinforce WAOs for primary gifted students.

A requirement of Australian teacher registration is for teachers to demonstrate pedagogical and policy awareness to meet the specific needs of students across the full range of abilities (Australian Institute for Teaching and School Leadership (AITSL), 2019). These professional requirements will be examined in the Literature Review; teacher surveys and government reports mentioned earlier

infers a majority of Australian teachers might not be aware of updated information they require to update their professional knowledge of modern giftedness pedagogies, further justifying the need for this research project.

The Growing Gifted and Talented Student Population. Australian articles (Kronborg & Cornejo-Araya, 2018; Victorian Government, 2012) suggested the number of gifted students attending pre-tertiary schools exceeded 85,000 in 2011. This figure was calculated citing Gagne's research which appears in numerous state documents on giftedness. Gagné suggested 5-15% of students in a school system can be identified as gifted and talented (Gagné, 1999, 2021; Kronborg & Cornejo-Araya, 2018), whilst others including Gross & Sleap (2001) and a US report (Marland, 1971) approximate this group at 3-5% of any national student population. Using national government records to track enrolment growth patterns in pre-tertiary schooling 2013 – 2022 (Australian Bureau of Statistics (ABS), 2018), this population has risen between 1.5% - 2.5% each year in that period. No updated data corroborates gifted and talented population size in Australia after 2012.

From this data it can be postulated that, should this growth be maintained by 2024, Victorian pre-tertiary populations growing at a rate of 2% using the Gagné criteria would exceed 114,000 pre-tertiary Victorian students by 2024. Nationally, this would amount to approximately 600,000 students meeting gifted identification criteria at that time. Considering this significant subgroup of the general student population, this investigation is a timely and urgent addition to Australian and international research that may stimulate further discussions and invest professional interest in withdrawal acceleration options.

Local and International Agreements. Important developments in chartering the rights for Australian children (Education Council, 2019; Ministerial Council of Education Employment Training and Youth Affairs (MCEETYA), 2008) and studies into school strategies evidencing improved student outcomes (Hattie, 2003, 2007, 2009, 2016; Pollock, 2015) signify additional importance for this investigation. Additionally, Australia is a foundation signatory to other international agreements[2] which testify to student rights to contribute to their learning pathways and to access individual learning and teaching options in the pursuit of educational equality and equity. This investigation seeks to raise awareness of an educational options developed by some schools to address social and academic equity agreements for gifted students and will document the perspectives on WAOs by students attending these programs. This study is significant as it is seeking to clarify; how WAOs are used in some primary schools, illuminate how gifted students are identified

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[2] United Nations Convention on the Rights of the Child (UNCRC, 1989) and

United Nations Declaration on Human Rights Education and Training (UNHRET, 2011)

for WAOs, how tasks are designed and sourced to cater to individual precocities, and the outcomes of WAOs from the perspectives of gifted students participating in this research project.

Motivation for the Research Project

My professional curiosity was to investigate a teaching method some schools use for gifted primary students, and what those children thought of this method. Over many years as a primary teacher, I developed WAOs in primary and secondary schools and was concerned at the limited availability of research and pedagogy to assist schools wanting to duplicate this program. Conversations with local and international gifted and talented colleagues provided reasons why their schools delivered withdrawal accelerations, but none could refer to case studies that prompted the decisions to provide this program to raise my knowledge of this field. This raised my concern that schools were developing WAOs without the support of data on how these programs are structured, how gifted children are selected or understanding the reactions of teachers and peers when withdrawing students for accelerations and later returning them to continue classwork.

The target of this research project is to improve the gifted student experience in withdrawal accelerations, and so listening to the voices of the gifted was the priority. I embarked on this thesis to assist my own understanding of WAOs from the perspectives of gifted children. The provision of the scenario in Chapter 1.2 incorporates that knowledge and was later supported by the majority of responses that indicated the scene was accurately depicted. Schools may, in fact, have several 'Jesse's' in their midst and are looking to develop options for these children to optimise their potentiality, and further teacher expertise in the field of gifted education. Directly connected to my observations of WAOs is the possibility that gifted children selected for withdrawal accelerations might hold insights, motivations, and ambitions for their involvement in WAOs that their teachers could investigate to enhance these withdrawal acceleration options for gifted primary students.

Summarising the Problem

Educational literature has documented research into student and teacher perspectives of acceleration since 1990 (Culross, Jolly & Winkler, 2013; Vasilevska & Merrotsy, 2011). Within recent years publications have appeared (Bildiren, 2018; Kitsantas et al., 2017; Moon et al., 2002) examining the perspectives of gifted students on subject-based withdrawal acceleration programs, the learning options for gifted students in those programs and on the reactions of other people which impact those participants' perspectives. The limited availability and scope of research into WAOs was intriguing to me as a primary teacher and education advocate working with state, national, and international gifted associations. As such, the research problem manifested as *there may be unknown documentations of the perspectives of gifted primary students attending withdrawal acceleration options.* This problem has possibly restricted the information available to educators when designing withdrawal acceleration options in some schools. If researchers and educators cannot access updated

information on these interventions, gifted students are restricted in accessing options that optimise their learning conditions in primary schools.

Research Question

Using the overarching research question *what are the perspectives of gifted primary school children on their experiences in withdrawal acceleration options?* this study intends to uncover the perspectives on experiences by gifted primary children attending withdrawal acceleration options and how these influenced their participation in WAOs. Several sub-questions will support the composition of questionnaire and semi-scripted interview queries, focusing on characteristics of WAOs gathered from the literature. The sub-questions for this thesis are:

1. What were participants' perspectives of the selection process?
2. What were participants' perspectives of others' reactions to WAOs?
3. What were participants' perspectives of the structure of WAOs?
4. When did participants experience the events that developed their perspectives of WAOs?

The justification of the overarching research question forms the basis of the next chapter, the Literature Review and will encompass an examination of literature on these topics:

- optimal learning environments
- giftedness pedagogy
- student agency
- building knowledge for the field

Chapter Summary

This investigation will generate information of gifted primary student perspectives on aspects of withdrawal acceleration options that are not widely documented in the literature. The concerns are (i) the limited amount of accessible research on withdrawal accelerations in primary schools, (ii) whether policy and pedagogical comprehensively support the experiences of gifted children in primary schools, (iii) and what gifted students are offered in the way of an optimised learning environment for their needs. The study is important as it adds new information onthe gifted from an Australian context, identifies areas for further research, and affords opportunities for gifted students to voice their observations, memories, and reactions to enrich teacher, parent, and researcher knowledge. The investigation will, for the first time in the field respond to a hypothetical scenario as a means to provide stimulus material and information for the analyses.

The next chapter presents the literature that has been instrumental in shaping the study, targeting a gap that exists in the evidence base within the field.

CHAPTER 2: LITERATURE REVIEW

Introduction

Outlined in Chapter 1, the purpose for this chapter will establish what empirical research reports about effective teaching provisions/interventions for gifted students in primary schools. As this thesis aims to raise the awareness of parents and teachers of options for the gifted in schools, it is appropriate to review literature on inclusive measures schools take to cater for the academic, socio-behavioural, and other needs of this student subgroup.

One of these interventions is a learning session where some gifted and or talented children are withdrawn for an accelerated learning experience. These options are structured to fit inside the timetabling and funding structures of schools as a measure of convenience for both gifted students and teachers.

For the first time in the gifted and talented field, this study will refer to instances where only advanced learners are provided this pathway, introducing this type of intervention as a *Withdrawal Acceleration Option* or *WAO* (*pron*: WAY-oh). WAO is a strategy provided by some schools to extend the breadth and pace of learning significantly different to the experiences of their peers. To facilitate the review of the literature, this chapter is divided into four sections illustrated in **Error!**

Figure 1

Literature Review Structure
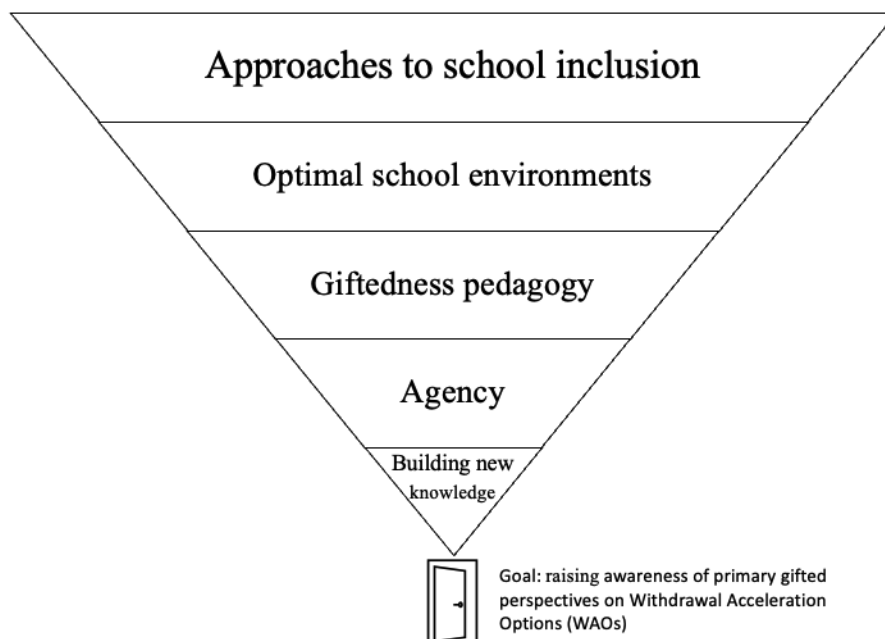
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Structure of the Review

Error! Not a valid bookmark self-reference. outlines the conceptual framework for this chapter. The chapter will begin with a review of the research describing models that underpin formal education and establish where policy and practices for the inclusion of the gifted coalesce in schools. Later, this chapter will examine modern approaches to the inclusion of student agency in the design of learning experiences, and whether research seeks the perspectives of students to support teaching philosophies, particularly those generating opportunities for the gifted.

The first section examines current philosophical approaches that underpin inclusion in schools. Examined in the previous chapter, Australian schools are directed by local legislation and international charters to deliver to students equal access to schools and to receive equitable opportunities to work to their potential. The literature espousing different philosophical stances on inclusion will also provide examples of inclusive pedagogy, focusing on ways teachers deliver inclusive practices in schools and whether any stance is significantly supported.

Conceptualisations of an 'ideal' education environment is the focus for the second section of this thesis. This section will raise knowledge of how philosophical approaches to education are conceived as theoretical pedagogical frameworks, thereby influencing teacher decisions as they design optimal learning and teaching environments. A range of views will be examined that advocate for the principles of student-centred, knowledge-centred, and other foci for learning connected to instruction/motivation models that attempt to describe the optimal functioning of educational environments.

The third section will critique research examining the intentions, design, production, and effectiveness of teaching strategies for the gifted within the classroom and when these students are withdrawn for acceleration lessons as a homogenous group. Following a discussion of the range of interventions featured in the literature, this section will focus on one differentiated teaching intervention used in some primary schools, a Withdrawal Acceleration Option or 'WAO'.

The fourth section will examine implications of including child agency and voice in education from a historical context, and how they intersect with modern research on policy, research, and teaching practices. A core component of this focus will review articles on the voices of primary school gifted students, the focus group for this thesis. Literature on the perspectives of the gifted will be examined, and it will be discussed whether this information provided insights about the structure, task design, and teaching strategies that gifted students experience in different learning circumstances.

Finally, a summary of the findings of the sections will present a case for the significance for this investigation by identifying lacuna(e) in the literature raised by the previous sections. This chapter will justify reasons for investigating aspects of primary gifted education within primary schools and generate the research question and foci for enquiry to present to participants in the data collection phase.

Sources

To place this dissertation in the field of gifted education, contemporary educational literature and research studies dating to the latter decades of the twentieth century were accessed and analysed. Where possible, resources were accessed using databases and electronic searches limited to the period 1986 to 2022, excluding seminal works published prior to this period. The research starting date was chosen to correspond with the influential US research into WAOs by Feldhusen, Proctor & Black (1986). Feldhusen et al.'s (1986) research centred on observations of some schools recognising that teachers were unable to effectively differentiate for exceptional learners due to school policy and systematic restraints, and directly contributed to negative social, emotional and academic outcomes for gifted and talented students (Colangelo et al., 2004; Culross et al., 2013; Feldhusen et al., 1986). In doing so, Feldhusen et al. signalled for the first time the need to rethink instructional methods catering exclusively to the gifted.

Approaches to School Inclusion

If a modern Australian philosophical approach to teaching could be defined, it would have at its foundations the principles of inclusion (i.e., access and collaboration) and differentiation (i.e., catering to individual needs) reflecting local sociological and structural changes. A reading of documents examined in Chapter 1 indicates these principles can be celebrated as a modern focus on Australian inclusive education that advocates for equality and equity in schools.

Research examined in Chapter 1 indicated the Australian philosophical approach to schooling prior to 1973 was less-unified in its purpose to guarantee all students a school education and meeting safety, academic, mobility, and social-cohesion goals through adequate resourcing (Forlin, 2006; Lingard & Mills, 2007) and teacher training (Bailey et al., 2008; Carroll, Forlin & Jobling, 2003; Reid, 2009). Several materials compared the lower prioritisation of those goals when compared with funding school administration (Bailey, 1992; Bailey et al., 2008). International and legislative arrangements examined in the previous chapter changed the Australian philosophical focus in more recent times to adopt policies underpinned by research on equality (inclusion and access to schooling) and equity (provisions for individual needs in schools), and to redirect attention onto supporting inclusive methods in schools. The next section will establish how research has catalogued

the development of inclusive environments designed to support primary children reflected in policy, theory, and practice.

Philosophical Frameworks Underpinning Inclusion in Schools

As established via the policies and evidence summarised in Chapter 1, Australian schools are mandated by state and federal legislation to offer a variety of education options to maximise the access to mainstream schooling to all students, and access to range of educational provisions for students with special needs. In the demonstration of inclusive teaching, educators rely upon their training and knowledge of national teaching standards and evidence-based theories to inform their approaches to identifying, planning, and executing strategies for students with special needs. Curriculum and instructional adjustments, physical access to different learning environments, and the development of adjustments for the individual educational needs of students with disabilities are among strategies the literature (Al-Shammari, Faulkner & Forlin, 2019; Anderson & Boyle, 2015; AITSL, 2019) states which lead to optimal educational outcomes in schools. The following section examines theoretical perspectives that support inclusive educational strategies.

Behaviourist Influence on Inclusion. Instructional models based in behaviourism are typically described (Al-Shammari et al., 2019; Dai & Chen, 2013) as an instructor-centred approach or 'top-down' approach to teaching. A characteristic of this approach sees the teacher bound by knowledge of the reactions of students to stimuli, which influences the design of tasks, instructions, and motivations to engage and lead to changes in behaviour. Behaviourist theories can be dated to seminal theories by Skinner (Behaviourism Theory, 1966) and Pavlov (Classical Conditioning Theory, 1927) which held that learning conditions must be designed to change behaviour, rather than the behaviours dictate the learning conditions. Supporting these theories, articles (Cologon, 2019; Harold & Corcoran, 2013) state behaviourist strategies require a teacher-centred approach to pursuing behaviour and knowledge changes, most often seen through applying explicit and direct teaching practices. Cologon (2019) and Harold and Corcoran (2013) advocated a cautious, systematic approach to inclusive instruction that emphasises a success-oriented process of breaking skills and knowledge into smaller elements and work most effectively with very young students beginning to learn literacy, numeracy, and social skills in multi-ability settings.

This philosophical approach to inclusion encourages smaller grouped tasks and a high degree of 1-1 teacher/student interaction to establish reinforcement for success and identify possible errors in understanding (Al-Shammari et al., 2019). This often occurs at the younger levels of schooling or with children with developmental delays, yet also occurs with children displaying significant learning advancements. Behaviourist strategies are often seen in the literature when examples of

inclusion for gifted students suggest strategies such as mentoring, individual learning plans and when seeking advanced placement to primary or secondary school.

Developmental Models of Inclusion. Developmental/Cognitivist theoretical models have relevance to the inclusion of gifted children, and feature heavily among pedagogical strategies recommended in local (Gross, 2012; Gross & Sleap, 2001; Gross, Urquhart, Doyle, Juratowitch, et al., 2011) and international publications on teaching interventions for the gifted (Colangelo et al., 2010; Colangelo et al., 2015; Colangelo et al., 2004; Yamin, 2010; Ziegler & Phillipson, 2020; Ziegler & Stoeger, 2017). Research (Al-Shammari et al., 2019) reports developmental or cognitivist theoretical models engage in inclusive practices when educators use a range of instructional approaches that feature both behaviourist (e.g., explicit teaching) and constructivist instructional methods (e.g., self-guided learning).

Hassad (2011) supported an assertion that this hybrid philosophical approach is based in Piagetian constructivism, the assimilation and accommodation of new knowledge by learners, and then the structuring of experiences for learners to then exercise this new knowledge. The developmental approach is referred to in the literature (Bailey et al., 2008; Dai & Chen, 2013; Hassad, 2011) as a 'top-down' strategy, moving from general knowledge to the specific, and is seen in this research dominated by collaborative learning, inquiry-based pedagogy and explicit teaching methods that are common from middle primary through to secondary school levels. This philosophical approach aims to motivate students to use new understandings to explore areas and domains of strength akin to constructivist approaches for inclusion.

Developmental theoretical models have relevance to the inclusion of gifted children, a position supported by Rogers (1991), VanTassal-Baska (1992), and Slavin (1987, 2018). These authors advocate teachers exercise a flexible approach to the design of tasks. Furthermore, teachers were encouraged by Rogers (1991) and VanTassal-Baska (1992) to provide self-guided task options for the gifted which offer a degree of choice of pace, task selection and output styles (i.e., presentation) that will be key foci for later investigation. Two developmental instructional strategies (compacting, telescoping) are tightly bound to the factors that generate perspectives on a teaching strategy (WAO) for primary gifted students, the focus group for this thesis. Compacting curricula, described in the *Handbook of Gifted Education* (Colangelo & Davis, 2003) recognises gifted students tackle tasks faster and at a level of greater complexity as their counterparts; planning adjustments are also made by the teacher to reduce the repetitiveness of instructions and drills to enable gifted students to remain with their colleagues as they continue with tasks set by the teacher at their level. Telescoping (Colangelo & Davis, 2003) is a teaching strategy whereby the teacher reduces the time

advanced/gifted students take to complete the school curriculum and can be done as an in-class differentiation method or via a series of withdrawal learning options.

Constructivist Models of Inclusion. The constructivist paradigm for inclusion expands Vygotskian principles supporting individuals to learn cooperatively, develop knowledge collectively, and reinforce self-knowledge and self-motivation to learn (Hassad, 2011). These principles are based on Vygotskian theory that all learning occurs within a 'Zone of Proximal Development', which was clarified as the cognitive space existing between skills and knowledge a learner can do independently what he or she can do with the assistance of a more skilled 'other' (Eggen & Kauchak, 2016).

Two publications (Al-Shammari et al., 2019; Fosnot & Perry, 2005) advocated the benefits of a constructivist approach to inclusion as a philosophical framework in schools; learner-centred, task-based, open-ended, multiple intelligences, and discovery-based models that emphasise internal scaffolding skills and cooperative strategies vital to the inclusivity of students with special needs. Assumptions in the literature that constructivist models are 'bottom-up' (Hassad, 2011; Al-Shammari et al., 2019; Fosnot & Perry, 2005) refer to observations that specific knowledge and skills have been mastered, and thereby require opportunities to examine wider applications of knowledge and skills. This guides learners to identify rules that bind how knowledge is obtained and used and to see patterns in knowledge in different contexts.

Constructivist instructional strategies are often seen in the literature when examples of inclusion for gifted students suggest differentiated teaching strategies. Constructivist theoretical models have relevance to the inclusion of gifted children, and feature heavily among pedagogical strategies recommended in local (Gross, 2012; Gross & Sleap, 2001; Gross et al., 2011) and international publications on teaching interventions for the gifted (Colangelo et al., 2010; Colangelo et al., 2015; Colangelo et al., 2004; Yamin, 2010; Ziegler & Phillipson, 2020; Ziegler & Stoeger, 2017). These authors advanced inclusive strategies aligned with the constructivist paradigm; for example, identifying opportunities for grade or subject skipping ahead of non-gifted peers. Project-based learning and individual learning contracts are also examples of this philosophical stance that are offered when gifted students demonstrate consistent, exceptional talent exceeding the capabilities of their peers and requiring individual alterations to their learning map. Other options include opportunities for students to adopt self-paced, self-directed, and self-monitored learning in-class, receiving mentoring in-class or being withdrawn from the class to receive accelerated tuition individually or included as members of a same-ability, similar-age groups.

Summary. This section reviewed three overarching philosophical stances to inclusive education. Literature reviews used in this section (Hassad, 2011; Al-Shammari et al., 2019; Dai & Chen, 2013) held that teachers who are inclusive use techniques that overlap some, or all of these approaches in some way to guarantee student inclusivity in their classrooms. Other evidence suggested teachers do alternate their philosophical approaches dependent on structural factors such as the curriculum being taught (Muir, 2008) and the individual learning characteristics of students (Botha & Kourkoutas, 2016), but again these findings were published prior to the COVID-19 pandemic, which could have altered teacher's perceptions of their philosophy of teaching to reject notions of separatingthe gifted from heterogenous classes or forming inclusive homogenous groups for accelerated learning options.

In summary, there is an opportunity to investigate how 21st century teachers exercise philosophical positions to deliver optimal, inclusive learning outcomes to students. No Australian surveys have been conducted to investigate teacher philosophies on the inclusion of the gifted. This information could inform educational policy, professional learning of in-service teachers and teacher training of pre-service teacher in addition to school charters to map different needs to meet the outcomes of diverse student populations. Increasing work pressures on teachers (Bird & Markle, 2015; Fraser-Seeto & Howard, 2015) suggest negative changes in the perspectives teachers have of their profession, and as an extension, how they consider their ability to optimise learning for students with additional needs. This can begin by investigating the perspectives of one subgroup, gifted primary students, on whether their teachers are addressing those needs by optimising their learning environment in a modern, local context. The literature examining the principles and options driving an optimal inclusive approach to education will now be examined.

Theories on Optimal School Environments

A wide field of research describes instructional and environmental conditions for schools to develop ideal learning environments. Meta-analysis of literature reviews (Fraser, 2015; Gage et al., 2018; Guay et al., 2016; Guay et al., 2008) and original research on optimising school environments (Boettcher, 2007; Elen, Lowyck & Lehtinen, 2004) presents two important observations. First, qualitative research dominates this field and essentially restates the established premises of Maslow, Herzberg, and McClelland to be discussed in the next section. Second, critiquing ideal education environments is a substantial field and can be subsumed into (i) principles directly influencing student and teacher behaviour and (ii) other systems surrounding the interactions of students and teachers, for example, departmental policies, community involvement and laws.

Overarching Theories. A review of meta-analyses of research on optimising learning environments (Boettcher, 2007; Osemeke & Adegboyega, 2017; Papadopoulos, 2015) leads to the

observation that the theoretical bases underpinning this field is bound by three theories; Maslow's Hierarchical Theory of Needs (1943), McClelland's Human Motivation/Achievement (or "Three") Needs Theory (1961) and Herzberg's Two Factor Theory (1966). Each originally conceptualised needs and motivations in management settings and later brain research and were later added to educational science by describing the interplay between the motivations of educators and the educated.

Maslow (1943) established that individuals must have fundamental physiological needs served by others (i.e., teachers, schools), and by providing these services enables a learner to build sense of security and motivation to strive for personal goals and fulfillment. McClelland's (1961) work built directly upon Maslow's theory and determined that people are co-dependent when striving for achievement, affiliation, and power in their relationships, inadvertently failing to acknowledge Vygotsky's similar and seminal ZPD theory (1978). Herzberg (1968) established these motivations are resolved either satisfactorily or unsatisfactorily before, during, and after transactions between people (in this thesis, teachers, and students) and influence the ways people perceive their needs and motivations, unifying the three theories as a motivational system.

Research reported the link between high motivation of teachers to meet the educational and socio-behavioural needs of students (Hornstra et al., 2018) with the motivations of students to attend classes, meet success criteria, and demonstrate positive social perceptions of themselves and others (Slavin, 1987, 2018; Urdan & Schoenfelder, 2006). The principles underlying these observations deepen educator, policy maker and researcher knowledge on how to design learning experiences that are inclusive and progressive.

Principles of Student and Teacher Behaviour. Evidence largely agrees on interweaving principles that determine the establishment of positive learning environments. Gage et al. (2018), and Kutsyuruba, Klinger and Hussain (2015) clearly articulated these characteristics as transparent and respectful leadership, community-supported culture generating high expectations of students and teachers, a consistent approach to data driven planning for student performance and motivation, and measures for the social, emotional and physical safety of students.

Hattie's Visible Learning reports (1985-2019) postulated links between student/teacher motivations and instructional strategies as the key drivers of sophisticated and responsive school learning environments. These drivers were also noted by Slavin (1987), Hornstra et al. (2018), Urdan and Schoenfelder (2006). Again, these motivators closely reflect the 'Needs' theories of Maslow, Herzberg and McClelland summarised in 2.1.2 *Overarching theories*, that encompass schools meeting students' psychological safety needs. Through questionnaires and interviews, Hattie (2003,

2007, 2009, 2016) found the perceptions on optimal experiences documented by students were similar to those reported by Gage et al. (2018) and Kutsyuruba et al. (2015) who surveyed teacher responses. This data presented connections to socio-ecological principles of mutual recognition of needs for respect, honesty and advocacy, supportive communication, and the delivery of challenges (Guay et al., 2008) for learners to grow as independent and resilient individuals.

Other Influences. A wide range of information found other systems influencing the student/teacher dynamic. These systems correlate to original socio-ecological views of learning by Bronfenbrenner (1996) and critiques of methodological practices that suggest positive learning environments are influenced by institutional factors radiating outward from the individual to include personal support systems (parents, teachers) and institutions (school, community and laws). Literature (Creemers & Kyriakides, 2007; Fraser, 2015; Kutsyuruba et al., 2015) confirmed education departmental regulations and infrastructure influenced the maintenance of optimal learning environments. These laws and teaching standards protect the rights of children to equal access to schooling and equitable opportunities for success were discussed in Chapter 1. Several articles (Bird & Markle, 2015; Kutsyuruba et al., 2015; United Nations Institute of Statistics, 2011) maintain the difficulty of objectively assessing of the influence of regulations on schools as governments regularly change educational policy reflecting their affiliations.

Literature reported the training of teachers (Fraser, 2015; Gage et al., 2018; Scott & Dinham, 2003) and consistent use of research-based pedagogies by schools (Bird & Markle, 2015; Hattie, 2009; York & Kirschner, 2015) as dominant elements contributing to academic success and positive school functioning. Indeed, Visible Learning studies (Hattie, 2016) indicate in-service teacher training and efficacy have the most dominant influence on positive learning by students. The question arising from this finding is what *are* optimal school practices?

Summary. Educational policy and pedagogies are philosophically geared to develop optimal learning situations. The options available to policy makers and educators correspond to basic human needs for safety, inclusion, and recognition of individual learning characteristics at school. The practices that bring these principles to fruition reflect differences in teaching styles, teacher priorities and knowledge. Studies of teachers support the view that when teachers update their professional learning to recognise individual needs, this leads to positive learning outcomes. The next section will examine the literature on methods that lead to optimal (and sub-optimal) outcomes in schools.

Optimal School Practices

The establishment of international large-scale assessments (ILSAs) in the modern era aims to provide policy makers, researchers, and educators a lens with which to examine trends in the development of optimal school practices. The Organisation for Economic Co-operation and Development (OECD) Programme for International Student Assessment (PISA) conducted tri-annually reports data from secondary teachers and students describing academic and socio-behavioural experiences in schools.

The Teaching and Learning International Survey (TALIS), conducted every five years asks primary and secondary teachers about working conditions, to provide insights into the policies, instructional strategies and different educational contexts within which teachers operate. The Trends in International Mathematics and Science Study (TIMSS) is specific to mathematics and scientific domains and measures the effectiveness OECD countries demonstrate in teaching mathematics and science. An examination of the principles of each ILSA reveals PISA's uniqueness in offering students an avenue to provide their perspectives on teaching and how their schooling is managed. Both TIMSS and TALIS provide subjective teacher data well suited for an examination of relations between teacher quality, task quality, and student outcomes across cohorts, time, and countries from all continents.

Several researchers (Creemers & Kyriakides, 2007; Hattie, 2009, 2016; Nilsen, Gustafsson & Blomeke, 2016; Pollock, 2015) make recommendations for optimal professional practice based on the analysis of PISA, TALIS and TIMSS data. Each reported student motivation is most heavily influenced by teacher effectiveness. In Australia, students scored higher when they perceived their teacher as more enthusiastic, especially when students said their teacher was engaged in the subject (PISA, 2019). Cognitive and affective awareness by teachers of the capabilities of students was assessed as the highest recommendation (Hattie, 2009; Kane & Cantrell, 2012; Nilsen et al., 2016), and others specifically mentioned the clarity of instructions and goals (Reyes et al., 2012). These authors clearly establish a priority for teachers to use ongoing professional learning to support their recognition of student abilities that lead to the design of individualised, data-driven learning. Other research basing their findings in PISA/TALIS results advocate for engaging and progressive classroom working environments (Guay, Ratelle & Chanal, 2007; Guay, Lessard & Dubois, 2016) and support options for self-driven problem solving, particularly in mathematics (Klusmann et al., 2008; Moore, 2022; Nilsen et al., 2016).

Whilst much of this research examines the importance of behavioural management to constructive classroom climate, focus was also placed on teachers creating stimulating working conditions for

students through collaborative tasks and goal setting. Some evidence on optimal learning environments went further; York and Kirschner (2015), Vaughan (2019) and Moore (2022) expanded earlier empirical research. Each connected teacher's awareness of student capabilities, individualised learning planning and self-driven problem solving to advocate for greater self-determined task choices by students. Self Determination Theory factors include strategies to enhance intrinsic motivation, autonomous decision making and competency, exemplified by self-guided learning and students maintaining key performance indicators often seen in advanced learning, gifted education programs (Ritchotte et al., 2016; Ryan & Deci, 2000) and alternative education philosophies including Montessori, Steiner and Reggio Emelia. Advocating for greater autonomy in learning will be resonant in a later section of this chapter, when the evidence-base on student agency and voice in the design of instructional programs for gifted students will be revisited.

Sub-Optimal Practices

Synthesis of the most recent ILSAs data prior to the COVID-19 pandemic reflects significant negative practices in schools indicating a reduction in supporting academically vulnerable students from the perspectives of students. When cross-referencing qualitative Australian PISA and TIMSS 2018 reports (the most recent editions) a significant proportion of high-achieving (Level 6+) and low-achieving students (Level 2-) signalled their PISA performances had declined whilst mainstream students' performances (Levels 3, 4, 5) increased, a finding shared by Schleicher (2019). The analysis supports the view that groups with additional academic needs reported less teacher support when compared with students not displaying learning limitations or advancements.

The implication of this data indicates Australian teachers as recently as 2018, from teacher and secondary student responses, were not offering curriculum adjustments that changed the pace, difficulty, or instruction methods to assist students in the lowest (Level 2-) and highest (Level 6+) academic categories. Put simply, students at the extreme ends of the academic intellectual spectrum reported their teachers were not providing tailored educational solutions for vulnerable students' particular learning needs. This corresponded to Australia's 2019 PISA rating dropping in English language, numeracy, and science literacy, continuing a long-term decline beginning in 2000. A review of political statements after 2019, culminating in electoral positions for the 2022 Federal election reported by national media (Duffy, 2022; Hewett, 2022; Sonnemann, 2019), including the national broadcaster did not address the specific responses by students and teachers regarding academic support for vulnerable students. Instead, the major political parties pivoted to focus on supposed inefficiencies in school funding, how universities attract teacher candidates identifying underperforming teachers in the education system.

Modelling Optimal Learning

A final window into optimal inclusive school practices is viewed by way of theoretical frameworks illustrating components of learning environments, supported by data-driven research. These models differ from philosophical models from which they are based, depicting structures, motivations, and interactions within learning situations. No models were able to be located within the literature that mapped optimal learning situations exclusively for primary students, and no local examples of modelling for optimal learning pathways in Australian schools were uncovered.

When establishing which models would most effectively inform the circumstances of the Separated Accelerated research project, three criteria were introduced; (i) frameworks that articulated multiple inputs in a school setting (i.e., stages of lessons, tasks, reactions, instructions, assessment, groupings) were preferred, reflective of a class lesson in the modern era (ii) systems that created a semantic loop, as interactions at the closure of lessons would influence subsequent actions at the beginning of other lessons, and (iii) presented the opportunity to address the inclusion of vulnerable primary students, such as gifted students who are the focus for this thesis. Three models met each of these criteria and will now be presented in chronological order.

Expectancy-Value Model (2002). The Expectancy-Value model (Eccles & Wigfield, 2002) poses the modelling of optimal learning experiences exclusively from the student's view. Eccles and Wigfield's model depicts learners making presumptions on the value of a task (satisfying, not satisfying) and forming self-expectations on their ability to complete tasks (self-schemata). An example of this model would see children making assumptions on the personal value of class project (i.e., Will it be fun? Will I learn anything useful?) and stating the degree of success they expect to achieve during the task's progression. The actions of the teacher are inferred but not diagnosed by this model, which focuses on the learner's self-efficacy and personal motivation to continue to build knowledge, reflecting constructivist principles. The model does not function as a loop (Criteria ii) but meets the other criteria for consideration by depicting parts of learning situations (Criteria i) and can illuminate the optimal learning pathways for children for advanced and gifted learners (Criteria iii).

Macro/MVP Model (2008). The Macro Model of Motivation/MVP model (Keller, 2008) extended Keller's ARC model (1983) cataloguing motivation, willingness (volition), and performance of both teachers and students in a systematic process. Keller suggested satisfaction, that is, the learning goal, occurs after effort has been stimulated, creating performance, and following responses from the teacher, reflecting behaviourist principles of learning. This model depicts motivation as both a cause and a consequence for student action and includes teacher interactions

with students (i.e., formative feedback) as learning progresses after learning has taken place, meeting Criteria (i). Keller notes the student's responsibility to attend new learning experiences, using prior knowledge and feedback as motivating factors. In reviewing the MVP model, it is clear this system relies on the learner to self-regulate on-task behaviour during learning and reflects its origins in mathematics classes where students receive feedback (answers, results) after effort has been provided as a reflection of their performance. Key to this model is its depiction of motivation after a lesson (satisfaction) being a driving motivator that loops to the next learning situation (Criteria ii).

Education Situation Quality Model/MOCSE (2019). The Education Situation Quality model (Domenech-Betoret, Gomez-Artiga and Abellan-Rosello, 2019) illustrates student experiences in secondary schools and universities, pivoting around individual perspectives held by students beginning, during and concluding tasks. This model features elements of established instruction/motivation models similar to that note the influence of feedback (Keller, 2008) and perceiving self-ability and satisfaction (Eccles & Wigfield, 2002). The Education Situation Quality or 'MOCSE' (pron: *"MOCK see":* acronym in its native Spanish language) model was reviewed as a means to map student experiences in learning situations and combines behaviourist and constructivist philosophical elements and meets the three criteria. The objectives of this model are to map the decisions students make to the teacher's actions, tasks, and class interactions at different stages of lessons, and how these then inform student self-perceptions after and in the lead-up to subsequent sessions.

It was noted by Piaget (2001) that the decision-making capabilities of primary children (5-12 years, the sample group for this study) are seen in research displaying narrower predictive qualities in terms of goals setting and evaluating their own abilities when compared to the significantly older students studied by Doménech-Betoret et al. (2019) when developing the MOCSE model. MOCSE extends knowledge of both Keller's model, and Eccles and Wigfield's model by melding interactions with the teacher and satisfaction (Keller, 2008) with self-evaluation and building knowledge (Eccles & Wigfield, 2002). These perspectives on learning (knowledge of content, the environment and self, satisfaction, and the interactions of others) will influence the themes for the sub-questions to be provided in the next chapter.

The MOCSE model stood out among the selected theories as it offers insights into stages of learning situations and functions as a looped system (Criteria i and ii). Feedback (self/peer/teacher) was found by Doménech-Betoret et al. (2019) to be the driving characteristic affecting the self-image of secondary and university student progress during courses of study in the MOCSE findings. As feedback is a phenomenon central to philosophical and pedagogical frameworks throughout different school levels, MOCSE was considered as a window explaining the experiences of primary school

children, highlighting perspectives on a particular teaching strategy, the Withdrawal Acceleration Option, to be introduced later in this chapter.

Other Frameworks. Other Achievement Goal models were examined for this thesis but did not meet one or more of the review criteria. Vroom's (1964) Valence-Instrumentality-Expectancy model was based in factories not schools and was based in adult-centred monetary motivations rather than self-motivation and a cycle of education (Barron & Hulleman, 2015). Ziegler's Systems Theory (Ziegler & Stoeger, 2017) was considered as it mapped how gifted people think systematically about their self-identity when applying their talent to challenges. Ziegler examined internal stimuli and gifted responses, termed "action repertoires" (p. 5), but did not consider external supports such as those mentioned earlier, teacher recognition and awareness, peer interactions, etc. Gifted students participating in this investigation represent a cohort that demonstrate higher degrees of dependence on their teachers noted widely in research (Betts, 2009; Betts & Neihart, 1988; Bildiren, 2018; Fraser, 2015; Sapon-Shevin, 1994; Whitmore, 2009), obstructing a clear link between the Ziegler model with the goals of this thesis. This theory did raise awareness of reactions that impact gifted individuals, such as doubts and self-questioning, and the causations of underachievement. Ziegler found low interest and low self-expectations are exhibited by gifted people in these situations, and this information will be targeted by questions in the Method chapter to generate perspectives on WAO tasks and study environment.

Growth Mindset Theory (Dweck, 2012) was reviewed but did not illustrate motivation as a looped system, nor attribute the educator strongly as a dominant source of feedback for student resilience and confidence. Finally, because the focus for this thesis is gifted/high-functioning primary students, Self-Determination Theory (Ryan & Deci, 2000) was compared against the criteria but could not meet the provision for teacher feedback and illustrating different stages of the classroom-based learning cycle.

Summary. The notion of an ideal, optimal learning environment necessitated an examination of what this concept means philosophically, pragmatically, and when viewed as an instrument modelling inclusive learning in schools. Each meaning subscribes to the idea that learners have needs and these inspire motivations for self-improvement in confidence, skills, and knowledge that incorporate seminal needs-based theories in their structure (Maslow, Herzberg and McClelland).

OECD countries compare their efficacy in supplying optimal learning conditions to other industrialised nations through the application of ILSAs, which account for cultural differences and teaching styles. Since 2000, ILSA reports have influenced educational policies catering to individual learning styles and encouraging pedagogical initiatives for delivering curriculum content in safe and

supportive schools. However, the lack of statistical information comparing the efficacy of primary teaching strategies hinders a clearer understanding of how (and how well) teachers are catering to the inclusion of students with special learning needs. This represents an opportunity for research to add to the literature on the methods employed by teachers when and if they are supporting academically vulnerable primary students.

Several theoretical frameworks were assessed that illustrated influences on learning pathways using an instruction/motivation paradigm. Criteria for selecting the models tied philosophical knowledge of inclusive, optimal learning environments that illustrated the teacher/student dynamic and how feedback and motivation are linked throughout a learning process in schools. Three models met my criteria and the Education Situation Quality model (Doménech-Betoret et al., 2019) was adjudged to align more favourably with the intentions of this study, examining gifted primary students' perspectives on a teaching strategy.

However, the MOCSE model was originally designed to study the decisions and actions of students far older (highest secondary and university levels) who are not influenced in the same ways as primary school children, some of whom could be 5 years old during the investigation. Following the results of the Data Analysis chapter, this model will be scrutinised and will serve as an influence for a new theoretical model should its depiction of WAO perspectives and experiences not be accurately aligned with the data. If the analysis suggests otherwise, this review will use the opportunity to propose an overarching framework based on MOCSE, that accurately depicts the interplay of teachers/gifted students during the stages of a classroom lesson. The next section will review literature on options the teachers of gifted children in primary schools can access and generate knowledge of one teaching strategy that aims to accelerate the pace and breadth of curriculum learning for gifted students.

Gifted Pedagogy

This section will critique literature examining strategies describing how schools identifythe gifted, and in so doing also identify their academic and socio-behavioural needs for optimal learning. In their thorough literature review, Gross and Sleap (2001) noted no uniformity in an Australian pedagogical approach which identifiesthe gifted and advocates strategies meeting the needs of the gifted, outside of a general philosophical acceptance that schools are responsible for respecting the rights of the gifted to equity and equality mentioned previously.

Literature reviews on Australian gifted and talented policy and pedagogical approaches were compared from 2001 to the current day (Gross & Sleap, 2001; Kronborg & Cornejo-Araya, 2018; Walsh & Jolly, 2018). Analysis of these materials and online government sources found

discrepancies in pedagogy mentioned in Australian state and commonwealth documents on each of four points: (i) how states recognise evidence of gifted behaviours, (2) which schools offer acceleration options to assist parents and researchers, (iii) details of which acceleration options are used in schools, and (iv) criteria for gifted students to access enrolment information for WAOs or third-party vendors of gifted programs. No jurisdiction provided information answering each of the four points when the sources were examined in 2022.

There was no uniformity in Australian state and federal documents cataloguing details of WAOs similar to 18 accelerations strategies described in the previous section (Colangelo et al., 2004; Gross & Sleap, 2001). This information would be of great interest to the field by providing qualitative and quantitative data on the types of WAOs available nationally that could potentially assist school funding and knowledge of WAO structures. Some jurisdictions (Australian Capital Territory, New South Wales, Tasmania and the Commonwealth) acknowledge different forms of giftedness with a range of WAOs in core subjects (Maths, English composition and literature), visual arts, music, dance, media arts and languages acceleration provided by teachers as well as third-party gifted and talented providers but did not detail the acceleration strategies provided to those gifted groups.

Three states identified select-entry and public secondary programs using WAOs (NT, Queensland, South Australia). These assist potential applicants to locate schools that provide accelerated learning pathways for gifted and high-ability students. All states listed secondary school options, and the only references to primary school WAOs listed third-party providers or criteria for early entry by kindergarten-aged children to primary schools (ACT, NSW, NT, Vic). Most of the authorities relayed information WAO applicants needed to supply or demonstrate (i.e., for performance/arts WAOs) to meet enrolment criteria in public and select-entry schools. No surveys have been undertaken locally to catalogue which schools host students psychologically profiled as Gifted, which hinders an understanding of the breadth of this subgroup and the measures undertaken in schools to meet their needs as a vulnerable group.

The Australian Professional Standards for Teachers (APSTs) requires all teachers to modify their strategies to cater to individual learning needs as a requirement for teacher registration. These requirements encompass academic, socio-behavioural and physical adjustments to suit vulnerable students, for instance, gifted students (AITSL, 2019; Henderson & Jarvis, 2016). This section will review literature explaining the identification and teaching strategies available to teachers of the gifted, outlining in-class options and when gifted students are withdrawn for external learning opportunities.

Identification

The notion of identifying gifted behaviours and talents is not uniform and dependent on cultural differences despite a wide body of evidence (Brown et al., 2005; Maker & Sak, 2021; Opengin & Sak, 2012; Sternberg & Davidson, 2005; Tannenbaum, 2000) regarding recognisable giftedness traits. Identification of gifted behaviours manifests as demonstrated talents at some point in a student's educational career but may not develop in other year levels or reflect the dominance recognised in formal assessments. These observations are supported by NZ studies (Riley, Webber & Sylva, 2013; Riley et al., 2017) reporting superior levels of problem-solving scientific and mathematical talent in secondary students that had not been displayed by those students or recognised by teachers in previous years.

Research supports the view that a teacher's knowledge and readiness to recognise talent is viewed in the context of a particular curriculum or learning environment classroom and when teachers compare student abilities subjectively (Reis & Renzulli, 2009; Renzulli & Reis, 2022). These decisions are made as a result of teacher perceptions and context-specific assessments built on experience more than through objective uses of data (Baudson & Ziemes, 2016; Krijan & Boric, 2015) and training (Benny & Blonder, 2016). When linked, this establishes a proposition that teachers are more likely to depend upon subjective assessments of gifted capabilities than diagnostic assessment or applying strategies targeting academic strengths based in objective professional knowledge.

Three reports provided Australian data reflecting poorly on professional knowledge of giftedness identification and management in this country. These details are provided by state teacher surveys on giftedness (Gross, 2012; Victorian Government, 2012) and departmental reports to the federal parliament (Beattie et al., 2006; Watters & Diezmann, 2001) signalled overwhelming evidence that Australian teachers did not possess updated skills and knowledge to recognise and differentiate their teaching to gifted children. This was an astonishing finding which has not been widely published in national gifted and talented publications. The *Schools in Australia* parliamentary report (Karmel et al., 1973) more than three decades earlier, reported the same findings; Australian teachers were not adequately trained to cater for the needs of differently-abled students and schools were, largely, not allocating funds for the development of programs for vulnerable students. No updated information has been collected since 2012 on these topics, and a proposed 2020 survey to update the Victorian government statistics was postponed indefinitely due to the national health crisis and subsequent school lockdowns.

Interplay: Gifted Behaviour and Teacher Recognition

Analysis of research (Munro, 2013; Snowman, McCrown & Biehler, 2012) suggests that (i) an interplay exists between a teacher observing a gifted child's academic and socio-behavioural needs and (ii) this can be influenced by the gifted student's perception of the educator's ability and motivation to develop differentiated tasks for the gifted. This is a fundamental basis for understanding the role that each of the parties play in a differentiated learning scenario. This section will investigate the role that these parties/protagonists play in the engagement of giftedness behaviours, and the choices each makes that impact the development of targeted interventions for advanced students.

Observational Factors. The key to generating knowledge how and why gifted students are identified for an academic intervention is the interplay between gifted students and their classroom teachers, represented in Figure 2. Reviewing research on educational interventions, the following synthesis of factors underscoring how teachers determined why some children are offered interventions whilst others are not based on mutual observations is now provided.

Figure 2

Identifying Influences on WAO Selection
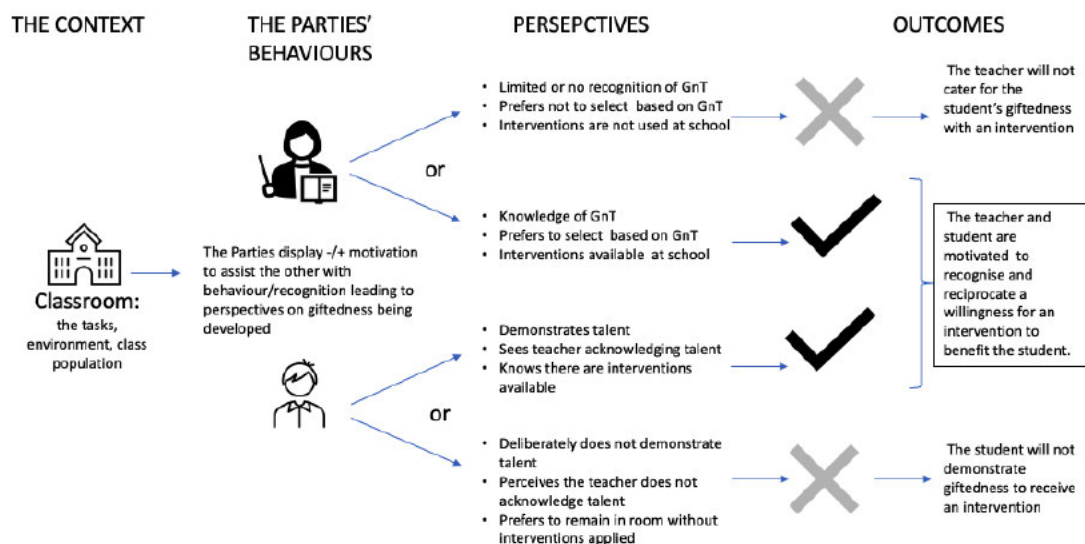
Publications investigating the gifted student/teacher dynamic (Botha & Kourkoutas, 2016; Eren et al., 2018; Fraser-Seeto & Howard, 2015; Gage et al., 2018; Gross & Sleap, 2001; Munro, 2013), cited frequently in the literature were reviewed, and each agreed on an essential element that

influences whether and how accelerations are provided in schools. Each publication noted that what either party (student/teacher) sees, knows, and shows of their understanding of the other's gifted knowledge, skills and behaviour determines their reactions to options such as interventions. The term *intervention* is defined as referring to teachers instigating changes to a learning program or environment, noted by Proyer, Gander and Tandler (2017) to cater for diverse learning needs of individual or groups of children with special needs. This relationship is illustrated in Figure 2.

This relationship directly connects to instruction/motivation theories examined in the previous section. Understanding this connection is a pivotal aspect that underpins both the identification, and later, degree of support for the gifted in schools. There are different views on the causation and impact by the actions of each of these parties:

i. Does the gifted child's display of exceptional learning cause the teacher to observe and then react with an intervention?
ii. Alternately, does the teacher displaying giftedness knowledge and teaching skill encourage the child to demonstrate their exceptionality, thus leading to the offer of a differentiated teaching strategy?

Gifted Student Causation. Of the first view, illustrated by Figure 2 (Alexander, Carr & Schwanenflugel, 1995; Chan, 1996; Gagné, 2005, 2010; Munro, 2005, 2013; Silverman, 1992) positions the behaviour of the gifted child as the stimulus that causes teacher giftedness recognition and identification. These articles are unified in regarding student behaviour engaging professional teaching knowledge and leading to interventions; additional or more complex tasks, ability grouping, and responsibility for self-directed activity reflecting constructivist ideology.

Exploration into the catalysts of gifted behaviour in the literature (Gagné, 2021; Munro, 2005, 2013; Plunkett & Kronborg, 2011) is critically important in understanding this view of Gifted causation. The linking of gifted personality characteristics (including task fixation, motivation to succeed and coping mechanisms) with environmental conditions (classroom working atmosphere, child's family background, and impactful life events) explain why gifted children demonstrate exceptional behaviour in particular conditions.

Examples of catalysts impacting gifted children's motivation to display their talent were reviewed (Gagné, 2021; Gross & Sleap, 2001; Marsh & Craven, 2006; Prior, 2011) and raised awareness of the ways gifted children display their awareness and confidence in their teacher's ability to provide learning opportunities that cater to their talents. Prior (2001) and Gross and Sleap (2001) explained that gifted children seek to engage with their teachers with persistent and higher-order questioning

and seek validation of their success more often than mainstream students. Gagné's Differentiated Model of Giftedness and Talent (1999) is cited frequently in this field and in local government documents to assist teachers in recognising these giftedness-related behaviours and serves to support teachers in providing strategies, such as open-ended tasks and celebrating exceptional results to recognise those gifted needs.

These catalysts additionally included the teacher providing tasks that strongly challenged the domain talent of gifted students, opportunities to display talent in an artistic, academic or sporting context or offered a high degree of autonomy for choosing pathways of study. Other catalysts noted by Marsh and Craven (2006) and Munro (2013) included gifted children's positive reactions when grouped with similar-ability peers and when gifted students observed either their class teacher or Withdrawal Acceleration Option teacher (WAO teacher) provided consistently challenging tasks aimed at their strengths. This evidence will be revisited in the Data Analysis and Discussion chapters when participants perspectives on teacher actions will be examined.

Figure 2 also illustrates instances whenthe gifted do not receive strength-based interventions. US studies (National Association for Gifted Children (NAGC), 2021) correspond with reports (Eren et al., 2018; Fraser-Seeto & Howard, 2015) finding several reasons whythe gifted do not display their behaviours openly; bullying by peers, embarrassment at displaying their talent, additional neurotypical diagnoses, and a lack of clarity perceived in the teacher's capability.

Studies of Big Fish, Little Pond theory in schools (Fang et al., 2018; Marsh & Parker, 1984; Zeidner & Schleyer, 1999) explained that some gifted students request not to receive additional consideration, preferring to excel in class with standard curriculum tasks rather than receive interventions catering to their strengths. Whenthe gifted form the perspective that their teacher is unknowing or uncaring of their needs was emphasised in reports (Guay et al., 2016; Wang & Neihart, 2015) and reinforce Australian information regarding the awareness and training of the teachers of the gifted (Beattie et al., 2006; Victorian Government, 2012; Watters & Diezmann, 2001). Proponents of this dynamic (Alexander et al., 1995; Chan, 1996; Gagné, 2010; Munro, 2013; Silverman, 1992), that the gifted child's behaviour provokes the teacher's reaction continues scientific observations of child giftedness and precocious behaviour not limited to the classroom, but largely fails to consider the role of the teacher as the stimulus for developing gifted reactions.

Teacher Causation. This thesis agrees with observations made in other literature (Bildiren, 2018; Coleman, Harradine & Williams, 2005; Fraser-Seeto & Howard, 2015; Plunkett & Kronborg, 2011) which state it is a more valid proposition that teachers rely on their giftedness knowledge,

creativity, and inter-personal behaviour to provoke advanced responses in gifted students when compared to the student-causation position.

In some literature, teacher observations and training frequently did not lead to in-class or other gifted interventions. Queensland studies by Gallagher, Smith and Merrotsy (2011) into four primary schools reported that teachers were concerned about possible adverse effects of grade and subject accelerations outside of the classroom. Analysis of the data indicated negative teacher perspectives on social cohesion in schools and the perception of elitism amongst school children and their parents if WAOs were to be introduced. In this regard, the Brisbane findings echoed concerns raised in other studies, and share concerns for egalitarianism with European counterparts investigated by Persson (2010). This sentiment was later reported in submissions to the Australian Senate (Watters & Diezmann, 2001), where Australia's self-attributed identity as 'the Clever Country' in actuality is revealed as displaying a degree of apathy and opposition to providing gifted educational experiences such as accelerations and other adequate educational provisions (Gross & Sleap, 2001; Lassig, 2009).

Teacher Training. Studies of teachers demonstrating differentiated teaching methods in Australia and the UK confirm that tasks and instructions offering sufficient challenge for gifted and talented students was uncommon in many mainstream schools (Bailey et al., 2008; Carrington & Bailey, 2000; Fraser-Seeto & Howard, 2015). Fraser-Seeto and Howard's (2015) findings were attributed to few teachers experiencing this pedagogical field in their pre-service teacher education or thereafter through professional learning. As a result, teachers required professional learning in giftedness education, even though they indicated they rarely, if ever recalled observing a gifted child or changed their teaching or resourcing for the gifted students in their classrooms (Fraser-Seeto & Howard, 2015).

It is therefore concerning, from an Australian context that the 2005 Gifted and Talented Education Professional Development Package for NSW Teachers (Gross et al., 2005) was unknown to almost 75% of NSW teachers, 5% had completed parts of the package and only 1% of NSW primary and secondary teachers had completed the entire professional development course sponsored by the NSW government. Similar packages have not been presented to all Australian teachers, and was represented by Fraser-Seeto and Howard (2015) as among a raft of professional learning programs that teachers would not or could not undertake due to rising work pressures. This finding underscores the validity for increased awareness not just of gifted behaviours, but how gifted children may react to their teachers' awareness of their capabilities, building on this notion of teacher causation.

Gifted Profiles and Interventions. Understanding that gifted individuals are not identified by a single set of behaviours or abilities was a significant advance for giftedness research (Davidson

Institute for Talent Development, 2007; Reis & Renzulli, 2009). Betts and Neihart (1988) exponentially widened the knowledge of giftedness types by collating research of gifted behaviours into six personality profiles. These profiles were currently featured in Australian professional development units for teachers (Gross, 2012). These profiles documented six distinct gifted personality types by their demonstrated behaviours, feelings, and attitudes via interviews and observations of secondary students in schools. The Betts and Neihart profiles (Appendix G) name relevant interventional supports for these learners at school and at home, and methods for accurate identification of their gifted 'profile' (Betts & Neihart, 1988; Neihart, 2016).

A review of the *Profiles of the Gifted and Talented* (Betts & Neihart, 1988) more than 30 years after its original publication hold up to scrutiny in the current age and provides a necessary tool for teachers and researchers to cross-reference any of six gifted 'types' with notations on identifiable behaviours, needs and optimal supports. The 2010 revision of the profiles (Betts & Neihart, 2010, pp. 1-2) provided an additional taxonomy that catalogued observed behaviours, adult perceptions of different gifted behaviours, and optimal school interventions to accommodate those behaviours and challengethe gifted in their strength domain.

Associating this knowledge of gifted personality types and the research of Sternberg (1985), Renzulli (1986) and Gagné's (1999) models respectively, researchers and educators have, for many decades had access to information with which to understand differences between gifted learner types and the means to optimise their learning environments. Each of the types mentioned above continues to be utilised as the basis for recognising gifted behaviours in classrooms in the twenty-first century, notably in cultures sharing a Eurocentric or westernised educational culture owing to historical discoveries in the field made in those cultures. A review of these models (Frydenberg & O'Mullane, 2010; Kronborg & Cornejo-Araya, 2018) demonstrate a significant influence on gifted identification policies in Australia advocating for curriculum acceleration, strength-based learning, and connections to the professional learning of teachers (Jolly & Chessman, 2017; Steenbergen-Hu & Moon, 2011) on meeting the needs of the gifted.

Summary. In this section, two observations on gifted identification presented a paradox: does the gifted child's demonstrated behaviour attract or motivate identification processes, leading to a teacher's differentiated response? Alternately, does a differentiated interventional process begin with an educator using their training and motivation to provide an already-differentiated learning environment with the intention of stimulating exceptional learning behaviours from gifted children? It is an established notion by proponents of both views (teacher-led or student-led) that should the actions and intentions of either party not be recognised and understood, the identification-

differentiation-intervention process will likely not benefit the self-esteem, self-concept, and other developmental growth of the gifted student.

This situation is hindered by the lack of information from teachers providing insight into the degree of professional knowledge and experience withthe gifted in schools, and what perspectives gifted students form on their interactions with teachers. Understanding the structure and variety of learning options provided to gifted students will inform the development of a research sub-question and result in several questions for participants in the investigation. The next section will examine literature on the teaching options available to teachers of the gifted and provide context of the experiences from which the participants formed their perspectives.

Teaching Options for the Gifted

The principles of differentiated options for the gifted has strong roots in constructivist theories that understand the special learning and social-emotional needs of this subgroup. Examination of research into the principles of educational design for the gifted reveals a common ideology based on challenging strengths with increasing task quality or quantities (Charlton et al., 2002; Reis & Peters, 2021; Stanley et al., 1974; Tomlinson, 2017; Tomlinson & Jarvis, 2010), increasing autonomy to choose the pace and depth of learning dominant skills (Ma & Ma, 2012; Oxford, 2015; Reeve, 2016), and like-ability grouping (Proyer, Gander & Tandler, 2017), leading to optimised study motivations and working partnerships (Coleman, Micko & Cross, 2015).

Seeking to unify approaches to teachingthe gifted, three models strongly depicted the modelling of gifted teaching options in Australian schools and feature in current local government documents: those published by Maker (1982), the Schoolwide Enrichment Model (SEM) approach of Reis and Renzulli (2022), and Tomlinson's model (1999). Overwhelmingly, these approaches advocate for the acceleration of the pace and/or breadth of curriculum delivery by teachers to capitalise on the talents of the gifted yet advocate this with differences in scope and specificity. These models will now be reviewed.

Maker's Model. Previous research and government documents (Maker, 1982; Maker & Sak, 2021) advocate for the use of this differentiation model in primary and secondary schools globally. A review of Australian state and federal government documents and international giftedness journals showcases wide support for Maker's model, which encourages teachers to differentiate content, process, product, and learning environments. Examples of this model and its applications in schools for all ability types are vast and are featured in government websites and often-cited articles in the field. In applying Maker's model to gifted learning situations, local (Chandra Handa, 2009) and international researchers (Colangelo & Davis, 2003; Rogers &

Beckstead, 1991; Smith, 2008) and Australian government documents (New South Wales Government, 2020; Queensland Government, 2020; Victorian Government, 2013; Western Australian Government, 2010) testify to its flexibility as an effective option guiding teachers to adjust learning content, timing and outcomes for students. A key strength of Maker's model is the formation of ability groups and the selection of materials and tasks adjudged to suit their learning levels.

Fraser-Seeto and Howard (2015) indicated the ability grouping strategy elevates teacher workloads if teachers cater to each group separately and often was found to result in time-filler activities provided for the gifted, rather than the provision of tasks on par with cognitive abilities. This article questions the capacity for teachers using this model to meet the needs of differentiated groups equally if content, instructions, and outcomes are altered for each ability group due to the duplication in planning, resourcing, and teaching times. This was an important insight that will connect later to perspectives on the tasks gifted students were provided and whether those students reflected the tasks truly challenged their cognitive abilities.

Schoolwide Enrichment Model (SEM). Literature reflected the value of SEM as having significant implications for schools offering a wide range of learning options for high achieving and gifted students at primary and secondary school levels. In reviewing 40 years of surveys of secondary schools using SEM (Reis & Peters, 2021) the authors saw the successful widescale provision of self-determined learning pathways for withdrawal programs and in the reinforcement of instructional strategies by select-entry public schools that accelerated the pace and breadth of curriculum-based learning.

The authors of the 40-year review, who had developed the SEM model and then continued to offer subjective views on its veracity suggested that students selected for the SEM program were more likely to pursue creative challenges in their professional lives when compared with non-SEM students. This necessitated locating reviews in the field that did not feature the original modellers to check the validity of SEM in the current era. Summaries of talent development by schools implementing SEM modelling (Beecher, 2010; Beecher & Sweeney, 2008; Rogers, 2007; Rogers, World & Vialle, 2011) nonetheless agreed with Reis and Renzulli, finding high degrees of productivity, enjoyment, and challenge by gifted students which extended into their working lives and supporting models that catered strongly for the gifted. Syntheses of acceleration research (Lassig, 2009; Maher & Geeves, 2014; Rogers, 2007) expressed confidence that, overall, schoolwide enrichment models benefit gifted students psychologically and academically despite some negative reactions that were often found to be short term, and not contributing to long-term educational

limitations such as decreased results, depression and inability to function independently at school and home.

Tomlinson's Model. Referenced widely in research into pedagogical approaches to differentiation, Tomlinson's model (Tomlinson, 1999, 2017; Tomlinson & Jarvis, 2010) encourages teachers to vary the speed, specificity, cognitive, and other abilities needed to produce enhanced learning, similar to proposal provided by other authors (Fraser-Seeto & Howard, 2015; Gagné, 1999, 2004; Gallagher, 2003). Tomlinson's model requires teachers to identify a student's current level of knowledge and interests and then patterning accelerated learning plans that engage the student at that level within the classroom. The model is also mentioned in literature encouraging flexible in-class teaching options, for instance, via a variety of ways information is gathered and presented (Gross et al., 2011; Makel et al., 2016; Steenbergen-Hu et al., 2016), and when teachers form decisions about children working together or independently (Pollock, 2015; VanTassel-Baska, 1998; Yang et al., 2012). Articles chronicling the evolution of this model (Subban, 2006; Taylor, 2017) and a study of schools using Tomlinson's model (Bondie et al., 2019) found significant time investment by educators of the gifted was necessary to update their curriculum knowledge often many grade levels beyond the capabilities of the cohort, and extra allocations of time were not often possible.

Summary. Three differentiation models were assessed that dominate literature of gifted pedagogy and feature strongly in Australian government documents on inclusivity and gifted teaching approaches. The summaries of the three models contribute to the continuing development of the gifted pedagogy by allocating strategies and resources to meet acceleration needs. The most important of these principles is the belief that alteration of content, processes, and outcomes for gifted students should challenge their strengths.

Each model agrees with the basic premise of accelerating of the pace and breadth of curriculum content to gifted students yet offers different structures with which acceleration interventions are provided. Tomlinson's (1999) approach requires a close connection between student and teacher for there to be accurate and ongoing recognition of the gifted student's needs, and therefore more likely seen amongst strategies within heterogenous classrooms. Maker's (1982) and Renzulli and Reis's methods (Reis & Peters, 2021; Renzulli & Reis, 2022) fit school models where students can be withdrawn into homogenous groups away from the classroom (i.e., extension, advancement or enrichment grouping) for accelerated learning options that include acceleration options. The next section will now examine acceleration strategies.

Accelerations

Accelerations are teaching strategies described in the literature (Colangelo et al., 2004) as a curriculum model and also an intervention technique used by some schools. Acceleration offers advanced students significantly more complex task design and instruction, and opportunities to study with similar-ability peers Culross et al. (2013, p. 36) and in high-achieving groups in heterogenous classes. This strategy is offered to students that progress through their age-grouped academic program at a faster rate of mastery or at ages "younger than typical" (p. 9).

Publications by Colangelo, Assouline and Marron (2010), Kronborg and Cornejo-Araja (2018) and Vasilevska and Merrotsy (2011) examined the conditions under which this teaching strategy is provided, dividing accelerations into two forms. The first, *grade-based accelerations*, is where exceptional student achievement is recognised by early advancement to the next grade level, represented by grade skipping, double promotion (Rimm, 2018; cited in Kronborg and Cornejo-Araya, 2018), and early-age admission to primary school. The second form, *subject/content-based accelerations*, are instances where students demonstrate curriculum mastery in a subject area beyond the ability of their cohort and are provided content and/or instruction from higher grades but do not attend higher-grade classes in that subject. This form of acceleration is seen in telescoping curricula, curriculum compacting, through teacher mentoring, and ability grouping within and outside classrooms. Currently, there are no independent statistics detailing which acceleration forms are offered by public, private or religiously affiliated schools in Australia to indicate how schools cater for the gifted using this strategy.

Peer-reviewed documents (Colangelo et al., 2004; Maher & Geeves, 2014; Ronksley-Pavia, 2011; Southern et al., 1993) corroborate the listing of up to 18 distinct acceleration methods schools can develop or reinforce to assist advanced learners either in-class or requiring the withdrawal of gifted students. This list, published as the *Templeton National (US) Reports on Accelerations* (Colangelo et al., 2004) coalesces accelerative measures internationally and offers some options not available in some countries (e.g., Honours' high school programs, early graduation). Other acceleration types listed included early admission options to primary and secondary schools, self-determined study pathways, curriculum adjustments, and extracurricular programs. The influence of the Templeton Reports on Accelerations directly led to these same strategies being used in an Australian educational policy titled *Releasing the brakes* (Gross, Urquhart, Doyle, Matheson, et al., 2011) and other articles (Fraser-Seeto & Howard, 2015; Gross & Sleap, 2001; Vasilevska & Merrotsy, 2011; Walsh & Jolly, 2018) to raise community and professional awareness of Gifted teaching strategies.

Acceleration Types

Accelerations can be divided into categories that can be provided as structured school-based curriculum models, in-class differentiated techniques by class teachers or combining these to form a model where gifted children are withdrawn for acceleration. School-based acceleration models include early-entry arrangements to kindergarten and other school levels, dual enrolment, and advanced placement or 'grade skipping' to higher school levels. Acceleration interventions by teachers include curriculum compacting (reduce introductory instructions, drills and practice of established skills) within a grade level, telescoping (fits curriculum delivery to a smaller timeframe), mentoring and tutoring by aides, teachers or older students.

Policy and Practice

A review of Australian state and federal departmental websites (New South Wales Government, 2020; Queensland Government, 2020; Victorian Government, 2013; Western Australian Government, 2010), submissions to the federal parliament (Beattie et al., 2006; Watters & Diezmann, 2001) and literature reviews on giftedness (Colangelo et al., 2004; Maher & Geeves, 2014; Ronksley-Pavia, 2011; Southern et al., 1993) advocated several recommendations for in-class accelerations. Common recommendations found amongst this information include curriculum compacting where a student is presented only aspects of learning not previously mastered and the provision of student self-developed 'passion' projects (Beattie et al., 2006; Gross, 2012). Other authors (Betts & Neihart, 2010; Colangelo et al., 2015; Colangelo et al., 2004) documented methods for subject acceleration where a student completes work both at the enrolled grade level as well as studies at a higher level, and individual tutoring with an older student or aide within the classroom.

No online departmental documents examined in any depth research on the provision for grouping high-ability and gifted students in homogenous groups temporarily withdrawn from the classroom. This represents a significant vacancy in the field that will benefit from awareness of withdrawal acceleration options. Information on select entry schools was not considered as these involve full-time enrolment in accelerations rather than students being temporarily withdrawn from classes and returning to their cohort afterward. Likewise, research was uncovered to reveal historical documents on Select Entry Accelerated Learning (SEAL) programs that existed in some Victorian secondary schools until funding was cancelled in 2016; this program was similarly precluded from this study owing to students attending full-time accelerations.

One variant of acceleration is the focus for this thesis. The literature (Colangelo et al., 2004; Kronborg & Cornejo-Araya, 2018; Rimm & Lovance, 1992; Rogers & Beckstead, 1991; Ronksley-Pavia, 2011) describes this form of intervention, subject skipping, is chosen by schools when the criteria for or availability of grade skipping is not met due to administrative facets or concerns about

the sufficient socio-developmental maturity in an advanced child. This instance can be explained by a Year 1 gifted child with the capacity to study Year 6 English but does not display the confidence or social acuity to work alongside Year 6 students.

Case study research provides insights into a subject acceleration method where gifted children are withdrawn from their cohort to another room as a homogenous study group. US research terms this intervention as a 'pull-out' program (Fernandez & Hynes, 2016; Renzulli, 1987; VanTassel-Baska, 1987; Vaughan et al., 2016), but that term can apply equally to students of any ability level and infers students (who are 'pulled out') cannot exercise a choice to attend or remain with their class. This thesis therefore disagrees with the term 'pull out' as pertaining particularly to the gifted and proposes 'Withdrawal Acceleration Option' (WAO) from this thesis point forward as a definitive addition to knowledge of the field. Later in this chapter, literature on student agency and choice will examine these choices. These articles also describe instances where advanced children attended lessons in older grades, essentially a limited version of grade skipping, not as a small grouping of similarly-aged, gifted students.

In their research on accelerations, Vasilevska and Merrotsy (2011) catalogued several articles including doctoral theses and case studies in an annotated bibliography. These described the circumstances and outcomes of gifted primary students withdrawn from primary classes to attend lessons with older grades for some subjects. This acceleration technique melded grade-skipping with the purpose of subject-skipping and three articles (Bernstein, Lubinsky & Benbow, 2021; Gross, 1992; Victorian Government, 2012) found those primary students became bored or disenchanted with being the younger, gifted child in classrooms where they had little in common with the older classmates.

Withdrawal Acceleration Option (WAO)

International studies of interventions (Al-Zoubi, 2014; Bailey et al., 2008; Baudson & Ziemes, 2016) examined school experiences of secondary gifted and talented students. Primary WAO examples were provided by Kitsantas et al. (2017) and Bildiren (2018), and Moon et al. (2002). These publications established a connection between academic growth by students experiencing ability grouping away from the classroom who were permitted greater student autonomy in producing summative tasks against faster and broader subject delivery.

Qualitative surveys reported by Al-Zoubi (2014), and Baudson and Ziemes (2016) attributed growth in academic capability, gifted self-identity, and confidence due to gifted students succeeding with more complex challenges when compared to non-gifted peers. Bailey et al.'s literature review (2008) of almost 21,000 US, UK, and Asian studies identified dominant influences on achievement in

WAOs were positive group dynamics between gifted students in WAOs and the challenges presented by higher-order thinking tasks set by teachers. Instances of these interventions include selection to higher-ability working groups, individual working contracts, withdrawal accelerations, and the design of tasks that encourage a gifted child to analyse and use researched information (Colangelo et al., 2004; Coleman et al., 2005; VanTassel-Baska, 1998).

When conceptualising a definition for withdrawal accelerations, Kronborg and Cornejo-Araya (2018), proposed a notion comparable with other authors (Brigandi et al., 2019; Colangelo et al., 2010; Dare & Nowicki, 2019; Fernandez & Hynes, 2016; Gross, 1992; Renzulli, 1987). In essence this conceptualisation stated that withdrawal subject-based accelerations are "…when a particular student is accelerated by subject area… moving to a different classroom for part of the school day" (Kronborg and Cornejo-Araya, 2018, p. 3). The studies of Kitsantas et al. (2017) and Bildiren (2018), and Moon et al. (2002) provided examples of whole-day WAOs in US and Turkish schools instead, where gifted students did not return to their cohort at the end of a WAO session. Australian reports by Hill (1994), Merrotsy (2006) and Hoekman (1994) examined primary and secondary students experiencing the hybrid grade/subject skipping model whereby individual students were withdrawn temporarily for subject-based acceleration in older classes to establish whether accelerations to validate this strategy as the optimal teaching strategy for gifted students. Participants in this investigation experienced a different set of circumstances, being withdrawn during the day for WAOs with same-aged students in a homogenous grouping and returning to the classroom afterward, often when the non-accelerated grade's lesson was still in-session. These circumstances are not thoroughly covered in the literature by Kitsantas et al. (2017) and Bildiren (2018), and Moon et al. (2002) and thereby present a vacancy in the field to raise awareness of WAOs in a modern, local context.

Justifications. Research was evaluated to establish the reasons and motives presented in the literature on WAOs. Some publications (Colangelo et al., 2010; Reis & Renzulli, 2009) advise fostering the socio-behavioural needs of gifted students through same-ability groupings to better the circumstances for gifted students to maintain and extend their levels of academic exceptionality. Investigations of case studies, surveys, and literature reviews (Benny & Blonder, 2016; Brody & Benbow, 1987; Renzulli, 1996; Teare & Brighouse, 1997) into 'pull-out', 'extension' or 'enrichment' programs reveals two functions generally fulfilled through WAOs. First, as children selected to WAOs exceed the curriculum benchmarks for tasks at their grade level, this type of acceleration allows gifted students the opportunity to extend their advanced skills in programs not available to mainstream, mixed-ability classrooms (Reis & Renzulli, 2009) with a low student-teacher ratio to maximise teacher support (Diezmann & Watters, 2000; Reis, 2001). Research additionally revealed benefits to non-gifted students whenthe gifted attend WAOs. Culross et al.

(2013) and Gallagher et al. (2011) discovered that removing accelerated students for some lessons provided the class teacher a smaller student ability range with which to cater, reducing the student-teacher ratio without the demands of also meeting the needs of the gifted in class.

Supportive evidence by Al-Zoubi (2014), and Baudson and Ziemes (2016) validated findings of gifted students' improvement in self-esteem, improvement in social interactions with other gifted students and in their academic progress in WAOs. It was noted those papers surveyed teachers of secondary gifted students to establish these perspectives rather than seeking data from the gifted secondary students. Other studies by Yang, Gentry and Choi (2012), Vasilevska and Merrotsy (2011), Moon et al. (2002) corroborate the secondary teacher findings by studying primary children, their teachers, and parents. A synthesis of 314 studies between 1912-1988 (Rogers & Beckstead, 1991), assessed critically by Steenbergen-Hu and Moon (2011) investigated psychological outcomes for gifted secondary students. Those studies noted significant positive effects were found for the socialisation and psychological adjustment of gifted children who received grade skipping, grouped subject skipping with other gifted children, and when provided mentorships with older students or teachers.

During instances where gifted students were surveyed, several authors examined the aspects of gifted students' wellbeing, such as happiness (Proyer et al., 2017; Vasilevska & Merrotsy, 2011), improved study motivations (Neihart, 1999), and working partnerships (Coleman et al., 2015; Rogers, 2007; Rogers, Wormald & Vialle, 2011) when selected for homogeneous-ability groups. Empirical studies (Bildiren, 2018; Yang et al., 2012) recorded the subjective responses of students after their school made changes to either the learning environment or tasks provided exclusively to gifted students. Findings from these studies found improved study habits (Neihart), positive self-image, and resilience (Proyer et al.) and raised engagement with peers and teachers (Coleman et al.). This finding coalesces with a 30-year literature review by Colangelo, Assouline and Marron (2010) that discovered greater group interactivity, behavioural self-regulation, and positivity in gifted students from pre-tertiary levels that received academic interventions, compared to gifted children in schools where differentiated giftedness interventions were not offered.

Historical Context of WAOs. Research into this field reveals that WAOs as a teaching practice based in empirical research can be dated to almost a century ago. Hollingsworth's 1926 investigation of gifted high school students pioneered the field of educational psychology in giftedness in a quantitative study linking accelerated literacy tasks to continuing academic progress in secondary school students with superior IQ scores (Culross et al., 2013; Silverman, 1992).

Studies of different types and efficacy of acceleration interventions widened significantly after 1986. This was a direct result of studies by Feldhusen and colleagues (1986) into how gifted secondary students were screened for interventions, how these students engaged with teachers during the intervention process and the methods employed by teachers to continually differentiate for these students (Coleman et al., 2005; Culross et al., 2013; Loreman et al., 2010; Swiatek & Benbow, 1991). Case study research by Feldhusen, Proctor and Black (1986), noted influences on teachers who could or could not differentiate effectively to ensure positive academic outcomes for gifted children. Reasons for these responses cited school policy and systematic restraints (i.e., funding, timetabling, and teachers' giftedness knowledge), developing recommendations on interventions to assist such students (Brody & Benbow, 1987; Colangelo et al., 2004; Culross et al., 2013; Loreman, Deppeler & Harvey, 2010; Swiatek & Benbow, 1991).

Feldhusen et al.'s publication (1986) proposed recommendations culminated in the development of the Purdue Three Stage model, which called for a parallel gifted learning pathway with no academic interaction between gifted and non-gifted students in classrooms. This model has dominated the conceptualisation of acceleration pedagogy this century according to Culross, Jolly and Winkler (2013) by separatingthe gifted from the non-gifted in curriculum studies partially (i.e., subject skipping) or wholly (i.e., grade skipping). The Purdue Three Stage model promoted the teaching of divergent and convergent thinking skills, creative problem-solving skills, and the encouragement for independent study skills for the gifted. Other research by Moon et al. (2002) and Culross et al. (2013) echoed the Purdue research into giftedness teaching methodology and found the Feldhusen et al. recommendations to be among initial proponents of withdrawal acceleration pedagogy. Other recommendations by Feldhusen et al. (1986) included advocating for interventional assistance for students demonstrating significant advancement in one area but difficulty with other fields, and for teachers to encourage task persistence in gifted children to ameliorate social and emotional difficulties.

Other suggestions that refer to Feldhusen et al.'s (1986) research recommended schools apply comprehensive informal and formal identification models to locate students throughout the course of a school year (Brody & Benbow, 1987; Cross & Swiatek, 2009; Moon et al., 2002) rather at a fixed point; for instance, via the use of an exam result to validate selection to an acceleration program. Finally, Feldhusen et al. advocated for schools to cultivate continuing academic excellence and the pursuit of high expectations among the wider student population in schools.

WAO Outcomes. Reports on the holistic outcomes of WAOs widened considerably after the publication of Feldhusen et al.'s (1986) study. Increased self-esteem and perceptions of personal safety, positive perspectives of their domain talent, and proactive social and working relationships

within schools feature in European and US qualitative studies that utilised interviews and questionnaires (Kulik & Kulik, 1992; Maher & Geeves, 2014; Ritchotte et al., 2016; Rogers, 2007). These findings were consistent with research across other demographics; older primary students (Dare & Nowicki, 2019; Frydenberg & O'Mullane, 2010; Kitsantas et al., 2017; Steenbergen-Hu & Moon, 2011), subject-specific accelerated groups (Bicknell & Riley, 2013; Proyer et al., 2017; Smedsrud, 2018).

Studies of older gifted students in WAOs (Frydenberg & O'Mullane, 2010; Kitsantas et al., 2017) showcased lowered perceptions of their social standing on being removed from classrooms when compared to lower primary levels, though higher secondary levels appreciated the opportunities to pursue their strengths with greater self-direction. Gifted students attending Mathematics accelerations at all levels (Bicknell & Riley, 2013; Proyer et al., 2017; Smedsrud, 2018) were positive in their working relationships in WAOs and expressed gratitude at being removed from the distractions of their non-WAO classroom.

Motivation to Establish WAOs. Understanding the principles underpinning WAO design reveals a range of motives for the establishment of this interventional method by schools. A common motive for hosting WAOs featured in the literature (Gross, 1992; Kronborg & Cornejo-Araya, 2018; Prior, 2011) is to select and serve exceptional students supported by academic and/or psychometric testing demonstrating commitment to strength-based learning for high ability students. US based articles were critiqued (Côté & Furlong, 2016; Kilgore, 2009; Matthews, 2020) and found high schools were motivated to accelerate gifted students in the fields of science, sport, ICT, and Mathematics (known as Advanced Placement classes) to gain preferential selection to universities and thereby gain a marketing advantage. Some Australian universities offer advanced placement classes to secondary students, but these do not target specific secondary schools, a major point of difference with US and UK schools. To date, no local studies have been published examining the reasons some schools offer WAOs to establish if there are additional financial or prestige-related motives for acceleration options.

It was noted in the advertising literature published by schools participating in this investigation that no information stated what selection criteria might be for their acceleration programs or what outcomes for the WAOs could be expected by parents. A similar finding was made among the schools advertising their WAOs on state departmental websites. Only four schools nationally offered student application options for WAOs, but not how the applications are judged, creating questions about the transparency of WAO selection methods in those schools. Examples found among state educational documents included WAOs for the preparation for the Victorian High-Ability Program (VHAP) and Victorian Challenge and Enrichment Series (VCES). Event-based programs including

the Australian Problem-Solving Mathematics Olympiads and the Future Problem Solving (international) Program invite gifted students, selected by teachers to attend WAOs to practise skills and knowledge only in the days or weeks prior to the event .

Criticisms. The literature indicates there are criticisms for separating gifted children from the classroom for parts of the school day. Criticisms of WAOs in the literature continue to play-out in research reports locally (Southern et al., 1989; Vialle et al., 2001) and in international publications (VanTassel-Baska, 1987). These arguments suggest this type of intervention separates vulnerable children who display atypical learning and social behaviours from the care and connection to their class teacher and classmates from whom they derive support and social connectivity. Other criticisms, based on parent and WAO student perspectives, argues that withdrawal lessons were believed to be mostly unstructured or sporadic in their planning and delivery, presenting randomised assortments of activities from higher class levels, and might not address their individual learning styles and precocity (Cox et al., 1985; Davidson et al., 2007; Winebrenner, 2003).

Studies of educator perspectives on giftedness and acceleration methods are strongly tied to teacher's ethical, differentiated considerations for all students, not specific conditions to be only applied to benefit the few. European (Ozcan & Kaya, 2016; Persson, 2010), US (Pollock, 2015), and Queensland studies (Gallagher et al., 2011) of teacher perspectives on accelerations discussed earlier shared a sentiment that many teachers believed the educational priority should be placed on societal growth rather than more exclusive learning experiences that benefit fewer people at a higher level. A review of those studies, however, noted limitations on access to contemporary research because of a variety of reasons (apathy, ignorance, cultural factors, time availability, and training factors). The results of this is widely documented (Benny & Blonder, 2016; Feldhusen et al., 1986; Fletcher & Speirs-Neumeister, 2012; Steenbergen-Hu & Moon, 2011) to show teachers were largely unaware of other research indicating mixed ability or null class grouping has detrimental academic and social benefit for gifted students, leading to their frustration, underachievement, and in some cases, denying their previously demonstrated giftedness and talent.

Reasons for Criticisms. It was noted that the criticisms of unstructured WAO program design and lack of formal identification of gifted students selected for WAOs were indeed mentioned in publications from local and international researchers that recommend withdrawing gifted students for accelerations (Colangelo et al., 2010; Colangelo et al., 2015; Colangelo et al., 2004; Gross et al., 2011; Rogers & Kimpston, 1992; Steenbergen-Hu et al., 2016; Steenbergen-Hu & Moon, 2011). These publications continue to frame much of the literature regarding the structuring of acceleration systems that include WAOs, insist that the processes for identifying and supporting gifted children must be strategic and ongoing.

When revisiting articles presenting overall negative perspectives on WAOs, multiple articles (Cox, Daniel & Boston, 1985; Davidson, Davidson & Vanderkam, 2007; Southern, Jones & Fiscus, 1989) reported a strong sense that data interpreted in these publications sought to raise reader awareness of the negative aspects of WAOs (e.g., may not target strengths, separates gifted from peers), and did not present a balanced view of the withdrawn acceleration method. Those articles did not examine the underlying reasons for the perspectives on the parents, WAO students, nor class teachers to filter whether underlying structures may have influenced the reactions reported such as prior knowledge of the gifted field, outcomes for the gifted in schools and data on homogenous ability groupings at school. A review of US and UK articles on gifted 'pull-out' methods between 1990-2010 (Brigandi, Gibson & Miller, 2019; Worrell et al., 2019; Ziegler & Phillipson, 2020) found that whilst earlier negative and ambivalent perspectives on WAOs existed, positive reflections of withdrawal accelerations began to dominate after 2005 which may coincide with the US investigations of and subsequent publication of the Templeton reports on Accelerations (Colangelo et al., 2015) and presently remain generally perceived as a productive teaching intervention.

In response to negative perspectives on WAOs, Cornell and colleagues (Cornell et al., 1991) stated that some educators might assume that there were no negative affective repercussions for most accelerated students within the classroom or when withdrawn for grade or subject-based accelerations. Cornell et al.'s research supported assertions that gifted students' academic, social, and emotional lives are complex, multifaceted phenomena from which it is difficult to get a homogenous profile. Again, this research was based on teacher perceptions and the opportunities exists to raise awareness of perspectives on WAOs from the gifted students' point of view.

Summary. This section reviewed published studies depicting a range of perspectives on WAOs, mostly from educator and research viewpoints. These perspectives illustrate negative and positive aspects of WAOs, which encourages opportunities for further research to locate whether these views influence schools to provide (or not) this option to gifted students. It was noted that despite the views, no studies exist that offer an optimal WAO structure schools may share, transparent criteria for WAO selection, how content is sourced and the expected outcomes for students and schools hosting this option.

This thesis suggests the literature reveals significant gaps in understanding how WAOs are conceptualised by schools, how these are structured in terms of student and task selection and how were these structures perceived by WAO students. Evidence in this section highlighted this accelerative method leads to overall positive self-esteem and challenge for Gifted students, yet it is not definitive which elements deliver these perspectives, particularly for gifted primary children.

The next section will query how student voices have informed the literature, and which opportunities exist to raise awareness of the perspectives on WAOs in primary schools.

Agency and Voice

Literature was selected that raised knowledge of situations when students voiced opinions or sought to alter aspects of their learning that were formerly the sole prerogative of the teacher. Earlier in this chapter aspects of optimal learning were examined, and these highlighted options such as self-determined study pathways, open-ended learning contracts and accelerations where students were supported by teachers to pursue their learning strengths.

Research on agency and voice for this section was preferred that explained causal links before and after gifted students exercised their opinions, which were almost always bounded by those provided by their school. No studies were uncovered explaining the contexts under which primary students were provided with options with no or limited adult oversight, guidance, or teacher expectations. This presents opportunities for future research into self-determined pathways provided in primary schools and if they meet the expectations of gifted students and their teachers. It was considered that though local policy documents since 2008 (Education Council, 2019; Ministerial Council of Education Employment Training and Youth Affairs (MCEETYA), 2008) call for greater student access and involvement in their learning plans, the steps to accommodate new policies in schools is hampered by what some researchers (Fraser-Seeto & Howard, 2015; Klusmann et al., 2008; Nias, 1999) found to be the normative pressure of state-mandated curricula testing and reporting on teachers.

Essentially, studies into the lived experiences of students are not a unified field and models mapping those experiences need additional information to suit other ages and cultural learning contexts. Several publications, including Boyd (2005), Hodgkin, Fleming and Bryant (2013) and Jindal-Snape and Cantali (2019) examined instances where students provided their perspectives on their learning journeys, though in each case follow-up studies were not conducted to check if those perspectives influenced changes in the options provided to the respondents. These authors examined factors impacting key student perspectives and experiences across higher elementary and secondary levels, finding differences in "structure, philosophy and status" (Hodgkin et al., 2013, p. 30) to primary student experiences.

Study and social motivations, views on teaching methods, and socio-emotional reflections on school life were studied by Hodgkin et al. (2013), but this investigation did not query reasons why schools created the learning situations on which students formed their views. Differences in the responses were attributed to "…teaching methods, different expectations, different teachers and subjects, and

more teaching to meet external needs, such as GCSE[3]" (Geen, 2005; cited in Hodgkin et al., 2013 p. 31), and referred to secondary school matriculation levels. Access to the responses was not able to establish what those methods, expectations and needs which respondents were referring, and these will be targeted as themes for the questions in the chapter on Methods.

Gifted Voices in Research

Research documenting the perspectives of gifted students on accelerations is rarer than teacher surveys (Heyder et al., 2018), case studies (Olthouse, 2014; Roznowski et al., 2000), interviews (Benny & Blonder, 2016) and literature reviews (Culross et al., 2013; Kaufman et al., 2009; Vasilevska & Merrotsy, 2011; Vaughan et al., 2016) on accelerations within the 1986-2022 timeframe. Three studies, Kitsantas et al. (2017), Bildiren (2018), and Moon et al. (2002) were crucial in raising awareness the perspectives of gifted children in primary schools through the collection of student responses.

Influencing the data-collection method for this investigation, analysis of Kitsantas et al.'s, Bildiren's and Moon et al.'s studies verified gifted student perspectives using either questionnaire or interviews. When studying gifted voices on their school experiences, Kitsantas et al. (2017) and Moon et al. (2002) noted the most significant influences on a gifted student's academic development was in how they perceived positive, negative, and neutral experiences of their learning environments, which influenced their identity as a member of their grade and relationships with their teacher. This information corresponds to Hattie's Rope model (Hattie, 1992) applying to all students, but is especially prevalent to gifted students who experience social and emotional vulnerabilities noted by Betts and Neihart (1986). Hattie wrote on how learners see themselves and their perspectives on their learning and desired outcomes can be conceptualised as strands of self-concept. For example, students may present an overall positive perspective on their schooling yet display a sense of helplessness that they feel they cannot cope in the classroom, even as an advanced or gifted learner.

These perspective 'strands' are crucial to understanding the characteristics of WAOs experienced by gifted students which are rarely presented in modern literature. It follows that to raise awareness of gifted perspectives on WAOs it is necessary to examine the available research to locate gaps in the literature, and thereby identify an opportunity to develop a research question and a methodological approach for this investigation.

Three Studies on WAO Perspectives

Three important findings have been established when examining the perspectives on WAOs using the responses of students. First, a limited range of international studies analysed gifted primary

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[3] General Certificate of Secondary Education (UK)

student perspectives on subject based WAOs, which differ from the Australian format seen in this investigation. Doctoral research on acceleration-related perspectives was examined (Jaggar, 1999, in Vasilevska & Merrotsy, 2011) that was described as the first study that specifically addressed the issue of student perceptions of subject acceleration in secondary schools, and one of the very few studies at the time that addressed acceleration interventions for the moderately gifted. This research queried more than 300 secondary students with surveys and purposive student sampling of 10% of the group to establish secondary WAOs did not adversely affect socio-emotional development.

Second, across the studies WAO students expressed a positive reaction to withdrawal accelerations, but significant number of gifted students did not enjoy being separated from their (non-gifted) classmates, the format for this type of acceleration. Third, the studies met criteria for research on primary gifted perspectives on WAOs and used either single or multi-phase investigation formats to generate data on this topic as interpretations of basic assumptions, observations and reactions to (gifted) learning environments (Oxford, 2015).

Moon, Swift and Shallenberger (2002). This qualitative investigation of fourth and fifth graders in the US suggested WAO-selected students expressed negative observations, memories and reactions on parental expectations, additional WAO homework and being separated from their non-gifted classmates but provided positive perspectives on being challenged and being selected for WAOs. Data were collected using teacher-corroborative observations, interviews with teacher, students, parents and administrators, recounts, and a goal-attainment Likert-scale survey over one school year. The appearance of negative parental and homework perspectives among the responses in this study resonated with other researchers. This study was highly influential when comparing instruction/motivation models later in the Discussion chapter of this thesis, as it suggested aspects outside of the school could also influence gifted student perspectives.

Moon et al.'s case study featured schools withdrawing gifted students for whole school days, not single acceleration lessons that were common to the WAOs observed at the schools participating in this doctoral investigation. Some gifted students referred to their intellectual dominance in the classroom having a direct bearing on their social and academic standing in the classroom, which they felt was jeopardised by their withdrawal for accelerations. That finding corresponds to reports on 'Big Fish, Little Pond' (BFLPE) theory described by research (Marsh & Craven, 2006; Marsh & Parker, 1984; Zeidner & Schleyer, 1999) into the perceptions of advanced students participating in multi-ability learning situations. Mixed reactions by WAO students on their removal from their classroom powerbase was a significant conclusion of Moon et al.'s (2002) research and links to publications by Ronksley-Pavia (2011), Schaeffer (2015) and Sapon-Shevin (1994), and longitudinal research by Hattie (2003). Each of these researchers agreed that gifted children exhibit positive social

and emotional growth when their precocities were openly acknowledged in heterogenous classes. This was a significant finding in the research that will inform the development of the sub-questions focusing on selection processes for WAOs, whether gifted students were offered choices to attend WAOs, and what the gifted students knew about the conditions they would experience in that program.

Kitsantas, Bland and Chirinos (2017). This US study of elementary and middle school (Years 3-8) gifted children broadened Moon et al.'s (2002) findings, searching for student and teacher perspectives on WAO learning experiences. Groupings of 4-10 gifted students who attended full-day WAOs were questioned via a single interview which provided a narrow window data set for analysis. Seven questions targeted views on teaching methods, group interactions, task design, and how participants reflected on the value of the WAO to their academic and social progress. Upon reflection, the Kitsantas et al. study should have used the opportunity to encourage elaborations in the responses via open-ended questions or comparisons to hypothetical scenarios recommended by methodological scholars (Creswell, 2015; Ramirez et al., 2015) to widen the range of collected data, and check whether additional themes could be generated for analysis. The Kitsantas report additionally revealed the researchers did not consider peer-pressure and shyness within the grouped interviews when analysing results or share whether each student had provided their maximum input during 30-minute interviews. These factors could have generated a wider range of results on personal progress in WAOs, the effects of reactions outside of WAOs, and self-regulatory skills mentioned in the Kitsantas et al. report.

Participants in the current investigation detailed perspectives on the WAO selection process, the structuring of WAO lessons and tasks, and academic and social outcomes to widen knowledge of WAOs in Australia. The themes generated by Kitsantas et al. (2017) on WAO structure, selection and reactions by others influenced the composition of questions for this investigation's data collection strategy but will offer a multi-phase investigation using open-ended questions.

Bildiren (2018). This Turkish study compared socio-emotional outcomes (i.e., happiness, anxiety, behaviour and conformity, school status, popularity) between those receiving a WAO and those gifted children remaining in classrooms, receiving accelerated learning alongside non-accelerated peers from their teacher. No similar studies of this dynamic, separating groups of primary gifted children, could be located in the literature, evidencing the results of this study as critical to this field.

Validating earlier US studies (Kitsantas et al., 2017; Moon et al., 2002) and BFLPE theory (Fang et al., 2018; Marsh & Parker, 1984; Zeidner & Schleyer, 1999) of perspectives on WAOs, Bildiren

(2018) reported significant differences in the outcomes reported by students when the Piers Harris Self-Concept Scale subtests were applied to Years 3 and 4 gifted students. WAO students reported decreased happiness, greater anxiety, less willingness to conform, and a loss of "mental and school status" (p. 1491) when they were withdrawn to another classroom for extension when compared to gifted students remaining with non-gifted classmates. Limitations of the Bildiren study included: not establishing baseline data on WAO students prior to being selected for withdrawal, not compensating for teaching styles or relationships between gifted students and their classroom and WAO teachers (and there is no evidence the researchers revisited the WAO students to investigate if their original responses were temporary or lasting.

Summary. Investigation into the perspectives WAO students provide on social and academic aspects of their acceleration is rare, despite this strategy existing in the literature since the 1980s. Three studies generated observations, memories and reactions to WAOs that highlighted influences on happiness, anxiety and satisfaction at school. Each of these studies examined the student attending full-day WAOs, whose students were not withdrawn from lessons and then returned afterwards. Research was available during the 2002-2017 period (Creswell, 2015; Lee et al., 2010; Ramirez et al., 2015) which offer excellent insights into multi-phase case studies being beneficial to researchers and providing data to possibly generate themes from their analysis of Moon et al. (2002), Kitsantas et al. (2017) and Bildiren (2018). This represents an opportunity for this doctoral thesis to present the options used by those studies, and to also consider other methods, for instances, the use of a hypothetical scenarios to validate perspectives, as suggested by Creswell (2015) and Ramirez et al. (2015).

Moon et al.'s study (2002) uniquely mentioned influences outside of school that impacted the self-perceptions of students, and this related strongly to an Instruction/motivation model – the MOCSE model- that mapped factors that pressure student esteem and productivity and will be revisited in the Discussion chapter. The studies featured several limitations that will guide the development of the investigative methodology and methods, for instance; only a single data collection strategy, some offered no opportunities for WAO students to speak privately or in confidence, exploring and reconciling the paradox of respondents on their withdrawal from classrooms, and questions over choices WAO students could make on their attendance and the tasks provided to them. The next section will examine these opportunities to locate an overarching lacuna in the field and present a research question to add significant knowledge to the literature.

Opportunities for Research

The goal of this study is to raise awareness of the perspectives gifted children in primary schools express on their experiences in a withdrawal acceleration option. This teaching strategy offers an

optimised learning pathway in which gifted students are challenged at their point of academic dominance with a faster pace and depth of instruction apart from their non-gifted peers. This chapter proposed the following gaps in the literature that will be reconciled by an overarching research question and sub-questions.

Building Philosophical Knowledge

There is an opportunity to investigate how 21st century teachers exercise philosophical positions to deliver optimal, inclusive learning outcomes to gifted students. Developments in international and local policies encourage teaching adjustments that cater to a range of abilities and make it possible for students to take an active role in planning learning pathways. From a philosophical standpoint, no studies were found that pursued a question of whether teachers change their methods from one model (behaviourist, cognitivist, constructivist) and what influenced this decision when working with gifted primary children. The pressures on teachers applied by the global health crisis presents an opportunity to investigate if teachers adjust their strategies for the gifted in their teaching values and whether this has changed over time. Knowledge of the premium teachers place on giftedness professional development packages and their readiness to use updated gifted-focussed theoretical frameworks and pedagogies encourages a research question on how to gain current insights into the wayst gifted primary students can be educated at schools, and the perspectives on those methods from student responses.

The questions that will build philosophical knowledge of WAOs will target perspectives on challenge and inclusion being met by the participating schools. Questions targeting this topic will be presented in the Methods chapter. Responses to this notion will provide insights on inclusivity and strategies that targeted the needs of the WAO participants.

Building Theoretical Knowledge

A unifying connection between instruction/motivational theories to include accelerations for primary WAO students is limited and not conclusive. Primary students experience different learning structures and expectations in schools when compared to secondary counterparts because of the generation of theoretical frameworks used to validate acceleration strategies where evidence has been collected. Some theoretical models noted changes in perspectives during the progression of lessons; those instructional models would be preferred if it was shown primary student responses changed at different times in WAOs.

The questions that will build theoretical knowledge of WAOs will target three topics: (i) perspectives on being selected to academic accelerations and of the structure of WAOs, (ii) perspectives on the reaction participants experienced because they were selected for WAO, and (iii) understanding when

those perspectives occurred to WAO students in the context of acceleration lessons. These topics will inform the subquestions introduced in the next section.

Building Pedagogical Knowledge

Significant research describes different aspects of identifying gifted behaviours and providing accelerations, though the structural details on designing WAO programs are scarce. This view is evidenced by (i) differences in local giftedness policies and pedagogy that obstruct a coordinated, consistent approach supporting and teachingthe gifted, (ii) no Australian case studies of WAOs in primary schools that limits knowledge and duplication of WAOs in schools, and (iii) rising workplace pressures on Australian teachers that reports indicate has directly influenced a loss of priority for updating professional knowledge of giftedness education (Fraser-Seeto & Howard, 2015; Victorian Government, 2012; Watters & Diezmann, 2001). Those reports may be redundant following the Australian schools' lockdown during the 2020-2021 COVID-19 pandemic; indeed, updating this information presents is timely and important to the field. This thesis suggests that, despite Australia's considerable legislative history on education that pre-dates the UK and USA (which now dominate gifted and talented publications) and international reports on school inefficiencies when assisting vulnerable students such as the gifted, gaps have appeared in the knowledge of gifted and talented policy, research, and pedagogy.

An opportunity is generated by this gap to pose a research question on perspectives by primary gifted students on their school's withdrawal acceleration strategy. The answers will make a significant contribution to knowledge of the WAO selection and task design process, and perspectives on the choices provided by teachers for the acceleration program.

Building Knowledge of Perspectives

Knowledge of primary student perspectives is important in raising awareness of the decisions, structures, interactions, and procedures that culminate in provision of WAOs. Studies indicate children in primary schools attending WAOs full-time or on a regular full-day basis provided their opinions on accelerations, but those studies did not present situations where students were withdrawn temporarily and return to their class to be reintegrated into mixed-ability tasks on a regular basis. This situation presents another interpersonal dynamic not examined in the literature as an influence on gifted perspectives. No analysis exists to illustrate what perspectives gifted primary students withdrawn temporarily for acceleration lessons are formed on those decisions, structures, interactions and procedures that resulted in WAO experiences.

The importance of this data potentially widens knowledge of an intervention which empirical research shows provides an optimal learning strategy for gifted primary students. The questions that

will build knowledge of gifted primary perspectives will identify which perspectives exist on being separated from peers and then reintegrated into class tasks, and which perspectives exist in relation to the structuring and delivery of WAO tasks.

Building Epistemological and Ontological Knowledge

Studies of primary school perspectives on WAOs to this point in time presented analysis based on Likert-scale surveys or interviews to inform analysis on WAO perspectives. Only one study (Moon et al., 2002) offered a multi-stage data collection process or compared results with other reports or offered the choice to participants to elaborate freely or in confidence in individual and focus-group settings.

An opportunity is generated by this gap to present another multi-stage investigation method, based in qualitative methodology using established formats (Likert-scale surveys and interviews), and an additional format (scenario response) to generate perspectives on WAOs for interpretation. The data collection and analysis methods employed by this investigation will be explained in greater detail in the next chapter. Primary gifted students will be invited to provide initial perspectives on WAOs (survey), compare their experiences to a hypothetical WAO student (scenario response) based on the overarching research question stated below.

Research Question

One of the strengths of conducting qualitative, interpretivist research is that it generates data that may subsequently encourage future studies and enhance professional practice. Upon reviewing educational literature linking gifted student perspectives and withdrawal acceleration options in this chapter, it is evident gaps in research literature exist.

To generate knowledge, the proposed research question was, *what are the perspectives of gifted primary students attending withdrawal acceleration options in schools?* This question was intended to generate a wide range of gifted student perspectives by offering an open-ended query. Oxford's (2015) and Elen, Lowyck and Lehtinen's (2004) articles on perspectives are interpretations of basic assumptions, observations, and reactions to learning environments. This research project will investigate three features affecting gifted primary student perspectives on structures, task design, and reactions of others to withdrawal acceleration options. These topics will serve as the basis for the sub-questions. These features are defined as:

- **Structures-** identified in the literature (Moon et al., 2002; Kitsantas et al., 2017; Bildiren, 2018) as the characteristics of selection process, withdrawal frequency, and how students were re-integrated into multi-ability class following a WAO session

- **Task design**- identified in the literature as types of subject-acceleration tasks (Colangelo et al., 2010; Colangelo & Davis, 2003) used in primary schools. These tasks are influenced by choices made by educators and WAO students that offer a faster pace, curriculum range, and in some cases, self-directed learning (Vaughan et al., 2016; York & Kirschner, 2015)
- **Reactions**- identified in the literature (Gushkin et al., 1986) as the interactions with other people, including non-gifted peers, teachers, WAO teachers, and parents experienced by gifted students to their withdrawal to the acceleration option

Introduced in Chapter 1, and in response to these topics, the sub-questions for this thesis are:

1. What were participants' perspectives of the selection process? This sub-question will interrogate respondents' memories and reactions to the WAO selection process that resulted in their participation in the acceleration program.
2. What were participants' perspectives of others' reactions to WAOs? This sub-question will investigate respondents' assumptions and observations of people's behaviour outside the acceleration program to the withdrawal of the WAO students from classes for accelerated learning.
3. What were participants' perspectives of the structure of WAOs? This sub-question will investigate respondents' views on the delivery of WAO lessons, task design and meeting the academic needs of the accelerated students.
4. When did participants experience the events that developed their perspectives of WAOs? This sub-question will investigate at which stages of WAO lessons the perspectives on structure, task design and reactions occurred to the respondents, to document whether these occurred at specific instances with any regularity.

Chapter Summary

This chapter suggests significant gaps exist in the knowledge of interventions which make education more equitable and inclusive for gifted primary students. These gaps exist at different levels, from the philosophical to the pragmatic when conceptualising optimal learning experiences for the gifted. The gaps exist due to (i) the recency of research into WAOs to optimise gifted learning environments, (ii) limited coordination and oversight into the ways schools cater to the gifted in Australian schools, and (iii) the emergence of studies into the perspectives of the gifted as a means to understanding accelerations.

The recency of research on WAOs led to the discovery of three key topics lacking fundamental information when attempting to understand the perspectives of gifted primary students who are

withdrawn for accelerated learning; how WAOs are structured and the criteria by which students are chosen, the choices that influence the design of WAO tasks, and information on the reactions of other people that impact the gifted who are withdrawn from heterogenous lessons. These topics will form basic categories for the questions featured in the following chapter.

Limited coordination and oversight of the ways schools cater to the gifted in Australian schools was revealed as a major reason gaps appear in knowledge of WAOs and the perspectives of the gifted. Australian policies prioritise inclusive teaching practices but differ on how the gifted are identified and methods for their inclusion in mainstream schools is limited. This position limits a coordinated effort to research and refine the range of strategies Australian teachers incorporate in their differentiated teaching styles, and to build reproduceable programs such as WAOs to furnish optimal learning outcomes to the gifted.

Other gaps were revealed in the ways researchers gather information on the gifted and theorise optimal learning situations for gifted primary students. The emergence of studies based in Grounded Theory into the perspectives of the gifted targeted participants' overall impressions of the effectiveness of WAOs rather than further knowledge of the components of these options from the viewpoints of the primary school students chosen for this learning option. Several authoritative educational models were examined and revealed an opportunity to develop a conceptual framework that accommodates the influences on motivation and learning experienced by gifted primary students who experience a different learning situation.

The following chapter will focus on the methodology that interrogates the research question and explain the methods for collecting the data for analysis.

CHAPTER 3: THE METHODOLOGY AND METHODS

THE METHODOLOGY

Introduction

This chapter is designed to explain the rationale for the methodology adopted for this research project. The Literature Review evidenced a gap in knowledge explaining several facets of Withdrawal Acceleration Options (WAOs) from their philosophical and theoretical underpinnings to a scarcity in professional knowledge of gifted primary students' perspectives on this teaching strategy. This latter point highlights the objective for this project; a gap exists because there is limited evidence, particularly in the Australian educational context, of qualitatively interpreting the perspectives of gifted children in primary schools attending these options. This contrasts with the broad array of studies that quantitively analyse the impact of these programs on academic results and the self-esteem of these students which dominates research into WAOs.

Figure 3

Research Framework
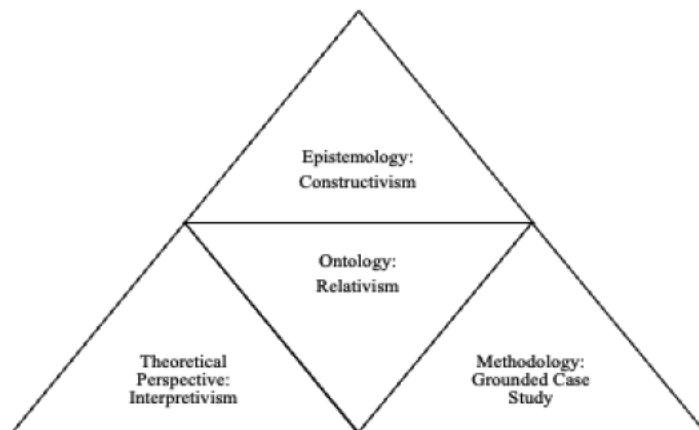
This chapter is organised into four sections, illustrated in Figure 3 is guided by Crotty's (2020) epistemological framework. This illustration depicts four basic elements of the research process to explain the methodologies and methods chosen for this study.

The first section will justify the qualitative framework for this study which sought to raise awareness of gifted perspectives. The second section will then unpack the ontological and epistemological positions of the study, which afforded opportunities for gifted children to develop and share perspectives on WAOs that were personally meaningful. The third section will provide details on the grounded case study approach to this investigation (Charmaz, 2000; Glaser, 1992), which inspired the composition of the investigative phases that generated perspectives on WAOs by gifted primary school students. The final section will justify interpretative inductive reasoning as the approach to filter data into themes for analysis and discussion.

Qualitative Methodology

Qualitative methodology was chosen as the research methodology for this thesis and the results will lead to future investigations of WAOs and the perspectives of gifted primary students. Creswell (2015) maintained that qualitative research should seek to explain a research question through the description of unique characteristics of the phenomena studied. In this project those characteristics could lead to research on selection processes, teaching strategies and task design unique to WAOs that do not appear in the literature.

Qualitative research methodology was chosen to provide a means to explore and showcase, and not quantify, the range of observations, memories, reactions and other perspectives leading to a functional, more informed understanding of the research problem. Research that influenced this methodological direction (Kitsantas et al., 2017; Bildiren, 2018; Moon et al., 2002) generated knowledge of the positive and negative perspectives on WAOs by gifted students, parents and/or teachers. Whilst influential to the goal of this thesis, those publications sought to explain stakeholders impressions of WAOs without explaining the various structures underpinning those accelerations under which those perspectives were formed. Acceleration selection processes, program and task design, how the withdrawals from classes were conducted, checks on the mental wellbeing of the students and the range of learning options provided to WAO students in primary schools were not detailed and are considered essential in understanding the circumstances upon which the student perspectives were provided. My investigation intends to extend this knowledge by incorporating a similar methodological approach to collect and analyse data from gifted children on their perspectives.

Goals of the Methodology for this Investigation

The intention of the methodology for this investigation was to generate perspectives on a phenomenon for inductive, interpretive analysis. The pursuit of knowledge based in data was encouraged by O'Donoghue (2018) to follow naturalistic inquiry techniques where theories are generated from the data, reflecting the principles of Grounded Theory (Charmaz, 2000). The importance of the pursuit of data to illustrate processes that explain a phenomenon was emphasised

by O'Donoghue (2018), opposed to the formation of conclusions based solely on academic performance through a positivist mindset. As established instruction/motivation theories do not explain the influences on the perspectives of the gifted who are withdrawn from classes for WAO lessons, it is necessary to develop a strategy whereby new knowledge answers the research question. The paucity of WAO literature revealed in the previous chapter limited an understanding of not only the structural facets of WAOs to allow schools to develop acceleration options, but also obstructed knowledge of the realities of primary gifted students attending WAOs. The ontological approach to this investigation was to raise awareness of the WAO processes observed by gifted primary students, from which they developed individual perspectives on different aspects of their unique experience. To accomplish this objective, within *The Separated Accelerated* research study inductive strategies to generate knowledge was utilised rather than beginning from theories and testing them via a positivist deductive approach.

Relativist Ontology

Universally accepted theories on cognitive theory and human development including Piaget (Four Stages theory), Vygotsky (Zone of Proximal Development theory) and Bronfenbrenner (Ecological Systems' theory) maintain that individuals develop understandings of their reality in stages influenced by genetic (Piaget), interactive (Vygotsky) and environmental factors (Bronfenbrenner). These factors influence motivations, reactions and other perspectives guiding a person's relative growth socially, behaviourally, and intellectually. For the purposes of this section, it was important to generate deeper understanding of the perspectives of gifted primary children on the 'reality' of their participation in WAOs. As such, their memories, opinions and other perspectives contained different representations of reality as participants explained their experiences in the ways that made sense to *them*.

The selection of relativistic ontology in this methodology recognised the gifted is not a homogeneous group of individuals. Gifted individuals certainly differ in their conceptualisations of reality to the wider non-gifted population, and evidence also suggests (Neihart, 2016; Reis, 2001; Renzulli & Reis, 1985) those views also differ among people who are gifted. As such, a major impetus for this investigation was to document the perspectives of gifted primary students on actual WAO experiences, relative to each other's views.

Evidence advocates for researchers to respond to the studied environment by focusing on the ways participants formed perspectives on their experiences. Lincoln and Guba (1985), Stake (2016) and Creswell (2015), each highly influential in the ontological and epistemological framing of this research project, recognised the influence of real-world experiences on perspectives and how researchers analyse these respective views. Each encouraged qualitative researchers to document the

different dimensions to induce themes explaining the participants' experiences, reactions, observations and emotions though inductive techniques rather than establishing plausible theories and afterward connecting these to responses.

Inductive strategy was prioritised in the design of the research question and data collection methods in pursuing the relativist ontology. Specific details of the investigative process will be presented in the Methods section. A key aspect of deriving the research question from an inductive/interpretative rather than a deductive/positivist approach was offering an open-ended, overarching topic. By asking *what are the perspectives of gifted primary students on withdrawal acceleration options in schools* the research question invited WAO students to share information about their personal reality.

This research question does not distinguish which perspectives (experiences, reactions, observations and emotions) were targeted, nor to whom the perspectives referred (teachers, other students). Neither does the research question seek for students to make a particular number of contributions to the study overall. Each of those elaborations would have changed the boundaries of the study. Instead, the research question stated above offered a flexible parameter to generate information on these topics rather than being tethered to examining a single perspective.

Each of the two investigative phases were composed as open-ended or multi-choice queries to gather multi-variate responses from the primary WAO respondents. This provided a means to meet a gap in research as explained in the Literature Review acknowledging a dearth of qualitative studies exploring the perspectives of gifted students in primary schools in their own words. These responses created a 'map' representing participant perspectives from which themes were interpreted during the data analysis stage of this investigation. The map represented the collection of information from which new knowledge was constructed of the perspectives held on WAOs by primary gifted students. The next section will explore the decision to orient the investigation via a constructivist epistemology, explaining how new knowledge will shape concepts and theories to raise specific awareness of Withdrawal Acceleration Options and giftedness education in general.

Constructivist Epistemology

Within the qualitative paradigm, the research completed for this dissertation was shaped by the epistemological framing of constructivism (Charmaz, 2000). Constructivism calls upon the research to recognise the meanings ascribed by participants in a study to their experiences and perspectives (Creswell, 2015) and pursues gaps described in Chapter 2 (*Opportunities for research*).

This research project provided three avenues with which to construct new knowledge in this field and supported by Crotty (2020), with the view that knowledge and meaningful reality is constructed

from human practices interacting with each other and the world. Firstly, participants were afforded a significant recognition by their inclusion to this study to acknowledge their uniqueness at being selected for a WAO. This provided the participants opportunities to suggest and consolidate what they knew about WAOs, and their choices within that acceleration paradigm.

Next, the data generated knowledge of the perspectives of gifted primary school students on a host of topics including the WAO selection and withdrawal processes at schools, acceleration teaching strategies and reactions to WAOs at schools. The investigative phases, to be explained in the Methods chapter, confronted respondents with questions that opened an opportunity for them to consider elements of WAOs (supported by the data) they had not previously considered, for instance, selection criteria, how non-gifted children, their parents and teachers reacted to their withdrawal and how WAO tasks were designed to test their strengths.

Thirdly, the concepts and theories generated by the data generated discussion on theoretical frameworks that describe school experiences to determine whether current models apply to the WAO experiences depicted in the perspectives of the gifted students. This thesis formed the proposition in the previous chapter that a gap exists in the field of educational modelling that does not account for differences in the learning experience undertaken by WAO students when compared with students that were not withdrawn.

Interpretive Analysis

The constructivist viewpoint holds that concepts and theories are derived from the responses of participants seeking to make sense of their experiences. As the core data in this investigation collected a range of perspectives from gifted primary students, an interpretivist theoretical perspective was required to coalesce these subjective responses into a manageable way to generate concepts and themes. Significant research on Grounded Theory designs (Charmaz, 2000; Mills, Bonner & Francis, 2006; Sebastian, 2019) supports the structuring of qualitative interpretive data collection and analysis methods, seeking to generate theories rather than verify data against established models.

A review of materials explaining action research methods (Auriacombe, 2015; Bhattacherjee, 2007; Susman & Evered, 1978) confirm the view that interpretive research attempts to parse human experiences (ontology) through the subjective perspectives of participants within the context being examined (epistemology). An understanding of interpretive research requires that researchers rely less upon their intuition and seek data based on researcher/subject collaboration, which is consistent with constructivist epistemology. This inductive method was chosen over a positivist framing which would have necessitated theories being suggested, variables identified, and data applied to those

theories to generate knowledge. A reading of Crotty (2020) positions the researcher outside the data collection process in the positivist paradigm, as that researcher is looking backwards to theory to verify statistics, opposed to generating theories *from* empirical data.

Interpretive methods were applied on three distinct datasets. The questionnaire/survey phase provided Likert-style options for respondents that offered this researcher a simple, literal interpretation of the data. This approach was influenced by studies of the gifted (Kitsantas et al, 2017; Bildiren, 2018; Moon et al., 2002) that produced a range of perspectives on WAO programs that differed from Australian examples and featured different research boundaries mentioned in the previous chapter. An example taken from the Data Analysis chapter shows more than 65% of responses indicated WAO students had been selected in previous years for the acceleration program; this was interpreted to indicate students had the perspectives they may have partially or wholly reflected on based on their historical experiences rather than just the current school year. The data then served as the basis for semi-scripted questions applied in subsequent interviews with participants.

A second instance of interpretation was necessary for the scenario task at the conclusion of the questionnaire. Respondents were asked to read the scenario (displayed in Chapter 1) and then provide written perspectives on their WAO experiences compared to the protagonist, Jesse. These responses were not limited in quantity or specificity and adding each participant's unique impressions from which questions were designed for the final phase, the interviews.

The third iteration of interpretative research occurred during live interviews with WAO participants. Questionnaire data and scenario responses were scrutinised to create a map of individual and group perspectives on aspects of WAO selection, structure, and their withdrawal for acceleration lessons. Examples of this approach appear in Chapter 3 (*Open Coding*) and assisted the triangulation of the data leading to the formation of the sub-questions. Several articles (Denzin & Lincoln, 2008; Lincoln & Guba, 1985; Stuckey, 2013) attested to the effectiveness of researchers building layers of interpreted data through interactive, multi-method investigative processes including interviews to generate "rigour, breadth, complexity, richness and depth to the inquiry" (Denzin & Lincoln, 2008, p. 5). As data were assembled, coded and reduced, the range of interpretations broadened during and after the three occasions.

When the data had been exhausted, it was possible to connect statements positing positive, negative and undecided reactions on the path to forming concepts and specific to the WAO context. This approach is supported by Stake's (2016) argument that small populations may present perspectives

that register with the reader's epistemological experiences and therefore the notion that some grounded theories fit plausibly, or it can be seen where theories may not fit.

Case Study Decisions

The focus of this study is upon how a particular teaching strategy is experienced by a group of students creates a bounded case study (Creswell, 2015), conforming to Stake's (1995) notion of examining the reactions to the phenomenon rather than examination of the group. The unit of analysis was a Withdrawal Acceleration Option provided at six primary schools attended by 21 gifted students. Each school offered essentially the same WAO format, selection processes, catered to the same range of student ages and withdrew WAO students during classroom lessons for academic acceleration. Case study analysis concentrates on understanding an essence of a shared experience. It was not the intention to examine the phenomenon of withdrawal accelerations and therefore situate this project phenomenologically. Compared to orthodox phenomenologic and phenomenographic ethnographical approaches, case studies examine the essence of experiences as opposed to a report on the impact of experiences by participants *after* an event had occurred. Because this research project looks at perspectives, not the phenomenon (WAOs), it determined that the use of the case study approach was the appropriate research method.

This study follows an interpretivist case study design like other studies of gifted children (Kitsantas et al., 2017; Bildiren, 2018; Moon et al., 2002). Those case studies adopted multiple interpretive case study methods to focus on the way the phenomenon of interest, the Withdrawal Acceleration Option (WAO) influenced the perspectives of the gifted on aspects of this program. Other qualitative case studies (Gallagher et al., 2011; Ritchotte et al., 2016; Smedsrud, 2018) incorporated case study ethnography in their theoretical research designs using a mixed methods methodology rather than a singular qualitative case study approach for this investigation.

As human experiences by their nature are subjective, this case study was designed to interpret textual (*what* was experienced) and structural perspectives on WAOs (*how* an experience was perceived). O'Donoghue (2018, p. 61) recommended researchers not to make the error of claiming universal 'generalisability' when offering interpretivist theories, as positivist researchers may claim this on the basis of testing and retesting results. Hence the decision to present this study through a relativistic, interpretivist lens. This is not to say there will not be generalised arguments that underpin the formation of subthemes and subsequent theories in this investigation.

Merriam's (2015) commitment to relativistic interpretive constructivism and case study guidance specifically for beginning researchers was preferred over Yin (2009) and Stake's (2016) techniques. A review of research methodology texts (Bhattacherjee, 2007; Stake, 2016; Taylor & Medina, 2011; Yazan, 2015) found Yin's approach is based primarily in positivist constructivism requiring

consistent, scheduled investigative routines to generate control groups from large sample sizes (>50), and applying pre- and post-tests to locate changes in the data.

Reviews of Stake's case study methods (Eisenhardt, 2011; Stake, 2016; Watts, 2007; Yazan, 2015) emphasised the need to investigate peculiarity and complexity in cases between data collection phases with which to form themes but was found to require researchers to apply "sensitivity and scepticism" (Stake, 1995, p. 50) while approaching the case and collecting the data. Yazan (2015) concluded Stake's manner of case study research offered great flexibility to practiced researchers, yet was less clear on explaining strategies that novice researchers would need to exercise a sensitive, sceptical approach to case study data analysis.

Merriam's (2015) qualitative approach to case study design is similar to Stake's, coming from a constructivist-qualitative methodological perspective. Both claim a case always ties something unique, specific, and bound to a context (i.e., a primary school withdrawal acceleration) and may help researchers understand what seemingly different perspectives have in common, relative to each person in the study (Merriam, 2015; Stake, 2016; Yazan, 2015). Moreover, triangulation of data using Merriam's comprehensive strategy called for the Literature Review to function as an essential phase contributing to theory development and research design. In illustration, the Literature Review in this thesis proposed several gaps in the research to assist the conceptualisation and composition of the research question, and from the data analysis providing the flexibility to suggest sub-questions to emphasise the concepts and themes that were discovered (Yazan, 2015).

Summary

The objective of this research project was to document, interpret, and analyse the perspectives of gifted children attending a withdrawal acceleration option at their primary school. This qualitative bounded case study used various methods of data collection consistent with peer-reviewed studies to collate information so that concepts and themes could be uncovered, and lead to new knowledge on gifted perspectives that raises teacher, parent, and researcher awareness of experiences in primary school WAOs.

Options for the design of the methodology were considered to locate a means for explaining the positioning of the researcher, the use of multiple methods of data collection, adopting an interpretivist stance on the delivery of the methods and later data analysis. Three case study methodologies were compared with which to approach the methods of data collection and analysis; Merriam's (2015) qualitative approach to case study design offered additional details for early-career researchers structuring research design when other formats required a degree of experience and synthesis that may benefit future studies. The result of the methodology was a theoretical approach

that offered an opportunity to generate new insights into the field from an analysis of student responses using a multi-phase approach offering opportunities for respondents to air their perspectives on various topics. Analysis of the data occurs during the investigative process and directly influenced the final phase of the investigation and analysis of the data leading to information pursuing gaps in research revealed in the Literature Review. The next section will elaborate on the methods by which the methodology was realised.

THE METHODS

Introduction

This section describes the methods employed by the investigation for gathering data. The investigation incorporated a sequenced, multi-phase approach to data collection and used three techniques to generate responses. The research plan will be explained, the process for data gathering and analysis will be justified and include theoretical underpinnings for the questions. Finally, the data analysis method will be introduced and lead to the following chapter. Each phase and technique will be described in this section and the investigative process corresponds to the information presented in Figure 4 .

Figure 4

Phases of the Investigation
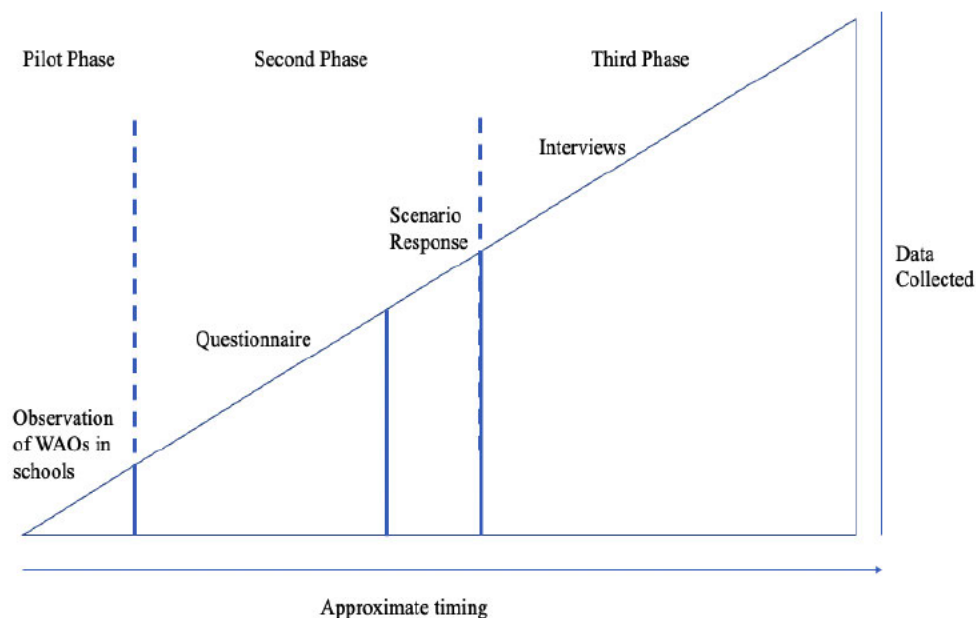
The Research Plan

The intention of the plan was to elicit subjective responses that portrayed perspectives of children selected to attend WAO for comparison and interpretation, constructing images of these experiences. After an orientation or 'pilot' phase where no formal data was gathered, data collection was

undertaken via an electronic questionnaire and interview using an explanatory question design format.

Aligned with principles of constructivist Grounded Theory research (Charmaz, 2000; Yazan, 2015; O'Donoghue, 2018), data collection ran in tandem with data coding and informal analysis. As the perspectives of the respondents were being shared, the collection of these responses throughout the investigation allowed for the early generation of concepts. After the entire data set was collected, it was again analysed using consolidating, reducing, and interpreting responses leading to the establishment of overarching themes (Charmaz, 2000), in pursuit of answers to the research question.

Invitation to Participate in the Investigation

To meet Human Research Ethics Committee (HREC) requirements for an ethical study of and with children, a consent form was also designed for the approval and authorisation for the investigation by school principals (Appendix F). This form requested my access to WAO students for an introductory phase, an online questionnaire completed with teacher supervision and interviews. The Principal Consent Form also confirmed that the children selected by the school for the investigation represented the selection criteria, the duration of interviews, and means by which data would be stored.

The information pack consisted of a Participant Information Letter (PIL), parent (consent) and student (assent) forms and information enabling selected students to begin the online questionnaire. Each form is provided in the Appendix. Steps outlined the information pack cover letter requested teachers co-ordinating the WAO pathway in the responding schools to contact the parents of students meeting selection criteria with the offer to participate in this investigation either by email, phone or with the delivery of the PIL pack.

The PIL (Appendix C) presented my credentials as an educator and doctoral student at Australian Catholic University and articulated the research problem and the research question. The PIL provided information to assure parents there were no known or anticipated risks to participants in this study. Names of participating students would not appear in the thesis or reports resulting from this study, and either parent of students in the study could choose to withdraw their child from the research project at any time, to cater to any students of separated families. Parents could contact the researcher directly by email or via their school, to request accompanying their child during either the survey or interviews on the Parental Consent form, which was also notarized by that Principal's signature.

Participant Selection

Schools communicating their interest to participate in this venture were required to select academically gifted children using selection criteria to populate the sample group for this investigation. These criteria are specified forthwith. The sample size was finalised at the beginning of Term 3, 2019 and featured 21 gifted primary students from 6 schools that met selection criteria. This section will now investigate the parameters guiding school and participant selection.

Inclusion Criteria

(i) Participating schools participate in a gifted and talented network

(ii) Schools withdrew gifted children temporarily from classes for accelerated learning (WAO)

(iii) Only children meeting superior psychometric and academic scores were selected for WAO

(i) School Gifted and Talented Credentials

An initial emailed communication to gifted and talented regional, state, and national networks outlined the research problem underpinning this investigation and the research question. These networks share in developing teacher and parental knowledge of giftedness identification and management. Advice on the delivery of the investigation was received from officers of the Australian Gifted and Talented Educators- Victoria (AGATEVic) group, the Victorian Association for Gifted and Talented Children (VAGTC), and three regional gifted and talented school networks in Melbourne, Australia. As a result of the initial invitation to participate in the investigation, six schools accepted the premise of the study and indicated their willingness to abide by the investigative timeline and selection criteria of students requested for the study.

(ii) WAO Credentials

Of 15 schools accepting the offer to participate in the study, six schools met the selection criteria for the investigation that began in August 2019. These schools represented faith-based, state-funded, and independent education systems. From emailed, peer-to-peer online meetings and the pilot phase of the investigation (i.e., school visits) it was established that those schools hosted variants on WAOs listed by US and local articles (Colangelo et al., 2010; Colangelo & Davis, 2003; Gross & Sleap, 2001; Gross et al., 2011) and selected the tasks and students for their programs using common techniques in the field. Each of the participating schools scheduled a weekly 'extension', 'advanced learning', 'enrichment' lesson where gifted primary students were temporarily withdrawn from lessons for subject-based acceleration and returned to classrooms after the WAO.

The period of the Victorian school calendar spanning July to August coincides with annual events that have significance within the gifted and talented educational community at state, national and international levels. The international Future Problem Solving (FPS) competition, Australian Problem-Solving Mathematic Olympiad (APSMO), regional and state Tournaments of the Minds (TOM), the Victorian Mathematics (MYQ) and Science Talent Quests (STS) and the Energy Breakthrough Human Powered Vehicle (HPV) trials and competitions, among others, are held during Term 3 and 4 in Victorian schools. The schools participating in this investigation use these events as social and academic goals for WAOs, confirmed in those schools' advertising materials and during the pilot phase.

(iii) WAO Selection Criteria

Chapter 2 (*Identification*) explained that teachers perceive and manage giftedness in students differently as a result of their personal and professional life journeys. This affects the motives, efficiency, accuracy and processes with which students may be identified, measured, and invited to participate in acceleration options such as WAOs (Baudson & Ziemes, 2016; Fraser-Seeto & Howard, 2015; Krijan & Boric, 2015). Benny and Blonder's (2016) studies of gifted and talented strategies used by teachers found that these decisions are formed by teacher perceptions and context-specific assessments (e.g., weekly class tests) built on experience more than through objective uses of data and training. To compensate for subjective teacher decisions about the elevation of advanced students to WAOs, which would compromise the use of objective psychometric tools I decided to focus on the inclusion of primary school WAO participants selected by their teachers based on diagnostic testing.

Principals and WAO teachers in schools participating in the investigation indicated the selection of primary students to WAOs incorporated a range of giftedness and talent measurement instruments, as well as classroom teacher observations. These instruments included the Weschler Intelligence Scale for Children (WISC-IV/V), Raven's Standard Progressive Matrices, Kaufman Brief Intelligence Test 2 (Kbit2) or Mill Hill Vocabulary Scales tests for the measurement of superior logical processing and language abilities in gifted children. Each instrument is advocated by the Davidson Institute for Talent Development (2023), a US non-profit foundation recognised for the publication of international peer-reviewed giftedness research. Ronskley-Pavia (2011) reported that other diagnostic tools including the Naglieri Non-Verbal Ability Test (NNAT), the Breuer-Weuffen Discrimination Test for pre-school children and E. Paul Torrance's Test of Creative Thinking used globally were often ignored, unknown or not chosen by Australian schools even though these were used widely in Europe and the United States.

Information displayed by the websites of gifted advocacy groups in Australian states and territories advocate for student testing to authenticate a diagnosis of giftedness for parental and scholastic purposes (Hammerton, 2011; New South Wales Government, 2023; Northern Territory Government, 2020; Queensland Association for Gifted and Talented Children (QAGTC), n.d.; Tasmanian Association for the Gifted (TAG), 2016; The Gifted and Talented Children's Association of WA (GATCAWA), 2023; Victorian Association for Gifted and Talented Children (VAGTC), n.d.). It was found after dialogue with WAO teachers joining this investigation those purposes may be for family medical records, school scholarship applications, school funding or to validate school advanced differentiated programs, such as withdrawal accelerations. Among local gifted advocacy groups, the Australian Association for the Education of the Gifted and Talented (AAEGT) and the Victorian Association for Gifted and Talented Children (VAGTC) promote diagnostic testing to validate levels of giftedness and talent, though each does not articulate a preferred model for this exercise. The determining level signifying an 'above superior', 'genius' or 'gifted' label differs between researchers, advocacy groups, schools and between countries, sitting generally above an IQ of 130 (Kempf-Leonard, 2004).

My review of each of those instruments indicated a level of giftedness, talent or advanced intellectual attributes above a 95% standard. This level is categorised by shared terms, for instance 'Superior', 'Extreme', 'Upper Extreme' or 'Genius' feature in the WISC-V, Wechsler Individual Achievement Test-3 and Kaufman BIT tests (Na & Burns, 2016). These instruments are applied annually or bi-annually either by specialised teachers with a background delivering and assessing psychometric data in these schools and/or qualified psychologists. Schools in this investigation were found to differ as to when these assessments and subsequent WAO selections took place during the school year. The results are commonly retained by the participating schools within those students' individual records and not shared with parents due to school privacy and administrative policies.

Exclusion Criteria

(iv) Schools that did not withdraw gifted children from classes temporarily for accelerated learning

(v) High-capability students who did not gain superior psychometric scores

(vi) Grade-skipped children who did not attend a WAO

(iv) WAO not Provided by a School

There is not a one-size-fits-all approach that Australian schools collectively use to identify and support those that have been psychologically profiled as gifted. Documented in the Literature Review, Australian educational policies subordinate the responsibility to identify and support gifted children to schools via their policies on student inclusion. As a direct result of this policy stance, there is no local mandate on schools to supply WAOs, nor provide regulatory bodies with information indicating how schools differentiate for the gifted outside of the professional requirements of teachers. The Literature Review featured reports (Gallagher et al., 2011; Vialle et al., 2001) that some local jurisdictions preferred in-class differentiation to WAOs as an acceleration option based on social, rather than academic considerations, though this information has not been updated nor broadened nationally to establish why schools do not offer WAOs.

Additional research discussed in the Literature Review showed other forms of acceleration are offered by some schools locally and internationally. Some schools indicating interest in participating in this investigation feature select entry (or SEAL) options explained in Chapter 2, whole-day options and grade-skipping that separated the gifted from non-gifted peers permanently, offering an accelerated parallel curriculum and not subject-skipping, and therefore were not invited to the study. The potential for examining the perspectives of the gifted in select entry acceleration options may be revisited by future research.

Teachers are required by national teaching regulatory bodies to practise and refine student talent identification methods during their careers through informal observations and, if a school requires, via formal professional development sessions (AITSL, 2019). In effect, Australian teachers are required to differentiate for a diverse range of abilities in their teaching in the classroom. These actions support teacher perspectives of how learning appears in knowledge, skills, and behavioural needs in schools. Prior to entering the profession, pre-service teachers are trained to form perceptions of student abilities to effect targeted teaching to support diverse learning needs in classrooms, though pre-service content presenting the attributes of gifted learners is seldom taught in Australian universities to student teachers (Beattie et al., 2006; Walsh & Jolly, 2018).

(v) High Capability Students with no Gifted and Talented Diagnosis

Schools featuring WAO students selected by teachers who were academically high achieving but had *not* met the cognitive measurement standards were not included in the study. The purpose of this approach was to preserve as close to a homogenous group as possible for sampling. This bypassed the need for the researcher to screen participants as the sample group will comprise exclusively gifted primary children chosen by teachers for that school's WAO. Articles mentioned in the Literature

Review (Betts & Neihart, 2010; Hattie, 1992; Ronksley-Pavia, 2011) attest to psychological differences in the perspectives on self and the learning environment by the gifted, who experience social and emotional vulnerabilities because of their exceptionality. Conversations with schools uncovered large numbers of students that had exceeded their grade level achievement levels, but when measured with diagnostic tools did not meet the standards reflecting a giftedness diagnosis and thus were not invited to participate in the study. This requirement was articulated on the Principal's Consent Form (Appendix F).

(vi) Grade-Skipped Children/ no WAO Selection

One method of acceleration mentioned in the literature (Colangelo et al., 2010; Culross et al., 2013; Gross, 1992; Rimm & Lovance, 1992) supports exceptional learners by advancing them to older grade levels. This locates the gifted child with older peers demonstrating similar ability, and replaces the need for additional acceleration. One child in this study was grade-skipped at a very young grade level (Year 1) but was provided a 1-1 withdrawal acceleration weekly with the WAO teacher outside of the classroom and therefore qualified for this study.

Summary. The criteria for participants to this study established which schools offered a subject-skip acceleration type of WAO on a temporary basis. Other types of WAOs that included select-entry, whole day or permanent acceleration pathways such as grade-skipping did not share the fundamental characteristic of removing gifted children from regular classes and returning them to the non-accelerated learning afterward, the second criteria for this research project. The participants were selected on merits measured by established field-tested tools for diagnosing giftedness at schools that provide an acceleration lesson and withdraw these children for that purpose.

The next section formally introduces the methods for data collection. The three phases of the investigation will be explained and discuss factors influencing the selection of data collection processes to gather data on the perspectives of gifted students on withdrawal acceleration options. The questions featured in each phase will be provided and the focus of those queries will be explained.

Phases of the Investigation

An important element of qualitative studies is to use multiple sources of data for the triangulation of responses (Lincoln & Guba, 1985) to establish possible patterns of perception (Hays, 2004; Stake, 2016; Yazan, 2015) in naturalistic studies. Two key data collection methods were adopted for this study after the pilot phase: an electronic questionnaire/scenario response phase and semi-structured interviews with individual or pairs of respondents.

Pilot Phase

Three purposes underscored the pilot study phase. Firstly, it was important to observe WAOs at the participating schools to verify with WAO teachers the feasibility of the investigation to inform the wider study or to guide questions on student selection criteria based on observations. The primary requirement was that participating schools featured a timetabled withdrawal acceleration method consistent in purpose with those listed by the UNSW Gifted Education Research Resource and Information Centre (GERRIC) and US Templeton Reports on Accelerations documented in the Literature Review (Colangelo et al., 2015; Gross, Urquhart, Doyle, Matheson, et al., 2011). These methods included mentoring, subject skipping, in-class as well as withdrawal or 'pull-out' acceleration classes that were a lesson in length and required students to afterward return to their classrooms.

Secondly, due to participants being primary school age, I judged it necessary to reassure primary gifted children and WAO teachers that my presence was not unexpected, confusing, or uncomfortable for the participants and teachers by introducing myself to the students. The third purpose for the pilot phase was the opportunity for the schools and I to establish the mutual benefit of this investigative partnership. As this study required personal information to be gathered from children during school hours, it was important for both this researcher and the schools to confirm their bona fides for the study and compromise on a schedule that did not present difficulties for the students to attend.

There was no data collection of participant responses in the pilot phase. My impressions were limited to informal observations of grouping and tasks and of the interactions between WAO students and WAO teachers. After contacting schools that responded to invitations by phone, I formally introduced myself in person at schools to brief school principals and WAO teachers regarding the parameters for the investigation. This included scheduling two separate day visits to observe WAOs in progress. During this time, a sampling of questions presented in

Table 1 from both phases were provided to principals and WAO teachers as a courtesy, explaining some of the lines of inquiry.

Table 1

Sample questions provided to teachers (Pilot Phase)

Question	Intention
What do you call the type of lesson you go to, which has harder or different work to the rest of your class?	Perspective on the characterisation of the WAO at school.
When you started these lessons, how did you feel about leaving your class and classroom?	Perspectives on the WAO selection process and on their withdrawal from the regular classroom.
What types of activities do you do in these lessons?	Perspectives on WAO activities to contrast this with non-acceleration lessons.
In these lessons, what are they for? What happens in these lessons, which is different to the work your classroom?	Perspectives on the purpose of the WAO.
Why do you think you were allowed to go to these lessons?	Perspective on personal accelerated level of ability and reactions by others to the withdrawal to WAOs.

The Questionnaire

Questionnaires have been used extensively in qualitative educational research to catalogue the responses of gifted children. Examples of this technique that influenced this research plan (Bildiren, 2018; Moon et al., 2002) began a multi-phase data collection process with Likert-scaled questions from which data could be collated easily to locate similar and unique responses. The questionnaire used in this investigation aimed to elicit a wide range of information about memories, reflections, conceptions and even predictions of how the WAO that they attended functioned.

The purpose of the questionnaire was to (i) provide data on the overall impressions of the WAO (positive, negative, or not definitive), (ii) supply information on WAO structures (subjects, goals, groupings), and (iii) identify unique responses for deeper questioning in the interviews. The questions targeted perspectives on WAO selections, content, knowledge of self and the WAO

environment, and perspectives on the reactions of other people to WAOs experiences by the participants.

In Chapter 2 (*Modelling optimal learning*), the Literature Review explained several instruction/motivation models that are used to contextualise optimal learning environments. These are now presented in Figure 5. Fink's Taxonomy (2013) and the Expectancy Value Cost Model of Motivation (Eccles & Wigfield, 2002) informed the design of topics for the questionnaire to generate perspectives on WAOs that were designed to optimise a learning environment for the gifted.

Figure 5

Influences on Question Composition
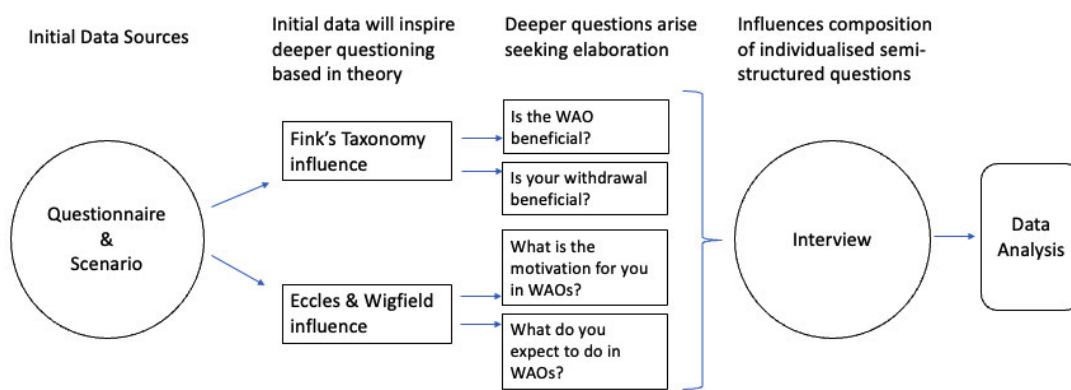
Fink's (2013) Influence on the Questionnaire Composition. Fink's model (2013), illustrated by Figure 5 is dependent on the participant reflecting on changes in their own and other's cognitive and social behaviour over time (Barnes & Caprino, 2016). Along this path, the participant evaluates their cognitive and affective development, and how interactions with other high-achieving students developed in WAOs in the present, not requiring projection to possible future options.

Fink's model (2013) was preferred for this investigation over Krathwohl's Affective Domain Taxonomy (Krathwohl, Bloom & Masia, 1964), which categorises embedded emotions in time and place contexts, comparing episodic and knowledge memories. Influenced by conversations with WAO teachers during the pilot phase, it was anticipated some participants might be confused or display anxieties associated with completing the questionnaire and interviews. Furthermore, it was discovered some participants might present unclear emotions and memories as their giftedness was accompanied by atypical behaviour types, such as Attention Deficit Disorder (ADD) and Attention Deficit Hyperactivity Disorder (ADHD) requiring a series of 'episodes' to gather responses, rather than in a single episode inferred by Krathwohl's taxonomy, reinforcing the selection of the Fink model.

Eccles and Wigfield's (2002) Influence on the Questionnaire Composition. The Expectancy Value Cost Model of Motivation (Eccles & Wigfield, 2002) was influential in the design of the questionnaire format to complement the Fink model (2013). Eccles and Wigfield's model influenced the composition of questionnaire topics seeking perspectives on their motivation for attending the WAO. The Expectancy Value Cost Model of Motivation provided a key to questioning perspectives on the motivation for being selected to the WAO, their expectations of the complexity and range of tasks, and predictions on the likelihood of being selected for future WAOs.

An example of a question influenced by the Expectancy Value Cost Model of Motivation was composed in this way showing where both Fink's (2013) and Eccles and Wigfield's (2002) models intersect:

> Question 25: "Do you think you will be able to complete all activities (Fink, on expectations) if you are selected for these future lessons? (Eccles & Wigfield, on motivations and expectations)?"

Creswell (2015, p. 484) noted that qualitative research methods enhance "describing, analysing and interpreting a culture-sharing group's shared patterns of behaviour, beliefs and language that develop over time". In this vein, the use of Expectancy Value models, such as Fink's (2013) and Eccles and Wigfield's (2002) models provided a means to generate participants observations, motivations, perspectives, and predictions with WAOs and the degree of social or academic success they believed the achieved in that option. The questionnaire responses revealed affirmative, negative, and middle-ground perspectives of participant experiences and expectations, and the convergence, divergence, or development of novel themes (Creswell, 2015). Later, these answers would assist the composition of semi-scripted questions for the interviews that would be analysed through constant comparative methods, content, and inductive analysis techniques.

Influential Questionnaire Models. Questions were sequenced from objective to subjective, the format influenced by the Bildiren (2018), Kitsantas et al.(2017), Moon et al. (2002) studies of gifted perspectives on acceleration, and the School Attitude Assessment Survey (McCoach & Siegle, 2002) of student perspectives on the educational experiences of secondary school students. These approaches validate my use of this scaled instrument in this interpretivist study. Originally an instrument to gauge underachieving gifted student perceptions of their schooling, the SAAS assessment was incorporated into several instruments to qualitatively analyse student perspectives of schools (Henderson, 2007) and the longitudinal survey of Australian Youth examining student perceptions of their schooling (Marks, 1998).

The purpose of the original SAAS format was to design a psychometrically sound questionnaire to measure and analyse a range of school-based attitudes. Primary and secondary student attitudes were gauged regarding the positiveness of the school environment, interactions with teachers, enthusiasm for school tasks, and academic self-conceptions in US schools. An important influence on the composition of *The Separated Accelerated* questionnaire, SAAS responses revealed, when psychological profiles filters were applied, positive and negative perspectives of learning, teaching, and the school environment in gifted and talented students. The results were packaged with a summarising recommendation by the authors (McCoach & Siegle, 2002) that the SAAS could again be used to further understanding of gifted student perceptions of schooling.

WAO participants had demonstrated to their teachers advanced cognitive behaviours and skills, and so it was anticipated this subset of school children would be able to understand the particular focus behind the questions. This view was confirmed during the pilot phase; questions were viewed by teacher-members of a gifted teachers' network to establish whether the wording of questions could be comprehended by gifted students in WAOs from different primary levels. The support by these WAO teachers reinforced that the questions were comprehensive and valid and encouraged the participating schools to recognise the importance of this research field and the benefits of the research.

Designing the Questionnaire Format. The design of the questionnaire aimed to elicit a wide range of information about memories, observations, predictions, and other perspectives on WAOs and self-reflections on their involvement in the acceleration program. The presentation of questions follows the progression of these perspectives and is presented at the conclusion to this section. These threads presented participants with a subtle timeline of thought; subjective memories (past), observations (past/present), and predictions (present/future) facilitating a progression of participant responses from historical to present and future focused.

Sequencing the Questions. The sequencing of the questionnaire began with questions requiring brief demographic information (first name, surname initial, age, and year level) and the selection of the participant's school from a list. This enabled later matching of responses and respondents. Multiple choice questions required participants to identify a WAO currently or recently attended (In these lessons, what are they for? What happens in these lessons, which is different to the work your classroom? Q5) and how often this occurred (daily, weekly, for a competition). Following questions asked if the WAO teacher actively worked with the group during those specialised lessons (In these lessons, do other children mostly work together, by themselves or with the teacher? Q15), and whether participants were selected for the WAO solely, or attended these lessons in a group (Do you go to these lessons by yourself, or with others? Q7). Results from the

questionnaire were automatically converted to a spreadsheet document by the online survey website and connected with question stems provided in the following chapter for the interviews.

Importantly, it was necessary to confirm research presented in the Literature Review that found the gifted are highly motivated to attend accelerations (Colangelo et al., 2010; Coleman et al., 2015; Plunkett & Kronborg, 2011; Proyer et al., 2017; Yang et al., 2012). It was essential to understand whether WAOs in the local context reflected the optimal learning principles for engaging the gifted evidenced in those materials, as no Australian evidence on WAOs was able to be located for the Literature Review. Questions to measure motivation for attending the WAOs included, "Do you enjoy these lessons?" (Q6*)* and "Why do you think you were allowed to go to these lessons?" (Q8) to prompt perspectives on their selection to, and early evaluation of this specialised, exclusive learning pathway.

Other questions asked for perspectives of the working and social dynamics inside the WAO group, "In these lessons, do other children mostly work together, by themselves or with the teacher?" (Q15*)* and "When people work together on activities, do they usually work with equal effort?" (Q16). These questions targeted participant self-analysis to determine how each WAO student understood the working relationships amongst themselves, and with their educator in the accelerated lessons.

The final section of the questionnaire pursued observations and predictions of students on retaining their WAO selection. These queries were stated as: "To be selected for these lessons, how important do you think it is to work with others?" (Q23), "Next term, do you think you will be selected by your teacher for these lessons away from your classroom?" (Q26). This question was targeted at both the participants' motivations for continuing in the WAO lessons and inviting those students to view their efforts through their teacher's perspective, predicting whether their WAO participation would again allow them to attend future WAO lessons.

The Questions for the Questionnaire. Queries were sequenced to investigate respondents' perspectives of the WAO experience from longer-term memories to more recent observations and potential predictions. This sequence was represented on pages separated to query broader threads, developed using the KwikSurveys.com website. These broader threads, from which the questions arose included memories of WAO experiences, observations of how people interact in WAOs, reflections on being selected to a WAO group and predictions on being selected in the future for a WAO group. These are represented in **Error! Reference source not found.**, Questionnaire queries, below:

Table 2

Questionnaire Information

Perspective Investigated	Questions	Focus for the Questions	Answer Format
Memory of WAO experiences	What do you call the type of lesson you go to, which has harder or different work to the rest of your class?	Perspective on how the WAO is identified or named at the school to contrast this with other school WAO types.	Multiple choice, multiple answer
	Do you go to these lessons by yourself, or with others?	Perspectives on the structure of WAO lessons.	Multiple choice, single answer
	When you started these lessons, how did you feel about leaving your class and classroom?	Perspectives on the selection to the WAO and on withdrawal from the class.	Multiple choice, multiple answer
	What types of activities do you do in these lessons?	Perspectives on WAO activities.	Multiple choice, multiple answer
	When you do activities in these lessons, who do you work with most of the time? By yourself, with a partner, group, or the teacher?	Perspectives on choice and task design in WAOs.	Multiple choice, single answer
	Do you usually have enough time to finish all the activities in these lessons?	Perspectives on the structure of WAO lessons.	Multiple choice, single answer
Observation of WAO experiences	In these lessons, what are they for? What happens in these lessons, which is different to the work your classroom?	Perspectives on the purpose of the WAO.	Multiple choice, multiple answer

	Why do you think you were allowed to go to these lessons?	Perspectives of personal level of ability, and perspectives on the abilities of others.	Multiple choice, multiple answer
	Do you think these lessons improve your skills, for when you return to your classroom?	Perspectives on WAO skills when returning to the regular classroom.	Multiple choice, single answer
	Do you usually get good results in these activities?	Perspectives on WAO achievement.	Likert 5-scale
	When WAO people work together on activities, do they usually work with equal effort?	Perspectives on challenges meeting the needs of the WAO group.	Likert 5-scale
	What did you notice about the number of activities you were usually given in these activities?	Perspectives of WAO activities and how WAO lessons are structured to contrast this with other school WAO types.	Multiple choice, multiple answer
	What did you notice about how many other students in these lessons finished the activities?	Perspectives of the degree of challenge observed in other WAO participants.	Multiple choice, multiple answer
Reaction to WAO experiences	How much do you enjoy these lessons?	Perspective on motivation for attending WAO.	Likert 5-scale
	How much do you want to go to more lesson like these in the future, away from your classroom?	Perspectives on motivation for remaining in WAO.	Likert 5-scale
	Ho do these lessons challenge you?	Perspectives on WAOs meeting gifted learning needs.	Likert 5-scale

Prediction and Observation of WAO experiences	To be selected for these lessons in the future, how important do you think it is to complete the activities in those lessons?	Perspectives on the criteria for future WAO selection.	Likert 5-scale
	To be selected for these lessons in the future, how important do you think it is to know how to work by yourself?	Perspectives on the criteria for future WAO selection.	Likert 5-scale
	To be selected for these lessons in the future, how important do you think it is to work with others?	Perspectives on the criteria for future WAO selection.	Likert 5-scale
	To be selected for these lessons in the future, how important do you think it is to try new ways of thinking and completing activities?	Perspectives on the criteria for future WAO selection.	Likert 5-scale
	To be selected for these lessons in the future, how important do you think it is to ask questions about activities to the teacher and others in the group?	Perspectives on the criteria for future WAO selection.	Likert 5-scale
	Next term, do you think you will be selected by your teacher for these lessons away from your classroom?	Perspectives on the criteria for future WAO selection.	Likert 5-scale
	If you do attend future lessons like these, do you think you will continue to improve your very good skills?	Perspectives on the outcomes for future WAO attendance	Likert 5-scale

Administering the Questionnaire. The questionnaire was electronically accessed by students at schools under the supervision of the WAO teacher. Participants had only one opportunity to respond to the survey instrument. Upon receiving participant Parent and Student consent/assent forms (Appendices D and E) students were provided a sheet featuring a QR code and website address by the WAO teacher (Appendix H). The capability of each school's student-used technology to

access the questionnaire was confirmed with WAO teachers during the pilot phase visit. This task was completed during a WAO lesson, on average across the participating schools questionnaire completion time averaged 50 minutes. During the questionnaire completion a WAO teacher was present, to assist participants accessing the questionnaire but not contributing to student answers.

Analysis of the Questionnaire. The analysis of the responses qualitatively was directly influenced by the SAAS testing format (McCoach & Siegle, 2002) and the intentions of the Expectancy Value models, such as Fink's (2013) and Eccles and Wigfield's (2002) models outlined previously.

Initial analysis sought to interpret and categorise responses on the basis of the degree with which students agreed/disagreed with questions and used later in the interviews to provoke respondents to clarify, confirm, or change responses. This process is illustrated in Figure 6 in the hypothetical instance of a student responding positively to Q11 of the Questionnaire.

Figure 6

Analysis of Questionnaire Data
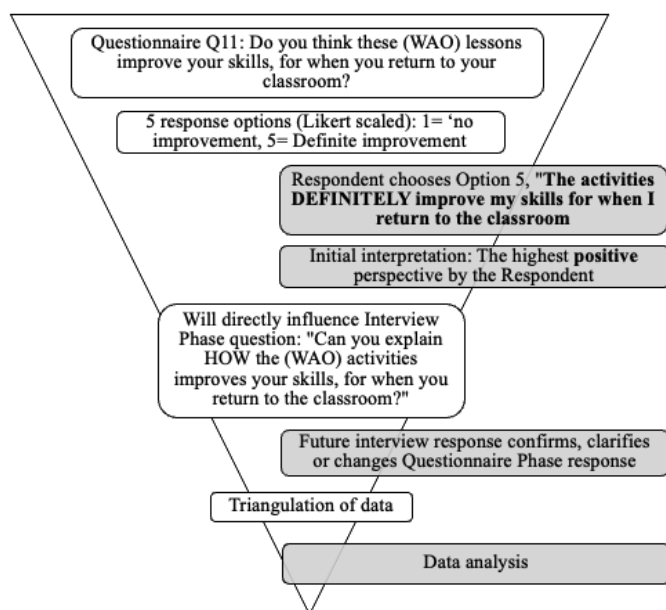
Processing the questionnaire responses, which occurred at various times between August 2019 and June 2020 (the consequence of school lockdowns) began with filtering multiple sources of data for the triangulation of responses (Guba & Lincoln, 1982; Lincoln & Guba, 1985) and establishing whether patterns of perception existed (Gasiunas, 2019; Yazan, 2015).

As the investigation pursued an interpretivist case study approach, the questionnaire provided the means to record individual responses to build each participant's investigation 'profile'. These profiles were reinforced by responses provided during the scenario response task and interviews.

Scenario Response

A final creative exercise presented in the Questionnaire asked participants to respond to a hypothetical scenario. Introduced in the Literature Review, this technique for generating perspectives has not been discovered in the literature on the gifted, despite being suggested as a valid qualitative methodological strategy (Creswell, 2015; Ramirez et al., 2015) during multi-phase case study analysis.

Influential Scenario Models. The primary purpose for introducing a scenario response task for this investigation was to generate perspectives on recognisable situation during withdrawal acceleration options to stimulate memories that could inform interview questions.

Literature on scenario-based case study research has been amplified this century, reported by Lundeberg, Levin and Harrington (1999) and Gijbels et al. (2005) as a result of the rise in Project-Based Learning (PBL) and self-determined paths of study. Lundeberg and colleagues (1999) reported that case study research uses scenarios to introduce an "authentic portrayal of a person(s) in a complex situation(s) constructed for particular pedagogical purposes" (p. 1). These purposes are explained by Gijbels et al. (2005) as connecting events to develop participants' knowledge of concepts, understanding of principles that link concepts, and the application of knowledge to stimulate responses.

Both models offered a conceptual framework for building scenarios to explain industrial and legal decision making that expanded original research by Barrows (1986) into problem-based learning in the medical field. Barrows' research studied an individual's capacity to identify concepts and consequences, and this was expanded by Gijbels et. al (2005) to examine how people accommodate and assimilate knowledge before applying rigor to place themselves in a similar situation. For those purposes, Gijbels and colleagues stated both factual and hypothetical scenarios backed by factual observations build recognisability and veracity into a scenario task for participants to respond. Lundeberg et al. (1999) described the process for leading participants into case studies via scenarios requires an order of descriptions, causes, processes, and consequences. It was noted that these models tread heavily on seminal edu-psychological research made decades earlier by Piaget (1964) in his Theory of Human Development, and thereby underpinned their relevance to this educational investigation.

Composing the Scenario. The design of *The Separated Accelerated* scenario provided in Chapter 1 corresponded to the models of Barrows (1986), Lundeberg et al. (1999), and Gijbels et al. (2005). These models propose using a hypothetical scene backed by professional observations and case studies of WAOs at secondary levels was composed to generate perspectives on this experience by gifted students. the design process for the scenario task will now be explained.

The scenario response task was optional and open-ended, allowing respondents to provide a subjective perspective on the WAO journey of a fictional exemplar, Jesse. The scenario used a portion of the original scenario that begins Chapter 1 of this thesis. The design of this task was informed in the pursuit of authenticity, for participants to have the opportunity to present responses with very few limitations (Guba & Lincoln, 1982). For this task, I drew upon my WAO teaching experiences to highlight salient points of a fictional experience and verified these details with WAO teachers during the pilot phase of the investigation. This is also acknowledged in Chapter 3 (*Bias and Credibility*).

As participants were purposefully sampled for their precocity in an academic domain and attended a withdrawal acceleration option, the content of this scenario offered elements that were recognizable and invited elaboration, comparison and inductive analysis on the part of the respondents. The dialogue was provided in both written form on the questionnaire and audio recorded to account for participant choice. The name of the hypothetical protagonist, 'Jesse' is selected as a non-binary name.

Table 3 showcases this format, below:

Table 3

Scenario Strategy

Introduction to scenario, stated by the researcher	Scenario delivery	Response Options
Jesse is a person who goes to another classroom for very hard activities with another teacher. Jesse can work on some activities alone, or with people the same age and really enjoys the atmosphere of the activity room. The activities are always different and nothing like the work back in the classroom. Jesse's classroom teacher always checks the work Jesse completes before the next lesson and offers a comment about how well Jesse is doing. Jesse's parents always ask if these lessons are fun. Is this story similar to your experiences in the lessons you visit, away from your classroom? Can you explain parts of Jesse's story that are the same, or different to your experiences in these lessons?	Written and recorded audio in the questionnaire describes the scenario to include a boy or girl participating in individual, group or team lessons *similar to the responses* listed by the participant in the online questionnaire.	A range of response options • Dot point response • Narrative response discussing Jesse's WAO experience primarily • Recount response discussing participant's WAO experience primarily • No response

The Scenario Parts. The scenario response task follows the questionnaire which was estimated to take more than 30 minutes to complete. No time limit was placed on completing the scenario other than the length of the WAO lesson during which the task was attempted. An abridged version was provided to participants and the full version was available as an audio file on the questionnaire page for students desiring additional context.

The introduction to the scene, which is an abridged version of the scenario beginning this research project, established a motivation for the protagonist to be recognised by the class teacher and to attend a WAO. The name 'Jesse' was selected as a non-binary identity for the respondents, and the protagonist was described as undertaking additional tasks due to a very high level of capability away from the classroom, stated as:

> *Jesse is a person who goes to another classroom for very hard activities with another teacher.*

The development of the scene described task options for Jesse and the protagonist's reactions to the working with challenging tasks in a variety of ways. This information was illustrated to provoke perspectives on working individually, in groups, and on the complexity of WAO tasks experienced, stated as:

> Jesse can work on some activities alone, or with people the same age and really enjoys the atmosphere of the activity room. The activities are always different and nothing like the work back in the classroom.

The final aspect of the scene offers observations on the reactions of other people to Jesse's inclusion in the WAO. This was stated as:

> Jesse's classroom teacher always checks the work Jesse completes before the next lesson and offers a comment about how well Jesse is doing. Jesse's parents always ask if these lessons are fun.

This information was added to gain perspectives on the behaviours of other people to gifted students that are withdrawn from the class for acceleration, and gauge observations of support and interest in the WAO and the academic strengths of the gifted children chosen for the acceleration option. It will be revealed in the Data Analysis chapter this portion of the scenario provoked the greatest number of comments for this task, describing actions (and also in-actions) of teachers and parents and generated a conceptual line of inquiry under-represented in the literature at this point in time.

The data required by the scenario response task presented multiple options to the participants. Students could choose to respond with single words, short phrases, and longer descriptive passages to the queries *Is this story similar to your experiences in the lessons you visit, away from your classroom? Can you explain parts of Jesse's story that are the same, or different to your experiences in these lessons?* This tactic provided the options for comparative narrative/word analysis of the resulting data, and for the students to make observations of Jesse's journey exclusively, or as a comparison with their own WAO experiences.

The culmination of the questionnaire and scenario responses served to build a profile of each participant's WAO perspectives on selection, tasks, and the reactions of others to the acceleration program at their primary school. The final phase of the investigation, the interview, expanded on this information to present broader knowledge of these perspectives on aspects of WAOs unrepresented in the literature.

The Interviews

The purpose for the interviews was to use the questionnaire and scenario responses to obtain detailed clarifications from respondents for subsequent qualitative data analysis. Outlined in the Participant Information Letter (PIL), respondents were invited to expand on their questionnaire responses in interviews. Contained in the PIL (Appendix A) and separately on the parent consent and student assent forms (Appendices D and E, respectably), selected WAO participants who completed the questionnaire assented to semi-structured meetings with me at their school during school hours.

Some interviews were conducted in the week following the online questionnaire, whilst others were influenced by the Victorian schools' shutdown and occurred many months after the questionnaire via Zoom and MS Teams peer-to-peer video platforms. Stated on the PIL, interviews were planned between 30 and 45 minutes to correspond with school lesson durations and to allow sufficient time parameters for responses to flourish and be elaborated for recording. Any potential discrepancies between responses were mitigated by way of providing respondents with their questionnaire responses to ensure recollections of student responses could be compared, changed, and clarified if that respondent chose to do so.

Influences on Interview Question Composition. The design of the interview questions followed a qualitative construct to provoke responses for interpretation. A significant influence on the choice to pursue a multi-phase investigation was informed by previous research (Lincoln & Guba, 1985), which promoted interviews to generate deeper perspectives on a phenomenon being investigated, leading to a triangulation of data and member checking from multiple sources. The original conceptual framework for the interviews is illustrated in Figure 7, below:

Figure 7

Conceptual Framework for the Interviews
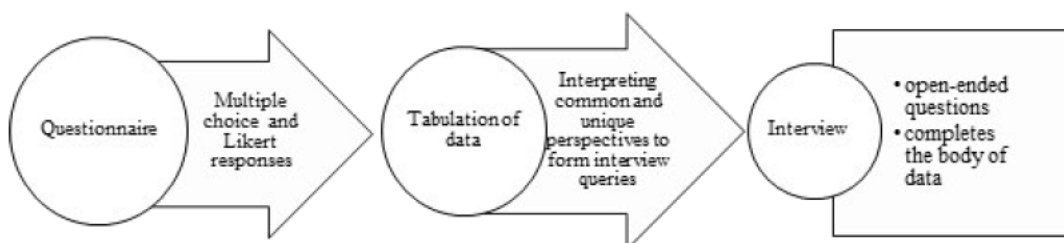
Interviews are a valued qualitative method, which Wilson (2009) stated aims to consult with "…students about their points of view, interpretations and meanings to understand classroom dynamics" (p. 88). This was an important motivator for the development of the investigation, as a key motive for the research was to respond to the limited publication of WAO perspectives in the

documented responses of children attending these accelerations by developing this investigation to further professional knowledge of this learning experience from the spoken responses of gifted children.

One study examined in the Literature Review exemplified the question structure for the interview phase of this investigation. To generate responses using the Moon et al. (2002) strategy, topics within the questionnaire provide respondents with the flexibility and freedom to change or elaborate their responses later in the interviews providing information for data analysis and the conceptualisation of themes. Moon et al.'s investigation was structured to generate perspectives on educational/structural facets of WAOs, how WAOs affected participants socially and emotionally. Additionally, Moon et al.'s (2002) strategy differed in a significant manner to my method, by asking respondents to point to a matrix of provided statements (a similar intention to Likert-scale responses in the questionnaire) that illustrated only advantages and disadvantages of those WAOs facets, which respondents would then offer verbal clarifications without additional researcher input.

Formatting the Interview Questions. Using a semi-structured interview format provide the grounds within which participants feel a sense of sharing what they consider to be valuable and important insights (Miles, Huberman & Saldana, 2014). This flexible structure enabled me to link questions together, creating trains of thought from previous responses to build semi-scripted questions. An example of this can be seen in this use of a (1) questionnaire query to develop (2) an interview question, and then (3) a follow-up question. Those responses that were limited in detail or not provided in earlier questions were asked follow-up questions as a prompt to generate more detailed lines of inquiry, "why did you answer that way?", or "could you tell me more about your answer?" An example of the alignment of questions from the questionnaire to the interviews and then the provision of a supplementary query is described in Table 4. This tactic provided an additional opportunity to clarify an earlier interview or questionnaire response or change an answer if they had remembered a WAO situation and subsequently perceived it differently, deepening the perspectives recorded for later analysis.

Table 4

Aligning Questions During the Phases

Questionnaire query →	Interview-linked query→	Follow-up interview question
When you started these lessons, how did you feel about leaving your class and classroom? (Q9)	(Student name), is there ONE feeling you have in all of these lessons? What is that feeling? (Interview Q4)	(Student name), is there something in particular that happens (in the WAO) that makes you feel this way?

Sequencing the Interview Questions. The interview queries were guided by the same progression of the questionnaire questions from longer-term memories to recent observations and potential predictions. These broader threads, from which the questions arose included memories of WAO experiences, observations of how people interact in WAOs, reflections on being selected to a WAO group and predictions on being selected in the future for a WAO group. These are represented in Table 5.

Table 5

Interview Questions

Perspective Investigated	Question	Links to Questionnaire Query:
Memory of WAO experiences	Why do **you** come to these lessons?	Why do you think you were allowed to go to these lessons? (Q8) Do you think these lessons improve your skills, for when you return to your classroom? (Q11)
	Tell me if you would prefer to stay in your classroom, or come to these lessons, and why?	When you started these lessons, how did you feel about leaving your class and classroom? (Q9)
	What were you told by your classroom teacher about being chosen for these lessons? What do you remember about being selected for these lessons?	When you started these lessons, how did you feel about leaving your class and classroom? (Q9)
	Can you tell me if your classroom teacher knows the things you do in these (WAO) lessons? Do they ask you about the tasks? Do you want them to? Why?	To be selected for these lessons in the future, how important do you think it is to ask questions about activities to the teacher and others in the group? (Q24) Next term, do you think you will be selected by your teacher for these lessons away from your classroom? (Q26)
	Tell me about your choices of activities in these lessons. What choices do you get? What choices would you like in these lessons?	What did you notice about the activities you were usually given in these lessons?
Observation of WAO experiences	What do other children in your class think you do in these lessons? Do they ask what you do? How do you know they care, or do not care at all about you attending these lessons?	Why do you think most of the people in your class do not come to these lessons? (Q17)

	Can you tell me what you think is the most important goal of your teacher sending you to these lessons?	To be selected for these lessons in the future, how important do you think it is to complete ALL of the activities in those lessons? (Q21)
		Do you usually get good results in these activities? (Q13)
Observation and prediction of WAO experiences	Can you tell me reasons why your teacher might choose you next month/term/year to go to these (WAO) lessons?	Next term, do you think you will be selected by your teacher for these lessons away from your classroom? (Q26)
		How much do you want to go to more lesson like these IN THE FUTURE, away from your classroom (Q27)
	Can you explain parts of Jesse's story that are the same, or different to your experiences in these lessons? From what you now about Jesse in the story, would he likely be asked to attend a future (WAO) lesson with your group?	Jesse is a person who goes to another classroom for very hard activities with another teacher…. Can you explain parts of Jesse's story that are the same, or different to your experiences in these lessons? (Scenario Q29, abbreviated)

Qualitative Analysis of Data from Interviews. The purpose of data validation was to clarify the experiences and expectations by/of student participants in withdrawal acceleration options and observe whether these corresponded with experiences and expectations across other schools. Punch (2014) suggested that the interview is "the most prominent tool in qualitative research" (p.144), enabling the researcher to create queries or situations that encourage respondents to provide trains of thought, or validations of their observations.

Transcribing Data. A professional transcription site transposed recorded responses manually into text for this investigation and data cleaning was conducted by the researcher thoroughly checking the transcripts against the recording and amending any errors in the transcriptions. As this investigation was based in constructivist/interpretivist Grounded Theory research, the intention of the collation of responses was to uncover possible concepts and overarching themes grounded in the data (Creswell, 2015). This would explain the perceptions of primary students on facets of WAOs not represented in the literature.

The transcriptions were displayed in dialogic/transcription format that separated the responses of myself and the children in the interviews as 'R1' (Respondent #1) and 'I' (Interviewer). The Participant Information Letter (PIL) informed parents and school principals that participants in the recorded studies would not be named in the publication of the final report, I substituted a generic 'Respondent' pseudonym to marry responses to respondents for the data analysis.

Coding the Data

Grounded Theory analysis is based in research-tested coding strategies. For the purposes of this investigation, the processes of open and axial coding occurred consecutively to locate (i) substantive topics in the data via open coding, and (ii) theoretical codes to join the topics into possible themes using an axial coding process described in research on qualitative analysis strategies (Elliott, 2018; Ryan & Bernard, 2015; Sebastian, 2019). The next section will explain the processes for open and axial coding in this investigation.

Analysis of all data first required reduction through open and axial coding to identify common key words and phrases (i.e., narrative and comparative analysis) that described perspectives on facets of WAOs including selection, tasks, groupings and overall impressions of their withdrawal from classes. The analysis of multiple data sources and responses required encoding into identifiable groups (Miles & Huberman, 1994) associated with strategies described by Punch (2014).

To explore the responses to the survey and interviews, the Miles and Huberman (1994) interactive model was selected for analysing transcripts due to this model's allowance for the progressive development of themes over time. This was preferred over a positivist case study method when pre- and post-event conditions are tested and compared to develop theories. Moreover, the connections made via the relativistic ontology chosen as the underpinning for this investigation seeks to connect how the participants perceived their selection to and attendance of withdrawal acceleration options at their primary school when compared with other participants, permitting the development of testable and valid theories (Eisenhardt, 2011; Glaser, 1992).

One lacuna in the field explained in the Literature Review (*Building theoretical knowledge*) was to discover whether the perspectives shared by participants on WAOs was explained by existing educational theories. Punch (2014) stated that a key objective of coding is to make propositions based in the data that are integrated into the Grounded Theory, creating "higher order conceptualisations" (p. 15) around which a new theory is built.

Open Coding the Data

Open coding saw responses arranged with common perspectives (observations, memories, questions) and subsequently grouped for a subsequent axial coding process to locate common or unique themes. Where possible, similar responses were reduced in quantity, whilst preserving the shared perspectives on facets of WAOs including selection, tasks, groupings, and overall impressions of their withdrawal from classes. When sorted into manageable, meaningful segments (Creswell, 2015), this information revealed a range of perspectives of WAOs held by students selected for these programs in schools. Two versions of open coding were applied to the data to

accommodate different data collection types. The first version sorted data via the Likert-scale responses from the questionnaire to divide perspectives from the group into easily recognisable 'tags', the term coined by Miles and Huberman (1994) to distinguish initial patterns in the data.

An example of this method illustrates the analysis of questionnaire data in Figure 8. The question "Do you enjoy these lessons?" (Q6) revealed, an overwhelmingly positive 'tag' that indeed, WAO students had positive perspectives of WAOs. The formation of tags thereby provided insights that were either clarified or countered by latter responses which will be analysed in the next chapter.

Figure 8

Open Coding Example (Tags)

6. Do you enjoy these lessons?
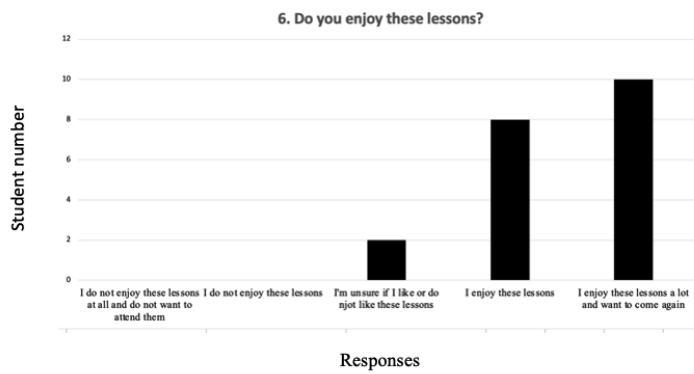
The second type of open coding was necessary for the interview data, as responses were more varied than the Likert questionnaire responses and were directly followed by the interpretive analysis is illustrated by Figure 9, grouping responses to an overarching question from R3, R7, and R8 during the interview phase. These responses were collated by respondent, enabling answers to be isolated from the lengthy, transcribed passages that in most interviews tallied to many thousands of words per student.

Figure 9

Open Coding: R3, R7, R8
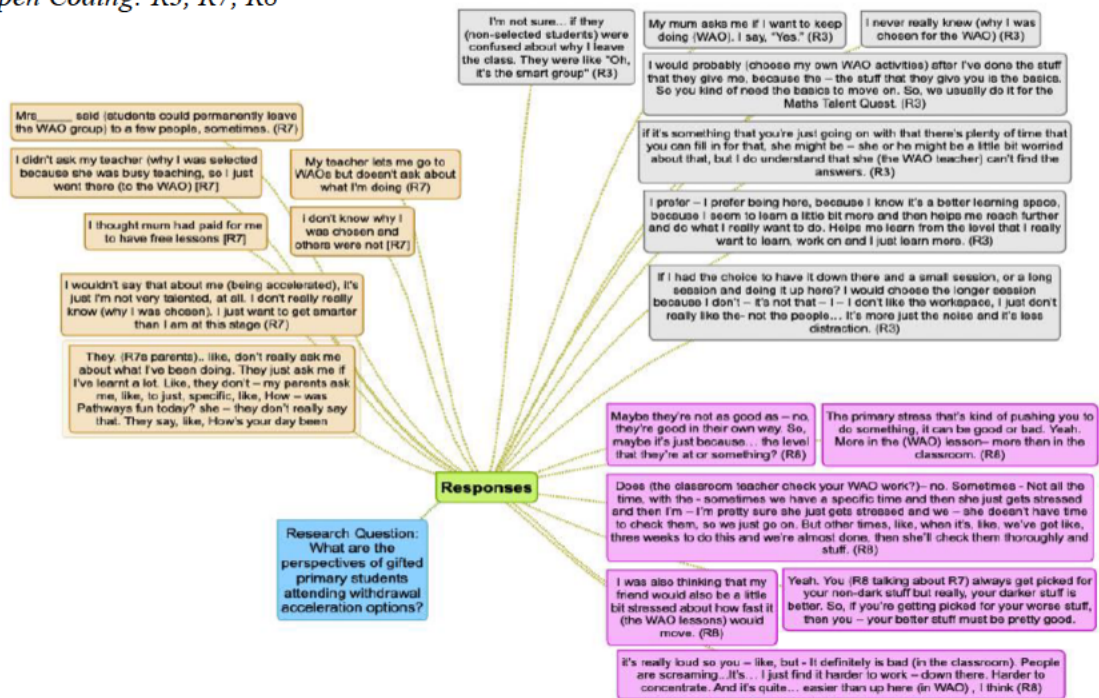
These responses, which were colour-coded during the data gathering fulfilled the open coding process (Elliott, 2018; Ryan & Bernard, 2015) for qualitative ethnographic investigations, compiling a student's answer profile. The results of the open coding of data in this investigation were interpreted to reveal, amongst other perspectives to be explained in the Data Analysis chapter (*Data analysis of the interviews*) that WAO students had, overall, positive perspectives on withdrawal accelerations. In order to retain the context of the responses another level of analysis, axial coding, was applied to generate themes that connected the perspectives.

Axial Coding the Data

The process of axial coding begins with gathering open coded responses from each respondent and cataloguing these by question. As a qualitative research process the intention is to interpret responses and suggest theoretical subcategories or 'axes' to begin to answer the research question and lead to a reduction of the data as concepts and themes are generated.

Where the open coding process collated each student's answer profile to display perspectives on common topics, the axial coding strategy required coalescing the data answers to paint a landscape of the perspectives from which themes could be built to answer the research question. A second layer of axial coding (Figure 10) interpreted positive, negative and undecided responses, to establish the degree with which the respondents felt the WAO was a constructive or non-constructive aspects of their school experience.

Figure 10

Axial Coding Q4 Responses
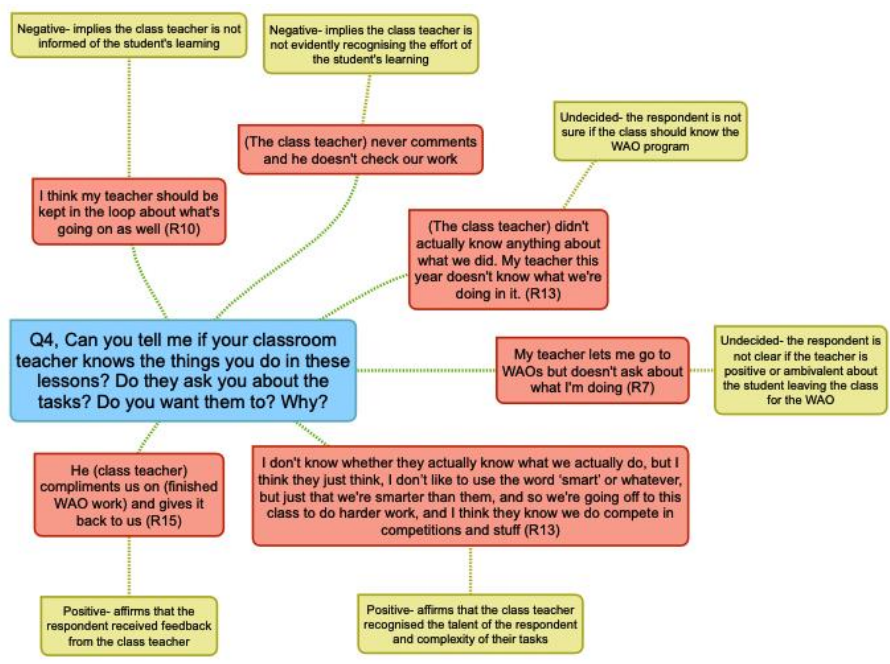
As the responses were subjective, this early synthesis of data afforded clarity and validity when filtering data for a final, third time to establish threads linking the responses. Figure 10 illustrates an example of data taken from the collected data demonstrating the methods by which responses were interpreted to reveal positive, negative and undecided perspectives on class teacher interest in WAO experiences.

Data Reduction

Techniques for analysing qualitative data were adapted from the Miles & Huberman (1984) Interactive Model. These techniques invite the use of flow diagrams, graphs, and tables to manage and present data, maintaining the integrity of the records through coding sequences to be explained in the next subchapter. Importantly, this model encourages the ideal of a "clean theoretical slate" (Eisenhardt, 2011, p. 6) as pre-determined perspectives may bias and limit the development of a proposed theoretical stance later in this thesis.

When synthesising the 'entering the field' stage of the Miles and Huberman model, Eisenhardt (2011), found an initial understanding of the essence of overlapping responses uncovered aspects of the participants WAO experiences that, when interpreted, formed important sub-themes after investigative phases. Considering the theoretical framework for the investigation followed constructivist Grounded Theory research, this approach allowed me to build categories (Charmaz, 2000) systematically from response to response, adjusting the direction of the data analysis as later responses are collected and are prepared for grouping in sub-themes and themes that answer the research question.

Strategic approaches to data reduction and display processes were suggested by Miles and Huberman (1994) and Punch (2014) to provide a means to codify participant answers from the online questionnaire and spoken perspectives from the interview phase. This approach requires researchers to interrogate the data, to identify any range of responses including common and also unique answers. The preparation of reduced data leads to the identification of themes via a graphical organisation of the data. This affords the researcher with data presented in a visual format funnelling responses into a limited, refined set of relationships for review. The responses may be overlapping, incidentally connected or distinct and unique, and lead directly to established subthemes. Methodological theorists posit that data display is used at all stages of qualitative data analysis (Miles & Huberman, 1994, p. 91; Punch, 2014, p. 198) to assist researchers' ongoing understanding of the lived experiences of the participants until data saturation had been reached and no new themes were being generated.

Key Word Analysis

Common key words and phrases for the questionnaire were built into the question and multiple-choice design for the two investigative phases. An example of this can be seen within Interview Question 8 (Why do you think *you* were *allowed* to go to these lessons?) placing deliberate emphases on terms within the question (i.e., 'you', 'allowed'). The intention of this strategy is two-fold; (i) from an investigative position, this required from the student a subjective explanation answering the theme of the question (why were *you* chosen?), and (ii) used emphatic terms that invited those words in responses, which could be easily located in the data. An anticipated response to this question could be expected as *"I was allowed to go to these lessons because...",* or *"I was asked to go to these lessons because…",* and thus providing an efficient means to group responses by their connection to these key terms.

The following example, taken from the collected data, illustrated a perspective based on key words embedded in the question that generated unique terms in the answers. This format will appear consistently in the Data Analysis section to demonstrate a participant's perspectives when answering

the scenario or interview tasks. This interview conversation generated a perspective on the class teacher's interest in WAO task. The key words in the question were '*check your WAO work*', with the context being the observation of the class teacher's wanting to know what tasks WAO students complete during their withdrawal. The key words were repeated in the answer and elicited information regarding perspectives on the reactions of the teacher, presented in this interaction:

> I: Does your teacher ever check your WAO work?

> R8: No. Sometimes. Not all the time. Sometimes she just gets stressed and then I'm
> pretty sure she doesn't have time to check it, so we just go on. But other times,
> when we've got three weeks to do (a project) and we're almost done, then she'll
> check them thoroughly.

The intention of this approach is to concentrate upon the contexts upon which the emphasised words were used in responses. R8 uses the term '*check*' in the context of providing a perspective on the reaction of the class teacher to WAO tasks that R8 has brought back to the classroom. The Data Analysis will provide several examples where participants used the embedded terms from questions to underpin their perspectives on a range of topics.

Summary of the Coding Methods. The basis for the generating Grounded Theory (Hussein et al., 2014; Sebastian, 2019; Strauss & Corbin, 2008) is the process delivering the data sources, collating the data into recognisable group sets and making inductions that lead to theories explaining the data. This investigation used multi-phase data collection methods similar to influential studies (Bildiren, 2018; Kitsantas et al., 2017; Moon et al., 2002) to generate information to build knowledge of WAOs. The data collection methods incorporated open and axial coding and data reductions to provoke perspectives on facets of WAOs that do not appear in the limited literature on this topic. Strauss and Corbin (2008) advocated that good Grounded Theory demonstrates effective social scientific study through comparisons between observations, data, and theory and leads to significant generalisations and verifications validating the generated concepts and theory. These methods were introduced in this chapter, which described a process whereby observations of WAOs (phase 1) were followed by an electronic questionnaire and scenario response task (phase 2), whose data then informed the scripting of questions for interviews (phase 3).

Aligned with the principles of doctoral research, several considerations for the planning and management of the investigation were identified, and conditions were instigated to meet these. The next section will explain the limitations that restricted the investigation, occasions where ethical considerations, bias, and credibility were tested.

Bias and Credibility

This qualitative investigation offered interpretive, constructivist analysis of responses to the research question, *what are the perspectives of gifted primary students attending withdrawal acceleration options in schools?* Creswell (2015) challenges researchers to consider specific bias and its qualitative equivalent, credibility by acknowledging assumptions and limitations in the investigation methods (p.258).

My association with gifted advocacy groups and professional career as a primary educator designing, among other programs, withdrawal acceleration options could influence my interpretation of data. Over more than a 10-year period, my 1-1 and small group collaborations with educators selecting students for WAOs and the selected WAO participants themselves could limit the lens with which the range and depth of data may be interpreted. This directly influenced the composition of the questions, in particular the scenario-based questionnaire query, presenting an amalgam of circumstances involving WAO students I had taught, as a fictional exemplar.

The wording of questions for the questionnaire and interviews was reviewed by the doctoral supervisory team for its connections to the research question and validity to unbiased data collection. During the pilot phase of the investigation school principals and WAO teachers were provided examples of questions from the questionnaire and interviews for feedback. No changes to the structure or content of questions were requested by the participating schools and the investigation was thereafter permitted to begin at the schools.

The method for triangulating responses matched peer-reviewed methods published in the field (Bildiren, 2018; Kitsantas et al., 2017; Moon et al., 2002), which did not influence the interpretation of the data. The Literature Review explained the differences in the methods for gathering data by these studies and as a result made unique changes, for instance the addition of the scenario response task, offering embedded key words in questions and reporting coding stages via graphical representations to offer authentic and credible evidence to support the building of concepts and themes. Steps were taken to provide the responses of questionnaire queries to respondents for authentication, and the transcriptions of the interviews were checked against the recordings to ensure dialogue was accurately chronicled.

To mitigate personal biases in the collection and collation of data into subthemes and broader themes centring on the research question, checks were made with my research supervisors to summarise transcriptions and make broader contextualisations that gathered all of the responses as subthemes. The incorporation of documented case study data analysis techniques posited by Miles and

Huberman, Stake and others will be shown in the Data Analysis chapter to offer valid, consistent data reduction and display process to represent the spoken perspectives of the respondents from the two investigative phases. Finally, I made determinations of themes that amalgamated the subthemes and substantiated my findings using transcribed participant responses, citing Creswell (2015) directing qualitative researchers to base personal interpretations tightly with the shared statements of participants.

Ethical Considerations

To comply with ethical considerations to respect participants' rights, research merit and integrity, justice and beneficence, the preselection of participants, the categorisation, questioning, analysis and communication of participant responses are aligned with the principles of the National Health and Medical Research Council statement (Australian Government, 2018). Issues of confidentiality, avoidance of harm, professional conduct, beneficence in the design, and supervision of the two research phases will now be detailed.

Participants and parents of respondents were informed student names would not be revealed in publications and reports, with coded pseudonyms offered to students on the parental consent form prior to the online questionnaire. This information is provided in the PIL and the student, parental and principal consent forms (Appendices C - F) prior to students accepting the invitation to participate in the investigation.

Participants were informed of the opportunity to confirm, clarify or change their answers during the interviews, including individual responses from the questionnaire after reflection. This was an important element to the ethical approach to this study, owing to the significant delay between phases of the investigation caused by COVID-19 school lockdowns between March 2020 and February 2021. Participants independently, or via instructions from their parents could exercise the right to withdraw from any aspect of the investigation in spoken or written form. This caveat is in accordance with Victorian Department of Education (2019) 'opt-out' requirements for research of children in schools. It was necessary for me to highlight to principals of schools participating in the investigation that due to the need to verify student responses through both the questionnaire and interview(s) phases, a participant could not choose to engage only in the questionnaire or the interview and therefore would need to withdraw completely from the study.

Schools were required to validate the ethical selection of students they invited to this investigation. A condition of the Principal Consent form was the understanding that selected students that were offered the PIL met that school's withdrawal acceleration criteria described in Chapter 3 (*Participant selection*):

I agree to my participation and the participation of class teachers and students identified with a psychological gifted and talented diagnosis, selected by teachers in a questionnaire and up to 3 interviews, of no more than 45 minutes each and permit student responses to be digitally recorded.

Excerpt, Principal's Consent Form Appendix F.

Participating schools and the participants' parents were provided documentation regarding the purpose of the questionnaire and interview phases in the PIL. This information statement included parental consent forms, schedule information for the phases and the researcher's professional credentials. Responding WAO students were invited to confirm their assent to participating in the investigation with a Yes/No question appearing as the first question of the questionnaire and again verbally at the beginning of the interviews. This reconfirmation was made to offer participants anxious about the interview process a means to delay or leave the investigation at any stage of the investigation.

As a courtesy, a sample of eight questionnaire and interview questions was provided to WAO teachers at schools responding to the PIL. These appeared earlier as

Table 1. This sampling was offered during the pilot phase to confirm the validity of my investigation and to assure WAO teachers that their students *could* indeed supply valid information regarding the acceleration option at their school. To avoid parental or teacher influence in the responses of participants, the full questionnaire and interview topics were not published prior to beginning the questionnaire and school visits. A summary of the data will be provided to schools after the presentation of the report.

I maintained a level of professional care evidenced by ensuring interviews ran to allocated school schedules (both in-person and via remote learning), thorough preparation and the presentation of necessary writing materials to participants and a reliable, easy-to-understand online questionnaire. It was necessary to show empathy to participants, attempting to put participants at ease during the interviews and indicating respect for their perceptions, expectations, and freedom to respond freely.

Chapter Summary

This chapter examined the rationale and the steps to develop this qualitative case study investigation and how data was collected and will be analysed. The processes for the selection of participants, was also outlined Limited international research documented and interpreted the perspectives of gifted children withdrawn for acceleration lessons, provided an opportunity to record perspectives that reflect the reality of their experiences. To pursue this evidence, three methical phases were implemented, each with a unique sequential purpose: pilot, questionnaire and interviews

The purpose for exploring the methodology and methods in this investigation was to generate evidence that will be analysed using an interpretivist-constructivist Grounded Theory approach (Glaser, 1992; Creswell, 2015; Merriam, 2015). The intention was to focus the researcher's attention on developing categories that explain data and refining categories into fewer and fewer sets, comparing data with emerging sets, and writing a theory that fit the realities in the eyes of the participants, practitioner, and researcher. The aim of the following data analysis chapter is to present the data and generate analysis. The analysis will support the proposition of a substantiative theory regarding the perspectives of gifted primary students on the characteristics of Withdrawal Acceleration Options.

Chapter 4: DATA ANALYSIS

Introduction

In this chapter, the analysis of the data will be presented and discussed. The demographics of the students accepting the invitation to participate in this study will be firstly introduced. The data from the questionnaire will be analysed and presented. Analysis of the scenario responses then follows and the qualitative data derived from the interviews will be presented and interrogated. The analysis of these data will report on the emergent and generated themes from both data sets to address the key research question; *What are the perspectives of gifted primary students attending withdrawal acceleration options in schools*? To pursue this question, four sub-questions were explored:

1. What were the participants' perspectives on the selection process?
2. What were participants' perspectives on others' reactions to WAOs?
3. What were participants' perspectives on the structure of WAOs?
4. When did participants experience the events that developed their perspectives on WAOs?

This chapter will focus on the analysis of the data, and Chapter 5 that follows will provide an in-depth discussion of the analysis and generate the findings of the study.

Participant Demographics

During 2019, 15 schools were invited to participate in this investigation. The schools are members of different school giftedness networks in the eastern, western and southern regions of Melbourne, Victoria. The schools provide accelerated learning options to gifted students and also non-gifted students demonstrating significant academic advancement and currently advertise these options in their promotional literature to parents. Six primary schools accepted the offer to participate in this investigation, which began with invitations sent to the families of gifted students selected by WAO teachers in June 2019.

Participants at each school had been selected for the WAO via teacher observations of gifted and talented behaviour, corroborated by psychometric testing achieving a superior giftedness score, attending WAOs in previous years or at other schools and academic results.

Initial questions on the questionnaire required students to add personal details. The purpose of these details was to align questionnaire answers with personalised interview questions and the subsequent collection of each student's responses. Acknowledging ethical standards requirements (NHMRC, 2017; Victorian Government, 2019) for research involving child participants, codes were later

attributed to students in the chronological order they began this task (signified by 'R'#) to replace individual names and preserve their identities. Table 6 provides background information on the participants.

Table 6

Participants' Encoding and WAO Grouping Information

Respondent	Year Level	Background information
R1	3	Male. Selected to attend weekly WAO classes in writing and Mathematics. No previous WAO experience.
R2	5	Male. Selected to attend weekly WAO classes in writing, Mathematics and Tournament of the Minds. 3 years' WAO experience. Brother of R4 and R8.
R3	4	Male. Selected to attend WAO classes that combine domains, such as philosophy and Tournament of the Minds. 2 years' WAO experience.
R4	6	Female. Selected to attend weekly WAO classes in writing, Mathematics and Tournament of the Minds. 3 years' WAO experience. Sister of R2 and R8.
R5	5	Male. Selected to attend weekly WAO classes in Mathematics. 2 years' experience at a previous school, first year of WAO in new school.
R6	4	Female. Selected to attend weekly WAO classes in writing and Mathematics. 3 years' WAO experience.
R7	5	Female. Selected to attend WAO classes that combine domains, such as philosophy and Tournament of the Minds. 2 years' WAO experience.
R8	6	Male. Selected to attend weekly WAO classes in writing, Mathematics and Tournament of the Minds. Brother of R2 and R4. 3 years' WAO experience. *Note: Grade-skipped to this year level in the previous term and remains in WAO.*
R9	6	Male. Selected to attend weekly WAO classes in Mathematics. No previous WAO experience.
R10	5	Male. Selected to attend weekly WAO classes in writing and Mathematics. 2 years' WAO experience.
R11	5	Male. Selected to attend weekly WAO classes in writing and Mathematics. 2 years' WAO experience.

R12	6	Male. Selected to attend WAO classes that combine domains, such as philosophy and Tournament of the Minds. 3 years' WAO experience.
R13	6	Female. Selected to attend WAO classes that combine domains, such as philosophy and Tournament of the Minds, and Mathematics. 3 years' WAO experience.
R14	6	Female. Selected to attend weekly WAO classes in writing and Mathematics. 3 years' WAO experience.
R15	5	Male. Selected to attend weekly WAO classes in Mathematics. 3 years' WAO experience.
R16	3	Female. Selected to attend WAO classes that combine domains, such as philosophy. No previous WAO experience.
R17	5	Male. Selected to attend weekly WAO classes in Mathematics, and a combined ICT/STEM class 2 years' WAO experience.
R18	2	Male. Selected to attend weekly WAO classes in writing and Mathematics. No previous WAO experience.
R19	4	Male. Selected to attend weekly WAO classes in writing and Mathematics and classes that combine domains, such as philosophy. 1 years' WAO experience.
R20	F	Male. Selected to attend weekly WAO tuition in writing and Mathematics with the WAO teacher privately, and a member of the Year 3 /4 WAO group No previous WAO experience.
R21	6	Male. Selected to attend weekly WAO classes in Mathematics. 2 years' WAO experience.

The participating group comprised of (n=21) 14 male (70%) and 7 female (30%) primary students aged between 5-12 years. Participants were drawn from each primary year level except for Year 1 (due to the Year 1-aged participant being grade-skipped). R15 was the only student participating in a WAO from a public primary school, with the other students attending independently funded schools.

R15 attended a multi-level WAO with primary students three years above his level in 2019, with those other WAO students at his school choosing not to participate in the study. The grade and gender distribution of the participants is represented below in Figure 11:

Figure 11

Year Level and Gender Distribution
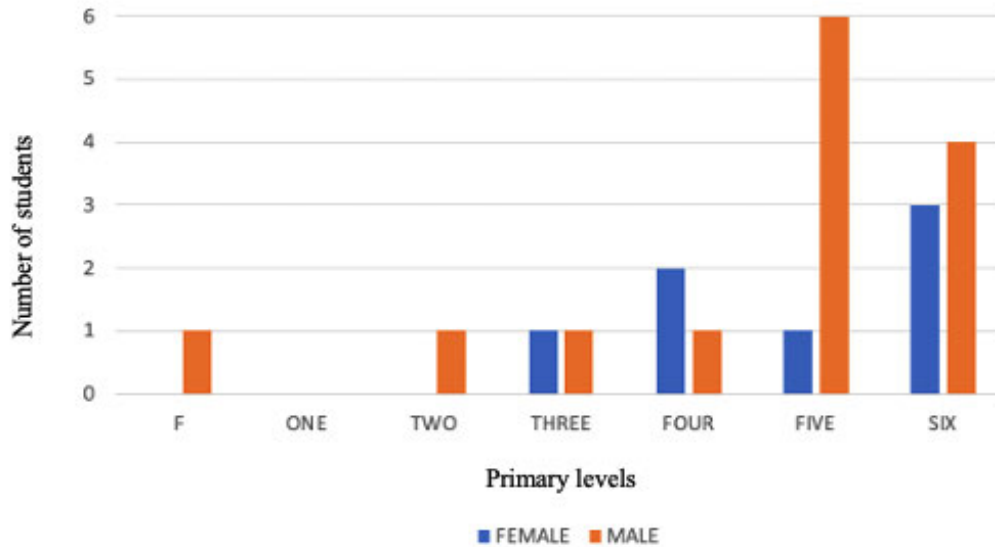
Results from Figure 11 show 14 participants (70% of the group) attended respective Year 5 and 6 WAOs at their school. During the Pilot Phase of this investigation, I verified information with schools identifying these year level populations increase noticeably when compared to other year levels, due to the influx of students enrolled in schools ahead of entry to secondary schooling. Students accepting academic scholarships to the participating schools represented 80% of Year 5 and 6 WAO students. Foundation level and Year 4 participants (seven of the group) consisted of an individual Foundation/Prep grade student (R20) who received 1-1 tuition with the Withdrawal Acceleration Option Teacher (WAO teacher) and other Year 2-4 students were included in combined Year 3 and 4 acceleration lesson held weekly.

The questionnaire and interviews supplied 697 responses from the participating students. Analysis of the response rate indicated six schools contributed gifted students attending a timetabled Withdrawal Acceleration Option (WAOs), and each participant contributed at least 30 responses for analysis.

Specific Perspectives

Basic assumptions, memories, observations, and reactions to WAOs were the perspectives investigated for this investigation, aligned with research by Lowyck, Elen and Lehtinen's (2004). Participants in this investigation were invited to provide perspectives on facets of WAOs, such as selection methods, reactions of people to WAOs, and how lessons and tasks were organised for

withdrawal acceleration options. The sub-questions enabled initial open coding of the perspectives on the following:

- memories of WAOs

- observations of WAO peers, non-WAO peers, WAO teachers, and class teachers

- reactions to WAO and classroom tasks by WAO students

- predictions of future WAO selection

Data Reduction and Analysis Format

Data were reduced using open and axial coding processes described in the Methods chapter. This narrowed responses to common keywords and phrases. This approach identified related and unique responses, which were converted into graphs to facilitate a visual understanding of the rate and commonality of responses.

Results were drawn from the questionnaire, typed reflections by the participants comparing their WAO experiences to a hypothetical situation, and transcribed responses from the interviews. The display and analysis of data in the following section combines graphical representations, percentages, and quotes of the participants.

Data analysis was guided by an interpretivist epistemology. The approach to displaying the data analysis was influenced by other qualitative reports, particularly *Muted Voices: The Views of Families on Special Schools* (Aspland et al., 2021) and *Gifted students' perceptions of gifted programs* (Kitsantas et al., 2017). These reports provided responses verbatim, influencing the path towards the development of possible theories responding to the research question.

Qualitative Analysis of the Data

Analysis of the phases of the investigation, (1) the questionnaire and scenario, and (2) the interviews is presented in Chapter 4.

During the analysis of the questionnaire and scenario data the frequency of responses will be represented as graphs, and subsequent analysis of the data will refer to percentages or the actual number of participants providing an answer.

Data Analysis of the Questionnaire

The questionnaire was designed to identify insights into student perspectives to be followed up through interviews. The questionnaire design featured a limited range of response choices using the Likert (5 point) scale format and this facilitated efficient data reduction by comparing the selections provided by students in graph form. For descriptive purposes, scores were classified according to methods suggested by Gagné (2021): mean scores lower than Point 2 indicated a low/very low response, answers at Point 3 were attributed as a positive/medium range response and scores above Point 4 indicated a high/very positive connection to the question proposed. Discrepancies in the specificity and quantity of answers collected can be attributed to a range of factors. Older students had experienced more WAO lessons and were thus found to provide more-detailed responses and provided multiple answers. Some students did not answer all questions due to a lack of experience in the WAO program and uncertainty about how to answer some questions, particularly the scenario query. The duration provided by WAO teachers for the students to complete the questionnaires limited opportunities for WAO students to make longer deliberations and responses. COVID lockdowns restricted the available times for WAO teachers to implement the questionnaire.

Figure 12

WAOs in Schools
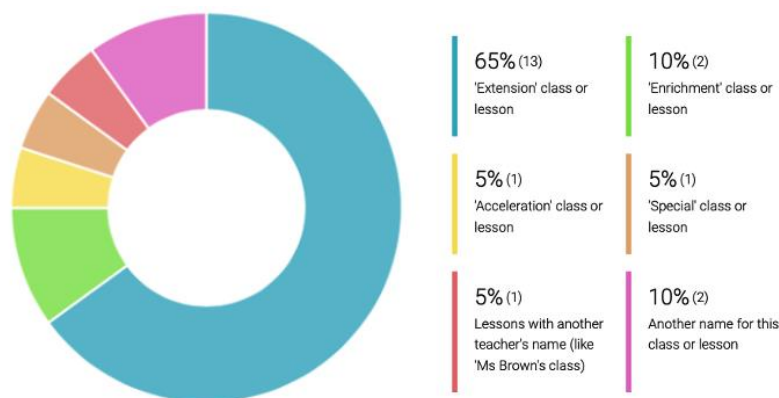
Memories of WAO Experiences. Initial questions for the questionnaire aimed to elicit perspectives on the structure of WAOs across year levels. First among the topics was unpacking memories of how they came to be selected to the WAO program and how that program was structured at their school, displayed in Figure 12. These topics pursued research Sub-question (SQ) 3, *What were participants' perspectives on the structure of WAOs,* and also answered SQ1*, what were the participants' perspectives on the selection process?*

As the participants could articulate the title of their WAO, it was reasonable to associate the familiarity with that option and their self-identifying as students of a higher intellectual capability.

Additional information regarding selection criteria would be investigated during interview conversations.

Most responses (85%) displayed in Figure 12 indicated the WAO was termed an 'extension', 'enrichment' or 'special' class, different in name and nature to their regular lessons, and displayed in Figure 12. Other WAOs were known by participants by the WAO teacher's name (e.g., "Mrs ____'s" lesson: R9), and the youngest participants (10%) could not recall the title of the WAO at their school.

Only one respondent connected the name of the WAO with the purpose for that lesson ("Acceleration class": R21). This data indicates WAO students were aware of the objective (by associating the title of the WAO) and recognised that program was available to a select group of students at their school. This information connects to SQ3, evidencing some knowledge by the participants that the WAO structure catered to very few students. However, this data required further clarification via the interviews to establish whether the students selected to the WAOs were informed, or knew why they had been chosen, when others were not, and by whom.

Observations of WAO Purpose. All students indicated they recognised the purpose for the WAO, displayed below in Figure 13. When asked, "In these lessons what are they for? What happens in these lessons, which is different to the work in your classroom?" (Q5), responses indicated they understood the structure of the WAO they attended catered to different strengths among the acceleration group.

Figure 13

WAO Domains
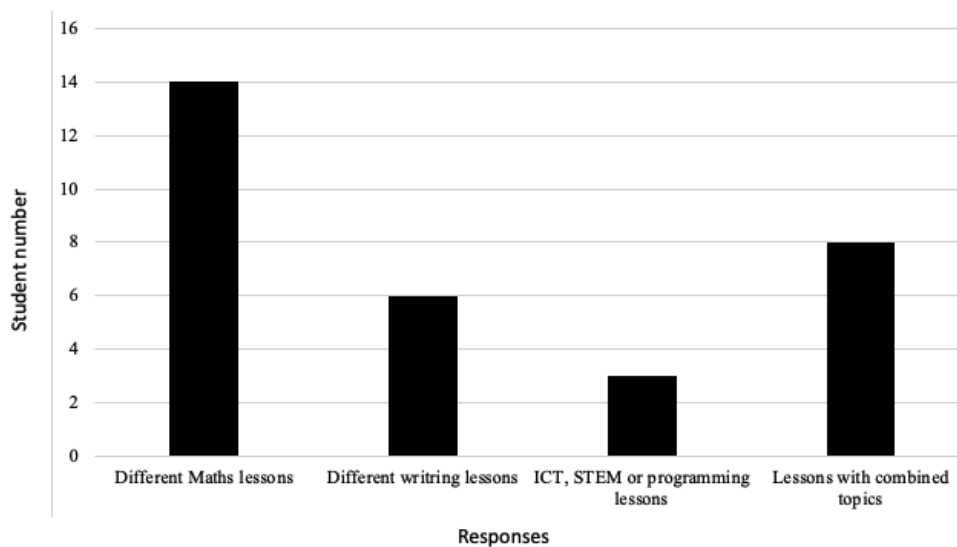
Whilst single-subject accelerations for Mathematics and creative English writing dominated the results, more than half of the students attended WAOs that focused on other, or a range of academic skills. Less-frequent responses catalogued efforts of the participating schools to offer non-core (i.e., not English or Mathematics) WAO lessons. Acceleration sessions were remembered providing ICT, STEM, or programming lessons (14%) as well as lessons with combining elements of history, geography, music, art, and philosophy. Multi-disciplinary activities were also mentioned in observations of WAO sessions, developing Tournament of Minds (TOM) [©] competition tasks, Australian Science Talent Search[©] and Future Problem-Solving International [©] productions.

Analysis of the information displayed in Figure 13 indicated schools provided WAOs to accelerate subject-based skills, predominantly in English and Mathematics. When this information was coalesced with another question (Do you go to this lesson by yourself, or others? Q7) illustrated by Figure 14, new details emerged that indicated students attended WAOs in different groupings and provided new information to answer SQ3.

Figure 14

Composition of WAO Attendance
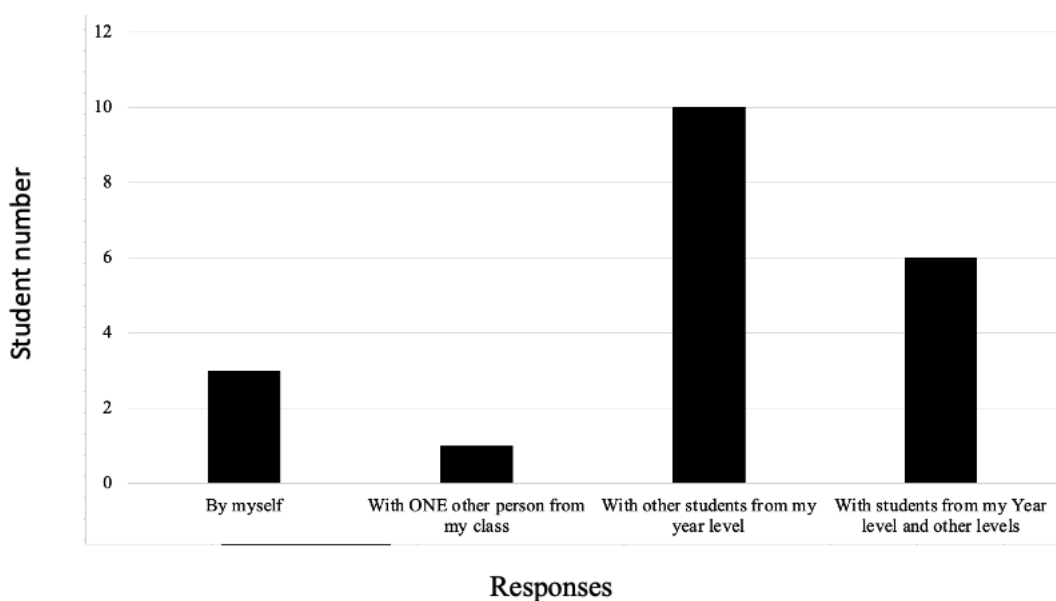
Figure 14 indicated half of the participants attended WAOs with children from their year level. All children attended WAOs for Years 4-6, with younger students being incorporated into multi-level WAOs at Year 2 or 3 levels depending on the school. This information indicated schools employed a homogenous or horizontal grouping method in older primary year levels, which did not necessarily address the differences in skill, speed, or depth of understanding these children displayed depending on the WAO task. This analysis revealed the participating schools recognised the need to provide accelerations, yet limited the access of younger WAO students to attend upper-level WAO classes,

even though their academic capabilities, supported also by their psychometric results suggested the younger WAO students could have undertaken older WAO tasks, for instance mathematical problem solving and creative writing exercises successfully.

Comparatively, Figure 14 also shows 30% of the participants in younger primary classes experienced heterogenous or *vertically* integrated acceleration. Students from different year levels were grouped with similar degrees of exceptionality, but only in Mathematics WAOs. At one school, this was evidenced by a grouping of Year 3 and 4 WAO students into a single cohort, and at another school two participants attending Foundation and Year 2 displayed talents similar to the capabilities of the Year 3 WAO students, and were thereafter included in Year 3 WAO sessions. Year 4 children remained in WAOs created their own year level and were joined by gifted children from younger year levels.

Reactions to WAOs. Question 9 asked participants to rate the level of excitement for attending WAOs in schools (Do you enjoy these lessons? Q6). The results of this query were uniformly positive and are displayed in Figure 15. This question queried perspectives on being withdrawn for the WAOs, connecting with the sub-question centring on being selected for the acceleration program Sub-question 1 (SQ1). As the question specifically asked about leaving classmates and the classroom this topic focused upon perspectives formed at a particular stage of a lesson (SQ4). Later, in the interview conversations, the responses to this question also served to ground a discussion connected to Sub-question 2 (SQ2), regarding the observed reactions of non-WAO people when the WAO became a more fixed part of the class timetable.

Figure 15

Perspectives on Withdrawal
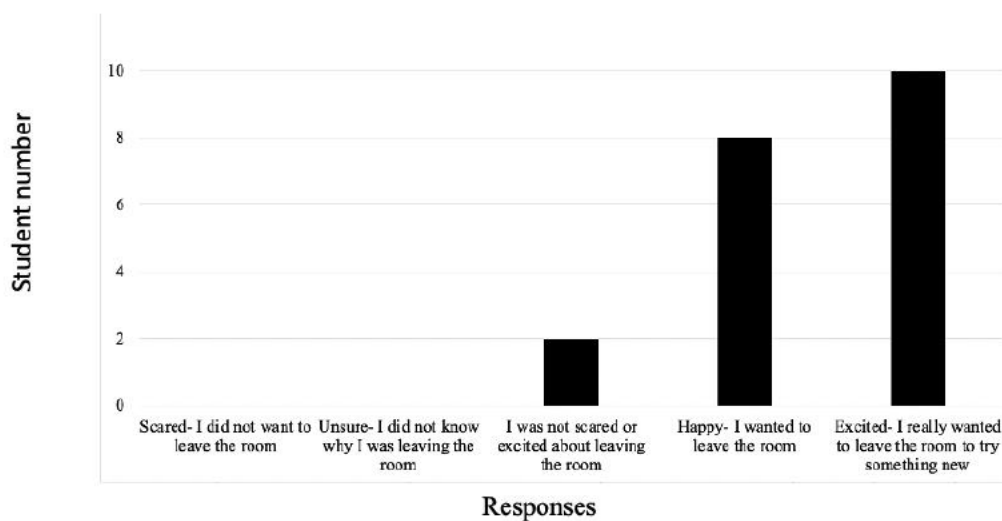
Respondents indicated an overall positive perspective on leaving the classroom to attend the WAO (Figure 15), in-turn providing evidence answering sub-question 1 on selections. The majority of participants (90%) indicated a positive preference reporting the upper scales in this 5-option Likert-style question. This finding was important, as subsequent details on the perspectives of the students cast doubts as to how 'positive' many students were when other perspectives began to emerge that were interpreted as less positive.

Half of the respondents selected the highest response available in the questionnaire for this question (Excited, I really wanted to try the activities). Data for this question illustrated the most positive reaction to being separated from their class to attend the WAO and connected to the first sub-question focusing on WAO selection perspectives. No participants selected a response corresponding to a negative (i.e., <3 out of 5) for leaving the class. Later, this would be compared to interview responses where some students reflected on negative reactions of other people to the WAO group's withdrawal, connecting to SQ2.

Memories of WAO Activities. When investigating the structuring of WAO activities corresponding to SQ3, participants provided the collective memory that worksheet activities created by the WAO teacher were a regular task in WAOs. This information is displayed in Figure 16.

Figure 16

WAO Tasks
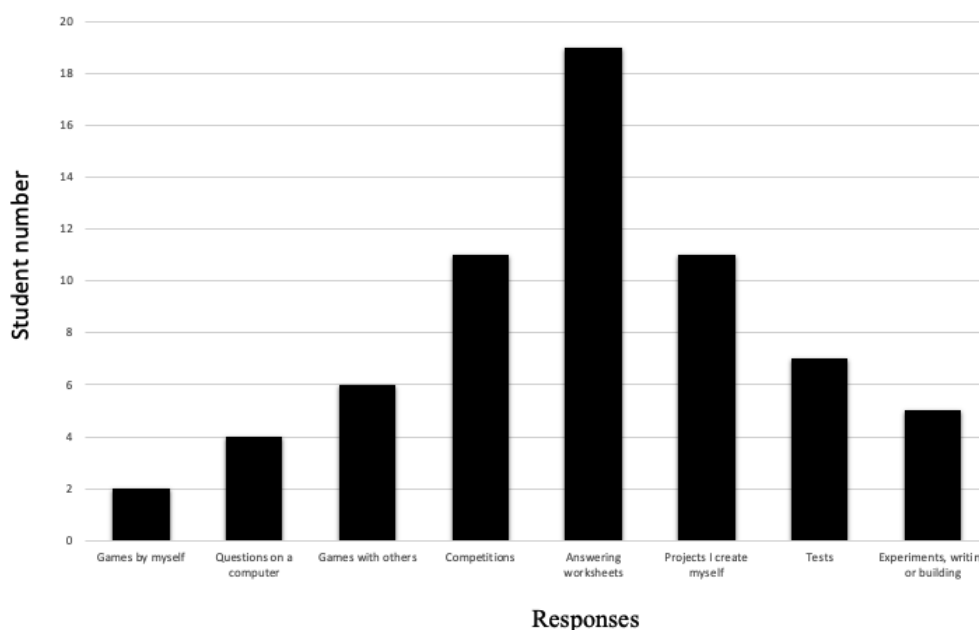
Data revealed a widely held observation among the group, which was the application of traditional paper-based task options by WAO teachers in acceleration lessons, usually during Mathematics-

based WAOs. This was an important finding, as the data indicated WAO teachers were providing generic worksheets to whole WAO classes, irrespective of individual strengths and learning needs. In the interviews, it was established worksheets were provided to all students, rather than tailored to enable differentiation among students with different levels of excellence. Later, described by Figure 18 data shows the participants remembering being able to complete one or very few tasks during a WAO session. This suggested that during WAO sessions either only worksheet tasks were provided, or after a worksheet was completed, then the WAO teacher permitted students to follow their own learning paths. In either case, this finding would be the focus for an interview question (Tell me about your choices of activities in these lessons. What choices do you get?: Q5) to build an answer for sub-question 2.

Q5 responses raised doubts that WAO students could or would be offered choices of study methods or flexibility to pursue learning in areas where they could use their strengths. perspectives on study choices including autonomous tasks added to building knowledge for SQ2 regarding the choices provided in WAOs for gifted children. As these choices were observed during the investigation's Pilot Phase to be largely designed by teachers, this evidence advanced knowledge answering SQ3 on the reactions of others (i.e., the teachers, peers, and parents) to maintaining WAO programs and providing tasks that challenged WAO children's capabilities.

There was not an equal provision of games, blended learning/ICT or other strategies across the different age groups. Twenty percent of these students indicated they received tasks via other means. Digital technologies, including recorded messages about tasks from their teacher, electronic slideshows and emailed tasks were recalled, which was expected during the school lockdowns of 2020. Twice this number (40%) experienced accelerated learning with the application or creation of non-ICT games during the WAO lesson, supporting understanding of SQ4, which were limited to the duration of the WAO lesson. This reinforced data answering to SQ3 regarding other's reactions, where responses indicate class teachers did not implement WAO tasks for the participants in regular class lessons, and where WAO teachers did not incorporate other learning methodologies to challenge the students in WAOs. Around a third (35%) of participants recalled taking practice tests from higher year levels in WAO lessons.

Grouping in WAOs. An aspect of WAOs for investigation was documenting how students worked together in WAOs. Data displayed in Figure 17 indicated a split in responses regarding WAO collaborations, and these were consistent across the participating schools.

Figure 17

Perspectives on Groupings
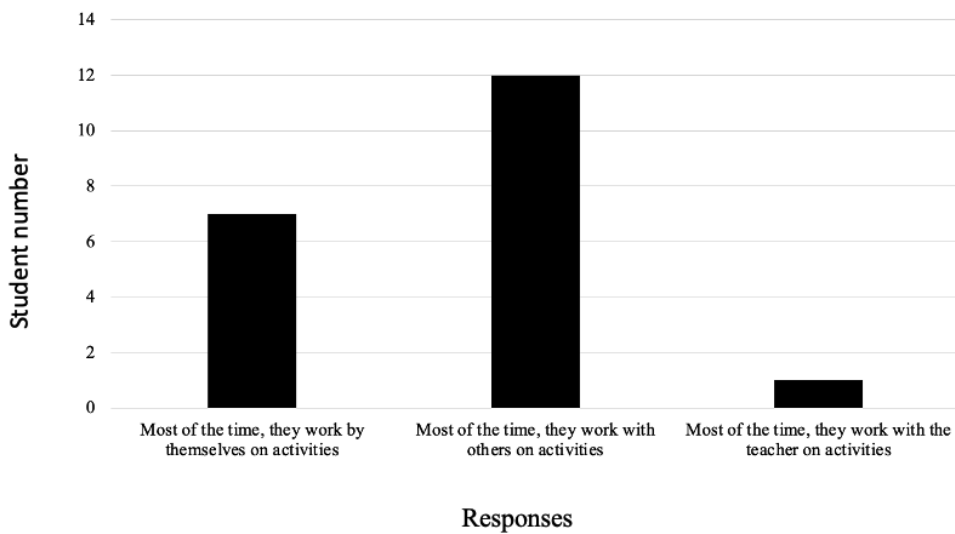
Some schools only provided WAOs where children worked in pairs and small groups, whilst other schools required WAO students to work individually. Over half (57%) of the schools provided grouped WAO tasks and over one-quarter (28%) indicated schools offered individual tasks. When answering a follow-up question (Q14), respondents indicated they preferred the individual study tasks set by the teacher over paired or small group tasks. This was reflected in the responses stated by 45% of the group, who shared, "Most of the time I do the activities by myself".

All responses which stated WAO experiences were completed "with others on the activities" came from students attending two of the participating schools. Activities when the WAO teacher worked privately with students elicited a single response, indicating 1-1 mentoring was not an acceleration WAO option used at the schools. Later, during the interviews R20 recalled working individually with the WAO teacher on activities, in the lead-up to being skipped from Foundation lessons in English and Mathematics to a Year 3/ 4 combined WAO. This information, however, was not entered in the questionnaire, and will be analysed at a later stage of this chapter.

Choices in WAOs. Other information during the interviews would centre on perspectives of student choice and the role of the teacher as the director of tasks, prompted by the answers to this question, *when you do activities in these lessons, who do you work with most of the time?* Answers were compared to interview responses where some students remembered options their WAO teacher provided or did not provide during acceleration lessons, for instance allowing students to choose their own tasks and groupings. This furthered understanding of the second sub-question, focusing on the perceptions on choices available to primary students in WAOs

Displayed in Figure 18, Question 18 enquired whether all WAO students recalled usually completing one or more tasks during their acceleration lesson. One-quarter of the responses indicated those students were able to complete other tasks after the major focus task in WAO lessons ("Usually, I finish all the activities in these lesson and often complete other tasks too").

Figure 18

Perspectives on Completing Tasks
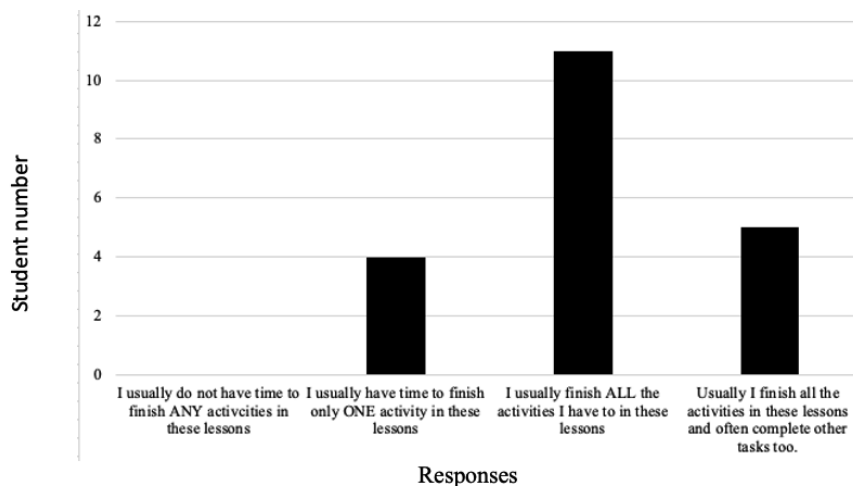
In analysing those statements and corresponding to the data presented in Figure 17, it was concluded that WAO teachers provided several tasks, or individual tasks of sufficient sophistication that the students successfully completed within a session. A similar proportion (20%) of the participants, comprising all respondents in Year 5 and 6 indicated they were allocated time to complete one activity in these lessons which included secondary school-level tests given as routine WAO activities.

Observations of WAO Experiences. A second thematic strand in the questionnaire was to target perspectives based in reasoned observations among the group, rather than latent memories. Questions were provided to connect causes and consequences of WAO selection, task design and other's reactions, pursuing each of the sub-questions. The intention of this strand was to deepen my understanding of the approaches by class teachers and WAO teachers for selecting gifted children to an acceleration option, supporting their attendance at that option and parcelling activities testing their advanced capabilities.

Selection to WAOs. Data displayed in Figure 19 evidenced a range of possible options why participants perceived they had been chosen for the WAO.

Responding to the question, *"Why do you think you are allowed to go to these lessons?"* (Q8), answers revealed student knowledge of the WAO selection process, the focus of the first sub-question. Respondents could choose multiple entries for this query, and two-thirds of the group 65% indicated past performance in classroom studies influenced their preselection ("Because I did harder tasks like these last year": R21).

Figure 19

Perspectives on WAO Selection
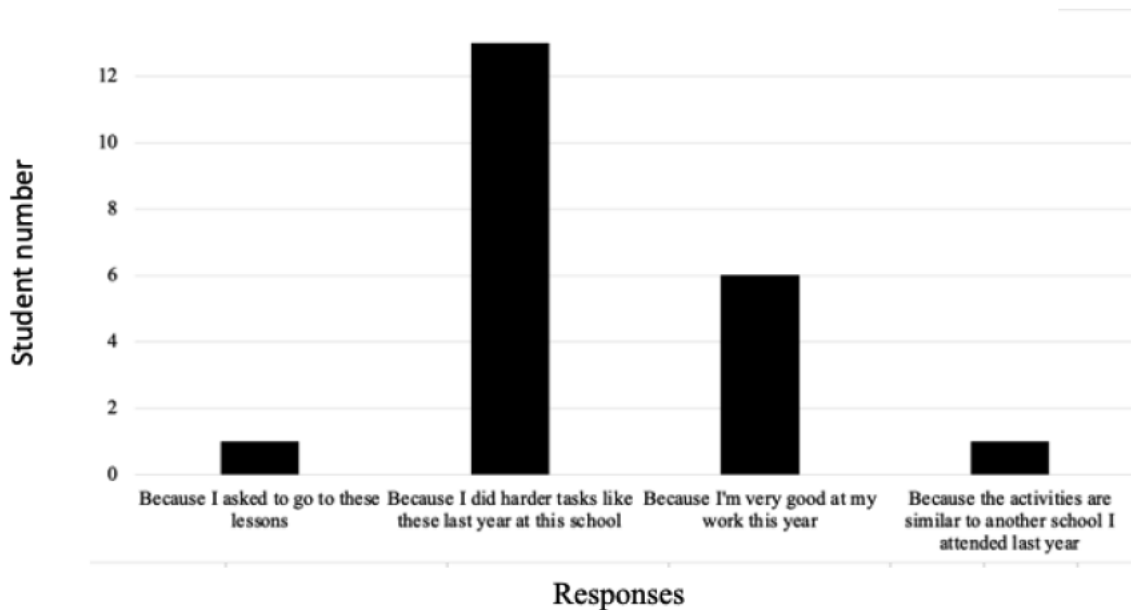
Most participants (60%) based their selection as a reward for current performance ("I'm very good at my work this year": R1). Six respondents chose multiple answers to this question, reflecting a perspective that a combination of past and present academic results was directly responsible for being chosen by the class teacher for the WAO. Figure 19 shows a single respondent (R4) had asked her teacher to select her for the WAO, and one other respondent observed his selection may have been predetermined, "Because the activities are similar to another school which I attended last year" (R5).

Respondents reflections on attributes impacting their selection by teachers for the acceleration program at their school is shown in Figure 19. It was observed during the Pilot Phase of this investigation that respondents continued to receive differentiated learning opportunities from their class teachers in scheduled core lessons but were nonetheless provided the WAO to cater further to their academic needs. Access to the WAO was not applicable to their classmates, as the teacher controlled the means of identification using psychometric data, academic assessments, and past WAO attendances. This information provided insights to sub-questions 1 (selections), 3 (reactions)

and 4 (timing); WAO students seemingly understood the reasons for their selection, perceived there was a selection process to the WAO and that these were reasons why they were withdrawn in some lessons and not other children.

Several questions aimed to establish participant perspectives on how effectively they felt WAOs met their learning needs. Data from Questions 10-12 is presented in Figure 20. It was important to elicit views in relation to the benefit of WAO tasks on their academic skills. A high proportion of responses (90%) indicated most, if not all activities challenged their academic capabilities. Of this subgroup, one-third declared "All the activities challenged my abilities" with the corresponding two-thirds stating "*Most* of the activities challenged my abilities" as their responses to Q10.

Figure 20

Perspectives on WAO Task Difficulty
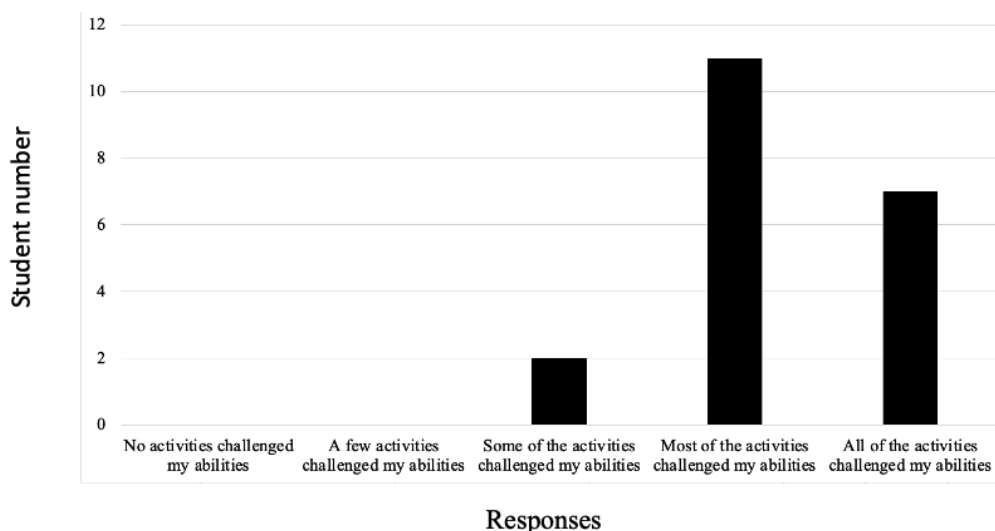
Two students (R12, R20) indicated the WAO activities did not fully challenge their capabilities, the lower of the three Likert responses offered by this question. This would be pursued later to establish if this view was aimed at the design of WAOs (to answer SQ3), or perhaps the selection process had not fully captured the advanced needs of these children (SQ1). This answer by R20 was especially interesting, as this student attends multiple acceleration options as a Foundation-level student attending Year 3 and 4 WAO. R20 also received 1-1 instruction with his WAO teacher yet indicated in his response these acceleration options are not challenging even though he was being provided personal WAO tuition and is provided tasks suitable for accelerated children many years older. During the interview, this student chose not to clarify his questionnaire response. It may be that R20's choice was made erroneously, or this student felt uncomfortable being interviewed remotely rather than at school.

WAO Selection and Classroom Skills. Figure 21 provides data that displays a spread of perspectives that linked the skills developed in WAOs and whether the participants thought these skills benefitted them when returning to classroom tasks. Responses to Question 11 provided an opportunity in the interviews to clarify how WAOs benefit the selected students, or why they did not. Those interview conversations would use this query to enquire about task design, individual strengths, and issues of autonomy as possible reasons the candidates selected their response to this question. Twelve respondents confirmed the view that their classroom skills definitely improved as a result of WAO attendances, signalled by choosing Response 4 (They improve) and Response 5 (They really improve).

Figure 21

Ramifications of WAO Learning
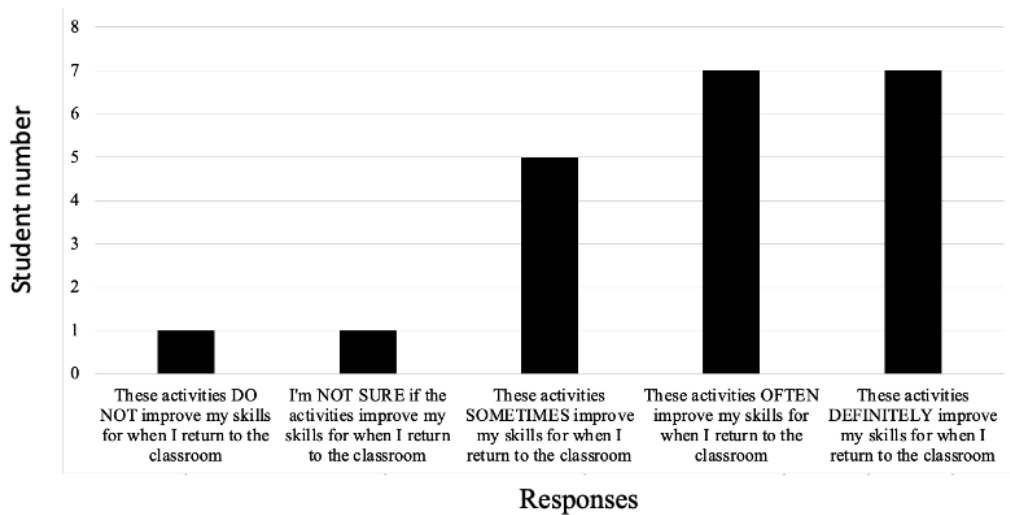
Data from this question showed WAOs allowed the students to continue their academic dominance when compared to their non-gifted peers in classroom lessons, a response providing answers to sub-question 1 (selections). This question was also designed to provide answers to perspectives on other's reactions to this program (SQ3, reactions) as it could be seen to benefit children who already demonstrate significant learning advantages over other children. From this information it can be seen most students recorded the perspective their WAO skillset directly improved their classroom results. This view was exemplified by a student, stating, "These activities definitely improve my skills for when I return to the classroom" (R2).

In contrast, two students indicated WAO skills did not strengthen their classroom capability. One respondent strongly suggested no correlation to WAO skills impacting his classroom capability ("These activities definitely don't really improve my skills for when I return to the class": R17). This

called into question why WAO activities did not challenge R17 to maintain his academic dominance in the classroom, connected to the first sub-question that focused on the WAO selection process and SQ4 acknowledging this perspective occurred to the student before or after, but not during WAO lessons. It is possible this response in the questionnaire might indicate a disassociation between class and WAO tasks, for instance between classroom Mathematics and WAO Mathematics. Classroom tasks would be influenced by the teacher catering to all ability types, whilst WAO tasks differentiate only to advanced learning levels, a likely condition impacting SQ3, the structuring of tasks within WAOs. Two students also indicated in responses that they were not capable of completing WAO tasks, despite their selection to the group by their class teacher. This data was interpreted as a focussed perspective of the structuring of WAOs, connecting to SQ3 and connected to their recollections of using their WAO skills in regular classroom lessons afterwards, the focus of the fourth sub-question (SQ4: timing).

Question 13 (*Do you usually get good results in these activities?*), displayed in Figure 22 investigated participants perspectives on success in WAOs.

Figure 22

Perspectives on Self-Capability
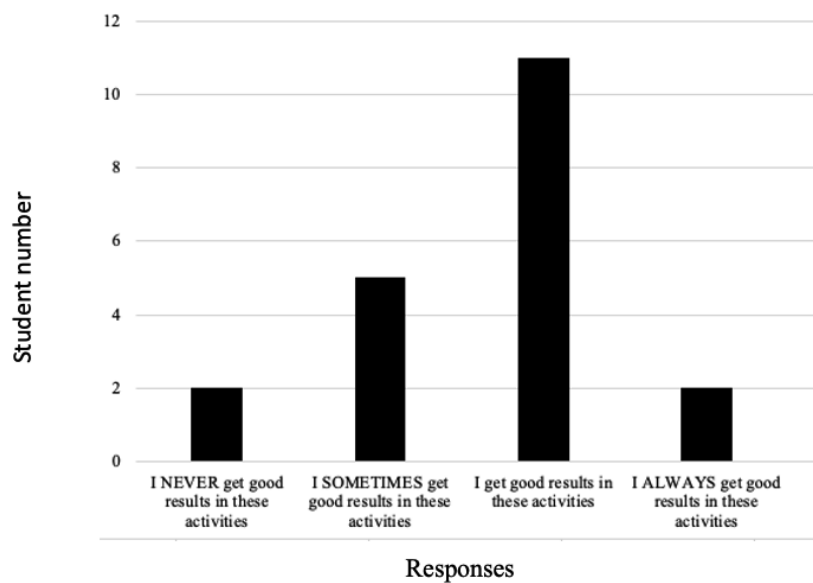
Responses painted an overall positive observation of success amongst the students in the acceleration lessons. Around one third (32%) of participants offered with certainty they "never get good results in these activities" or only "sometimes get good results". More than half of the group responded that they achieved "almost always good" results in WAO activities (65%). Figure 22 displays data indicating 90% of respondents selected a medium to highly positive response on their

WAO progress. Data signalling lower results (10%) were quickly targeted for follow-up questions in the interviews, to establish reasons for this response in developing possible themes.

Observations of the WAO Selection Process. When reducing the data for Qs10-12, two students shared the perspective they were not successful in WAO lessons. Later, in the interviews these children expressed uncertainty as to why they had been originally selected for the WAO. Interview data expanded on their answers in the questionnaire indicating each had been selected for the WAO for the first time during that year in groups of children that had previous WAO experience. When asked to clarify his questionnaire response, R1 stated, "I never really knew why I was chosen (for the WAO)".

Connecting to SQ1 focusing on perspectives on the WAO selection process, this evidence suggested a lack of communication from the teacher about why children had been selected. This called into question whether the students perceived their class teachers' reactions influenced selections, informing SQ3 (reactions). It is possible the respondents did not know they had been selected based on psychometric (intelligence testing) scores described Chapter (*Inclusion criteria*) rather than on the basis of academic results, of which WAO students and their peers would connect to the reasons for selection to withdrawal accelerations.

Perspectives on Children not Selected to WAOs. Data displayed in Figure 23 revealed respondents considered the reasons they were selected for WAOs, and suggested reasons why most of their classmates did not attend with them. This question provided a rich source of information for conversations in the interviews regarding the reactions of others to the WAO program and perspectives on WAO selection criteria. Supporting SQ1 (selections), the motive for the query was to gauge how the respondents reasoned their selection to the acceleration programme, but not other students.

Respondents were invited to make multiple selections illustrated in Figure 23, with only a small number (R5, R14) suggesting most of their classmates did not want to come to the WAO lessons. Most participants indicated that their teachers did not ask more students from their class to attend the WAO.

Figure 23

Perspectives on Non-Selection
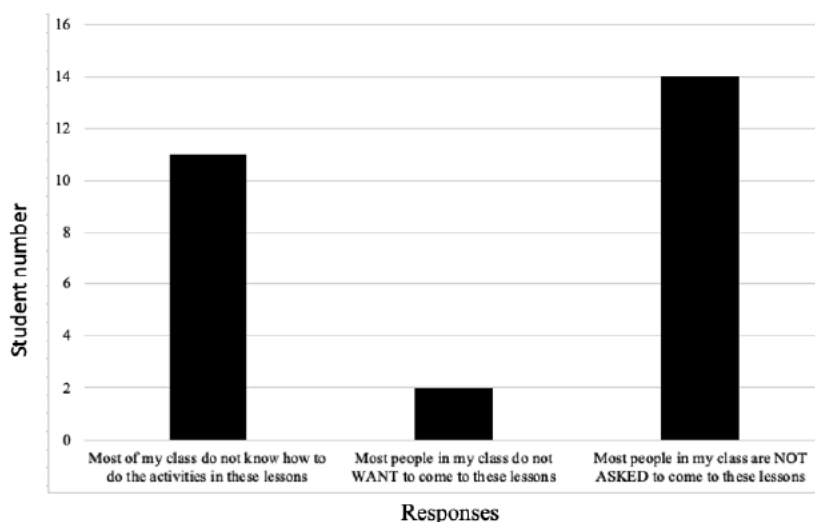
More than half of the responses (55%) attributed this decision to most of the class not knowing how to do the activities in WAO lessons, corresponding to sub-question 1. In tandem with Question 8 (Figure 19), it is clear WAO students recognised academic ability as one determining factor. Later, this question would provide an opportunity to probe interview conversation to elicit views on the why students were chosen to WAOs, and whether there were choices provided to all students evenly.

Reactions to WAOs. A third thematic strand in the questionnaire was to target participant reactions to WAOs as established members of their school's accelerated group. This strand is distinct but related to memories (a first-person account) and observations (first and some objective accounts), but asked students to recall memories of the WAO in the past, evaluate these in the present, and then predict how these might influence perspectives on new WAO experiences. Crucial to pursuing these reactions was targeting participants' knowledge of personal and WAO group working methods that supported students during WAOs, connecting these understanding to SQ4 investigating what happens during the acceleration sessions. Furthermore, this strand confirmed student understandings of the WAO teachers reactions (SQ2) that might influence the selection of students for future WAOs.

Possible Criteria Reactions. A series of questions targeted reactions to the importance of characteristics experienced during WAO sessions. Questions 21-25 asked students to rate the importance of completing tasks, the necessity to work independently and collaboratively, and their

perspective on needing analytical and critical problem-solving skills for their selection to WAOs. For example, one question asked, *To be selected for these lessons in the future, how important do you think it is to complete all the activities in those lessons?* (Q21).

Data displayed in Figure 24 represented conceptualisations that explained why WAO students were selected, how other children could be selected for future WAOs, and how they might again be selected to the acceleration program at their school.

Figure 24

Perspectives on Completing Tasks
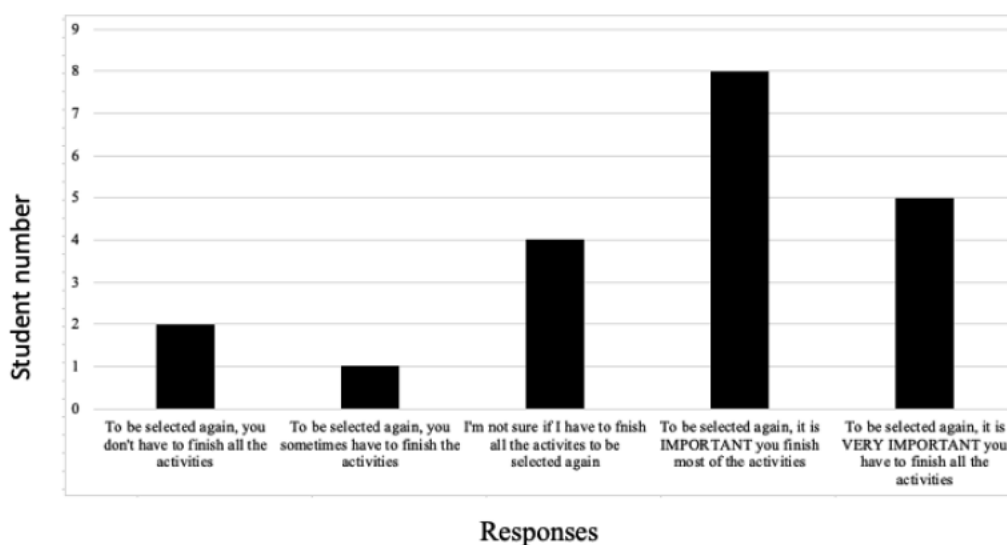
Most respondents (81%) indicated it was 'important' to 'very important' that all activities were completed in WAO lessons. In contrast, only three respondents indicated it was 'not important' to complete all activities. Those three responses had only begun their WAO experience 2019 when this doctoral investigation began, and so possibly did not have knowledge of WAO selection processes or knew how on-task behaviour in WAOs might impact their ongoing eligibility for other accelerations. The majority of participants (75%) chose the response 'it is important' or 'it is very important' had participated in WAOs for either 2 or 3 years, validated by information displayed earlier in Table 6. During the interviews these responses would be investigated for insights to illuminate sub-question 1 to understand why respondents believing completing tasks was an important component of their WAO experience.

Question 22 (Figure 25) investigated the reactions of the participants to their WAO experiences, provoking respondents to consider the likelihood of independent study as a factor in their WAO selection.

Figure 25

Perspectives on Work Habits
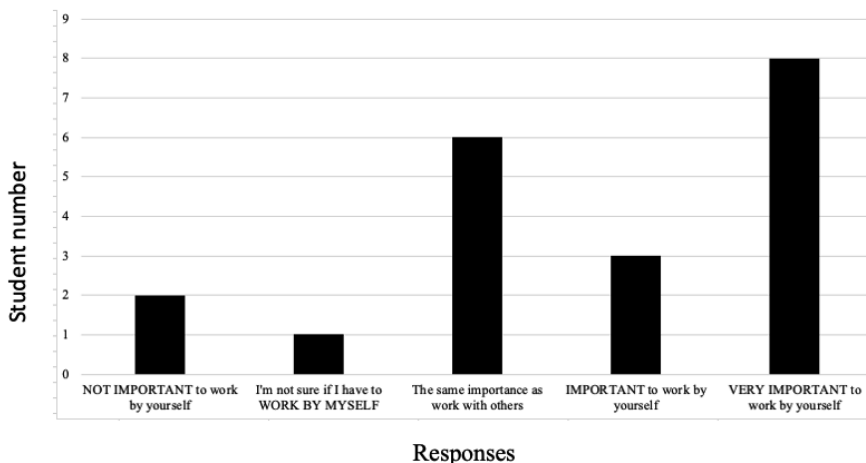
Analysed across year levels, there is no clear correspondence of the responses to reconcile whether this perspective was age-related or school-related. From the evidence, nine students (43%) regarded this criterion as 'not important', or 'with the same importance as working with others'.

A similar number representing the majority (11 students, 53%) providing the alternate view, confirming independent study habits as an important factor for WAO consideration. This response was indicated by several of the group, "It is very important to know how to work by yourself in these lessons" (R4, R5, R7, R12, R15, R18, R19, R21).

Interestingly, whilst WAO students had a diversified view of the importance for independent WAO study skills, this contrasted with almost a singular view on collaboration with peers and the WAO teacher during WAO lessons. Sixteen responses were provided to Question 23 (To be selected for these lessons in the future, how important do you think it is to work with others?) Evidence indicates answers regarded collaboration as either "important" (30%) or "very important" (68%).

In providing the only opposing view, R9 chose the response, "It is not important to know how to work with other people in these lessons". This was consistent with his earlier response regarding independent study, "It is not important to know how to work by yourself in these lessons'. This invited the question during the interviews of whether R9 perceived social as well as academic capabilities as factors teachers should perhaps consider when choosing WAO candidates, furthering knowledge elicited by sub-question 1.

Predictions. A final thematic strand in the questionnaire aimed to elicit participant predictions into whether they would be selected for new WAOs. Consisting of a single question, Q26 is deceptively simple (Next term, do you think you will be selected by your teacher for these lessons away from the classroom?), this topic corresponded to SQ1 (selection), SQ2 (teacher's reactions), and SQ4 (a future WAO time).

Figure 26

Perspectives on WAO Re-Selection
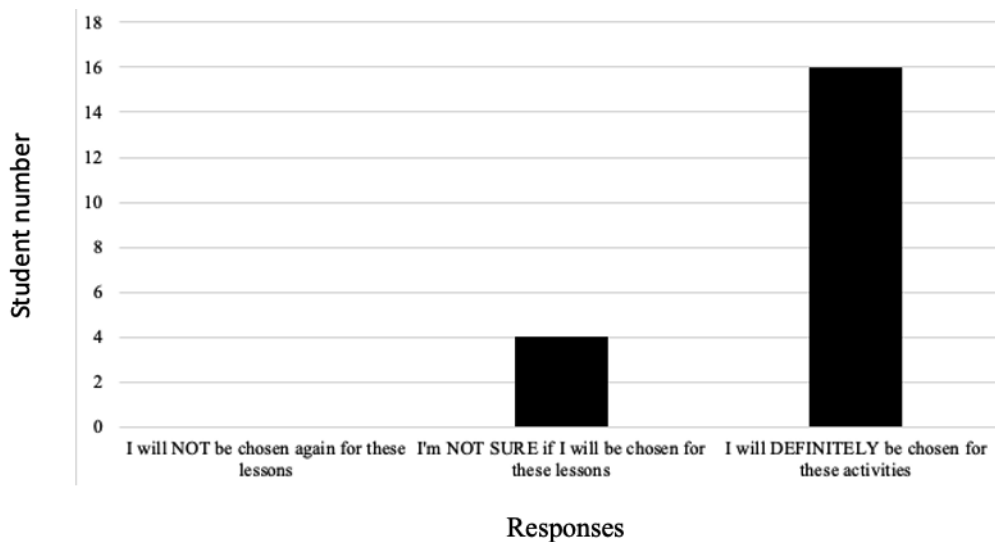
Responses for this question (Figure 26) balanced memories (a first-person account), observations (first and some objective accounts), and reasonings (perspectives on their teacher's reactions to their selection).

Q26 asked respondents to summarise the previous responses to the survey to predict the likelihood the teacher (and in some cases the WAO teacher too) would again select them for the WAO program. This query targeted the WAO students' awareness of (i) their academic and behavioural performance in WAOs and (ii) their views of whether those performances may have influenced teachers' selections for future acceleration experiences at their school. Corresponding to SQ1 and SQ2, during the questionnaire students had chosen responses based on their memories, observations, and reactions that originated in WAOs. Sub-question 4 (timing) is also informed by this query, as participants were asked to consider how past WAO performance might influence their teacher's future decisions regarding WAO selections.

Twenty students completed Question 26 on being again selected to the WAO. R20 did not try this question; information gathered during the interview indicated R20 used the remaining time in the questionnaire phase to complete a longer response to the scenario instead. Sixteen students (80%) chose "I will definitely be chosen for these activities", confident that the classroom teacher will recognise the advanced capabilities of these students. No students indicated they would not be chosen again for these lessons, even though some students were at that time in Year 6 (30% of the 'Definitely' subset) and may have been uncertain whether WAOs existed in their future secondary school experiences. Later, this question would provide an opportunity to elicit interview responses of the reasons why respondents thought they might or might not be selected again for the acceleration program.

Data Analysis of the Scenario

The final section of the questionnaire requested participants compare their WAO experiences to a hypothetical scenario. This task was optional and open-ended, allowing respondents to compare their personal experiences to a hypothetical WAO scene, inviting analysis, reflection and elaboration. The dialogue was provided in both written and recorded audio formats on the questionnaire to account for participant choice and to differentiate for possible participants having a difficulty understanding the requirement for the task.

The scenario responses provided strong insights that would support conversation topics in the interviews. The writing of the scenario incorporated my own observations of WAO students whilst working as a WAO teacher during the period 2010-2016. To validate my knowledge of WAOs, the scenario question incorporated behavioural traits of students outlined in the Methods chapter to test the validity and relevance of criteria for student selection (answering SQ1) and WAO structures (SQ3).

This question was the only query where respondents could freely compose an open-ended response in the questionnaire. Responses ranged from (a) the scenario depicted instances strongly familiar to some participants, (b) the scenario depicted occasional commonalities to WAO experiences, and (c) the scenario depicted instances unknown to most students.

The majority of respondents (81%) provided perspectives to the scenario question. Two respondents (R6, R10) did not complete the scenario question by the conclusion of the WAO lesson and did not return to the questionnaire in a subsequent lesson to complete this task. Two other respondents (R11, R15) could not provide a reason during the interviews why they did not complete the scenario response. One student (R4) registered "I'm not sure" as her perspective, tabulated as 'no response'

in the graph. Later, in her interview this student was reminded of this response and upon reflection in the interviews, she stated:

> Yeah, it's pretty much the same. I mean… I also enjoy these lessons and really like to do the harder stuff. The things we do are nothing like we do in the room because no one would do them. Yeah, Mrs____ doesn't ask or check any of my extension stuff. I think she asked last year if I was having fun, that was it. (R4)

In her response, R4 suggests some of her experiences are similar to Jesse's situation, citing her enjoyment for complex WAO tasks which were very different from those presented to her in the classroom. R4 observes that her teacher had not asked her about her WAO experiences, possibly since the previous year.

Analysis of the responses recorded 2 instances where participants expressed a match between the story and their factual experiences. R3 articulated the scene was "Exactly the same as my lessons", and R8 offered, "Everything here is the same as my lessons". Other students were more descriptive with their comparisons, offering common or occasionally similar agreements with elements in the scenario. R9 connected with separate elements in the questionnaire rather than as the brief overviews offered by R3 and R8 above.

> I go to another classroom for hard activities with another teacher, which are always different from the normal work. I can do on activities on my own and I enjoy the atmosphere. (R9)

R9 comments offered his/her perspectives on the purpose and format of the WAO at that school ("I go to another classroom for hard activities with another teacher"…), inferred a characteristic of WAO tasks ("…which are always different from the normal work… I can do activities on my own"), and finally offered a reflection on an emotional attachment to that WAO program ("I enjoy the atmosphere").

R12 offered the most lengthy and detailed response among the participants, connecting with each of the aspects mentioned in the scenario:

> This story is quite similar to my experience with the lessons I visit away from my classroom. I do go to another classroom along with some of my classmates for activities that are certainly more challenging than the activities in my usual classroom, but I wouldn't call very hard. (R12)

At this stage of the scenario response, R12 confirms a foundational principle of the WAO ("…the lessons I visit away from my classroom") and the selection of others joining him that were able to meet similar criteria ("…with some of my classmates for activities that are certainly more challenging than the activities in my usual classroom"), whilst offering a reaction to the tasks presented to him/her in the WAO ("..but I wouldn't call very hard"). R12 continued to provide additional contrasts with Jesse's scenario and their own, sharing perspectives on task and instructional design, and observations of the teacher's supportive behaviour in the WAO lesson:

> I can work on some activities alone all with people the same age as me during these
> extension classes. I do enjoy the atmosphere of the activity room during extension
> classes. The activities are nothing like the activities in my usual classroom. (R12)

Several students offered a similar response structure in this regard, teasing-out similar and also unique elements of the scenario, compared with their lived WAO experiences. Some respondents indicated the actions of the class teacher were different in the scenario, providing an encouraging conversational direction for the interviews. R2 mentioned the class teacher requested he/she self-analyse her WAO efforts as a guide to future improvements "My story is the same as Jesse's story except for one small thing. My teacher asks for a good comment and a 'something to improve' comment" (R2). It was not indicated by R2 in the scenario response whether the class teacher then revisited this student's self-analysis personally or changed aspects of R2's classroom instruction as a result of these reflections.

Two students, from the same school and WAO group as R12 mentioned earlier offered the observation that Jesse's experience was essentially the same as their own, although the degree of interest by their class teacher for their WAO work was different to teacher portrayed in the scenario:

> Yes, this is very similar, apart from our teacher doesn't usually give us individual
> feedback on our work. The rest of the lesson is pretty similar. (R13)

> Our teacher usually tells us to give him our work and gives it back to us the next
> lesson, but we don't get that much feedback on how well we are doing. (R14)

These contrast with R12's assertion that "our extension teacher does normally check the work we have completed in their class and gives us helpful feedback to improve" mentioned above. Notably, R13 and R14 see a distinct difference in their WAO experiences and from the scenario where we

read 'Jesse's teacher always checks the work Jesse completes before the next lesson, offering a comment about how well Jesse is doing' (Q29).

Another's response to the scene, "The teacher reviews my work but doesn't give me a result on the paper" (R5) reflected this student's observation his/her class teacher indeed "…reviews my work". The response did not indicate whether this review was perfunctory or detailed to support R5's efforts in the classroom or perhaps with skills that could be used in WAO sessions.

R7's response presented the opportunity to examine issues of student choice and agency in current WAO selection methods in the respondents' considerations. This participant's responses, interestingly, inferred a similarly experienced situation to Jesse, though a preference to not attend WAOs and remain in the classroom:

> (The scenario is…) pretty similar. I prefer to work with my grade to be honest,
> other than that almost the same. (R7)

This was a unique response that would base questions for later discussion in the interviews to all participants. R7's perspective raised questions whether participants were given the choice (or preference, as the term 'prefer' was used) by teachers and by proxy, their parents to remain in the classroom rather than attend the WAO. Certainly, as these children were chosen wholly or partially due to their exceptional classroom achievements- potentially nullified by selection to a group entirely comprising of exceptional students- it is logical they received a greater degree of recognition from their teacher, class peers, and parents as well as developments to their self-concept. This phenomenon, presented in research as the Big Fish Little Pond (BLFPE) effect (Zeidner & Schleyer, 1999) will be examined in the Discussion chapter.

Lastly, one respondent inferred dissatisfaction with observations of the class teacher's and parental support for R17's WAO efforts, and offered a negative perspective of the activity level in the WAO when attending:

> My teacher doesn't give me a comment about how well I am doing. I don't really
> enjoy the atmosphere of the (WAO) room as much. My parents don't ask me if the
> lessons are fun or not. My teacher doesn't check on my work often. (R17)

When cross-referencing R17's other questionnaire responses, there are no indications of dissatisfaction with WAO programme. Indeed, when responding to "*How much do you enjoy these lessons?*" (Q6), "*Do you think these lessons challenge you?*" (Q10), and *"How much do you want*

to go to more lessons like these in the future?" (Q27) this respondent consistently chose the most positive, or second-most positive answer available (i.e., responses 4 or 5). At this point it was clear no previous questions in the online survey requested ratings of class teacher and parental support, which may have validated the observations of R17 and possibly invited similar responses from others.

In summary, on the balance of responses participants held positive memories, observations and reactions regarding their WAO experiences reflected in data from the questionnaire phase of the investigation. Respondents indicated a preference for being selected for other WAOs. Answers also highlighted student uncertainties about task selection, and support from others for their selection to this learning option. Issues regarding student agency and identity surrounding group, and task selections punctuated the latter part of this survey exercise. In the following section, participants were interviewed to validate the questionnaire responses, and invited to elaborate or change their responses.

Data Analysis of the Interviews

Interview data comprised of spoken responses digitally recorded and transcribed by a professional transcription service. Analysis of the data used open and axial coding to reduce and 'tag' data that may be relevant to a discovery being made (Elliott, 2018).

Questions posed in the interviews were informed by responses in the questionnaire. Interviews provided an opportunity to explore issues of interest. As described in the Methods chapter, nine questions targeted student perspectives, specifically observations, memories, reactions, and predictions of events occurring during WAO experiences.

The coding process revealed the participants expressed a range of views and ideas about aspects of WAO selection, task design, and the reactions of people to WAOs. The next section will group the responses according to those perspectives, supported by examples of the unedited answers of the participants.

Perspectives on the WAO Selection Process. When asked in the interviews *"What were you told by your classroom teacher about being chosen for these lessons? What do you remember about being selected for these lessons?"* most students were unclear of the reasons they were selected to the acceleration group. More than 70% of respondents reported that their selection was not based on their giftedness diagnosis, the criteria for their candidacy to this investigation, but because of a selection choice made by the class teacher. Two students used "maybe" to convey their uncertainty in their clarifications during the interview, stating;

> Maybe it was because they (previous teachers) show (this year's) teachers the schoolwork that we've done and then they and then they decide. (R8)

> Maybe teachers suggest it, or parents maybe. I know that we need more to learn about this stuff because we're past the stage other people are at. (R4)

Above, participants R8 and R4 indicated they were uncertain, even though they had attended a WAO for several years, about the precise selection process for the WAO. However, it can be established R8 and R4's responses were broadly correct. It is possible that they did understand how they were selected given these quotes but are unable to express it in an articulate way. In these remarks, R8 and R4 considered the role of their parents in influencing means their WAO selection. As these students are siblings, this was a possible action by the parents, but could not be verified at the time.

R8 considered past performance as an influencing factor ("…they show teachers the schoolwork we've done"), and R4's awareness of the advanced learning levels of the WAO group ("…we're past the stage other people are at") indicated a basic understanding of the criteria for WAO selection. R7 confidently asserted, "I didn't ask my teacher why I was selected because she was busy teaching, so I just went" (R7), providing an avenue to investigate observations of teacher support and interest in WAO student selections.

Some students provided uniquely detailed perspectives. R12 remembered annual intelligence testing at his school and connected this process as a possible entryway for his selection to the acceleration option at his school:

> I think every student had to do a test, I forgot what it's called, but it's like a test that kind of shows where you are in terms of your learning, and so I think that all that sort of decided whether we're going to be an extension. I'm not too sure about that. (R12)

R12 articulated an understanding of cause-and-consequences connecting cognitive pre-testing ("a test that kind of shows where you are in terms of your learning") as a condition for being selected for the withdrawal acceleration option. At that school, criteria for WAO selection included teacher observations, previous WAO attendance, and attaining superior grades in WISC IV and the ACER General Ability Tests (AGAT) annually. The selection process is essentially understood by this student, even though R12 was uncertain ("I'm not too sure about that") at the time of the interview.

Only two students (10%) provided a confident, accurate understanding of the selection process, clarifying reasons they were selected for the withdrawal acceleration option at their school. R3 and R4 made bold statements to validate their inclusion in the acceleration lessons at their school, having multiple years of attending that program (R3- 2 years, R4- 3 years) to base their perspectives:

> We were chosen because we're talented. (R3)

> Because we're smart and that kind of thing. They (class teachers) have the same kind of expectations, so if I can meet Mensa's[4] expectations, they assume I can meet the expectations in extension classes. (R4)

R3's use of the term 'talented' was the only response among the interviews of the entire participants- whether intentional or accidental- that inferred any knowledge of the terms 'gifted' and 'talented', or self-awareness as a child who has attained those levels of cognitive measurement. R4's reasoning echoes R12's cause-and-consequences thinking, connecting achievement in one gifted program ("if I can meet Mensa's expectations") perhaps influencing the class teacher's decision to offer R4 a place in the withdrawal acceleration program. Again, the tone of R4's answer suggests this understanding is conjectural- there is no indication the teacher has informed R4 of this selection reasoning, and the student has taken the implications of the two programs to a plausible, though unproven conclusion ("…they assume I can meet the expectations in extension classes": R4).

In summarising perspectives on selection processes, there was no shared understanding why some students were chosen to attend WAOs, and others were not. From the responses it is inferred that teachers had not explained why some children were chosen and not others. In other remarks, respondents suggested the criteria enabling students to join the WAO program at their school was not provided by teachers. In the Discussion chapter, these perspectives will be connected to possible themes of uncertainty regarding their knowledge of the selection processes and how they might again be chosen for future WAO opportunities.

In response to sub-question 3, respondents speculated about reactions of people not involved in the WAO, and how those reactions informed the WAO participants of their learning differences to their peers. This provided a lens with which to examine subjective perspectives on self-awareness, peer support, and the role of the class teacher when selecting children to withdrawal acceleration processes.

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[4] *Mensa Inc. an international organization, created in the UK (1946), was created to serve as a society for highly intelligent people to meet on a monthly basis to promote and provide stimulating intellectual and social environments and opportunities for its members*

Perspectives on Other People's Reactions to WAOs. Data indicated common responses when participants discussed the reactions of people not directly connected with the WAO program. These 'other' people consisted of parents, the children not selected for WAOs, and the class teacher after the initial WAO selection process.

A common perspective was interpreted from the data to suggest that other people outside of WAOs did not express an opinion on or appreciate the capabilities of the WAO attendees, or of the complexities posed by the WAO tasks. Connected to SQ2 investigating others' reactions to WAO, Question 5 asked, "What do other children in your class think you do in these lessons? Do they ask what you do? How do you know they care, or don't care at all about you attending these lessons?"

Several participants offered variations indicating their peers did not seem to be interested in the WAO students leaving for the acceleration lesson. An example of this view was "Not many of them care I go to these lessons, or where I go to. They just keep doing their work and don't focus on us at all" (R15). Responses frequently mentioned an awareness by participants that there was little reaction by non-WAO peers when they were separated from their class for the acceleration lessons. R12's comment "I don't think they're (peers) necessarily interested in me. I think they just kind of occupied with what they're doing," indicated an impression R12 had considered it was unimportant for other people to know about the WAO tasks, as they had class tasks to complete themselves.

Inferences about peers' abilities were mentioned by several (25%) respondents as a reason others did not enquire about the WAO tasks and why participants attend these lessons: "Some of them don't want to be involved because it's too hard for them" (R14). These inferences were also punctuated with comments of self-awareness of gifted, talented or advanced capabilities, particularly in F-4 level responses. The Foundation level student approached the reactions uniquely, protective of his exceptionality that influenced his teachers to select him for that acceleration program: "I don't really want them classmates to find out what I do in the lesson" (R20). R20 added, "maybe they're not that interested (in what I do)" as an afterthought, considering reasons peers did not react to him leaving classroom tasks to complete tasks elsewhere.

Years 3 and 4 offered limited descriptions of any interest shown by their peers in their WAO attendance or tasks: "My friends sometimes ask, and I just say I do some 'different' stuff. Sometimes I do more hard stuff than you guys. Then they don't really ask much more about it" (R5). R3 suggested non-WAO peers might label the WAO members negatively; "I'm not sure if they (peers) were confused about why I leave the class. They were like 'oh, it's for the smart group'" (R3). In this statement, the emphasis on 'smart' can been interpreted both complimentarily as well as negatively. This reflection may also be evidence by R14's response, suggesting an ulterior motive for why peers

did not enquire about their absence from some class activities, "Some of them feel that they're capable enough to do it and they're envious" (R14).

Older students in Years 5 and 6 WAOs personalised motives for the reactions they observed in non-WAO peers, which was different to younger participants who did not tend to qualify their responses with reasoned observations. A perspective shared across this subgroup agreed with R15's observation: "Others… who are good at Maths try not to come to the WAO because there will be too much work and it's too hard" (R15). This observation qualified a knowledge of the complexities of WAO tasks ("there will be too much work and it's too hard") with a perspective non-WAO peers did not enquire or appear to show interest in R15's lived experience or perhaps pursue being selected for the WAO.

In a similar vein, R13 acknowledged the advanced levels of learning and increased academic effort required by WAOs might distance other students from asking about her learning experience, whilst signalling her own academic strength, and the necessity of completing complex tasks such as competitions:

> I don't know whether they know what we actually do, but I think they just think, I don't like to use the word 'smart' or whatever, but just that we're smarter than them. I think they know we do compete in competitions and stuff. (R13)

Perspectives on classroom teachers being interested in the selection and tasks of WAO students, was a common response. More than half of the participants provided observations suggesting the class teacher, the person selecting them for the WAO in their understanding was seemingly unaware or uncaring of the WAO students' experiences. This was an alarming proposition considering the requirements for teachers to demonstrate the capability to support children with diverse needs discussed in Chapter (*Participant selection*). R8 suggested time pressures may obstruct his teacher from making periodic checks on his progress, which occur at later dates:

> Q: Does your teacher ever check your WAO work?

> A: No. Sometimes. Not all the time. Sometimes she just gets stressed and then I'm pretty sure she doesn't have time to check it, so we just go on. But other times, when we've got three weeks to do (a project) and we're almost done, then she'll check them thoroughly. (R8)

One common remark mentioned was that the class teacher was perhaps not informed of the types of tasks his/her students undertook in WAO lessons by the WAO teacher. Participants from the Years 3-6 subgroup perceived their class teacher did not know the progress of students whom he/she had selected for the WAO, nor the content of which they were provided in the acceleration sessions. An example of a Year 5 response indicated this may have been due communications between teachers:

> I don't think he's (class teacher) really told. I think that he needs to be told by
> someone. And I think they should be aware of on what we're doing. I think there
> should be better communication with the class because I don't want it too
> different." (R10)

This student added, "Unless we tell (the class teacher), she doesn't get told about these things", indicating a perspective that perhaps, in his mind the communications should run *towards* the class teacher, rather than a fostered culture of mutual interest and explicit support between teachers and WAO students.

One quarter of the participants suggested their teachers were disconnected or disinterested in their WAO progress because participants or other teachers had not informed class teachers of the WAO experiences. This suggests participants considered the class teacher actively or passively elected not to follow their progress. Two students separately reflected on this common aspect of their experiences at different schools:

> I don't know whether they actually know what we do but I think that they think
> we're way smarter than them, and we're going off to do this class to do hard work,
> but that's all they know. (R13)

> The class teacher doesn't know anything about what we do. My teacher, this was
> back in Term 1, she asked if we could ask (the WAO teacher) to learn about the
> stuff we were missing out in Maths, but we do completely different things our
> teacher doesn't get told about. (R10)

Only one participant, a Year 4 student attending a Year 6 WAO at his school remembered an occasion where his class teacher showed interest in his WAO participation. "He (class teacher) compliments us on our (WAO) work and gives it back to us after reading it" (R15). This represented to R15 an explicit recognition made by the class teacher for the precocity of this student, completing tasks 2 years above his peer group. On only one other occasion did a student recall the class teacher incorporated tasks similar to those in the WAO to class tasks, to benefit the acceleration group

students. R12, provided this memory in his statement, "She gives us WAO activities when she feels that maybe we could move on from the topic".

In summarising the perspectives on reactions to WAOs, participants mostly assumed people outside the WAO at their school were not interested in why the participants were selected, whether these were a negative or positive learning opportunity or what the WAO program entailed. The prevailing perspective was that WAO students did not merit the curiosity of their teachers or peers when leaving the class for another learning opportunity unavailable to others. In the Discussion chapter, this perspective will be connected to sub-question 2, focusing on the reactions of other people outside the WAO.

In the next section, respondents offered observations and memories of the timing and design of WAO lessons. The data provided insights into the characteristics of WAOs and informed interview questions about how WAOs were taught. These topics provided a lens to connect understandings of how and why WAO opportunities were provided to participants, and later to reflections whether WAOs where perceived positively or negatively by the participants.

Perspectives on WAO Structure. The analysis of interview data revealed respondents' overall positive reaction to the tasks provided to them during those sessions. The interviews, however, uncovered inconsistencies with questionnaire responses; one example of a variation to an earlier response involved perspectives on choices WAO students could make about the tasks presented to them by the WAO teacher. During the interviews, participants above Year 3 provided rich responses to the prompts, "Tell me about the choices of activities you get in these lessons? What choices would you like in these lessons?". Foundation and Year 2 participants provided fewer ideas of choices, such as games (R18 wanted "More stuff!") and were unable to clearly articulate other ideas during online interviews. With less experience in WAOs, these younger children were perhaps less knowledgeable or less confident in imagining choices for future accelerations.

Questionnaire data regarding the choices WAO students could make about developing their own tasks was often contradicted during the interviews. These choices included the range of study options, the quantity, and the complexity of tasks they encountered in WAOs. Displayed by Figure 16, more than half (11 students) of the group indicated they pursued "Projects I created myself". Indeed, the opportunity to choose how tasks were completed was commonly appreciated by respondents. Other students though, expressed the perspective that perhaps that self-guided learning might not provide the structure they wanted to continue their academic excellence. Frequently, responses raised comments about the WAO teacher's role in determining the pace, direction and monitoring of WAO tasks, and indicated many students were not encouraged to pursue individual learning paths in

primary school withdrawal acceleration options. These reactions were based in realisations that efforts were being made to challenge the WAO students at their level of need, "The activities fit the right level for me and sometimes they're a bit harder for me, so I get challenged" (R16). Participants also reflected on the preference for working in another room on their WAO tasks, distancing them from the grade classroom.

Numerous comments supported the questionnaire data providing insights into the type and function of WAO tasks, and the regularity with which these sessions were timetabled for the selected students. In broad terms, observations could be categorised by the meaning of the WAO program (design) to participants, when it was delivered (timetabling), and how the WAO was conducted (delivery). Responses could be seen to conflate the rewards of the WAO at their school with the intention to provide more complex learning opportunities; "I always go because you get a certificate and stuff and so why not go? There's always fun work to do because otherwise class work is boring" (R5). Others indicated their pre-conceptions of the WAO before beginning those sessions were afterward changed; "I wasn't aware there was going to be competitions and stuff" (R12).

Uncertainty of the regularity of WAOs in their school's timetable linked many responses. Participants were unsure if the WAO sessions were a regular weekly, twice weekly or another scheduled event more than 6 months before the onset of the global health crisis, which would have influenced these sessions. Of the responses in this subcategory, many could not precisely report a timeline of their WAO attendances when interviewed in 2019 and prior to school lockdowns in 2020. An example of this view was: "In Year 5 we haven't really been doing it, as evenly. I don't really know when that WAO time is" (R5). Interview data indicated students who received irregular WAO sessions also were uncertain if they were still expected for sessions; commonly it was recalled that weeks and even months elapsed between WAO sessions, and sometimes WAOs ran with no topical connection to previous occasions.

Other responses indicated participants' confusion about the delivery of tasks in the WAO, both in terms of the planning and patterning of tasks to continually challenge the high-functioning WAO students. Some participants expressed the perspective that they did not have a clear understanding of the selection of WAO activities aimed at their talents, which they had come to expect from the curriculum-based sequencing of activities they experienced in the classroom. This analysis is reflected in comments including:

> The thing is not knowing what you're going to do. Sometimes when we're doing
> the work in the WAO we have a timetable for the day but sometimes it doesn't go

to plan, and we do different things. So, we don't usually know what we're going to do anyway. We have an idea but we're not certain. (R6)

Respondents presented a narrower set of perspectives outlining their preferences for the method WAO tasks were presented to the groups. Responses highlighted perspectives on student autonomy and the degree by which tasks were seen to cater to the needs of the gifted and talented students. R10 provided the insight that the amount of self-direction was "a little too much power in our hands", whilst others questioned the role of the WAO teacher if that person was not actually teaching to the accelerated learning needs of those selected students.

An analysis of the conversations reveals patterns indicating this is not a preferable situation for WAO students, and their preference is to develop their exceptionalities guided by their WAO teacher. R3 confirmed a similar method at his school when he stated:

> I choose (my own WAO activities) after the I've done the stuff that they give me-
> the stuff they give us is the basics. We usually do this for the Maths Talent Quest.
> (R3)

In this response, R3 reports after completing teacher-developed WAO tasks, WAO students were encouraged to pursue their own domains of talent when completing initial tasks for a specific academic goal. In this situation, R3 evidently produced a part of a Maths Talent Quest project designated by the WAO teacher ("…the stuff that they give me..") prior to choosing another option to complete that lesson. R15 reported his preference for working from older year-level tasks his WAO teacher provided over conceiving his own Maths challenges. Of significant interest in pursuing a possible finding focussed on student agency, another student provided a detailed, lucid observation of self-management offered to WAO students at his school. To R12, this was the way WAOs operated, as he had witnessed other acceleration methods as a student in a US primary school:

> There are some activities where we have a bit more choice, but not necessarily like
> in the US. Mr. ___ comes to you next week and he says, "for the rest of the year,
> you can choose what we do, and I'll help you'. So, your choices are, you can choose
> any subject, you can choose any level, grade, six or seven to do whatever you want
> to do. It can be not just Math, it can be Engineering, Programming, it can be Art,
> can be Music and be English. And you can choose to do it by yourself as a whole
> group or as a person. (R12)

R12's recollection was verified by other participants at that school as a preferable learning experience, combining elements of student choice of topic, domain scope and sequence, timeframe for completion, and grouping. Subsequent information from the WAO teacher at that school indicated this experience was true, with the addition of one aspect- WAO students needed to complete set tasks from a task booklet *first*, then this flexible arrangement was provided. At a subsequent meeting with R12, he offered this clarification:

> I think it was a work... Well, it was sort of like a book... A booklet? You were given a booklet and you could do that page, or you could do that page, or you could do that page, and everybody could choose what they want from the booklet. So that's sort of the freedom that we have a time to do it. (R12)

Other responses grouped in this subcategory expressed a preference for working away from the classroom cohort, and the suitability of the WAO environment for their acceleration needs. These perspectives coalesced with other respondents' views that identified a more productive study environment was experiences in the WAO when compared to their classroom.

> I prefer being here, because I know it's a better learning space, because I seem to learn a little bit more and then helps me reach further and do what I really want to do. (The WAO room) helps me learn from the level that I really want to learn, work on and I just learn more. It's not that I don't like the workspace, I just don't really like the… not the people… It's more just the noise and it's less (distractive). (R3)

In summarising the perspectives on the choices offered in WAOs to students, the participants expressed support for the WAO at their school, even though aspects of planning and delivery for WAO sessions sometimes obstructed a clearer understanding of what was expected of them and the capacity of the acceleration program to target and further extend these students' exceptionalities. In some responses it was perceived that teachers may not have communicated effectively among themselves and with WAO students regarding the timetabling or choice of tasks to cater to the talents of the WAO groups. In the Discussion chapter, this thread will be connected to questions participants expressed about the rationale for withdrawal acceleration options and whether these were seen by participants as a viable and desirable means to assist them at school.

In the next section, respondents speculated about their continuing selection to the WAO at their school, providing a lens with which to connect expectations and motivations for the withdrawal acceleration process in those schools.

Perspectives on Future Selection to WAOs. During the period scheduled for the interviews, all students were attending regular or semi-regular acceleration lessons weekly, though this changed as COVID-related school lockdowns made WAO scheduling difficult. During mid-2020, WAOs in Australian schools had moved to a remote-learning format. Acceleration lessons competed for weekly lesson allocations with the core subjects (for example, English, Mathematics, Religious Education, foreign languages). As a result, schools were presented with circumstances that severely influenced the scheduling of WAO sessions and opportunities to work in cohesive WAO groups. This influenced the responses for the 'prediction' themed questions connected to SQ4 on the events leading to perspectives (Q7: can you tell me reasons why your teacher might choose you next time, do you think you will be selected by your teacher for these lessons away from your classroom?"), as respondents were unsure when or how future WAO sessions would be scheduled.

Ninety percent of the participants in the study indicated a preference to continue in their present acceleration program for the foreseeable future and a similar tally (85%) of the participants indicated both the likelihood they would be selected again by the class teacher for the WAO program. This represented an overwhelmingly positive response to the WAO opportunity presented to the gifted and talented students, despite some negative observations, memories, and reactions catalogued in the previous sections.

A reason some participants offered in predicting the reselection to WAOs was a preference to be separated from the noise and distractions of the grade level classroom. Two respondents indicated a preference for being separated from his class, whilst in the same conversation R8 offered his perspective for possible reasons why other students would not be selected:

> It's not that I don't like the classroom workspace I don't really like the… not the
> people…. it's more the noise they're making in the classroom and it's less
> distracting when I go to these lessons. Maybe they're not as good as us or they're
> good in their own way? maybe it's just the level they are at or something (R3)

> I blame them (non WAO students) for not listening because that's what some
> people do, but some people just don't get (the WAO tasks) which is annoying.
> Those are two different things, and then people who just don't listen, the majority of
> the class and then sometimes they don't get told off for not listening. I really don't
> know why they don't come to these lessons because it would be a bit more
> challenging for them (R8)

No participants in the interviews changed their questionnaire responses when considering their own re-selection to WAOs. As several weeks elapsed between the questionnaire application and the interviews, it was anticipated the students might have forgotten their survey responses or wanted these to change as they became more experienced with the acceleration program, but this did not eventuate.

The majority of interview responses validated survey answers indicating students expected to be selected again for WAOs (Interview Q8: Can you tell me reasons why your teacher might choose you next time to go to these lessons?). Answers appear as a possible response SQ1 on selection criteria, with most participants indicated previous WAO attendance might be a criterion for future selection. R13 gave an example of this perspective when she stated:

> I definitely think I'll be in it next year, even if there are kids who come to school
> that are better than me. I think I'm at that level where I will still manage to get into
> it. (R13)

In the interpretation of this data, it was determined that the participants predicted that they would be selected again for WAOs at their school, with a few exceptions. These perspectives intersect with uncertainties students have about the selection process, their perspectives on the interest their class teachers have for selecting them again for WAOs and how WAO tasks are designed in schools to suit exceptional talents.

Chapter Summary

This chapter revealed patterns in responses from the participants, which were interpreted through open and axial coding methods as four distinct subcategories from almost 700 answers. This information is presented based on the data that infers participants reacted positively to being selected and withdrawn from their classroom to accelerate their academic skills with other advanced students. However, these participants indicated they shared uncertainty of the reasons and processes by which they were selected, why other students were not chosen and why WAO lessons occurred on an irregular basis. There were also common perspectives suggesting participants experienced a lack of interest and support from their peers, parents, and teachers for their involvement in the WAO program, even though these people had observed their dominant academic strength at school.

Additionally, participants indicated there were uncertain how tasks were designed and scheduled to cater for their talent which exceeded the capability of both their teacher and peers, sharing views on student agency when choosing the domain, timeframe, grouping for tasks, and degrees of teacher assistance or direction. This underscored general support amongst the group for the existence of the WAO at their school, and overall preference to again be chosen for this program if offered.

The next chapter will critically discuss the findings and initial analysis and cast this against research examined in the Literature Review. The aim of this investigation was to study the perspectives on gifted primary students attending withdrawal acceleration options in primary schools. Noted in this Data Analysis chapter, responses indicated whist WAO participants have positive regard for these programs, there are impactful elements that sometimes cloud the satisfaction attendees experience, or want to encounter, when they leave their primary classroom to participate in the acceleration option at their school.

In anticipation of the following chapter, this analysis generated three interpretations. These are:

1. *Confusion*. The interpretation of participants regarding reasons and methods for student and task selection in acceleration programs in primary schools is portrayed as one of confusion

2. *Choices*. The interpretation of participants regarding the WAO process of selection, inclusion and programming is one of wanting to be involved in these choices

3. *Ambivalence*. The interpretations of participants regarding the reactions of teachers and other students who were not attending the WAOs is one of ambivalence

The three interpretations listed in this summary will suggest those perspectives can be mapped via a model for understanding the complex nature of these experiences, termed a Doorway model. The intention of the Doorway model, to be explained in the next chapter, is to provide an insightful path to parents, teachers, researchers, other students and perhaps the gifted students themselves in understanding an undocumented set of lived experiences by students of withdrawal acceleration options in primary schools.

Introduction

The purpose of this research was to investigate insights in the ways gifted primary students interpret, describe, or characterise a Withdrawal Acceleration Option (WAO). In my own experiences as an educator responsible for developing WAOs in primary schools, I felt impeded by limited instructive examples of WAO-building and understanding this strategy from the view of gifted primary students. Alversson and Sandberg (2013) encouraged researchers to identify and challenge assumptions that underpin giftedness pedagogy. In pursuing this investigation, the challenge was to identify the practice of 'pull-out'/withdrawal programs targeting the needs of gifted students. In identifying practices to meet those needs, Alvesson and Sandberg propose a process of gap-spotting to widen knowledge in social science fields to benefit practitioners and sample groups. The Literature Review revealed this lacuna in current, published research into the structuring of WAOs, reflected in the perspectives of gifted children who are selected and then attend WAO lessons.

Main research question and sub-questions

The study addressed the overarching research question: *What are the perspectives of gifted primary students attending withdrawal acceleration options in schools?* The purpose of this research was to raise the awareness of teachers, parents, and researchers of primary school WAOs provided to gifted children and possibly develop a theoretical model to advance that knowledge. To pursue this question, four sub-questions were explored:

1. What were participants' perspectives of the selection process?
2. What were participants' perspectives of others' reactions to WAOs?
3. What were participants' perspectives of the structure of WAOs?
4. When did participants experience the events that developed their perspectives of WAOs?

The previous chapter provided an analysis of the raw data collected through written questionnaire and interview phases of the investigation. Accompanying the analysis, this chapter includes a discussion of the results and how these results contribute to a deeper understanding of the needs of gifted students participating in a WAO style withdrawal program. This discussion will focus on three interpretations emerging from the responses analysed in Chapter 4; confusion, choices, and ambivalence.

In the final part of this chapter, a conceptual model will be generated theorising the perspectives of the student participants and bringing the study to a close. Termed the 'Doorway' model, it is offered to understand the origin and outcomes of primary gifted children's perspectives when they are

selected for and then attend Withdrawal Acceleration Options (WAOs). It is anticipated that this model will generate new policies, enhance teacher practices in the field as well as provoke conversation amongst the educational community. How this model may inform key stakeholders is discussed in Chapter 6.

Discussion of the Results

The purpose for this chapter is to critically discuss the findings and cast this against research examined in the Literature Review, the research question and sub-questions. The findings provided reasons, memories, and predictions of WAO experiences among the perspectives. From the data and analysis provided in Chapter 4, WAO participants indicated a positive regard for these programs at their school in surveys and interviews. An example representative of this view was provided by one Year 5 student attending WAOs:

> Yeah, they (WAO lessons) do satisfy me. They satisfy me because it's giving me
> something to learn about, and it's giving me an opportunity to not be bored and just
> sit there (in the classroom) just pretending to listen and taking it in. (R6)

However, responses also described other WAO characteristics that clouded the satisfaction attendees experienced or wanted to experience when they left their primary classroom to participate in the acceleration option at their school. Three interpretations soon to be examined in this chapter will suggest those perspectives can be explored via a model for understanding the complex nature of these experiences, termed the 'Doorway' model. The intention of this Doorway model is to explain insights to parents, teachers, researchers, other students, and gifted students in understanding an undocumented set of lived experiences by students of withdrawal acceleration options in primary schools.

In this section, quotes originate from participants making multiple-choice selections from an electronic questionnaire, typing a response to a hypothetical situation and responses from interviews. Each response featured in this chapter was provided verbatim. This approach to displaying the data analysis was influenced by other qualitative reports, particularly *Muted Voices: The Views of Families on Special Schools* (Aspland et al., 2021) and *Gifted students perceptions of gifted programs* (Kitsantas et al., 2017), both of which focus on the responses of gifted children, though in different school formats to those attended by the participants. The Aspland et al. (2021) and Kitsantas et al. (2017) reports displayed responses verbatim to defend their data analysis and discussion points, influencing both the path towards the interpretative ontological goal for this investigation and the method by which responses were presented in this thesis.

Overview of the perspectives

The findings revealed three interpretations relating to perspectives shared by the WAO participants in this investigation. Each of these interpretations will be elaborated forthwith. The three sets of perceptions that have emerged concern:

- confusion
- choices
- ambivalence

Approaching the discussion of the results, these interpretations intersect with the themes interpreted from the responses examined in this chapter. Table 7 summarises the data analysis, showing responses on WAO selection processes, the reactions to WAOs by others and the characteristics of WAO structures generated perspectives of confusion, on wanting additional choices in the WAO journeys and the ambivalent reactions of others.

Table 7

Data Analysis Summary

Response themes	Perspectives from each theme were:
Selection process	**Confusion** regarding WAO selection criteria Wanted the **choice** to attend all leave WAOs **Ambivalence** of others on being selected for WAOs
Reactions	**Confusion** regarding the reactions of others to WAOs Wanted the **choice** to avoid WAOs and negative reactions **Ambivalence** of others when being withdrawn for WAOs and returning to the classroom
WAO structure	**Confusion** of how WAO tasks are designed and scheduled Wanted **choices** on task decisions, outcomes and groupings **Ambivalence** of others to the complexities of tasks

Interpretation One: Confusion

Confusion experienced during academic learning has been investigated at primary school level. Plaut (2006) incorporated a mixed-methods approach to examine how "cognitive disequilibrium… where students may experience confusion" (p. 392) develops. Later literature agreed in suggesting student confusion is triggered by the input of the stimuli, not the output of the responses. In specifying types of confusions exhibited by students, D'Mello et al. (2014) stated: "contradictions, conflicts, anomalies, erroneous information, and other discrepant events (which) can be beneficial to learning

if appropriately induced, regulated, and resolved" (p. 153). The data held this research to accurately reflect the perspectives of the group; within the data students reported a lack of information about WAOs and frequently accelerations were not held even though these were timetabled among other areas of confusion.

Analysis of data in this investigation supports the D'Mello et al. (2014) interpretation. Connecting the D'Mello et al. (2014) position to the giftedness field quantitative surveys of gifted children centring on depression and anxiety, Eren et al. (2018) found gifted primary students displayed difficulties understanding academic and social anomalies. These anomalies included understanding social status and connections with non-gifted students, and frustrations with tasks seemingly not catering to their talents. Incorporating a suite of evaluation scales (i.e., the Schedule for Affective Disorders and Schizophrenia for School-Age Children-Present and Lifetime Version (K-SADS-PL), the Depression Scale for Children, the Trait-State Anxiety Inventory, the Children's Depression Rating Scale and the Quality of Life Scale for Children), it was determined by Eren et al. (2018) that instructions by teachers, friendship dynamics, school rules, and expectations resulted in confusion and stress at higher levels when compared to non-gifted children.

Confusions Because of Organisational Factors. The first interpretation emerging from the data was that students were confused about the organisation of the WAOs particularly the selection process. The data supported the responses answering sub-questions 1 and 3 investigating what were participants' (SQ1) perspectives of the selection process and (SQ3) perceived structure of WAOs at their school. Participants could identify their class teachers as the selector for WAOs, but most students did not identify the criteria underpinning their selection and others' non-selection. Most of the participants (70%) identified the class teacher as the person who selected them for the WAO, yet only 10% identified a link to either a selection method (cognitive testing, previous attendance) or possibly due to their higher intellectual capabilities (<10%). In this information vacuum, students postulated the reasons for their selection, demonstrating their uncertainty. In the following comment, R7 supposed incorrectly that her WAO selection may have been the result of parental input, rather than because of her undertaking academic and psychological assessments leading to her selection:

> The first couple of times, no, I didn't really know why I was coming up there. But
> then I started to realise over time, because I was, like, "Mum, did you have to pay
> for me to come up here?" Because… she (the class teacher) never told me anything
> about it. (R7)

Responses indicated aspects of the WAO program that influenced participants' perspectives were either not explained to participants clearly to motivate their attendance (induced), ran to a regular

timetable or with inter-connected or sequential tasks (regulated) or understood the objective for the tasks and the program (resolved). An example of this perspective responds to the questionnaire section asking participants to compare their experience to a hypothetical WAO described in a scenario:

> Well, the thing is not knowing what you're going to do. Sometimes when we're doing the classroom work (in the WAO), we have a timetable for the (WAO) lesson but sometimes it doesn't go to plan, and we do different things. So, we don't usually know what we're going to do anyway. We have an idea but we're not certain. (R6)

Inconsistency in teaching and school structures was reported by Lodge et al.'s research (2018) as a significant factor leading to student confusion. Instructional clarity, often rigid and numerous assessment criteria, and the increased breadth and the haste with which curricula is presented to school children during largely inflexible school days causes student confusion and anxiety. This was clearly the case for students in the study reported in this thesis. Student confusion tends to be caused by organisational agents in schools, namely teachers indicated by results of the Lodge et al. (2018) study. Lodge and colleagues postulated a link between the ways teachers design school experiences and the clarity or confusion students subsequently experience. How gifted children understand a teacher's instructions and learning intentions informs a student's personal and social identity, and also their place in the academic hierarchy of the classroom. A lack of explanation to students by teachers and Withdrawal Acceleration Option teachers clearly resulted in their confusion, connecting the responses to Lodge et al.'s (2018) findings. The responses offer answers to sub-questions 1 (WAO selections) and 3 (WAO structure), as the students were never aware or informed of the reasons they were selected into the program or how each week would unfold.

Confusion Due to Limited Information. An interpretation drawn from this information is that WAO students observed instances where information regarding expected learning experiences was not provided to WAO groups and participants were confused as to why this was the case. Even though R6 provided this personal narrative, she indicated it was a shared experience ("We don't usually know what we're going to do anyway": R6). It seems that from this statement R6 provided an observation that sessions did not regularly follow expected sequences allowing students to build-upon earlier lessons, and explanations as to why this approach happened were not explained to WAO participants, leading to confusion.

Behaviours of intense curiosity and fixation, seen as descriptive markers that can identify gifted behaviours suggested by Eren et al. (2018) may lead to gifted children's confusion and stress when

conflicting or limited instructions are provided by educators. Essentially, when gifted children's need for information is not satisfied, this often can be attributed to unhealthy behaviours such as tantrums, anti-social behaviours, and a rapid decline in self-esteem (Roedell, 1984). Fortunately, there was no evidence from the participants' reponses that their lack of knowledge of their WAO circumstances led to such outcomes. Inactions by teachers were additionally reported in the Eren et al. (2018) research and influenced the perspectives by gifted children who saw such situations as lost opportunities to invest their interests into their preferred domain strength. The information presented by this investigation supports these findings.

Adding new information, the spoken responses of gifted children suggest when withdrawal acceleration options are designed for gifted and talented primary school children, confusions remain. Comments by R6 reflected her confusion in understanding the planning of WAO lessons and when they were scheduled:

> The thing is, we don't know what we're going to do. Sometimes we have a timetable, and it doesn't go to plan, and we do different things. We don't usually know what we're going to do anyway… we have some idea but we're not certain. (R6)

> I never really knew why I was chosen. I barely even finish my classwork. (R3)

Drawn from R3's response is the impression that reasons for the selection of students to WAOs, whether they themselves realise their degree of giftedness or not, might not be clearly explained by classroom or WAO teachers. R3 indicates a degree of self-knowledge ("I barely even finish my classwork") complicating his understanding of those reasons. As Coleman and others (Coleman et al., 2015; Ritchotte et al., 2016) attest, this may obstruct the realisation of his talents if he or his teachers do not identify, discuss, and manage gifted learning situations catering to the individual needs of WAO students.

Confusion as to Why Other Children Were Not Chosen. Connecting to SQ1, WAO participants were unsure why other evidently capable children were not chosen for WAOs, compounding their confusion about selection processes. The responses highlighted uncertainties about the participants understanding of their own abilities and the capabilities and motives of other students not selected for the WAOs. As WAO students were not receiving information from their teachers about the selection process, this created a vacuum. Ideas about the selection process were filled by the respondents themselves, suggesting possibilities based on their perceptions of non-

selected students. In one instance, R8 suggested that if other students wanted to join the WAO, they needed to change their work habits:

> I just blame them for not listening the first time, cause that's what some people do, but some people just don't get it. And then they don't get told off for not listening, so they should just suck it up and not do it again if they want to join the (WAO) lessons. (R8)

Some responses provided an insight into the qualities of non-selected students by WAO attendees. R8 uses accusatory terms (i.e., "I blame them…. they just don't get it… suck it up") to evaluate the learning or behavioural characteristics of those not selected. In this way, R8 projects his own success in achieving selection to the withdrawal acceleration program using aggressive, competitive language; *his* motivation and *his* on-task behaviour enable him to attend WAOs, and others could learn from his insights if they wanted to attend acceleration lessons. R8 also suggests information answering sub-question 1 (selections) and sub-question 3 (reactions). This participant's perspective aligns with studies spanning 30 years (Berlin, 2009; Kerr, Colangelo & Gaeth, 1988) indicating gifted adolescents posit negative stereotypes about non-gifted students. Gifted students tend to associate their giftedness with the diligence and academic rigour that they did not observe in non-gifted peers, as reported by Berlin (2009) and Kerr et al. (1988), hence a negative perspective of lesser academically rigorous learners.

In another instance, R4's view further supported the analysis that an information vacuum —when teachers do not communicate openly with WAO students— leading to biased and unsupportive judgements of others. In the comment below, she supposes another student abandoned the WAO program because those lessons did not meet that student's expectations when she stated:

> There was this one girl that always was coming but then she decided not to because, apparently, she didn't know enough. I always thought it was because she really wanted to just muck around and play games. (R4)

Interestingly, in this instance R4 realised a peer did not attend WAO lessons due to a belief that child made a personal choice not to continue in WAOs ("…she really wanted to just muck around and play games"). R4 believes the non-attending student was able to make a personal choice to leave the WAO, but later expressed the understanding that the child may not have met academic requirements for future WAO classes ("…she didn't know enough"). R4's statement also offered a tone of judgemental superiority also seen in the comments above, implying that whilst the non-WAO peer was not selected on either academic ("…she didn't know enough") or motivational grounds

("…wanted to muck around"), R4 understood she *was* selected for WAOs, and those criteria were key to her selection. Again, this sentiment was supported by R13, who extended an understanding of an aspect of why non-selected may not be participating in WAOs when she stated:

They (non-WAO students) don't want to be involved because it's too hard for them, and some of them feel that they're capable enough but they're jealous (R13).

It was understood from this information that R13 was unsure as to the motives of non-selected children for not attending WAOs. Segmenting this response suggests motivation ("..it's too hard for them"), choice ("…they don't want to be involved"), and envy ("...they're jealous") were reasons why other students did not attend WAOs. Consistent with other responses and research (Feldman, 1984; Gagné & Massé, 2002; Kaufman et al., 2009), when invited to identify personality traits for which they were envied gifted secondary students indicated they experienced jealousy for their talents by their non-gifted peers. It could be that this confusion by R13 exacerbated her own perception of others' jealousy, but this line of inquiry was not pursued.

Confusion About the Scheduling of WAOs. A final thread in interpreting confusion from the data may be supported by examining perspectives of WAO task design and the scheduling of WAO sessions. Gifted students have favourable views of themselves, especially when challenged by tasks requiring their specific talent (Berlin, 2009; Gushkin et al., 1986). In illustration, children with precocities in advanced Mathematics were seen to exhibit increased enthusiasm and fixation specifically on complex mathematical problem-solving tasks compared with other subjects and against other students of the same age. Adding new information to the giftedness field, when WAOs did not occur consistently or did not supply the sufficiently challenging tasks the participants expected, they were confused as to the reasons why. From these responses it was found inconsistencies in teacher awareness and communication led to confusion, answering SQ3 (WAO structures), and SQ4 (timing). Examples of this view were expressed by two students. R5 stated, "In Year Five we haven't been doing it as regularly. I don't even know when they happen". (R5). R6 concurred with this observation, stating:

It depends on the week. Sometimes it's none, in Term 1 it was more like twice a week. But, at the moment, I don't come. It's more once a week or maybe twice, no wait… no. No, once maybe, maybe twice every three weeks or once a week. (R6)

Both responses indicate again instances of confusion stemming from information regarding timetable changes either not being sent by teachers or not being understood by the WAO students. This was a shared memory of five participants from different schools, when teachers did not

communicate timetable changes. The veracity of this observation is more likely than a simultaneous misunderstanding the timing for their WAO lessons as it was similarly recalled in different locations.

Lastly, the analysis revealed a perspective that teachers were not supplying tasks designed to challenge gifted primary students' strengths, or providing a clear path for their accelerated learning needs. R12 shared, "I thought it was going to be hard writing work, I wasn't aware that it was going to be Maths competitions" (R12), and R7 inferred his confusion both of the lack of complexity in WAO tasks and the reasons for his selection when he stated, "I wouldn't say that I'm being accelerated (in Maths). I don't really know why I was chosen" (R7).

The Impact of Confusion on Gifted Children. Recognition of gifted behaviours by teachers cements the understanding of the gifted child's self-image with the teacher's understanding of that child's unique gifts and the pursuit of information to benefit the planning and teaching of the gifted child (Papadopoulos, 2021). The groundwork for understanding this circumstance was laid by Munro (2005), asserting a symbiotic relationship between the behaviours of gifted children and the motivations and professional skills of teachers. When teachers correctly identify gifted behaviour, and gifted children recognise their teacher's effort, they reciprocate by demonstrating their talents. This mutual recognition leads to the successful planning and provision of gifted interventions by teachers and is reciprocated by gifted students demonstrating their talents.

Regarding the responses by R12 and R7 in the previous section, efforts by teachers to cater to the individual strengths of WAO students fell short of some students' expectations. In both cases, the respondents indicated confusion as to their selection for the WAO lessons when those sessions seemingly do not improve or continue their precocity; for R12, writing ("I thought it was going to be hard writing work") and for R7, Mathematics ("I wouldn't say that I'm being accelerated").

Strength-based interventions for gifted students, those specifically widening and accelerating learning in a domain of precocity is a well-resourced field. Studies into these interventions, with WAOs being one example, date to original research on giftedness by Terman (1925). Reports of Terman's research (Hastorf, 1997; Proyer et al., 2017) established educational interventions such as mentoring, tutoring, and grouping as examples of a positive psychological approach to achieving "higher levels of eagerness to learn, stronger self-concept of exceptionality in gifted students and lower levels of test anxiety" (Proyer et al., 2017, p. 119). When structures for administering WAO lessons, such as the regular timing of lessons and provision of tasks which then do not run or are changed without being communicated to students, this leads to children exhibiting behaviours of confusion and vulnerability. Each of these circumstances was reported in the responses.

Summary. The data demonstrates a disconnect between the reasons and arrangements teachers provide gifted children with an accelerated learning pathway, and how these are interpreted by the gifted children when the reasons and arrangements are not clear to them. Corresponding to SQ1 (selections) and SQ4 (timing), WAO students experienced confusion when understanding their sense of self in the academic and the social strata in schools. This was noted in recollections of when they were initially selected for the acceleration option, and thereafter observed other capable students were not invited to this program in subsequent weeks with no information to this effect provided by teachers. Furthermore, in answering SQ3, *what were participants' perspectives of the perceived structure of WAOs,* confusion explained the uncertainties the students experienced when they were unsure of the tasks and even the timetabling of these classes designed for their benefit.

The interpretation of confusion by primary students in this study adds to knowledge of gifted experiences in schools. Research listed in this section is rich in explaining perspectives of self by gifted students in adolescent years, perceptions of secondary teacher support and also non-gifted peer relationships with gifted children. This section extended knowledge of these perceptions into primary levels and a link will be drawn to this finding and generate a theoretical model in Chapter 5.

Interpretation Two: Choices

Analysis of the data indicated participants had perspectives about the selection process for WAOs and the design of tasks catering to their accelerated learning needs. That analysis focused on sub-question 1 (WAO selections) and sub-question 3 (WAO structure). This section will discuss the dynamics of student/teacher interactions, both within WAO lessons and classroom settings, and whether WAO students were provided opportunities to pursue their own learning paths.

Choosing to Attend WAOs and Task Choices. The analysis revealed participants did not know if there were options to attend WAOs. Moreover, it was clear tasks were designed for the WAO group rather than individualised, targeting student strengths. R7 stated if she had been given a choice, she would have remained in the classroom with her class rather than attend WAO sessions, stating, "I prefer to work with my grade to be honest". Connecting to SQ1, it is possible this student and others with similar views wanted the choice to remain in the classroom, in-keeping with Marsh and Parker's (1984), and Zeidner and Schleyer's (1999) research of 'Big Fish, Little Pond' (BFLPE) studies. Zeidner and Schleyer's report suggested children with highly advanced behaviours exhibit positive social and emotional growth when their precocities are acknowledged as being distinctly higher in heterogenous classes.

Qualitative investigations into student voice and agency in primary schools is an encouraging, exciting but under-investigated field of research (Hart, 1992; York & Kirschner, 2015). The work of Vaughan (2019) examined the concepts of student voice and agency. These terms refer to the capacity of educators, as well as parents, to encourage student participation in the design and management of their learning experiences and also recognise children's rights to educational self-determination (Vaughan, 2019). Vaughan's research speaks to the structuring of WAOs queried by SQ3: *what were participants' perspectives of the perceived structure of WAOs?* Vaughan concluded positive student self-esteem occurred when teachers adopted a flexible and adaptive approach to student interests and strengths. Vaughan's research intersects with Betts and Neihart (1988), characterising intense curiosity and wanting to follow individual interest paths among behaviours commonly displayed by gifted children. During the interviews, R12 recalled occasions where the WAO teacher used this approach, enabling students to pursue their own path:

> Mr. _____ comes to you next week and he says, right, for the rest of the year, you can choose what we do. So, your choices are, you can choose any subject, you can choose any level, Year 6, or 7th year to whatever you want to do. It can be not just Maths, it can be engineering and programming, it can be Art, can be Music and be English. And you can choose to do it by yourself as a whole group or as a peer. (R12)

Prioritising Student Agency and Choices in Learning. In recent times, initiatives promoting student agency and voice have been central to the 2008 Melbourne Education Declaration on Educational Goals for Young Australians (Ministerial Council of Education Employment Training and Youth Affairs (MCEETYA), 2008) and reinforced by the Mparntwe Education (Education Council, 2019) Declaration. These federal educational declarations set out an Australian vision to improve educational outcomes through greater prioritisation of student agency and voice in educational pathways. The examination of Mparntwe Goal 2.2.1 explicitly states the directive that schools support student involvement in their learning:

> Goal 2.2.1: All young Australians become confident and creative individuals, successful lifelong learners, and active and informed members of the community: Australian Governments commit to working in collaboration with the education community to support all young Australians to become successful lifelong learners who develop their ability and motivation to learn and play an active role in their own learning.
>
> Council of Australian Governments, 2020, p. 7

Current studies of giftedness indicate a distinct motivation for gifted children to choose tasks within their exceptional learning domain across creative, academic and other domains (Gagné, 2021). These studies intersect with Vygotsky's Zone of Proximal Development concept (1978) of providing situations where children can be supported to pursue individual interests. This expectation is supported by the Mparntwe Declaration (2021), instructing schools to be more inclusive of children's involvement in determining their own educational goals. This declaration directs schools and their teachers to provide differentiated options for children to demonstrate their learning in unique ways.

In illustration, a gifted student artist might demonstrate their talent by choosing to complete artwork that exemplified his/her precocity, rather than produce a piece of a simpler standard required for non-gifted classmates. The exceptional student pianist may choose, if the educator provided this option, to demonstrate his/her mastery of complex composition by a recognised composer for a classroom music task, rather than being instructed to submit a beginner's level tune. Two students provided their insights on this topic. R14 signalled her choice preferences clearly in this regard when she stated, "If we could choose something responsible and something our level, I'd choose narrative writing" (R14).

Choices and Gifted Needs. Peer-reviewed research in recent years has not kept pace with the needs of gifted students and especially those in primary schools when investigating student self-direction in learning. Oxford (2015) and Reeve (2016) examined gifted learners exhibiting dominant autonomous behaviours including risk taking, choosing to working on tasks without guidance or direction and self-determining goals. Both findings added to understandings of the six recognised behavioural profiles of giftedness published almost 40 years ago by Betts and Neihart (1988) which were subsequently updated this decade (Neihart, 2016). Despite these additions, during the Literature Review this investigation revealed a gap exists that encourages additional research into teacher decision-making for groups of gifted children in primary school withdrawal accelerations, and how choices and agency are managed for and by young school children. This avenue could determine the effectiveness of comparing teacher-direction and student self-determination strategies as choices to manage the pacing and variety of lessons for WAO student needs. Limited choice of tasks was recalled by most students participating in this investigation, and data reflected their input into WAO tasks was absent or very limited. This interpretation is supported by R15, who stated:

> There's not really (a choice). He (WAO teacher) gives us a worksheet most of the
> time, like an old Maths Olympiad sheet to work with a younger Year 4 or
> something, and you to try to work for the questions with them. There is not much in
> terms of choice. (R15)

Several decades ago, research into giftedness (Roedell, 1984; Silverman, 1992) showed adults display knowledge gaps in understanding children with childish behaviours, who demonstrate adult levels of intelligence and autonomous behaviour. These articles confirmed but did not advance some of the earliest research into giftedness by Cohler (1941) and Hollingworth (1943), finding adults interacting with gifted children expect accelerated ability, self-reliance and intelligence to be matched with emotional maturity and grown-up behaviours in a smaller, child-sized body. When adult assumptions did not eventuate in those expected student behaviours, for instance, when a child exhibiting adult intellect demonstrates very infantile reactions to commands, demands, and uncomplicated requests, Strip and Hirsch (2000) reported that educators were often perceived by gifted students to be reticent in offering greater self-determination of tasks that challenged their strengths. An example exemplifying this perspective was shared by R13, when asked about the choices offered to her in WAO lessons, stated:

> In class, it's usually about, "Do you want to do this task or that task first?" We're still going to do both the tasks, but it's just what order do you want to do them in... so no free choice really. We don't really get to choose… the only choices we really get is we get to choose whether we want to do some competitions. (R13)

A shared perspective of respondents was having partial choice in pursuing individual paths. In these instances, the WAO teacher had developed booklets and stand-alone tasks for WAO lessons. After these were completed, the WAO students could choose their own pathways:

> Well, it was sort of like a book... A booklet? You were given a booklet and you could do that page, or you could do that page, or you could do that page, and everybody could choose what they want from the booklet. So that's sort of the freedom that we have a time to do it. (R12)

> I like being given a worksheet with the instructions on it but the (WAO) teacher also says extra instructions and then gives maybe a demonstration, and then we go to the work. If you don't need, or if you want, you can just do the work after reading the instructions and ignore what she's doing. (R5)

Data from this investigation suggests parallel narratives from WAO students regarding the choices offered for their acceleration lessons. Firstly, a larger proportion of participant responses suggested WAO students wanted input into the topics, timing, and study methods of their accelerated study choices. R15 emphasised a preference for working independently, stating, "Sometimes I would like to work by myself". This sentiment of separating himself from others was shared by R3, whose

motives were as much about choosing not to be in the classroom, as they were about extending his learning options:

> If I had the choice… I would choose longer sessions in the WAO, because I don't
> really like the, not the people, it's more just about the noise (in the classroom) and
> it's less distracting (in the WAO room) (R3).

R3's response highlights an area linked to widely-published and accepted giftedness profiles focusing on self-motivation and task fixation as driving behaviours in gifted children (Neihart, 2016). Research (Sapon-Shevin, 1994; Watters & Diezmann, 2003) emphasises the benefit of acceleration options to gifted children when withdrawn from classroom cohorts, as they like to work undisturbed for lengthy periods, particularly when concentrating on their specific talent in classroom tasks.

Gifted Children with Other Views on Choices. A second narrative was not anticipated from reviews of acceleration teaching methods when a subset of the participants (28%) responded in exactly the opposite way. This subgroup's responses indicated a preference for less student choice of tasks, evidently placing trust in their WAO teacher continuing to provide a level of challenge targeting individual talents. This finding is not represented in a primary school gifted context in the field literature, where gifted children expressed a preference of teacher leadership over self-determination of their tasks, groups and goals. In a secondary school study (Kitsantas et al., 2017) these preferences for teacher direction were evident, as the WAO teachers were leading advanced learners towards tests by providing ever-more challenging activities not available to their year level peers.

Peer-reviewed psychological profiling of gifted children in withdrawal acceleration groups has yet to explore motivations and aspects of self-determination and trust of others outside WAO groupings. Additional to possible research paths mentioned in the previous chapter, this information could build knowledge of primary student confidence in ability during accelerations. Data from this research could assist teachers in determining whether WAO students are 'routinised' by traditional classroom practices and therefore are reticent to seek self-determined study paths or lack the know-how to develop their choice of activity. The current gap in the literature might explain why some students seemed to trust the professional instincts and motivations of their WAO teachers to provide challenging tasks. R14 reasoned that self-direction at her school was less preferable, stating:

> I think that it's a little too much power in our hands, because I think the reason we
> have teachers is for them to teach us specific things. (R14)

R15 supported this perspective, stating: "I like it when my teacher knows we can do older stuff from Year 7 and goes to the trouble of finding their tests to give to us in (the WAO). It means I don't sit around thinking about stuff I want to do, but I probably won't do". In this circumstance, R15 clearly indicated an understanding that, for him the preferable result was to accept the WAO teacher's guidance rather than imagine and then create tasks for himself.

Both narratives corroborate findings (Silverman, 1992) spanning almost a century from the original works by Terman (1925) and Hollingworth (1943) to the current educational context, that when accelerations are controlled by educators, gifted children will accept these as recognitions of their exceptionality. New evidence provided by the responses in this study indicate a future opportunity to examine issues of gifted student relationships with teachers in primary school WAOs.

The positive outcome for such behaviour can be the desire of gifted children to want to choose more of the pace and scope of their learning, displaying greater student agency. However, negative outcomes may occur when adults cannot consistently acknowledge and reciprocate this motivation and opt for generic strategies (e.g., "Yeah, there's not really a choice. He gives us a worksheet most of the time": R15), rather than individualised and future-focused tasks described by another student ("So, your choices are, you can choose any subject, you can choose any level, grade six or seven to whatever you want to do": R12).

Summary. In summarising this section, the data suggests WAO participants expressed perspectives indicating their views on the limitations and possibility of wider, more self-determination to choose acceleration pathways at their school. The interpretation of the desire for greater choice in one aspect confirms decades of research into motivations for strength-based learning (Neihart, 2016; Wang & Neihart, 2015), and in the latter aspect delivered new information suggesting gifted children want the WAO teacher to continue to deliver targeted learning opportunities. Each is predicated by acknowledging WAO teachers and class teachers should demonstrate their updated knowledge of giftedness teaching strategies to meet the learning needs of gifted students.

Interpretation Three: Ambivalence

A third interpretation elicited from the data is built on the concept of ambivalence, and answers the second sub-question, w*hat were participants' perspectives of others' reactions to WAO?* Ambivalence as a concept suggests a state of either sending or receiving both positive, negative (or no engagement) thoughts and feelings about a relationship, a situation, an action or a combination

of these (Schneider et al., 2020). The concept of ambivalence was evident to respondents through their interactions with non-WAO students, the teachers and even parents.

An initial distinction must be made between this interpretation and that expressed in earlier regarding the separate interpretation of *confusion*. The previous section revealed that WAO students were confused as to *why* they were chosen and not others. However, with this second interpretation, participants were certain in their observations that people outside the WAO program were seemingly disinterested in their attendance in WAOs. It will be argued that respondents appeared to be more certain of the reasons why others that did not attend the acceleration lessons reacted to the WAO students in particular ways.

Observations of Ambivalence at School. Responses by the participants indicated that other stakeholders outside the WAO orbit did not exhibit surprise, care or questions about the children who are selected into WAOs and are working away from the class in an acceleration group. In the following instance, R15 illustrates an observation that other students seemed oblivious to he and other WAO students leaving the class for their acceleration lesson:

> Not many of them (peers) care I go to these lessons... they just keep doing their
> work and don't focus on us at all. (R15)

These reactions by WAO students align with studies into negative perceptions gifted children perceive others- peers and adults- have of giftedness and gifted programs in schools, connecting to SQ2. For example, Lassig (2009) and Stephens (2009) examined the ambivalence gifted elementary and secondary students reported in their teachers and non-gifted peers. In both studies, ambivalence was perceived by gifted students as negative or unempathetic attitudes to children attending gifted programs in schools. Berlin (2009) surveyed 6th - 8th grade gifted children to deepen understanding of these views, and found participants reported experiencing mixed feelings, doubts, and contradictory ideas of students in gifted programs. These perceptions were found in responses from several participants in this investigation, mostly from Years 5 and 6. An instance showcasing this perspective of her teacher's awareness was raised by R13:

> Mrs _____ didn't actually know anything about what we did. My teacher this year
> still doesn't know what we're doing in (the WAO). (R13)

Ambivalence Impacting Gifted Children. When gifted students are not educated to understand their learning conditions, Zabrucky and Bays (2011) found they were less willing to use their strengths or help-seeking strategies to better understand information to pursue their potential.

Data drawn from this investigation suggests that WAO participants felt limited in the desire to demonstrate and develop their talents because of the perceived disinterest of teachers and non-gifted peers. Gifted children's loss of self-esteem was investigated by Roedell (1984), who uncovered evidence of uncertainties regarding their teacher's knowledge of giftedness and the loss of confidence in their advanced learning abilities because their teacher seemed less dedicated to their efforts. Other authors (Perez, 1980; Pringle, 1970; Whitmore, 2009) suggested when gifted children notice a loss of support by teachers and peers this can lead to triggering a rapid decline in a gifted child's self-esteem and a rise in underachievement. This perspective was typified by R10, whose perspective indicated an observation from many years of attending WAOs at his school, coupled with reflection that more was not being done to assist his needs:

> They (teachers) don't know anything about what we do. I think they could also help
> us (when) we're struggling, if we're emotionally or having a problem, if we could
> be feeling like we're not smart enough.... I think they should be aware of on what
> we're doing. (R10)

Ambivalence of the Class Teacher. Very few respondents recalled their class teacher requesting to see examples of tasks from the WAO session or enquiring about WAO experiences. These recollections form a perspective of ambivalence by participants responding to research SQ2, what were participants' perspectives of others' reactions to WAOs? Dare and Nowicki (2019) attached significance to a gap between giftedness research and teaching practices that support classroom teachers catering to gifted children by practising acceleration in their teaching. Longitudinal research confirmed the existence of this gap hampering teachers in implementing accelerated tasks —i.e., those presented in WAOs— in heterogenous classes, citing "beliefs about the potential for social adjustment difficulties" for gifted children (Dare & Nowicki, 2017, p. 2).

Dare and Nowicki's (2017) view may explain repeated observations from this investigation. Statements by the students indicated upon their return to the mainstream classroom, WAO students frequently found the class teacher could not or would not incorporate WAO-level tasks in daily challenges, and rarely checked WAO work brought back to the classroom. For example, when asked if their teacher ever checks on WAO work, some respondents indicated with a negative response similar to R5 ("No, never"). Other participants corroborated this observation, stating:

> I'm pretty sure she gets stressed. She doesn't have the time to check it, so we just go
> on (with classroom tasks). (R8)

(The class teacher) never comments, and never really checks our (WAO) work. What we're doing in (WAO) doesn't correlate to what we're learning (in class). If we're doing tasks in class, (the class teacher) could give us some WAO stuff. (R9)

From these responses a sense of disinterest was perceived by R8 and R9 in the actions of their class teacher. Whilst R8 suggests possible reasons for his class teacher's ambivalence ("I'm pretty sure she gets stressed. She doesn't have the time": R8), his colleagues demonstrate firmer conviction for their perspectives. R5 is certain in his observation the teacher never demonstrated an interest in his WAO experiences. R9 piggy-backed his colleagues' views, offering an observation ("…never comments… doesn't correlate to what we're learning in class": R9), conceding that the teacher may have shown some interest in the past ("…(she) never really checks our work": R9) and offers a possible solution for the class teacher to show interest in the WAO students in future ("If we're doing tasks in class, (the class teacher) could give us some WAO stuff"*: R9).

When teachers appear not to recognise the needs for targeted interventions for gifted children, research by Csermely et al. (2017) found problems occur for these children at school. Of greater concern is that educators must recognise and address these needs as a condition for Australian teacher registration. Australian Professional Teaching Standards (APST) 1 and 5 require practicing teachers to demonstrate pedagogical awareness of differentiation for diverse learning needs. Standard 1 requires of teachers to *"demonstrate teaching to meet the specific learning needs of students across the full range of abilities"* (Australian Institute for Teaching and School Leadership (AITSL), 2019, Standard 1.5), which perspectives of confusion and ambivalence caused by insufficient teacher support infers this standard is not being met in the views of gifted students. WAO students reported WAO teachers did not provide individualised options targeting domains of talent, regularly offering generic worksheets and limited opportunities for task choices, such as self-directed activity. Australian Professional Teaching Standard 5 confirms this proposition that the teachers of WAO students (WAO teachers as well as classroom teachers) are not meeting industry standards when catering to gifted students' needs. APST 5 directs teachers to "assess, provide feedback and report on student learning" (AITSL, 2019, Standard 5); responses indicated classroom teachers were ambivalent about the tasks provided in WAOs, did not assess WAO tasks, regularly provide feedback on their acceleration or incorporate these into classroom lessons or show interest in the WAO students leaving and returning to the classroom.

This research demonstrated the links between teachers practising talent support and nurturing positive self-esteem and self-efficacy in gifted children, with mixed results for gifted children if talent support is not systematic, consistent, and recognised by WAO students. Explored in the

Literature Review, intense frustrations and anxieties, common to the psychological profile of many types of giftedness, negatively impact a gifted child's self-esteem and interactions with others.

From the perspective of Self-Determination Theory this reaction makes sense. Deci and Ryan (2000) reasoned that when choices, competency and relatedness of tasks are unsupported, students fail to recognise for who or what these tasks may be. Hence, their basic psychological needs are not being met and students are less-able to determine their own learning pathways. This is a good argument for suggesting classroom teachers need to be involved with WAO students, regardless of the level of support from WAO teachers. Where Deci and Ryan's research intersects with Pringle's (1970) a link can be established; a teacher's apparent disinterest may manifest as ambivalence in students. It is suggested by responses in this investigation that it is possible some gifted children may have been negatively influenced by those occasions where teachers seemed uncaring or uninterested in their WAO experiences. Other responses indicate a lack of information being provided by teachers, for instance, R5's response ("I don't really know when they happen") could additionally signpost a loss of interest by teachers in the needs of the WAO children, and thereafter those children's sense of uncertainty.

Ambivalence of Peers. Berlin (2009) and Swiatek and Benbow (1991) reported on challenges gifted adolescents experienced in social interactions in secondary schools, and the coping strategies utilised by these students to reduce perceived societal labelling. One strategy examined was for gifted children to stereotype other people's attitudes to giftedness motivated by those peer's supposed lower capabilities, interest, or endeavour. R7 remembered people in her classroom offering remarks that on the surface may have been supportive, but were interpreted otherwise:

> They say, "Oh, it's for the kids who need to learn more" … some of the kids in our
> class are quite opinionated. (R7)

Illustrated in the data, it can now be shown that these perspectives also appear to primary gifted students who attended withdrawal acceleration options although younger than the adolescents studied by Berlin and Swiatek and Benbow thirty years ago. This interpretation updates knowledge in the field to include primary gifted children and corresponds to the second sub-question, *what were participants' perspectives of others' reactions to WAOs?* In some instances, students were certain of their recollection of non-WAO student behaviours and the reasons for those reactions to their inclusion in the WAO:

> Some of my friends don't want to be involved because it's too hard for them, and
> some of them feel that they're capable enough to do it and they're envious. (R14)

I think some of them might get annoyed because they might think that they should be in the class too. (R13)

Observations of Ambivalence from Parents. Participants observed parents were seemingly uninterested in their WAO progress. Some students reported their parents did not enquire about tasks or the progress WAO students were making in their acceleration lessons. Research (Dare et al., 2016) indicated parents of gifted children are noticeably active when campaigning for their child's inclusion in giftedness activities with written and spoken requests to teachers and school leadership. However, it is unclear in the literature if parental engagement continues with similar explicit support after a gifted child is selected for acceleration options.

Whether adults associated with gifted children in this study are supportive or appear disinterested to the participants, responses reveal some parents seemingly do not enquire about their accelerated tasks. Only one response identified an instance where a parent enquired whether their gifted child was content with the WAO lessons, or the nature of upcoming projects and competitions after their child was selected for this acceleration option. Though information regarding parent engagement leading up to WAO selection was not tested with the respondents, some students indeed indicated their parents, in their opinion, paid scant attention to WAO experiences after they had achieved their WAO selection. In the following conversation, three students interviewed together shared a similar observation of their parents' reaction to the WAO attendances:

My parents don't ask anything about these lessons. (R3)

Mine don't either. (R8)

Mine don't really ask me what I've been doing. They don't, just to be specific, ask "how was (WAO) today?" They don't say that. (R7)

Studies of Parental Support for their Gifted Children. The interpretation of indifferent, disinterested or indeed ambivalent attitudes observed by gifted children of others supports findings established by longitudinal local and international studies (Colangelo et al., 2004; Gallagher et al., 2011). These studies indicate community perspectives of elitism may influence parents and some schools to hold negative, unempathetic or ambivalent perspectives of gifted programs, in the belief that gifted children will use their advanced capabilities with or without dedicated acceleration programs.

Often these perspectives are underlaid by cultural constructs, such as egalitarianism and inclusive education systems emphasising the responsivity for schools to respond to societal goals rather than pursuing individual talents. This have been observed in US (Colangelo et al, 2004), European (Persson, 2010), Middle Eastern (Antoun, 2022) and Australian (Gallagher, Smith & Merrotsy, 2011) reports. Persson's survey study found primary schools "appeared to be a hostile environment" (p. 536) for educators and parents of gifted children when schools sought input for separated classes for gifted children. In Gallagher's Queensland study, schools reported a preference to differentiate for gifted children in-class (i.e., to not develop a WAO) rather than risk those children's alienation at school by separating them from their non-gifted cohorts during the school day.

Research by Antoun (2022) indicated that even when teachers did undertake professional learning in giftedness education many teachers remained reticent to making adjustments for the gifted in their classrooms. This Lebanese and Turkish study of 281 teachers of gifted primary school students found that despite additional training in schools, the dominant reaction by most of this group was to disregard research-driven giftedness strategies in favour of methods they had seen their own primary teachers use which usually disregarded adjustments for students with gifted learning behaviours.

Recent studies by Ben Artzey (2020) and Mun, Ezzani and Yeung (2021) suggests parental support becomes less-evident after gifted children are selected for acceleration services. Parental contributions of attention to their gifted children were found by Ben Artzey (2020) to create perceptions of preferential treatment within those families that negatively influenced gifted children's siblings. Mun et al. (2021) documented gifted children's parent perspectives, finding a lack of consistent, comprehensive strategies by teachers to promote parent engagement with gifted children, giftedness identification and support services remained elusive to some parents, and these perceptions began to distance their interest in giftedness and willingness to volunteer in schools to assist their children.

Summary. In summary, the data suggests WAO participants experienced reactions or absence thereof to their selection and involvement in the acceleration option at their school, and this influenced their self-perception as a gifted person and relationships with others outside of the WAO environment. In a similar vein to the previous section (confusion), when gifted children experience reactions from others they could interpret as ambivalent, this can additionally impact their advancing academic functioning, emotional and social growth.

These disconnections support an interpretation that WAO students experienced ambivalent reactions of others to their WAO involvement. The perspectives shared by the participants may have influenced their sense of self in the academic and social strata of schools, particularly as they

understand their exceptionalities and want these recognised more openly at school and in the home. This interpretation adds to knowledge of gifted experiences in WAOs; whilst data exists explaining how gifted children react to their non-gifted peers, limited research within the last decade examines the impact on primary school gifted children when their peers, teachers and parents do not noticeably react to their involvement in primary school WAOs or use accelerated/WAO tasks overtly as a part of regular classroom practices.

Summary of the Interpretations

The Literature Review revealed the greater proportion of this information examined WAOs as an acceleration option for some schools, but rarely asked gifted primary children their perspectives of this experience. This finding revealed the lacuna pursued by the key research question, and specifically targeted the selection processes, structures, and reactions to WAOs experienced by the selected students when attending these lessons.

The findings of this investigation offer new perspectives unrepresented in the literature with which to develop WAO design and delivery to gifted primary school students. Deficiencies in the effectiveness of WAOs were mentioned in the data. This perspective was supported by interpretations of confusion, observed ambivalent behaviours of others not associated with WAOs and how the participating students understood the range of choices available to further their individual strengths. These interpretations highlight the WAO students' sense of self in the academic and social strata of primary schools, expressing a desire for clearer boundaries with which they can demonstrate their exceptionality and have this recognised and guided in schools.

In the next section of the chapter, an original theoretical model is suggested to add to the field of giftedness research, regarding the lived experiences of gifted primary students attending WAOs in this study. This subsequent section will begin with a broader contextualisation of primary school experiences for gifted children, before offering a conceptualised model encapsulating information about WAO experiences, so stakeholders may understand the sources for the interpreted perspectives in this chapter.

Towards a New Theoretical Model

Analysis of data indicates WAO students based their perspectives on circumstances at different stages of the acceleration intervention, corresponding to research sub-question 4. Indeed, when WAO students initially enter through the doorway of their grade's classroom, they began a series of experiences that influenced their perspectives of their selection to that option (SQ1), of the WAO structure (SQ2) and of their peers and teachers (SQ3).

This thesis suggests the doorway to the classroom and then the WAO room can ably represent this gifted experience in schools. Using the 'doorway' analogy, meaning can be extended to include the actual, undocumented experiences of gifted WAO primary school children, framing this new understanding as a Doorway model. This section will now contextualise research into student journeys before pinpointing a lacuna in the literature; namely, understanding the pathway experienced by gifted primary students attending withdrawal acceleration options.

A Broader Educational Context

Each student takes multiple journeys through the doorways at school. These are subtle, repeated and required experiences into and out of classrooms at each level of formal education. A doorway as a figurative philosophical construct also describes a student's social, academic and creative developmental pathway. Recent research (Buckley et al., 2022) indicates the layout of a physical environment, such as buildings, rooms and even doorways impact episodic memories. Some journeys may feature easier or more challenging opportunities and be anticipated positively, apprehensively, negatively or without consideration. Buckley et al. (2022) found students created memories termed "event boundaries" (p. 2), but did not examine these events through the lens of perspectives, only as means to recall events, thereby creating a vacancy to use the term 'doorway' to illustrate other circumstances.

For the purposes of this investigation, a 'Doorway model' is proposed in the next section to illustrate the implications of the findings. Online database research to-date does not associate the term *Doorways* model with any educational reference, creating a vacancy for its use in this context. Educational and trademark databases revealed only a local reference for this term as a management model instigated by the Australian Salvation Army, used as an expression to describe the delivery of emergency relief services to assist people in poverty or suffering significant disadvantage (Marston et al., 2015).

Earlier discussion in this chapter illustrated that respondents offered examples of these journeys. Some WAO students could clarify broadly why they left the classroom to attend WAOs ("…it's because we learn better in different environments and have different learning needs: R6), offering information responding to SQ1 regarding WAO selections. Other responses attested to student uncertainties of why they were selected to WAOs, which may have influenced their self-identity as a gifted person. One child subscribed to this view, stating, "I don't really know why I come to WAO's in previous years. I barely even finish my schoolwork" (R3). Other responses highlighted confusion about the reasons why the WAO students were required to leave the classroom, yet others did not ("I don't know why I was chosen, and others were not": R7).

Student perspectives of school environments shape the manner in which children socialise and explore their learning environments and relationships as they begin their unique process of lifelong self-discovery and expectation, according to Papadopoulos (2015) and Shavelson, Hubner and Stanton (2009). These investigations observed processes enhancing a continuing cycle of motivation, identity realisation and intrinsic desire to pursue improvement in personal and professional fulfilment. Connecting this information to SQ1, *what were the participants' perspectives of the selection process,* R9 illustrated his sense of identity as a gifted person by alluding to his membership of MENSA and connected this to his placement in the WAO at this school, by declaring:

> I assume they (the teachers) have the same kind of expectations (for the WAO). If I
> can meet MENSA's expectations they assume I can meet the expectations in
> extension classes. (R9)

Children form impressions of their lives and thereby the ways they approach social, academic and other learning experiences. This calls into focus the goals people establish for themselves and how they respond to stimuli. Gifted children in this study, whilst mostly unable to articulate their giftedness as a reason for their selection to WAOs, exhibited a distinctly high degree of motivation for continuing to participate in the acceleration sessions. Questionnaire data revealed 90% of responses stated a highly-positive memory for attending WAOs. The next sections will examine a particular instruction/motivation model that represents a close understanding of the circumstances surrounding student learning, and how this can be manipulated to also map gifted learning experiences such as WAOs.

Using the Education Situation Model/MOCSE

Combining elements of established instruction/motivation models, the development of the Education Situation Quality Model (Doménech-Betoret et al., 2019), seen in Figure 27 illustrates student experiences in secondary schools and universities, pivoting around individual perspectives held by students beginning, during and concluding tasks.

During the Literature Review chapter, the Education Situation Quality or 'MOCSE' (pron: *MOCK see:* the acronym in its native Spanish language) model was explored as a means to map student experiences in learning situations.

Figure 27

Educational Situation Quality Model (Doménech-Betoret et al., 2019)
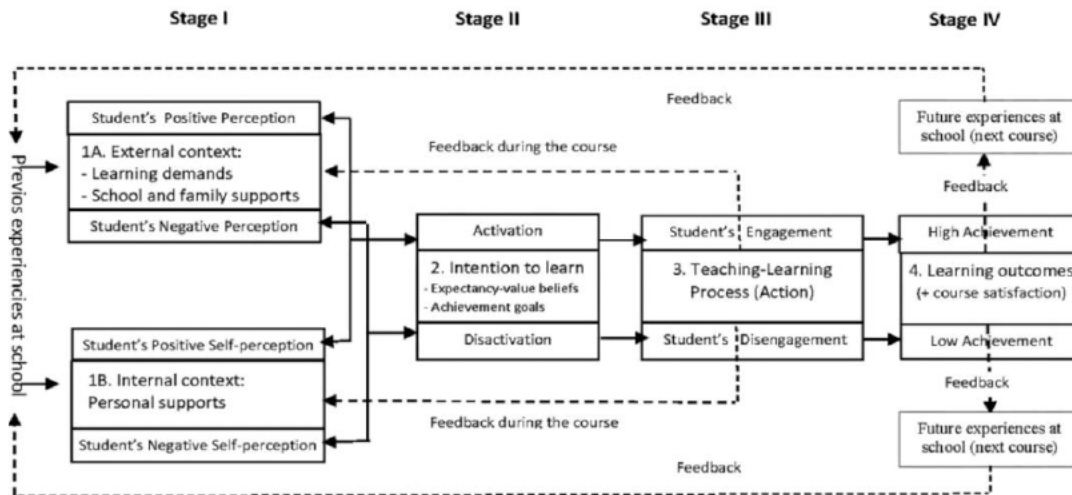
The primary objective of this model is to map the validity and reliability of two MOCSE measurement instruments referred to the initial pre-decision/action phase. These relate to learning demands and teacher supports perceived by students to overcome expectancy demands (social, academic and behavioural) in the classroom context. This model has an important role to play in depicting influences on school children's perspectives but does not comprehensively explain the events the participants' experienced, which will be unpacked later in this chapter.

In the broader context of understanding student experiences and how these shape student perspectives, MOCSE illustrates positive/negative self-perspectives impacting a student at each stage. As Stage 4 of the model influences re-entry to Stage 1 at the end of one learning situation and the beginning of another, MOCSE functions as a looped system.

Feedback (self/peer/teacher) was found by Doménech-Betoret et al. (2019) to be the driving characteristic affecting the self-image of secondary and university student progress during courses of study in the MOCSE findings and could also support examinations of self-perception by younger school levels despite differences in life experiences and maturation. For the purposes of this thesis, MOCSE was preferred as a model extolling feedback as the stimulus to which students responded with their engagement in lessons. MOCSE also offered information regarding SQ4, illustrating times during lessons that experiences influenced learners, who then formed perspectives of those experiences. Other models such as the Expectancy/Value Model of Motivation (Eccles & Wigfield,

2002) and different Achievement Goal models (Barron & Hulleman, 2015) propose conscious, focused goal-setting as a stimulus rather than using the role of a teacher setting those goals against curriculum standards, more a primary pedagogical approach.

Personal experiences guiding the perspectives of students were catalogued by Doménech-Betoret et al. (2019) beginning (Stage I) progressing initially through learning situations (Stage II), largely guided by individual achievement goals. These then impact the goal setting by students when challenged by the teacher's actions (Stage III) and task challenges impact the learning outcomes, feedback and degree of satisfaction experienced by students (Stage IV). This, in turn, feeds new perspectives for the subsequent learning experiences (Stage I). When examining the MOCSE model on a longitudinal scale, Kolhar et al. (2021) found feedback was influenced by parents, peers, teachers and also diagnostic testing as well as other environmental factors such as social media.

Understanding Primary Student Perspectives

The Education Situation Quality/MOCSE theoretical framework introduced above integrates important instructional-motivational theories to explain processes influencing student engagement and learning outcomes in school. A key benefit of this model is that it centres understanding on the student's perspectives; their motivations to attend and engage with the learning environment, their peers and challenges as an extension of the teacher's intentions.

A thorough connection between MOCSE and understanding how and when primary school children are motivated in their school-based learning reveals a limitation. Primary students experience different learning structures and expectations in schools when compared to their older counterparts in secondary and tertiary levels, the participants used when informing the development of the MOCSE model. Essentially, younger students react to feedback from their peers, teachers, parents and their learning situations differently to older children, represented in the literature as those in secondary and tertiary levels.

Studies published by Boyd (2005), Hodgkin et al. (2013), and Jindal-Snape and Cantali (2019) examined factors impacting key student perspectives and experiences across higher elementary and secondary levels, finding differences in "structure, philosophy and status" (Hodgkin et al., 2013, p. 30) to primary school experiences. These studies found differences in models of "teaching, different expectations, different teachers and subjects, and more teaching to meet external needs, such as GCSE" (Geen, 2005; cited in Hodgkin et al., 2013 p. 31)— the General Certificate of Secondary Education— referring to secondary school matriculation, occurring after primary education.

The differences between these educational levels sees greater emphasis in primary schools meeting holistic social, behavioural needs, with more homogenous teaching styles and opportunities for the teacher to individualise the curriculum based upon primary students' interests and evolving cognitive and emotional growth. Nias (1999) contrasted secondary educational culture to primary schooling in the former, emphasising a focus on goal orientation and ways of behaving sustained by the normative pressure of state-mandated curricula testing. Essentially, studies into the lived experiences of students are not a one-paradigm-fit-all field, and models mapping those experiences need additional information to suit other ages.

The Education Situation Quality/MOCSE theoretical framework offers an elegant, plausible design explaining how older students form perspectives of their expectations and levels of satisfaction when lessons conclude. The next section will now explore aspects of MOCSE that can be extrapolated to include the experiences of younger students, and how the circumstances lived by gifted primary children in WAOs can augment MOCSE. It is hoped this new information raises the awareness of teachers and parents of gifted children, to benefit and develop future withdrawal acceleration options in primary schools.

Research Gap

The MOCSE model may be applied both to gifted and non-gifted students, as all students will have perspectives of the lesson into which they are entering. MOCSE explains how feedback fuels student perspectives but does not account for situations where children with gifted abilities deal with additional learning situations when they leave one classroom and class cohort for another (i.e., a WAO). The Literature Review, however, revealed a gap exists needing further details to build awareness of this situation. From this chapter a new model is proposed that illustrates the responses of the gifted primary students in this investigation to the sub-questions.

Events that Contributed to Emerging Perspectives

Analysis of the data revealed an intersection between the MOCSE stages and the timings during lessons when the participants experienced events that culminated in their perspectives. This analysis is illustrated in Table 8 mapping when some perspectives occurred to the perspectives against the MOCSE model, building knowledge answering sub-question 4, *when did participants experience the events that developed their perspectives of WAOs?*

This information indicates participants were confused by aspects of the WAO structure— including task design and teaching strategies— throughout each stage of WAO lessons. However, the data indicated the MOCSE framework did not reflect influences prior and following learning situations. It was clear WAO students made impressions on their confusion around the choices provided to them and on the reactions of others to their WAO involvement prior to beginning classroom lessons with

their grade and also after returning to class. This indicated it was necessary to locate precisely when aspects of the WAO experience influenced the development of the WAO students' perspectives and compare the veracity of MOCSE and other models to that information.

When Confusion Influenced Perspectives. Confusions can be illustrated in the responses corresponding to periods throughout the four MOCSE stages, and in some responses confusions and uncertainties occurred even before and after classroom lessons when WAO children had returned to class. Data reported participants were confused by the processes underpinning their selection but not others they expected to see in the WAO, which learning domain, competition or multi-subject task was going to be presented and why WAOs sometimes did not occur without forward notification to students. After Common Entry, gifted WAO students were unsure why they, and not others, were chosen for WAOs, whether their WAOs would occur as expected and the reasons if the WAO did not run. Such instances would interrupt Stages 1 and 2 of the MOCSE model, activating these student's *intention to learn* as it was expected they would attend the WAO, and therefore not be included the classroom activity.

Table 8

When Perspectives Occurred (MOCSE view)

	Stage 1	Stage 2	Stage 3	Stage 4
Interpretations				
Confusion	X	X	X	X
On choices	X	X	X	X
Ambivalence	X	X		X

When WAOs did run as scheduled, confusion remained for some students when they were presented by tasks that did not challenge their skills, or connect to previous tasks logically, corresponding to Stage 3 of the table. Upon completing the WAO lesson, statements show the WAO children were confused by their teacher and peers not enquiring about their WAO experience when they returned to the classroom. The confusion was experienced during and after Stage 4 of the MOCSE model and provided answers to SQ3 and SQ4 sub-question, when other people did not react to the WAO students' arrival back in the classroom at the end of the class lesson.

When Ambivalence Influenced Perspectives. Table 8 identified points in each of the MOCSE stages at which students were aware of the ambivalence of others. During the time WAO

students were attending the acceleration program, the participants recalled their class teacher, peers and parents seemed unaware or uncaring of the levels of excellence exhibited by the selected group to complete WAO tasks. This data corresponds to research (Lassig, 2009) of gifted students in specialised schools that noted a seeming disinclination by class teachers to assist gifted children in equal amounts. Upon entering the grade classroom or transitioning to a new lesson (SQ4), participants recalled little or no interest by non-WAO people when they were withdrawn, interpreted by respondents as displays of ambivalent behaviour correlating to Stage 2 in the table.

Data indicated non-WAO people were not ambivalent during Stage 3 when the selected students attended the WAO due to those people having tasks back in the classroom, reflected in the comment of R15 ("Not many of them care that I go to these lessons or where and when I go… they just keep doing their work and don't focus on us at all"). No account of ambivalence was reported in the interviews correlating to Stage 3, as the WAO students were not in contact with their class teacher and non-WAO peers at this time, engaged in activities with their WAO teacher instead. Afterward, recollections of ambivalence resumed at Stage 4 when WAO students returned to the classroom and encountered no interest from their peers and teachers about their experience away from the classroom before completing the common exit from the lesson and transition to a break or the next lesson.

Perspectives recalling the ambivalence of the parents of WAO children cannot be listed in Table 8, which frames only the experiences starting and finishing a learning session, not events prior-to and following the session. Doménech-Betoret et al. (2019) confined their theoretical model to experiences during the periods of formative learning experiences, including this as 'Internal Supports' within Stage 1. This did not correlate with the response data. Responses confirmed the perspectives were recalled when students had completed WAOs, rather than immediately before they experienced the next. The theoretical model proposed in the next section will illustrate participants perceived that their parents seemed ambivalent to their WAO experiences after lessons, rather than before. This is supported by the statements of R3, R7 and R8 in Chapter 5 (*Observations of ambivalence from parents*).

When Issues of Choice Influenced Perspectives. The various perspectives on student choice were illustrated in the responses corresponding to the first three MOCSE stages. These stages correspond when students entered the grade classroom (Stage 1), were confronted with either being withdrawn for the WAO or realisation that the WAO would not run (Stage 2) and then the task options during the WAO (Stage 3). As their return to the classroom was not a choice (Stage 4), Table 8 shows no choices were recalled during this stage of WAO or classroom lessons. Also unrepresented in Table 8 were remarks that suggested students were not provided a choice whether they wanted to attend the acceleration program and would exist prior to Stage 1 in the table.

Corresponding with SQ2, choices whether or not to attend WAO lessons are compatible with Stage 1 in Table 8, as students entered the classroom during a Common Entry action. During this stage, the participants recalled their expectation that a WAO was about to occur, and their attendance was required by the class and WAO teachers. Data indicated WAO considered their choices to attend the option occurred at Stage 2 when it is likely the WAO teacher arrived at the classroom to withdraw selected students for the acceleration lesson. Data supports the view that perspectives about choosing tasks mostly occurred in Stage 3, when the WAO teacher began to engage the accelerated group with the WAO tasks. It was during this period in WAO lessons that the participants recalled the types of teacher and self-directed tasks provided, and whether it was their preference to ask for greater autonomy in developing their talents or whether they were comfortable with the guidance of the WAO teacher.

In summarising this section, the Education Situation/Quality/MOCSE model can be used to broadly track the origins of participants' perspectives during their WAO experiences against four distinct stages. Table 8 displayed when the three perspectives occurred to the WAO students, with some information occurring outside the stages posited by MOCSE. The previous section was able to show these perspectives can be partially catalogued via existing motivational theories to locate reasons why students develop their outlook on learning, and when these occur in a learning system. Updating knowledge uncovered by the data and how MOCSE can assist understanding those perspectives, the next section suggests a new theoretical model to reconcile the four research sub-questions.

The Doorway Theoretical Model

In response to the key research question, *what are the perspectives of gifted primary children participating in withdrawal acceleration options in schools*, I propose the following model in **Error! Reference source not found.**, below.

Figure 28

Doorway Theoretical Model of Gifted Perspectives in WAO Situations
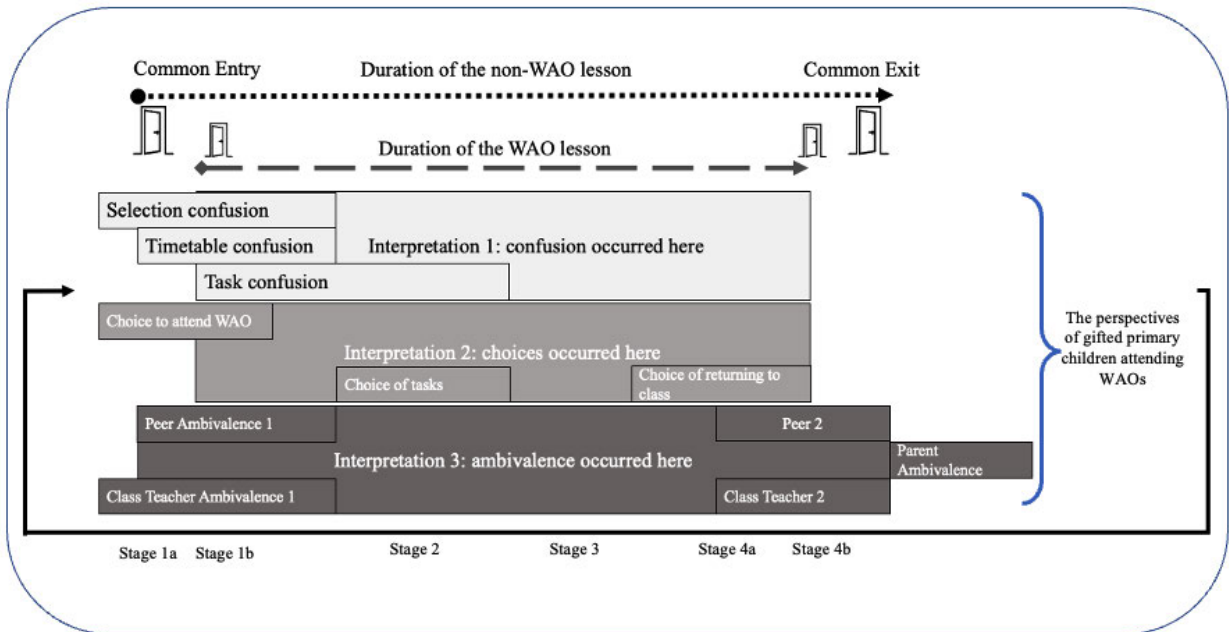
This new model refines the MOCSE model to accommodate the perspectives of gifted children in WAOs. This model maps instances revealed by the data when confusions, student uncertainty as to choices and ambivalent reactions of others influenced the perspectives of gifted primary students during WAOs. My purpose for developing a theoretical framework for this thesis is to raise the awareness of teachers, researchers and parents of gifted children in WAOs from this investigation.

The Literature Review identified a lacuna in published investigations of the perspectives of primary gifted children that experience an alternative learning pathway during routine primary school experiences. As a result, gifted primary student perspectives documenting their voices have been rarely examined and therefore are either unknown or under-considered by teachers, researchers and parents. This model, hereafter referred as the 'Doorway model' seeks to expand knowledge of this WAO experience to the gifted and talented educational field with additional commentary and structure.

Another pathway occurs in the school experiences of gifted primary children attending WAOs, pivoting their journey from that undertaken by non-gifted students in their grade. During this process, WAO students experience confusion, ambivalence and thoughts about the choices put to them as they seek to pursue their talents at school. The Doorway model depicts a 6-stage system mapping when influences on the perspectives of gifted children in WAOs occurred. Each stage impacts a subsequent stage and respondents indicated the perspectives were influenced prior and after WAO lessons, a significant difference with other theoretical frameworks, further validating the importance

of this investigation and the findings. The following explanation of the parts of this journey responds to the fourth research sub-question, *when did participants experience the events that developed their perspectives of WAOs?*

Common Entry

WAO students in this investigation shared perspectives on being withdrawn from regular class lessons to another room for accelerated learning. They recalled instances where their selection and withdrawal to WAO lessons influenced their perspectives. WAO students experienced confusions, even before they began class lessons. For the purposes of this investigation, this period will be termed 'common entry', referring to the time all students commonly entered through the classroom doorway. Prior to Stage 1a of the Doorway model, WAO students recalled confusion in the selection process for the WAO program, and whether WAO lessons would run when expected. Similarly at this stage, they recognised that their class teacher, classmates, and the WAO teachers lacked interest in their experience. This perspective was identified as corresponding to ambivalence, highlighting a connection to SQ2, *what were participants' perspectives of others' reactions to WAO?*

Stage 1a

Stage 1a corresponds to the time WAO students knew they were being withdrawn to the acceleration lesson (or not) and were confronted with task choices and the reactions of others as they were being separated from their class. The model suggests all three interpretations (confusion, ambivalence, choices) were experienced at this phase of their WAO experience. Some students had attended WAOs in previous years and were therefore aware of the existence of the WAO program at their school, but still provided responses indicating confusion about how they had been selected. This highlighted wonderings by these students regarding selection unknowns. A few students stated reasons why others had not been selected; in the Data Analysis chapter these reasons included laziness and the perceived inability of others. The evidence of student perspectives corresponds to research SQ1, *what were the participants' perspectives of the selection process?* It was also during Stage 1a WAO students who had previously attended WAOs shared views about others at their schools appearing ambivalent about their accomplishment for being selected to the WAO, continuing the connection from Common Entry with SQ2, *what were participants' perspectives of others' reactions to WAO?*

Stage 1b

Perspectives of confusion emerged during Stage 1b as students were withdrawn for WAOs and tasks were in some cases chosen for them by the WAO teacher, connecting to recollections regarding choices. Some participants in this investigation indicated, if given the option, they would want to remain in the classroom, where they perceived they would be acknowledged as an advanced student in the room by others. Connecting to research sub-question 3, *what were participants' perspectives*

of the perceived structure of WAOs, this stage saw students provide similar perspectives on choices available in WAO lessons. This finding corroborates Marsh and Parker's (1984), and Zeidner and Schleyer's (1999) research of 'Big Fish, Little Pond' (BFLPE) studies. BFLPE research advanced understandings documenting exceptional students experiencing better academic self-concept and fewer anxieties when grouped in homogenous classrooms.

WAO students were confronted with the reactions, or lack thereof, by their teachers and peers to their being withdrawn from the classroom because of their exceptional abilities during Stage 1a. Some responses indicated these reactions were seemingly ambivalent to their departure, and therefore connects to the fourth sub-question, *when did participants experience the events that developed their perspectives of WAOs?* Peer and teacher ambivalences were detected in the responses, suggesting classmates and the class teacher sometimes were disinterested that WAO students were attending the WAO. Other responses described a lack of peer and class teacher interest in what the WAO tasks might entail, or, in the class teacher's circumstance, why a WAO did not run as scheduled on the timetable, as this was not communicated to those students by the teacher that had selected them for the WAO.

On those occasions when WAOs were expected but did not run, during this stage WAO students found the class teacher did not incorporate accelerated tasks to daily challenges in the regular classroom and rarely acknowledged the challenges undertaken in WAO classes. This certainly raises queries regarding research sub-question 3 on the reactions of class teachers to WAO students, and how these children perceived a lack of support or interest by the teachers that had selected them for the WAO program, and in that way had identified these children as needing specialised learning support.

Stage 2

Stage 2 corresponds to the period following the withdrawal of the WAO group to another room, and thereafter the explanation and beginning of accelerated learning. It is during this stage that respondents indicated confusion as to why certain tasks were provided to them that might not be sufficiently challenging, answering SQ1 regarding a structural element of the WAO, the criteria against which they were selected for the program. It was clear from interview data that some students were under different impressions of what they were going to complete in the WAO (such as competitions) compared to the eventual tasks offered.

Perspectives on choosing their own tasks for completion or accepting the WAO teacher's direction for tasks during the lesson focused on the query provided by SQ3, examining the structuring of

WAOs and who the choosing of tasks by the WAO students. Confusion over the design of tasks was interpreted from the responses as lasting only a portion of the WAO lesson. Interview comments did not indicate this perspective lasted past the introduction to WAO tasks by the WAO teacher or beginning the tasks. This was also true for students permitted to develop their own tasks or choose freely from a range of task options; remarks indicate only at the beginning stage of the WAO lesson did this confusion surface and was not recalled afterward.

Stage 3

Stage 3 is mapped by the Doorway model as a period when relatively few perspectives were offered by the participants in the interviews. During this stage, the WAO teacher might provide feedback to students on their tasks and guide students towards the completion of accelerated tasks, similar to Stage 3 of the MOCSE model (Doménech-Betoret et al., 2019). As 100% of participants recalled prepared worksheets as the basic activity for WAO lessons, it is likely this was a routine from Stage 2 and throughout Stage 3 where one worksheet was completed and the next then handed-out to students.

Though this stage was not specifically mentioned in responses, WAO routines continued to confuse students throughout acceleration lessons, and perspectives regarding choices remained in the minds of the participants. Participants reflected how this process appeared during WAO lessons and influenced perspectives on choices depending on whether tasks were teacher-designed or student-designed throughout this teacher-stage of the session. Others recalled a choice of task options, including ICT and games, adding information to answer research sub-question 3 (i.e., structure). A few, such as R14 who memorably provided the perspective "I think that it's a little too much power in our hands", remembered their teacher allowed WAO students to choose their own learning path throughout WAO lessons, offering information in response to SQ2, regarding perspectives about choices in WAOs.

Stage 4a

It is during Stage 4a that the Doorway model in **Error! Reference source not found.** illustrates the approach to the end of WAO lessons and return of WAO students to the classroom. Some responses corresponding to this stage suggest, if given the choice, students would like longer WAO sessions, or to remain in the classroom rather than re-join their class. Those perspectives were interpreted as being partially influenced by the ambivalent reactions of non-WAO students and class teachers, connecting to SQ3, *what were participants' perspectives of others' reactions to WAOs?* Upon their arrival to the classroom after leaving the WAO, participants recalled no questions, conversations, or opportunities to share WAO experiences with classmates.

Stage 4b

This stage occurs immediately after WAO students return to the classroom after their withdrawal and re-engaging with peers conversationally prior to the class completing the non-WAO lesson, termed 'Common Exit' in **Error! Reference source not found.**. The MOCSE model (Doménech-Betoret et al., 2019) suggests this stage features students experiencing degrees of self-satisfaction and anticipation for future learning experiences. Questionnaire data would indicate respondents in this investigation overwhelmingly expressed a positive regard for attending WAOs reported in Chapter 4 (*Memories of WAO experiences*) experienced a satisfying learning experience and wanted to return for future sessions.

Interview data shed new light on those initial questionnaire answers, particularly in response to two research sub-questions. Widely held perspectives among the participating group stated that whilst they considered the WAO positively, they remembered most of their peers and teachers rarely acknowledged their return, responding to SQ2. The Literature Review noted circumstances under which gifted children perceive their differences to non-gifted peers and teachers rarely acknowledge returning to the classroom as an investigative target, and its impact on gifted children's self-efficacy. Some students perceived the class teacher knew WAO children had returned from the WAO, but seemingly did not adjust tasks or skills suited to those advanced students in classroom tasks to conclude classroom lessons.

Responses indicate a distinct perspective of ambivalence by the teacher to their capabilities and experiences, connecting directly to SQ2, *what were participants' perspectives of others' reactions to WAOs?* Rarely was a class teacher remembered asking to see a WAO task when the participants returned. Such an instance may have raised an awareness in a class teacher of not only the capabilities of the WAO students and assisted subsequent plans for those students in class tasks. The same responses apply to SQ3 querying the perspectives of WAO structures. Participants provided answers based on past attendance of WAOs, reflecting on being withdrawn from the classroom to attend the acceleration session and therefore needing to re-join the class before the end of that lesson. In this way, the gifted children in this study were also providing insights into a structural element of WAOs in-keeping with the pursuit of SQ3, how they were being separated and then accelerated away from their class teacher and peers.

Common Exit

Following Stage 4b, WAO children leave the class lesson with their peers either for a recess/lunchtime break or in a transition to the next lesson. Statements in this doctoral investigation reported the degree of interest their parents seemed to portray in their WAO attendances as one of ambivalence after lessons had concluded. This represents a break from the research by Doménech-

Betoret and colleagues (2019) who located this feedback in Stage 1 as an *'External Context'*, when students first entered learning situations. Answering sub-questions 1 (i.e., selections), 2 (i.e., others' reactions) and 4 (i.e., timing) this information seems to corroborate the research by Ben Artzey (2020) and Mun et al. (2021) who found parental interest and support for gifted teaching interventions, and the experiences of their gifted children wanes due to familial and social pressures.

Chapter Summary

Longitudinal studies from the mid-20th Century and continuing in recent times conclude gifted children deploy individual exceptionalities, such as skill acquisition, mastery and application, degrees of fixated behaviour and creativity from ages at which they realise their precocity in a learning domain (Baudson & Ziemes, 2016; Colangelo et al., 2010; Cornell et al., 1991; Neihart, 2016). These researchers indicated gifted and talented children require the acknowledgement of others and clarity shared with those students regarding the structures specifically created to pursue their exceptionality during formal schooling. Responses in this doctoral investigation concur with those findings. This investigation provides the insight that these acknowledgements and demonstrations of support are not being made consistently or in ways the selected students recognise. Moreover, giftedness research is yet to investigate the impact on gifted primary student's self-esteem and continuing advancement when structures such as WAOs are expected, but do not run and this information is not shared with the acceleration group.

The Doorway model (of gifted perspectives in WAO situations) as a conceptual map is a novel option that brings together answers to the various sub-questions, providing a means to locate when perspectives on confusion, choices and ambivalences occur during WAO lesson times. The next section will examine the implications of the findings and suggest recommendations that reconcile those findings. These recommendations will demonstrate implications for practice, policy, and further research to benefit stakeholders and subsequently, gifted primary school children. This chapter will establish the importance of the methodology, data and discoveries amongst the analysis to understand how this investigation builds awareness of WAOs and gifted children's perspectives, which it has been revealed is in limited supply, but worthy of wider research. Other limitations that influenced the investigation and influenced the findings will be examined and connected to theory of case study research designs.

Chapter 6: IMPLICATIONS, RECOMMENDATIONS AND CONCLUSION

Introduction

This final chapter brings the thesis to a conclusion. The purpose is to draw upon the analysis and discussions from previous chapters in order to articulate the findings of the study and the implications for the education of gifted children in primary schools.

The chapter begins by revisiting the purpose for the research and the relevance of this project to giftedness research. Following this, the rationale for the methodological strategy of the study will be restated and an outline of the relevance of this research project to primary giftedness education. The original research question will be addressed, and the findings of the study will be contextualised by implications for this area of research. Recommendations for practitioners and policy makers will be articulated and a substantive theoretical model will be proposed for future consideration in giftedness education, withdrawal teaching strategies and accelerations. The limitations of this research will also be noted and suggestions for future theoretical, research and practical investigations of WAOs will be proposed.

This chapter will present the following information:

- a summary of the purpose for the study
- a condensing of literature significant to the field and statement on a lacuna in the research
- an outline of the methodological and method strategy that collected and analysed the data
- a report of the research outcomes that generated sub-questions and themes
- an outline of implications and recommendations generated by the discussion of the results
- articulation of the argument for the implications and recommendations for policy and theoretical development of giftedness education
- detailed information on the implications and recommendations for methodological and practical development of giftedness education
- articulation of the importance for the addition of a new theoretical framework to the field of giftedness education
- thesis conclusions

Purpose of the Study

The premise of this research project, *The Separated Accelerated* was interpreting the perspectives of gifted primary school children who were selected to a specific type of acceleration teaching known as a Withdrawal Acceleration Option (WAO). This research project was developed to raise awareness of the perspectives of gifted primary children on facets of WAO experiences for parents, educators and researchers when considering options for the acceleration of the gifted.

The perspectives of gifted primary students is not a deeply-researched field of gifted education and underscored the importance of this research project. This study sought to address this gap and in so doing, makes a significant contribution to the literature of this field. It was stated in the Literature Review and Discussions chapters that schools appear to be providing these programs without the benefit of empirical evidence that explains and demonstrates WAO timetabling, selection methods and task design because of gaps in that knowledge.

Obtaining data from participants and interpreting their responses will continue to offer exceptional opportunities to develop Grounded Theory in fields where limited qualitative research exists on the perspectives of primary school students on acceleration interventions. These opportunities coincide with reforms to Australian education philosophy and policies on inclusion this century, which has prioritised principles for greater student voice and agency to be included in the decisions that form a modern Australian school education. Those principles, in the form of national education declarations (Education Council, 2019; Ministerial Council of Education Employment Training and Youth Affairs (MCEETYA), 2008) cast light on philosophical and policy views on how Australian schools optimise inclusive learning environments for all students. These view culminate in laws advocating for the rights of school children in this country and standards that regulate how teachers react to children with diverse learning needs.

Finally, this study is concerned with the limited advancement of theoretical knowledge of the gifted in learning situations. It was found that models explaining when, how and why gifted perspectives form were originally developed last century and were largely limited to positivist constructivism which analysed the characteristics of gifted students and options for instruction delivery. These models did not establish when, how or why gifted perspectives form in schools, especially during the formative primary years when giftedness self-identity initially develops and is presented with experiences in which innate gifts are translated into demonstrations of talent. On rare occasions that research was undertaken to examine perspectives of the gifted, these examined advantages and disadvantages of types of giftedness interventions largely from a secondary teaching paradigm and did not generate new models (or seek to alter established models) explaining the perspectives

applicable to gifted primary students or those undertaking withdrawal accelerations. This research project took the initiative to propose an augmented instruction/motivation model to bridge this gap in education model-building to reflect an important, modern supplement supporting knowledge of gifted teaching and research.

The next section will finalise the examination of field literature that generated the lacuna. This information inspired the choice of methodology and methods that generated data and subsequent theory to answer the research question.

Literature Summary

The research question was *what are the perspectives of gifted primary school children on their experiences in withdrawal acceleration options?* which uncovered perspectives on withdrawal acceleration options. The review of the literature proposed four categories to contextualise reasons some schools widen their inclusive practices to offer withdrawal acceleration options to the gifted. Those categories were:

- approaches to school inclusion
- optimal learning environments
- giftedness pedagogy
- student agency

Review of the literature supplied several insights on historical, theoretical, and pragmatic knowledge of inclusion generally, and the inclusion of the gifted specifically. Australia can be proud of establishing some of the earliest policies for inclusive education schools globally. In recent times the national impetus for developing, supporting and overseeing a comprehensive strategy for the inclusion of the gifted in schools waned and is only now beginning to gain traction through increased focus on equity and equality of opportunity for students. This situation can be directly linked to philosophical and political decisions ceding responsibility for oversight of student giftedness to schools, limiting access to data that can measure and coordinate a national response to the significant needs of the gifted.

Historic and current international documents advocate the provision of accelerations as an effective method that schools use to differentiate the teaching of gifted students (Colangelo et al., 2015; Colangelo et al., 2004; Gross, 2006; Gross, Urquhart, Doyle, Juratowitch, et al., 2011; Rogers, 2007; Rogers, Wormald & Vialle, 2011). The review of literature found that whilst accelerations are widely accepted, there are detracting views that question the validity of separating the gifted from non-gifted classrooms (Persson, 2010; VanTassel-Baska, 1987, 1992), which might not challenge gifted students academically but stands to benefit their social vulnerabilities. Research reported when

schools did not offer special adjustments such as WAOs to gifted primary students there were complicating factors which included moral and ethical decisions regarding separating the gifted from heterogenous class routines. A recent study found teachers would participate in giftedness training yet would not provide acceleration adjustments for the gifted based on their own primary school (Antoun, 2022) histories underlining the importance of updated teacher awareness and advocacy in building supportive structures for gifted primary school students

The limited array of information on withdrawal acceleration models intersects with gaps in professional knowledge of the experiences primary gifted children, who experience different learning circumstances to the peers and secondary gifted students. This lacuna was associated with gaps in theoretical models that map heterogenous learning situations but do not accommodate circumstances where gifted primary students are withdrawn from classrooms during lessons for acceleration. A review of the literature corroborated this finding and supported the plausible notion that gifted students experienced unsupportive reactions by others to their withdrawal, partially because teachers do not have access to updated instructional models during pre-service or career training. This then emphasised the relevancy of this research project to understanding student perspectives on withdrawal acceleration options to generate an authentic theoretical model, based on the Education Situation Quality model (Doménech-Betoret et al., 2019) to encourage future research into gifted pedagogy.

Methodological Strategy Summary

The study adopted an inductive methodology that addressed the key research question and in so doing generated substantive theory about the topic grounded in the data. The influence of interpretive Grounded Theory (Glaser, 1992; Sebastian, 2019; Strauss & Corbin, 2008) supported the approach to employ multiple data collection stages to provide a wide range of data and facilitate the triangulation of the responses. The focus of this investigation was to provide contextual evidence of the experiences of gifted primary students who attended withdrawal acceleration options.

Participants were tasked with providing a variety of memories, observations, reflections and predictions which reflected perspectives on various aspects of WAOs that were reliable and shared (O'Donoghue, 2018). Participants provided information by way of an electronic questionnaire that consequently guided the composition of personalised, semi-structured questions for interviews to form theories regarding WAOs.

Criteria were established to target primary schools that offered WAOs to students with a giftedness diagnosis rather than purely using teacher observations. This information tallied with my professional knowledge of acceleration options in primary schools that encompass (i) in-class

differentiation and (ii) when gifted students are withdrawn for scheduled lessons with a WAO teacher that augmented the in-class strategies the class teachers provided each day. The initial pilot phase of the investigation afforded the opportunity to visit schools to verify how WAOs operate in schools and the criteria by which gifted children were identified for accelerations.

Twenty-nine questionnaire queries supplied initial data on memories, observations, reflections, and predictions by the participants on aspects of WAOs. This data used Likert-scale and multiple choice/multiple answer options that would group answers efficiently. The questionnaire concluded with a scenario response task, unrepresented in case studies of gifted primary students, where respondents provided perspectives on the hypothetical experiences of a WAO student. In this way, the scenario task subverted the notion of gaining lived experiences from participants (Creswell, 2015; O'Donoghue, 2018) by gaining their perspectives on an 'unlived' protagonist's WAO journey.

The accumulated data guided semi-scripted interviews that targeted unique and common responses to the questionnaire and scenario task. The interviews provided knowledge of perspectives on facets of WAOs that were later interpreted via coding and keyword analysis.

The systematic approach to coding and analysis offered to early career researchers by Merriam (2015) was preferred over other methods which recommended case study experience (Stake, 2016) or positivist methodology (Yin, 2009) to function. Investigations of the methodologies in the literature studying the perspectives of gifted children (Bildiren, 2018; Kitsantas et al., 2017; Ritchotte et al., 2016) revealed qualitative constructivist research was a common practice and meta analyses of qualitative studies into perspectives (Kulik & Kulik, 1992; Steenbergen-Hu et al., 2016) noted the frequent use of positivist constructivist methodology to gauge the effects of accelerations on the gifted. In order to add knowledge to the field, this research project adopted an interpretivist position to consolidate the questionnaire, scenario and spoken responses and uncover concepts leading to themes that explained the perspectives the students provided on their WAO experiences.

Outcomes of the Research Project

Through coding and data reduction consistent with qualitative case study analysis, almost 700 answers yielded an array of student perspectives on various features of WAOs. The research project achieved its objectives by generating or updating knowledge for the field. These objectives were to:

1. establish the perspectives of gifted primary children attending withdrawal acceleration options on facets of this program in schools

2. develop a substantive, original theoretical framework that explains the perspectives of gifted primary children attending withdrawal acceleration options

Perspectives of Gifted Primary Children Attending WAOs

Data confirmed that participants regarded the WAO at their school positively, and most wanted an ongoing selection to this program. Themes were generated from the data on the structures, reactions and choices that influenced the perspectives of the participants; how and why WAO students and tasks were selected, how WAOs were organised and reactions to acceleration options by others.

Analysis of the data revealed common perspectives among the themes. Participants expressed confusion, thoughts on the choices available to them in WAOs and observed of the ambivalence of others; these findings have not been collectively or partially researched in the field of primary gifted education. When analysing the themes together, the data suggested the three perspectives occurred to the participants at different stages of WAO experiences, which was not reflected in the literature on gifted perspectives or WAOs. These perspectives will now be summarised. Later, implications and recommendations of those perspectives will serve to help build knowledge from policy, research, and pedagogical positions.

Confusion Perspective

It can be established that the participants were confused by the dynamic with their teachers which led to their WAO selection. Whilst experiences of confusion are mentioned in the literature, these are limited to the misdiagnoses of gifted children's needs and behaviours; information on confusions regarding criteria for primary school acceleration selection is not documented in the literature. Criteria for WAO selection during this study was not explained prior to beginning the WAO, nor what the experience of withdrawal and returning to the class afterward would entail on the accelerated students' academic and social wellbeing. These instances occurred regularly, with participants indicating their confusion as to why their teachers had not prepared them for WAOs comprehensively and explained the circumstances of their selection to the class openly to show interest for the WAO students' efforts.

Confusion was found to underpin perspectives on facets of the structuring of WAOs, again often a result of limited communication with WAO students. WAO students noted the infrequency of acceleration lessons that they could not explain, nor could they recall WAO teachers or their class teacher informing them of the reason for not running a WAO session, often for months at a time. Furthermore, participants expressed confusion on how WAO tasks were designed and the options available to them for completing these projects. Evidence showed students were offered worksheets,

games and competitions that provided limited creative input or understanding of why tasks were chosen for their acceleration.

Research has found that gifted students and their teachers must recognise the needs of each other to see, know and show their knowledge of giftedness to generate positive, cooperative behaviours to result in optimal learning environments for each other. Previous evidence (Munro, 2005, 2013; Rogers et al., 2011; Steenbergen-Hu et al., 2016; Steenbergen-Hu & Moon, 2011) attested to the working dynamic between the gifted and their teachers. Analysis of the data in this investigation suggests this was a source of confusion when the participants noted the reactions of others which also manifested as a separate perspective of ambivalence by others for their WAO experiences. This investigation proposes that whilst all students are demonstrating optimal learning behaviours, teachers choose WAO students selectively and did not address the reasons some students are chosen, and others not. As criteria for WAO selection was not openly communicated to all students, WAO members observed envy and ambivalent reactions from non-WAO classmates, their teachers and their parents at different stages of WAO sessions.

Choice-Related Perspective

On the topic of choices, participants were split in their perspectives of accepting the WAO teacher would provide targeted activities that met their intellectual needs and those responses wanting voice and agency in WAO task design. Evidence suggested students wanted to be offered the choice to attend the WAO, stay in the WAO lesson without returning, or to remain in the classroom and not attend the acceleration lesson, supporting research into Big Fish, Little Pond Effect (Marsh & Parker, 1984; Zeidner & Schleyer, 1999).

Among the responses, most students indicated they would appreciate greater self-direction for designing their WAO tasks whilst other students indicated a respect for the knowledge of the WAO teacher, preferring WAO teacher teacher-designed tasks over greater autonomy in WAO lessons. It was evident these respondents had made cognitive connections between their demonstrations of gifted behaviour and the knowledge displayed by their teachers to recognise and adjust their teaching to meet advanced learning needs (Munro, 2005, 2013; Rogers, Wormald & Vialle, 2011; Steenbergen-Hu et al., 2016; Steenbergen-Hu & Moon, 2011).

It was discovered perspectives on choices occurred at different stages of the structuring of WAO programs and lessons. Choices regarding attendance occurred prior to WAOs and included wonderings about not attending acceleration lessons up until the time during a class lesson when these children were withdrawn for acceleration. During WAOs choices were recalled about the possibilities for autonomous rather than teacher-developed tasks. Upon returning to the classroom

after the WAO lesson respondents formed perspectives on the choices to remain in the WAO lesson longer rather than returning to the reactions of their peers and teacher. Respondents furthermore wondered whether they would be chosen for future WAO lessons when they were unsure how WAOs were timetabled.

Ambivalence Perspective

The perceived lack of interest and support for the WAO group by others can be attributed to a lack of clarity regarding selection and task design by teachers. The data evidenced the disinterested, ambivalent reactions of others impacting perspectives on WAOs in different ways and times. Previous research (Baudson & Ziemes, 2016) examined stereotypes adults and non-gifted secondary students make about the gifted, which support the notion of disinterest and ambivalence. Information from this investigation now provides evidence ambivalence is perceived by primary gifted students to add to the literature.

This research found the ambivalence of parents, by the class teacher and the WAO teacher and reactions by non-gifted peers was a dominant and previously under-researched aspect of this field. Participants supposed the class teacher's and the WAO teacher's ambivalence led to few accelerated activities being offered in heterogenous classroom lessons and restricted study options in WAO sessions. Ambivalence on the part of non-gifted peers was attributed to jealousy, their limited awareness of the WAO program and limited recognition for exceptional learning qualities by the accelerated group.

Of interest was information suggesting the WAO group recalled experiencing the ambivalence of others at all stages of their withdrawn acceleration, including prior to WAO lessons and after school. This was an important distinction this research made against established instruction/motivation models that frame research and pedagogical understanding of learning situations.

The ambivalent reactions of others influenced the self-perceptions of the gifted primary students in different ways. Parents, teachers, and peers did not enquire about acceleration lessons from which the students patently demonstrated exceptional ability and pride in their accomplishment by being selected, and these reactions reflected by surprise and disappointment in WAO responses. Noting ambivalent reactions, some WAO students preferred to be more visible as a high functioning class member instead but were not offered the option of refusing to be withdrawn for the acceleration lessons.

Summary of the Perspectives

Three perspectives answered the research question and sub-questions. The research question asked *what are the perspectives of gifted primary children attending withdrawal accelerations in schools?*

As a result of this study, the research question is answered by the proposition that gifted students attending WAOs express confusion, have thoughts on limited choices, voice and agency in the ways schools select students and tasks and recognise the ambivalence of others when they are withdrawn for WAOs and return later to classrooms. The following section details the implications of these findings and recommendations for future research and practice.

Outline of Implications and Recommendations

The answer to the research question indicates significant gaps in the knowledge of policy, research and pedagogy concerning gifted primary school children. It must be considered that, because the perspectives and the topic of primary school WAOs receives scant attention in policy, research and the provision of practices it is likely the implications of this investigation can be trialled and replicated nationally to see if the results transfer across contexts.

The dominant implication of the outcome of this investigation affirms there may be a lack of preparedness, knowledge and communication by primary teachers when selecting WAO students and when building a withdrawal acceleration option for their needs. It is acknowledged this view is based on the perspectives of children and would be a valid course of study to establish deeper knowledge of these views. This is evidenced in the lack of clarity in primary WAO selection processes and task design, the limited choices available to WAO students for their participation in those accelerations and the influence of others to WAOs that influence the perspectives of the gifted under the supervision of teachers. This evidence was also connected to questions regarding teachers maintaining professional standards for student care in Chapter 5. This investigation identified aspects of withdrawal accelerations that required careful consideration before, during and after the introduction of WAOs into primary schools. The following section summarises the outcomes by focusing on the implications on giftedness policy, research and pedagogy and suggests recommendations to address incongruencies in how schools support gifted primary children using withdrawal acceleration options.

Policy Implications and Recommendations

Implications for Policy. The Literature Review established a lack of coordination and specificity in state and federal giftedness policies pertaining to a common diagnosis of giftedness and establishing detailed practices that support the gifted in classrooms (i.e., differentiations) and by extension, subject-skipped students withdrawn for accelerations (i.e., WAOs). As primary schooling represents the first full-time school experience to gifted students, who frequently exhibit social vulnerabilities, this limited oversight and guidance for their needs places this student population at risk.

The implication of the findings means schools offering WAOs are (i) not being guided by policy when structuring methods for the inclusion of the gifted in WAOs, (ii) there is limited objective oversight on the ways schools are catering to the gifted to confirm the effectiveness of interventions for the gifted, and (iii) a disconnection between proven research on the inclusion for the gifted and detailed regulatory guidelines that support schools and WAO teachers when building WAOs.

Recommendations for Policy. Collaboration between state bodies or definitive federal policies on giftedness using the following recommendations would highlight provisions to negate the risks of confusion, the lack of choices, voice and agency in WAO tasks and the influence of ambivalent reactions of others that impact the perspectives of gifted primary students in accelerations.

It is recommended primary schools and education departments update their policies on giftedness to include information on WAOs in their promotional and administrative documents. These will formalise school and departmental policies on WAO selection processes, structures and supportive strategies for gifted students in conjunction with the goals of the Alice Springs' (Education Council, 2019) and Melbourne (Ministerial Council of Education Employment Training and Youth Affairs (MCEETYA), 2008) declarations.

As an additional measure, educational doctrine should mandate primary schools offering WAOs are accountable for school reporting on accelerated subjects to record advanced progress against curriculum benchmarks. Research suggests this occurs during grade-skipping when gifted students become full-time members of higher classes; however, during the pilot phase of this investigation and from reading of similar studies (Bildiren, 2018; Kitsantas et al., 2017; Kulik & Kulik, 1992; Moon et al., 2002; Ritchotte et al., 2016) it is not an established policy to monitor progress of the gifted via formal reports. Once again, this is the effect of an education system where oversight of how schools cater for the inclusion of the gifted is ceded to schools. Schools have a vested interest in acknowledging and continuing the advancement of gifted and talented students, as a reflection of their advocacy to exceptional learning, their hiring of teachers and funding among other reasons. If our society wants students to demonstrate accelerated levels of learning, we need systems that measure and record those achievements to inform gifted students and parents with that data.

Theory Implications and Recommendations

Implications for Theory. Established instruction models mapping factors that impact student perspectives have not been updated to include the experiences of gifted students withdrawn for accelerations. Chapter 2 described limited connections by existing educational models (Barron

& Hulleman, 2015; Eccles & Wigfield, 2002) that theorise the gifted educational journey, particularly of those children withdrawn from the primary classroom for accelerations.

Models connecting valence, expectancy and rewards for primary gifted students has not, to this time, been updated to include circumstances where gifted children experience a different learning experience and set of outcomes to their classmates, such as a WAO. Instruction/motivation models and expectancy/value models critiqued in the Literature Review (Doménech-Betoret et al., 2019; Eccles & Wigfield, 2002; Keller, 1983, 2008) examined linear situations where students attended an uninterrupted learning experience with a defined purpose, continuation and conclusion. Those studies were based on high school and university students and not primary children, and thus did not account for additional factors that impact neurotypical primary-aged, nor gifted primary children revealed in substantive research on younger gifted behaviours (Betts, 2009; Dare & Nowicki, 2019; Neihart, 2016; Vialle et al., 2001).

There are two implications for this gap in the literature. Firstly, schools will not provide WAOs if teachers cannot demonstrate a comprehensive, updated knowledge of theories underpinning acceleration options for gifted students. Secondly, gifted children may choose not to attend WAOs or display their giftedness to avoid WAOs they perceive will not be recognised and reciprocated by teachers in the classroom and during the withdrawal acceleration option. Evidence from the responses indicated three perspectives that, had teachers received updated professional learning on these concepts (confusion, on choices, and ambivalence), would likely have resulted in teaching strategies that clarified the selection process, the choices in WAOs and supported positive reactions by others to the participants' involvement in those acceleration lessons.

Recommendations for Theory. One theoretical framework partially illustrated influences on student achievement and motivation closest to the experiences of students in this investigation. The Education Situation Quality or 'MOCSE' model (Doménech-Betoret et al., 2019) detailed the impact of several supports such as family, teacher and peers over different stages of lessons, but limits were identified that obstructed a universal connection to this investigation. This research project recommends the application of a new instructional model by teachers as a part of their professional and pre-career training that adjusts the terms of the MOCSE model to accommodate influences on gifted learning at different stages of lessons and assimilated the effect of withdrawal and return to lessons.

The themes identified in the present study informed the development of the Doorway model, which presents opportunities for teachers to add to knowledge of optimal gifted learning options. Further research could investigate whether the Doorway model might also map the perspectives of other

children who are separated from their classmates temporarily and those children attending whole-day acceleration options featured in the studies of Bildiren (2018) and Kitsantas et al. (2017). Those studies were influential to both the chosen methodology and methods for this study. Finally, much could be learned from the perspectives on classroom withdrawal from children with learning difficulties and those leaving the classroom for music and other talent areas. These are all lucrative avenues for post-doctoral inquiry.

Research Implications and Recommendations

      Implications for Research. The research problem illustrated the key motivation for this research; *there may be unknown documentations of the perspectives of gifted primary students attending withdrawal acceleration options* (Chapter 1, *Summarising the problem*). Three avenues were discovered among the consequences of the Literature Review and when determining the methodological pathway that imply those 'documentations' are not unknown but are rare. First, the implication of a US dominated field on accelerations is that local philosophies, policies and practices for developing accelerations must be based on different cultural-educational norms, using knowledge of different curriculum and teaching standards as local knowledge does not exist. Second, the Literature Review revealed limited research of the perspectives of gifted primary students in WAOs, which more often investigated whole-day accelerations where withdrawal from classes did not occur, or those involving secondary and select-entry students. Again, this vacancy in the research can imply subject-skipping WAOs might not be suitable for Australian primary schools (or internationally) as there is limited evidence on their outcomes, the reactions they generate and how they are structured.

This study identified gaps in knowledge of gifted perspectives. This century, research widened a focus on relativist studies enquiring of the lived experiences of the gifted to generate Grounded Theory (Charmaz, 2000), and is supported by international and local Australian inclusion policy and initiatives. Whilst these recent developments are heartening, research on accelerations for the academically gifted originally appeared in the literature dating to Leta Hollingworth's original studies 1928-1943 (Hollingworth, 1943; Silverman, 1992). It is concerning that only relatively recently has research deigned to examine accelerations through the lens of primary gifted students' perspectives for qualitative inductive analysis.

Previous evidence suggested researchers and authors of giftedness publications regularly examine accelerations through meta-analyses of studies surveying teachers' perspectives on giftedness and accelerations over qualitatively interpreting those perspectives by gifted primary students. The results of this investigation emphasised the need for additional research on how WAOs are perceived by gifted primary school students and how teachers can develop strategies to ameliorate confusion,

invite student voice and agency into WAO structures and support positive reactions to WAO students' experiences.

Recommendations for Research. It is recommended that when research continues to investigate giftedness accelerations in primary schools, researchers strongly consider the use of naturalistic ethnographies to build knowledge in this field. The research found positive associations between selections to acceleration options such as WAOs and continuing academic excellence upon return to classroom studies. However, the implications of the findings, when compared to data within the last 10 years (and certainly after the effects of COVID-19 school lockdowns internationally) suggest further naturalistic research would be welcome to verify whether gifted children continue to advance in class studies because of their WAO skillsets.

To address the bank of giftedness knowledge dominated by US and UK publications, it is further recommended Australian researchers continue to pursue WAOs which exist in the local context. This will instil confidence in Australian schools by providing data pertinent to local policies and school structures and generate global interest in WAOs with an 'Aussie flavour' reflecting the Australian and state curriculum models. Significant national policy declarations (Ministerial Council of Education Employment Training and Youth Affairs (MCEETYA), 2008) continues to encourage research into ways of supporting children with diverse learning needs, and providing avenues for their agency and voice in their educational journeys. These will invigorate researchers to add local finding to the global bank of knowledge of primary gifted experiences.

The use of case study research was a strength of this study and is recommended as an effective means to build evidence within this field. Furthermore, case studies using a Merriam-based strategy (for early-career researchers) or Stake-ian philosophy (for experienced researchers) are encouraged as the basis for qualitative, constructivist studies of gifted students in primary schools either through positivist or interpretivist styles. Additionally, the use of a scenario response task was beneficial to generate perspectives on facets of WAOs by removing a demand for personal information, and instead asking for impressions on a hypothetical situation. Perspectives were provided by way of comparisons with the fictional protagonist and delivered valuable data with which semi-scripted interview questions sought to elicit deeper observations, memories, reactions and other views.

Pedagogical Implications and Recommendations

Implications for Pedagogy. Of continuing interest to future research plans are the implications for the learning environments in which the gifted interact daily with teachers. Analysis of evidence from the participants in this investigation supports the view that teaching decisions were the most influential element on the perspectives of the gifted. Supporting studies of the teachers of

the gifted and government reports reviewed in Chapter 2, participants in this investigation noticed limited communications between teachers and WAO teachers, limited information about the selection process and tasks the narrow variety of learning options and support for their withdrawal and later re-integration into lessons negatively influenced their perspectives on WAOs.

Responses indicated the purpose for the WAO may be following what is termed the "principle of adding" rather than addressing "the principle of challenging" gifted children at the independent, not collective level (Juriševič & Žerak, 2019, p. 112). This view was supported by the discovery of the three perspectives from the responses that indicated schools could add value to WAOs by understanding and catering their learning characteristics with updated professional information. Participants acknowledged WAOs as a positive action by schools to meet gifted needs (i.e., the principle of adding), yet other actions before, during and after acceleration lessons did not fully realise the expectations of the majority of the group (i.e., the principle of challenging). This saw the generation of confusion experienced by the participants upon being selected and withdrawn, irregular communication on when WAOs occur in many instances, a lack of variety in learning options that typically saw teacher-selected worksheets chosen over offering student input and flexible learning options and support and interest in WAO experiences to reassure the gifted when confronted by ambivalent reactions.

The implication of this knowledge may see WAO students lose motivation to be connected with WAOs in schools, despite their overall positive perspective of this strategy. Recognising their teachers are ambivalent to their needs, gifted primary students will refrain from demonstrating their dominant skills to avoid WAO selection by teachers, and prevent the negative reactions of others by being withdrawn for WAOs. Gifted children can experience bullying, alienation or form the idea they do not receive additional attention and support as they are already academically advantaged byway of their giftedness (Coleman et al., 2015).

These circumstances would lead to the cancellation of WAOs due to falling numbers, with gifted students relying on the class teacher's differentiation strategies to cater to their needs. If our society wants students to be socially well-adjusted and emotionally healthy, we need teachers who understand, are empathetic and respond carefully to their needs. As gifted children demonstrate exceptional behaviours beyond the capabilities of most of their peers, they should be provided additional leeway to pursue their talents with guidance on *their* terms. I intend to consider this insight as another potential post-doctoral research pathway, to document how the findings of the perspectives shared by the WAO students are perceived by their classroom teachers and WAO teachers.

Recommendations for Pedagogy. An overarching recommendation supports further investment by primary schools, and particularly by teachers of the gifted to review and strengthen knowledge of current and emerging pedagogy supporting gifted students. Crucially, the findings indicate teachers should urgently and consistently review their knowledge of Standards 1 and 5 of the Australian Professional Standards for Teachers (APST) to elevate their responsiveness to confusions, choices and ambivalences detailed in the perspectives of the participants. It is recommended that teachers continue to update their training to structure social and emotional supports for gifted primary students in withdrawal settings and during regular classroom activities with non-gifted peers.

Findings in this investigation indicated WAO students acknowledged confusion and the reactions of other people before being withdrawn, impacting their perspectives of their selection to the WAO. Teachers must build and maintain a classroom culture of active interest in the social, emotional and academic growth of all students and are trained to respond to the diverse learning needs of inclusive classrooms. Schools are responsible for maintaining the professional development of their teachers explained in Chapter 1, and it is further recommended school principals insist and audit teachers of the gifted. Both classroom and WAO teachers should undertake annual in-servicing using government-endorsed gifted and talented advocacy groups in areas of identification, task design and behaviour management. These groups were mentioned in Chapter 3 (*Inclusion criteria*) and feature on all Australian federal, state and territorial government websites promoting giftedness education policies.

Next, primary school reporting of WAO achievements should be made against higher curriculum levels as a requirement for this program in schools. WAO students engage with activities based on higher academic benchmarks that aim to optimise their exceptional development and thus require an assessment reflecting their progress against those benchmarks. Evidence in this study showed WAO tasks often did not challenge participants at their level of ability, had not tested the knowledge of WAO students consistently and provided generic tasks to whole groups, rather than provide tailored tasks to gifted students. The high frequency of group worksheets in WAO lessons and infrequent provision of self-directed student tasks by WAO teachers recorded in the questionnaire data supports these views.

Acceleration activities should require complex critical thinking and creative solutions to key issues many years ahead of the WAO student's class/grade level and replace generic worksheet tasks that homogenise and regulate tasks for class groups, not individuals. These actions will reinforce school and WAO teacher accountability for the quality and regular provision of appropriate challenges and would include the consideration of student input into designing WAO tasks. It is recommended

WAO teachers submit formal curriculum plans (term, semester and/or year) that account for the structuring of WAO units at all year levels and the pedagogies involved. This recommendation would support the views of students wanting consistent communication about the timetabling and task delivery in WAOs as well as presenting information regarding choices and informing classroom teachers of the WAO experiences this subgroup would be encountering when absent from their classroom.

Summary of the Implications and Recommendations

The following implications were elicited from the discussion of the data analysis (Chapters 4 and 5) and recommendations for their remediation were provided. The implications are especially relevant to the Australian educational context and several present significance for other national systems. These implications and recommendations were:

1. Australian schools are not supported by government policies that define a uniform measurement for intellectual giftedness nor a comprehensive strategy for withdrawing primary children for accelerated learning. The lack of an overarching national standard has limited research-supported approaches to catering the needs of the gifted in primary schools. This information is needed by teachers to update their pedagogical knowledge on differentiation and will provide certainty when selecting students and designing tasks for WAOs.

2. Established theoretical models do not consider the circumstances under which gifted primary children are withdrawn temporarily for acceleration, who are then returned to class lessons to incur the ambivalence of others to their circumstances. A new theoretical framework, based in Grounded Theory is required which informs teachers of this paradigm as new information presented in this study implies negative perspectives on WAOs by gifted primary students are partially derived from a lack of understanding by teachers for this type of acceleration intervention.

3. Australian research of acceleration strategies in primary schools has not kept pace with overseas studies. This resulted in limited understandings of Australian approaches to WAOs and restricts information schools in this country can use to deliver withdrawal acceleration programs. Renewed investment in case study research documenting the perspectives and experiences of gifted students in primary schools is recommended to underpin the structuring of WAOs in this country and stimulate wider understanding and use of WAOs globally.

4. Teachers of WAO students are not demonstrating industry-required standards for identifying and supporting the needs of gifted students in classrooms and withdrawal accelerations. Participants shared perspectives of confusion, ambivalence and concerns regarding agency and voice as a result of teachers not demonstrating a consistent approach to some Australian Professional Standards for Teaching. It is recommended that primary teachers of the gifted annually update their knowledge of differentiation practices broadly, and gifted interventions specifically and evidence this knowledge via curriculum plans and school reports.

A New Theoretical Framework

A deeper understanding of the perspectives on WAOs by gifted children was generated and led directly to the construction of an original, substantive theoretical explanation for this uncommon teaching strategy. The proposition was made that established educational models are not relevant when guiding aspects of optimised learning environments for gifted primary children.

A new theoretical framework, the Doorway model (of gifted perspectives in WAO situations) extends the framework of the Education Situation Quality model (2019), comprehensively adding to knowledge of optimal learning situations for gifted students. The new model showed gifted children attending a WAO experience a different set of circumstances that impact their perspectives on learning when compared to non-gifted primary children. Introduced in the Discussion chapter, the Doorway model maps occasions when gifted primary students indicated they experienced confusion, the ambivalence of peers, teachers and parents and questioned the choices provided to them during WAO lessons. Moreover, teachers and researchers can access this framework to continue studies into secondary gifted perspectives and the experiences of other children with learning difficulties who are withdrawn temporarily from classes. This will facilitate new knowledge of whether there are similarities in the perspectives and experiences of the gifted are shared with other ability and age groups.

Limitations on the Research Project

Three constraints limited the progress of the investigation. Some of the factors had multiple consequences on the sample group, instrumentation, and the theoretical underpinning for this research. In the following section, each will be defined, and the consequences explained.

Sample Size. The number of schools in the study (6) providing the participants was small. A larger pool of schools (15) was approached initially, but the criteria for their involvement with this investigation (Chapter 3 *Inclusion criteria*) was not met. A wider sample group may have

supplied additional perspectives and added themes to represent the experiences of primary school children in WAOs on a larger scale. An examination of the national schools'[5] database does not filter for acceleration and gifted options timetabled by schools, and this limited access to a larger sample group. It could not, therefore, be established which other primary schools nationally used WAOs, and this information could have explored whether the perspectives were common across state borders.

Instrumentation. A third limitation was that no commercial instrument could be located that featured a multi-stage process to gather questionnaire data to support the develop of interview questions for primary-aged children. Moreover, no qualitative instruments could be located featured a hypothetical scenario to elicit comparisons and differences with the participants' experiences. Consequently, I developed a multi-stage method of investigation that had not before appeared in the literature. Explained in Chapter 3, the instruments used in this study were not pilot-tested prior to their application with participants. This limited the validity and reliability of the strategy, and further testing and the refinement of questions may have uncovered additional themes to compare to the field literature.

COVID-19. The most significant limitation on this investigation was the delay in sequencing interviews as closely as possible to the questionnaire completion dates due to the COVID-19 schools' lockdown in Victoria between March 2020 and February 2021. What were planned to be short-term memories between the answers given to the questionnaire and to be discussed in the interviews weeks later were subsequently extended to months between the phases. The continuity of the observational pilot phase, the questionnaire and then the interviews, which was intended to be a process of a few weeks stretched for most students between 6 weeks and 3 months. This necessitated providing participants with a record of their questionnaire answers to stimulate interview discussions. In this way, steps to delimit the long delays maintained the integrity of the study and allowed participants to confirm, clarify or change their previous responses.

The second consequence was, as schools resorted to online learning practices during COVID-19 lockdowns in Victoria, WAO teachers limited the access available to the participants. This was not anticipated when schools were initially invited to participate in the study and routines with the WAO teachers were established for their non-attendance in interviews. It followed that in more than 75% of cases WAO teachers attended the online interviews. During these occasions, participating school

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[5] School-level data is accessed via the MySchool website at https://www.myschool.edu.au

leadership groups (it was reported) requested teachers attend online interviews. This may have limited the freedom of the students to reply freely, expansively and/or specifically.

The next section will discuss the value and contribution of the study and conclude the thesis by summarising the key findings in relation to the research aims and questions.

Conclusion to the Thesis

The findings indicate there are areas worthy of further research that impact the emotional, social, and intellectual progress of gifted primary school children chosen to attend withdrawal accelerations. A major finding was no established theoretical framework maps the emotional, social, and intellectual progressions of gifted primary students conclusively. This research project advocates the Doorway model of gifted perspectives in WAO situations as a significant contribution to knowledge of gifted primary school experiences in withdrawal accelerations. The Doorway model serves two purposes; to map the influences that shape the perspectives of gifted students in primary school WAOs, and provide information to schools on the types of perspectives reported by gifted students, and when they occur during withdrawal accelerations.

The Doorway model depicts a 6-stage system mapping when influences on the perspectives of gifted children in WAOs occurred. Each stage impacts a subsequent stage and respondents indicated the perspectives were influenced prior and after WAO lessons, a significant difference with other theoretical frameworks, further validating the importance of this investigation and the findings.

Analysis of the data and subsequent discussion resulted in a set of recommendations for primary schools developing WAOs. Wider policy and research implications recommended addressing policies, professional standards and research to widen this field further. Implications for the practices of class teachers selecting gifted students for accelerations and the WAO teachers providing these programs were discussed. The thesis advocates that schools implement the use of the Doorway model to gauge the perspectives of gifted children on aspects of Withdrawal Acceleration Options and raise awareness of school communities differentiation and withdrawal acceleration strategies to effect improved academic, affective and creative results for the gifted.

This research project was designed to document the perspectives of gifted primary students on a particular type of acceleration option administered in schools that is not widely examined in research. Withdrawal Acceleration Options are offered in several countries including Australia, yet limited research into the perspectives of primary gifted children hinders a comprehensive philosophical, policy and pedagogical understanding of this teaching strategy. The consequence of this obstructs

the development of successful WAO models which can be duplicated to benefit gifted primary students' potential.

Grounded Theory (Charmaz, 2000) methodology and Merriam's (2015) interpretive case study analysis technique were applied to the perspectives of 21 WAO students and led to the generation of three themes. These were:

1. The interpretation of participants regarding reasons and methods for student and task selection in acceleration programs in primary schools was portrayed as one of confusion

2. The interpretation of participants regarding the WAO process of selection, inclusion and programming was one of preferring to be involved in these choices

3. The interpretation of participants regarding the reactions of teachers and other students who were not attending the WAOs was one of ambivalence.

This research project improved knowledge of these perspectives, which as a group had not been understood by the literature on accelerations. Moreover, the perspectives provided the opportunity to add knowledge byway of a new theoretical framework that maps which and when influences on the perspectives of the gifted occur in withdrawal acceleration options in primary schools.

Despite schools developing options that withdraw gifted primary students for accelerated learning, questions remain that test the effectiveness of these options and how they are structured. State and federal policies do not prescribe how accelerations are developed nor how gifted students are selected for these programs. Furthermore, analysis of the responses in this investigation suggested that primary schools offering a method to differentiate specifically for the needs of gifted children do not focus on the specific learning needs and styles of the gifted children selected and this can be attributed to the limited policy, theory, and research support.

The findings of this investigation provided recommendations to shape the wider understanding and adoption of WAOs in primary schools from different government, university and school levels. If those recommendations can be realised, it can be argued that risks of the confusions, ambivalence and not including additional agency and voice to WAO students will be minimised and the inclusion of gifted primary students in Withdrawal Acceleration Options will be more likely to optimise their learning experiences.

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Appendices

Appendix A.

Human Research Ethics Committee approval, 2019-93H

ACU
AUSTRALIAN CATHOLIC UNIVERSITY

Australian Catholic University
Human Research Ethics Committee
Project Approval Certificate

Chief Investigator(s)/Supervisor(s):	Professor Amanda Telford
Co-Investigator(s):	Assoc. Prof. Mellita Jones
Student Researcher(s):	Mr Gavin Smith-Pill
Project title:	The Separated Accelerated: a study of the perceptions of gifted primary students attending withdrawal acceleration lessons in schools.
Project approval date:	09 August 2019
Project approval end date:	30 November 2011
Human Research Ethics Committee (HREC) Register Number:	2019-93H

This is to certify that the above application has been reviewed by the Australian Catholic University Human Research Ethics Committee (ACU HREC). The application has been approved for the period given above.

Continued approval of this research project is contingent upon the submission of an annual progress report which is due on/before each anniversary of the project approval. A final report is due upon completion of the project. A report proforma can be downloaded from the website (link below).

Researchers are responsible for ensuring that all conditions of approval are adhered to and that any modifications to the protocol, including changes to personnel, are approved prior to implementation. In addition, the ACU HREC must be notified of any reportable matters including, but not limited to, incidents, complaints and unexpected issues.

Researchers are also responsible for ensuring that they adhere to the requirements of the *National Statement on Ethical Conduct in Human Research,* the *Australian Code for the Responsible Conduct of Research* and the University's *Research Code of Conduct.*

Any queries relating to this application should be directed to the Research Ethics and Integrity Office (Res.Ethics@acu.edu.au).

Kind regards,

Tanya Quesnel

Research Ethics & Integrity Officer
On behalf of the ACU HREC Chair, Associate Professor Michael Baker

Research Ethics and Integrity | Research Services, Office of the Deputy Vice-Chancellor (Research)
Australian Catholic University
T: +61 2 9739 2646
E: Res.Ethics@acu.edu.au
W: ACU Research Ethics and Integrity

Appendix B.

Emailed communication to Melbourne gifted and talented network members,

13 August 2019.

Subject: *An invitation to participate in a doctoral investigation.*

Dear Gifted and Talented Network member,

An opportunity has been presented for schools in our network to volunteer to participate in a research project of gifted children developed by one of our group, Gavin Smith-Pill, Ed. D candidate at Australian Catholic University.

The proposal for this investigation is to document the perspectives, motivations and experiences of identified gifted primary students- those with a psychological giftedness diagnosis- that have been selected for acceleration lessons away from their regular classroom. For the purposes of this study these options are termed 'Withdrawal Accelerations'. There is no Australian qualitative research and very minimal international literature in this field examining these perceptions in these children's' own words. It is hoped further exploration via this study will further inform teachers in the ISV Gifted and Talented Network of the perceptions of gifted children, thereby potentially enriching teaching options to cater to their giftedness.

This investigation has received Ethics Approval at Australian Catholic University, and now an invitation is made to independent schools whose Principal functions as the Chief Executive of that school, in order to authorise consent for the study on school premises. If you have an interest in potentially hosting this investigation at your school, a detailed synopsis of the process and study abstract is available.

Kind regards,

G. Smith-Pill

Appendix C.

Participant Information Letter

13 August 2019.

PARTICIPANT INFORMATION LETTER

PROJECT TITLE: The Separated Accelerated APPLICATION NUMBER: (2019-93H)
PRINCIPAL INVESTIGATOR: Professor Tania Aspland STUDENT RESEARCHER: Gavin Smith-Pill
STUDENT'S DEGREE: Doctor of Education

Dear Participant,

You are invited to participate in the research project described below.

What is the project about?

The research project will investigate the perspectives of gifted children who are selected for additional learning experiences away from their classroom. The purpose of this research project is to document a deeper understanding of the perspectives gifted children hold regarding their selection to advanced learning groups, and the development of environments catering to their unique talent or 'gift'.

Who is undertaking the project?

This project is being conducted by Gavin Smith-Pill and will form the basis for the degree of Doctor of Education at Australian Catholic University under the supervision of Professor Tania Aspland. I have broad experience working with gifted children, and 30 years' experience teaching in primary and secondary schools.

Are there any risks associated with participating in this project?

There are no known or anticipated risks to participants in this study. Names of participating students will not appear in the thesis or reports resulting from this study, and students may choose to withdraw from the project at any time. Parents may ask to accompany their student during either the survey or interviews on the Parental Consent form.

What will I be asked to do?

After reading this letter, please examine the accompanying documents. You are asked to permit or deny your child's participation in the study, and return the consent slips to your Principal, class teacher or the teacher instructing your child in these specialised tasks or lessons. Under my supervision, students will complete an online survey, and then attend up to 3 interviews with me to clarify and extend their responses to the survey. The online survey consists of 30 questions to be completed on either a personal computer, laptop or tablet computer, or can be provided on paper.

The online questionnaire asks participants about memories, experiences and perspectives of occasions when they left the classroom to engage in additional learning experiences. These might be English, Mathematics or other lessons and tasks at a more difficult standard than compared to their regular classroom studies. These questions are either multiple choice or ask participants to rate a response out of 5 possible options. The location for the online questionnaires and subsequent interviews will be determined by your school Principal and will take place in a mutually convenient location.

How much time will the project take?

The online questionnaire will take up to 30 minutes for each student to complete, at times convenient to the class teacher. In the weeks following the questionnaire, participants will be invited to participate in up to 3 interviews to clarify and extend the questionnaire responses. Each interview will be limited to 45 minutes per student, per interview. Interview responses will be digitally recorded for later clarification.

How much time will the project take?

The online questionnaire will take up to 30 minutes for each student to complete, at times convenient to the class teacher. In the weeks following the questionnaire, participants will be invited to participate in up to 3 interviews to clarify and extend the questionnaire responses. Each interview will be limited to 45 minutes per student, per interview. Interview responses will be digitally recorded for later clarification.

What are the benefits of the research project?

The intended benefit of this study will help inform primary teachers' knowledge of gifted student perspectives when developing additional learning tasks or lessons away from the classroom. Only limited literature exists that describe the perspectives of accelerated tasks and lessons for gifted primary school children; this study intends to highlight the thoughts and motivations of gifted students in these situations and how they may be developed to benefit these children.

Can I withdraw from the study?

Participation in this study is completely voluntary. You are not under any obligation to allow your child to participate. If you agree to participate, you or your child can withdraw from the study at any time without adverse consequences.

Will anyone else know the results of the project?

The results of the study will be known only to the ACU research team. It is intended the results of this study will be published as a seminar to the World Council for Gifted and Talented Children in 2023, with that conference location still to be finalised. Student responses from the questionnaire and the interviews will only be identifiable to the research team during the data collection stage, with the confidentiality of participants protected by allocating individual codes to each student. Students will not be identified in the publication, either by name or code. All paper field notes and electronic data will be secured in a locked cabinet in Room 4.13, 232 Victoria Parade, East Melbourne and confidentially destroyed after five years by a secure disposal service at Australian Catholic University.

Will I be able to find out the results of the project?

A summary of the results will be made available to the Principal of your school prior to the beginning of the 2021 school year. As personal contact details for participants is not being collected, parents of participants will be encouraged to contact their Principal to request a copy of this summary.

Who do I contact if I have questions about the project?

If you have questions regarding this study or would like additional material to assist you making a decision to permit your child to participate in this research project, please contact me via the Principal's Office at your school or my email details below. You may also contact my Principal Supervisor, Professor Tania Aspland at Tania.Aspland@acu.edu.au.

What if I have a complaint or any concerns?

The study has been reviewed by the Human Research Ethics Committee at Australian Catholic University (review number 2019-93H). If you have any complaints or concerns about the conduct of the project, you may write to the Manager of the Human Research Ethics and Integrity Committee care of the Office of the Deputy Vice Chancellor (Research).

Manager, Ethics and Integrity

c/o Office of the Deputy Vice Chancellor (Research)

Australian Catholic University,

North Sydney Campus

PO Box 968

NORTH SYDNEY, NSW 2059 Ph.: 02 9739 2519

Fax: 02 9739 2870

Email: resethics.manager@acu.edu.au

Any complaint or concern will be treated in confidence and fully investigated. You will be informed of the outcome.

I want to participate! How do I sign up?

Attached to this letter is a parent and a separate student consent form to signify your permission allowing your child to participate in this study.

Upon reception of the parent AND student consent forms, the returned forms will be digitised and the form itself disposed securely to maintain your privacy.

Please return the form, either permitting your child to engage with this study or otherwise to your school's Principal, or via my email address below as soon as possible. Should your form not be returned within 14 days, it will be understood your consent has not been provided.

Yours sincerely,

Gavin Smith-Pill

Gavin.Smith-Pill@acu.edu.au

Higher Degree by Research Department

Australian Catholic University

Appendix D **Parent Information Letter and Consent Form**

Parental Consent form: An Offer to Participate in a Study

TITLE OF PROJECT: *The Separated Accelerated; a study of the perspectives of gifted primary students attending withdrawal acceleration options in schools.* An exploration of the experiences of gifted children who are selected for additional learning experiences away from their classroom

APPLICATION NUMBER: 2019-93H

INVESTIGATOR: Mr Gavin Smith-Pill, Ed.D. candidate, Australian Catholic University

I .... *(the parent/guardian of the participant)* have read and understood the information provided in the letter, *An Offer to Participate in a Study*. Any questions regarding the study I have asked were answered to my satisfaction. I agree to my child's participation in a questionnaire and up to 3 interviews, of no more than 45 minutes each and permit my child's responses to be digitally recorded. I realise that I can withdraw my consent at any time without adverse consequences. I understand I may request a schoolteacher to accompany my child during either stage of this study. I agree that research data collected for the study may be collected, stored securely by Australian Catholic University and published, or may be provided to other researchers in a form that does not identify me or my child in any way. I am aware I may retain a copy of this Consent Form, when completed, and the attached Information Sheet.

FULL NAME OF PARTICIPANT: ....

GRADE LEVEL: ....

NAME OF PRIMARY SCHOOL: ....

Parent/Guardian

SIGNATURE: .... DATE: ....

Thank you for your time.

G. Smith-Pill

Please return the original consent form to your Principal, GATE teacher or class teacher at the soonest convenience, or this letter may be emailed to Gavin.Smith-Pill@acu.edu.au .

Appendix E. **Student Information Letter and Assent Form**

Student Consent form: An Offer to Participate in a Study

TITLE OF PROJECT: *The Separated Accelerated; a study of the perspectives of gifted primary students attending withdrawal acceleration options in schools.* An exploration of the experiences of gifted children who are selected for additional learning experiences away from their classroom

APPLICATION NUMBER: 2019-93H

INVESTIGATOR: Mr Gavin Smith-Pill, Ed.D. candidate, Australian Catholic University

I .... *(the participant)* have read and understood the information provided in the letter, *An Offer to Participate in a Study*. Any questions I have asked were answered to my satisfaction. I agree to my participation in a questionnaire and up to 3 interviews, of no more than 45 minutes each and permit my responses to be digitally recorded. I realise that I can withdraw from any part of the study at any time without adverse consequences. I understand I can request a teacher to accompany me in either part of this study. I agree that research data collected for the study may be collected, stored securely by Australian Catholic University and published, or may be provided to other researchers in a form that does not identify me in any way. I am aware I may retain a copy of this Consent Form, when completed, and the attached Information Sheet.

FULL NAME OF PARTICIPANT: ....

GRADE LEVEL: ....

NAME OF SCHOOL: ....
Parent/Guardian/Class or GATE teacher

SIGNATURE: ....   DATE: ....

Thank you for your time.

G. Smith-Pill

Please return the original consent form to your Principal, GATE teacher or class teacher at the soonest convenience, or this letter may be emailed to Gavin.Smith-Pill@acu.edu.au .

Appendix F. **Principal Information Letter and Consent Form**

Principal's Consent form: An Offer to Participate in a Study

TITLE OF PROJECT: *The Separated Accelerated; a study of the perspectives of gifted primary students attending withdrawal acceleration options in schools.* An exploration of the experiences of gifted children who are selected for additional learning experiences away from their classroom

APPLICATION NUMBER: 2019-93H

INVESTIGATOR: Mr Gavin Smith-Pill, Ed.D. candidate, Australian Catholic University

I .... *(the Principal)* have read and understood the information provided in the letter, *An Offer to Participate in a Study.* Any questions I have asked were answered to my satisfaction. I agree to my participation and the participation of class teachers and students identified with a psychological gifted and talented diagnosis, selected by teachers in a questionnaire and up to 3 interviews, of no more than 45 minutes each and permit student responses to be digitally recorded. I realise that I can withdraw my consent from any part of the study at any time without adverse consequences to students, staff and this school. I agree that research data collected for the study may be collected, stored securely by Australian Catholic University and published, or may be provided to other researchers in a form that does not identify the students, staff and this school in any way. I am aware I may retain a copy of this Consent Form, when completed, and the attached Information Sheet.

PRINCIPAL'S NAME: ....

NAME OF SCHOOL: ....

SIGNATURE: .... DATE: ....

Thank you for your time.

G. Smith-Pill

Please return this consent form to the researcher at the soonest convenience, emailed to Gavin.Smith-Pill@acu.edu.au

Appendix G. **Profiles of the Gifted and Talented (Betts & Neihart, 2010)**

PROFILES OF THE GIFTED & TALENTED

	FEELINGS AND ATTITUDES	BEHAVIORS	NEEDS	ADULTS & PEERS PERCEPTIONS OF TYPE	IDENTIFICATION	HOME SUPPORT	SCHOOL SUPPORT
TYPE I: Successful	• Boredom • Dependent • Positive self-concept • Anxious • Guilty about failure • Extrinsic motivation • Responsible for others • Diminish feelings of self and rights to their emotion • Self critical • Works for the grade	• High Achiever • Seeks teacher approval and structure • Risk Avoidant • Accepts & conforms • Dependent • Chooses safe activities • Gets good grades • Consumers of knowledge	• To see deficiencies • To be challenged • To take risks • Assertiveness skills • Autonomy • Help with boredom • Development of creativity • Higher level study skills • Self knowledge	• Loved by teachers • Admired by peers • Loved & accepted by parents • Overestimate abilities • Will make it on their own • Overestimate their successes • Works the system and plays the game	• Grade point average • Achievement Test • IQ Tests • Teacher nominations • Performance in areas of talent • Peer nominations	• Parents need to let go • Independence • Ownership of self • Freedom to make choices • Time for personal interests • Risk taking experiences • Allow child to be distressed • Affirm child's ability to cope with challenges • Active family member	• Subject & grade acceleration, concurrent enrollment • Need more than AP, IB, & Honors • Time for personal interests • Push out of comfort zone • Opportunities to be with varied and diverse peers • Development of independent learning skills • In-depth studies at edge of competence • Mentorships to learn other systems • Cognitive coaching
TYPE II: Challenging	• Highly creative • Boredom • Frustration • Fluctuating self-esteem • Impatient • Defensive • Heightened sensitivity • Uncertain about social roles • Intellectually & emotionally independent • Idealistic • More vulnerable psychologically • Want to right the wrongs • Less group oriented • Doesn't work for grade	• Always seeks the edge • Corrects teacher • Questions rules, policies • Is honest, direct • Has mood swings • Demonstrates inconsistent work habits • Has poor self control • Is creative • Persevering in area of interest • Prefers highly active & questioning approach • Stands up for convictions • Is competitive • More conflicts with peers	• To be connected with others • To learn tact, flexibility, self-awareness, self-control, acceptance • Support for creativity • Contractual systems • Less pressure to conform • Interpersonal skills to affirm others	• Find them irritating • Rebellious • Engaged in power struggle • See them as creative • Discipline problem • Peers see them as entertaining • Want to change them • Don't view as gifted • Underestimate their success • Want them to conform	• Peer recommendations • Modified parent nomination • Interviews • Performance in areas of talent • Recommendation from a significant, non-related adult • Creativity testing • Teacher advocate	• Respect for their goals • Acceptance and understanding • Allow them to pursue interest • Advocate for them at school • Modeling appropriate behavior • Family projects • Communicate confidence in their abilities • Affirm their strengths • Recognize psychological vulnerability and intervene when necessary	• Tolerance • Dual enrollment • Placement with appropriate teacher • Direct and clear communication with child • Give permission for feelings • More open ended in-depth studies • Mentorships that enhance resilience • Build self-esteem through mastery experiences • Recognize psychological vulnerability & intervene when necessary • Direct instruction in interpersonal skills to affirm others
TYPE III: Underground	• Conflicted • Unsure • Pressured • Confused • Guilty • Insecure • Wants to belong socially • Diminished feelings of self and rights to their emotions • Ambivalent about achievement • Work to belong • Internalizes & personalizes societal ambiguities & conflicts	• Denies talent • Drops out of G/T and advanced classes • Resists challenges • Changes friends	• Freedom to make choices • To be aware of conflicts • Awareness of feelings • Support to abilities • Involvement with gifted peers • Self-acceptance & understanding • An audience to listen to what they have to say (to be heard)	• Viewed as leaders or unrecognized • Seen as average and successful • Perceived to be compliant • Seen as quiet/shy • Adults see them as unwilling to risk • Viewed as resistive	• Gifted peer nomination • Home nomination • Community nomination • Achievement testing • IQ tests • Performance • Teacher advocate • Nonverbal tests of intelligence • Discover assessment	• Cultural brokering • Acceptance of underground • Provide college & career planning experiences • Time to be with same age peers • Provide gifted role models • Model life-long learning • Give freedom to make choice • Normalize the experience • Don't compare with siblings • Multicultural appreciation	• Frame the concepts as societal phenomena • Recognize & properly place • Give permission to take time out from G/T classes • Provide role models • Continue to give college and career information • Open discussions about classism, racism, sexism • Cultural Brokering • Stress hard work & perseverance over talent development & ability • Direct instruction of social skills need for leadership across contexts • Address their goals • Teach the hidden curriculum

PROFILES OF THE GIFTED & TALENTED (continued)

	FEELINGS AND ATTITUDES	BEHAVIORS	NEEDS	ADULTS & PEERS PERCEPTIONS OF TYPE	IDENTIFICATION	HOME SUPPORT	SCHOOL SUPPORT
TYPE IV: At Risk	• Resentful • Fearless • Angry • Depressed • Explosive • Poor self-concept • Defensive • Burn-out • Isolated • Unaccepted • Resistive to authority • Doesn't work for the grade	• Will work for the relationship • Has intermittent attendance • Doesn't complete tasks • Pursues outside interests • "Spaced out" in class • Is self abusive • Isolates self • Is creative • Criticizes self & others • Does inconsistent work • Is disruptive, acts out • Seems average or below • Is defensive • Power struggles with authorities	• An "alternative" environment • An individualized program • Intense support • Alternatives (separate, new opportunities) • Counseling (individual, group, and family) • Remedial help with skills • Direction and short term goals • Accountability and confrontation	• Adults are angry with them • Peers are judgmental • Seen as loners, dropouts, dopers, or air heads • Rejected and ridiculed • Seen as dangerous and rebellious • May be afraid of them • Viewed as losers	• Review cumulative folder • Interview earlier teacher • Discrepancy between IQ and demonstrated achievement • Incongruities and inconsistencies in performance • Creativity testing • Gifted peer recommendation • Demonstrated performance in non-school areas	• Allow child to continue in extracurricular activities • Assess for dangerousness • Keep dialogue open • Seek counseling for family • Explore family roles • Hold child accountable • Avoid punishment • Drug screen regularly • Focus on maintaining privileges & monitor progress toward goals • Communicate confidence in ability to overcome obstacles • Preserve relationship • Avoid strategies that make things worse	• Don't lower expectations • Long term support group • Diagnostic testing • Group counseling for young students • Nontraditional study skills • In-depth studies • Monitor self harm • Mentorships • Alternative out of classroom learning experiences • G.E.D. • Academic coaching • Home visits – assess for dangerousness • Discuss broad post secondary options • Promote resilience
TYPE V: Twice/Multi-exceptional	• Learned helplessness • Intense frustration and anger • Feeling of inferiority • Unaware • Work to hang on • Poor academic self-concept • Don't view themselves as successful • Lack of self-confidence • Don't know where they belong	• Make connections easily • Demonstrates inconsistent work • Seems average or below • May be disruptive or off task • Good problem solver • Strong conceptual thinkers • Enjoy novelty & complexity • Disorganized • Slow in performance	• Emphasis on strengths • Coping skills • G/T support group • Counseling • Skill development • Monitoring for additional disorders- especially ADHD • To learn to persevere • Environment that values & develops strengths	• Seen as a hassle because of accommodation • Seen as "weird" • Underestimate their potential • Viewed as helpless • Avoided by peers & teachers • Seen as not belonging in the gifted program • Perceived to require a great deal of supervision & imposed structure • Seen only for the disability	• Significant scatter across subtests on WISC or WAIS • Recommendation of significant others • Recommendation from informed special ed. teacher • Performance Interview • Teacher advocate	• Develop will to succeed • Recognize gifted abilities • Challenge them • Provide risk-taking opportunities • Focus developing talent • Assume college is a possibility • Advocate for child at school • Do family projects • Seek counseling for family • Nurture self control • Teach how to set and reach realistic goals • Affirm abilities	• Focus on developing talent & not on remediating deficits • Placement in gifted program • Provide technological aids, role models, and support • Provide alternative learning • Provide experience & expectations that reflect college expectations • Begin investigations and explorations • Develop social skills • Give time to be with peers • Give individual counseling • Teach compensation strategies • Teach self advocacy in Junior High • Teach how to set and reach realistic goals
TYPE VI: Autonomous	• Self confident • Self accepting • Enthusiastic • Accepted by others • Supported • Desire to know & learn • Willing to fail • Intrinsic motivation • Accepts others • Empowered • Work for personal satisfaction	• Has appropriate social skills • Works independently • Develops own short term& long term goals • Follows through • Works without approval • Follows strong areas of passion • Creative & critical thinkers • Stands up for convictions • Takes risks & develops alternatives • Resilient • Willing to work at the edge of their competence • Can play the game, when necessary • Producers of knowledge • Deep understanding of self • Seeks to better the world • Passion learners	• Advocacy for new directions & increasing independence • Feedback about strengths and possibilities • Facilitation for continuing growth • Support for risks	• Accepted by adults • Admired for abilities • Seen as capable and responsible by parents • Positive influences • Successful in diverse environment • Psychologically healthy • Positive peer relationships • Accurately estimate their successes	• Demonstrated performance in talent areas • Products • Interviews • Teacher/Peer/Parent/ Self nominations • Portfolios • Standardized tests	• Advocates for child at school and in community • Provide opportunities related to passions • Allow friends of all ages • Remove time and space restrictions • Do family projects • Include child in parent's passion • Stay out of their way	• Allow development of long-term, integrated plan of study • Remove time and space restrictions • Multiple, related in-depth studies • Mentorships at professional level • Wide variety of accelerated options • Waive traditional school policies and regulations • Stay out of their way

Appendix H. **Accessing the Questionnaire**.

The Separated Accelerated
Gavin Smith-Pill

Accessing the survey:

A quick and simple url to share

This is the quickest way to send out your survey but remember to ask people to identify themselves if you need to link the responses to an individual.

https://kwiksurveys.com/s/oYIa0DgC

Use custom domain

Quick share to social sites...

Grab a QR code for printing

Right click the QR code(left) to download it, then place it on your printed documents/stationary to allow smartphone users to scan and open your form without typing.

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