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# Teachers' perspectives on the identification of, and provisions for, gifted and talented English as an additional language students

This thesis is presented in partial fulfilment of the degree of Master of Education

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School of Education

#### **ABSTRACT**

In recent years, Western Australian State schools have seen a sharp rise in the number of students who use English as an Additional Language (EAL). Almost one-third of them have been identified as having culturally and linguistically diverse ancestry (Australian Bureau of Statistics, 2016). Many are gifted and talented (GT). However, while it has been widely acknowledged that GT abilities can be found in all ethnic, cultural, and linguistic groups, barriers such as socioeconomic circumstances, stereotypes, political climate, language backgrounds and a myriad of factors can influence the recognition, identification and full participation of EAL students in gifted and talented programs.

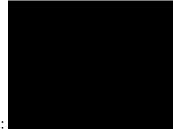
Teachers, often the 'gate keepers' for gifted services and special programs, play a critical role in the early identification of these students. Their perspectives may be influenced by their beliefs, attitudes, values, professional knowledge and experiences. This study therefore investigated teachers' perspectives on the identification of, and provisions for, GT/EAL students in the WA State school context through the theoretical lens of social constructivism. This constructivist perspective contextualised the teachers' social and cultural experiences and provided greater understanding of the circumstances that influence the identification process and the barriers that may prevent the full participation of GT/EAL students in gifted programs. An explanatory mixed methods design was used to collect both quantitative and qualitative data. Quantitative data were collected via an online survey, completed by that 50 primary school teachers in the Perth metropolitan area while qualitative data were collected from semi-structured interviews with 15 teachers. The interviewees were representative of the mainstream, the Intensive English Centres and the Early Years Extension teachers. However, none of the teachers were qualified in both gifted and EAL education.

Teachers in this study had a wide range of understandings and perspectives of giftedness and talent. They used both quantitative and qualitative data to identify GT/EAL students, but their choice of instruments varied widely. Provisions for these students were mostly academic extension activities within the classroom, rather than full-time programs. Teachers identified several internal and external barriers to both identification of, and provision for, GT/EAL students. Understanding their perspectives is a crucial step to bring about change and helping improve opportunities for GT/EAL learners to develop to their full potential. The results of the study may influence policy decisions regarding services for gifted and talented EAL students in Western Australian primary schools.

#### **DECLARATION**

I certify that this thesis does not to the best of my knowledge and belief:

- i. incorporate without acknowledgement any material previously submitted for a degree or diploma in any institution of higher degree;
- ii. contain any material previously published or written by another person except where due reference is made in the text of this thesis;
- iii. contain any defamatory material.



Signed:

Date: <u>10<sup>th</sup> July 2019</u>

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#### **CHAPTER 1 - INTRODUCTION**

Talent development is a life-long process that begins when a child or adult gains access to a systematic program of activities and requires the investment of time, psychological energy and money (Gagné, 2018). Individuals who are born with natural abilities or gifts, in any field of human activity, are more likely to acquire new competencies with ease and speed in learning (Gagné, 2018).

For clarity, the differentiating Model of Giftedness and Talent (DMGT) by Françoys Gagné (2018) will be used as the theoretical framework for this study. In the DMGT framework:

Giftedness designates the possession and use of biologically anchored and informally developed outstanding natural abilities or aptitudes (e.g. gifts), in at least one ability domain, to the degree that places an individual at least among the top 10% of age peers.

Talent designates the outstanding mastery of systematically developed competencies (knowledge or skills) in at least one field of human activity to the degree that places an individual among the top 10% of learning peers (those who having accumulated a similar amount of learning time from either current or past training) (Gagné, 2018 p.165).

Gagné's DMGT model (2018) defines giftedness as outstanding potential rather than outstanding performance. It also recognises the dilemma of the underachieving gifted child and advocates that through carefully planned, research based early intervention, schools can provide the facilitative environment to develop potential talent. Conversely, the absence of support or early interventions, can hinder the process of talent development.

#### The Context

According to the Australian Bureau of Statistics (ABS) 2016 Census, Western Australia (WA) enjoys the highest cultural and linguistic diversity in Australia. In the Greater Perth metropolitan area, 42.7% of the population were born overseas; 22.2 % speak a language other than English in the home (ABS, 2016) and more than 240 languages are spoken in WA (including Aboriginal languages). Since 2011, the number of Western

Australians who speak a language other than English at home has increased by 34.7% (ABS, 2016).

The diversity of the population is reflected in the schools in terms of English language competency, immigration status, social, cultural and linguistic backgrounds, life and educational experience (ABS, 2016; DETWA, 2011). As student populations become increasingly diverse, the educational system struggles with the challenge of implementing the best, systematic and equitable approach to meeting the needs of *all* students (Obi et al., 2014; Olszewski-Kubilius & Clarenbach, 2014), including those who are gifted and potentially talented, and from English as an Additional language (EAL) backgrounds. The literature suggests that finding the optimal match between the diverse needs of gifted and talented GT/EAL students and provision of high-quality curriculum and instruction is an extremely complex process (Harris, Rapp, Martínez, & Plucker, 2007) and cannot be fixed with a silver bullet (Callahan, 2005). The complexity is compounded by: a plethora of definitions of giftedness and talent (Sternberg & Davidson, 2005); numerous approaches to talent development (Rogers, 2007); and widely ranging views on how best to prepare teachers to meet these new challenges (Geake & Gross, 2008).

The purpose of this study is to investigate teachers' perspectives on the identification of, and provision for, GT/EAL students in the Perth metropolitan state schools in WA. Investigating multiple perspectives was a critical step in understanding possible challenges and issues teachers face when identifying gifted and talented EAL students for gifted programs and services. The findings may influence policy decisions to improve services for GT/EAL students.

#### The Problem

As a mainstream teacher, former specialist EALD (English as an Additional language/Dialect) teacher and gifted education coordinator, I share a growing concern with many of my colleagues: that insufficient resources are directed towards the needs of young children from EAL backgrounds, particularly for those with emerging gifts and talents. Although EAL support programs are available in the Intensive English Centres in Western Australia, these programs are intended for children with limited English language proficiency and who are at the very early stages of their English language acquisition. English language support services for these children are also restricted to the first two years of their formal schooling and strict eligibility criteria apply to those who are offered support. After two

years, these students are expected to have acquired enough English language skills to function in the mainstream schools with peers of a similar age. Once in the mainstream, support for their language needs is often withdrawn, severely limited or simply redirected due to funding constraints.

In 2014, because of funding cuts, the EAL specialist support programs across several state schools in the Perth metropolitan area were severely reduced or discontinued. Consequently, many EAL students currently do not have direct access to English language support from EAL specialist teachers. The assumption is that *all* mainstream teachers should be sufficiently equipped with the knowledge, skills and training to address the needs of all students, including EAL and gifted students. Additionally, while Australia presents itself as a multicultural country, there is limited research about gifted and talented English as an Additional language (EAL) students, how to identify them and provide for their needs in Australian schools (Blackburn, Cornish, & Smith, 2016). A review of the literature suggests information about gifted and talented EAL students are mostly from the United States.

Research suggests that EAL students may take seven to nine years to reach native speaker fluency (Cummins, 2000). Research also reveal that success in learning is inextricably linked to language development because language is not merely a means by which we demonstrate what we know but also the most important means by which we learn and refine our understanding of concepts (Burke, 1990). Hence, the level and effectiveness of assistance which EAL learners receive with their English Language development in the early years and throughout their schooling will affect not only the level of proficiency they attain in English but could also their conceptual development and learning in general (Burke, 1990). Consequently, inadequate support at the critical stage of language development may put some EAL learners at an educational disadvantage relative to their native English speaking peers because early learners of English are often faced with the dilemma of having to learn in the language that they are just learning to use (Burke, 1990). Against a tide of disadvantage, many of these students are successful and do excel compared to their peers (Castellano & Diaz, 2002; Tomlinson & Jarvis, 2014). These successes have been linked with a combination of successful practices, parents' educational involvement, positive attitude towards school and the quality of parent-child interactions regarding learning related behaviours (Rogers, Theule, Ryan, Adams, & Keating, 2009; Tomlinson & Jarvis, 2014).

Hence, key factors which influence the educational outcomes of EAL students includes both the school and home.

In the school context, sociodemographic and language related bias in teacher judgement regarding students' abilities have been widely acknowledged in the literature (Elhoweris, 2008). Teachers' perceptions of students' ability can have a powerful influence on their educational experience and future opportunities (Geake & Gross, 2008). In a study to examine the effect of socioeconomic status (SES) on teachers' eligibility decisions, Elhoweris (2008) found that teachers were more likely to refer students who represented an upper-middle socioeconomic status than those from the low SES. In the U.S. schools were found to be generally not well prepared to deal with individuals, particularly those who are 'different' (Ford, Coleman, & Davis, 2014). In their longitudinal experimental study, Pit-ten Cate, Krolak-Schwerdt, and Glock (2016) found that teachers' accuracy of decisions about eligibility especially in relation to minority students, could be improved by an increased level of accountability. Accountability such as the use of appropriate identification procedures and provisions for the specific needs of these students. This study suggests that increased accountability measures may be a way of minimising decision bias. Nevertheless, research acknowledges that gifted EAL students have special needs and must be adequately provided for to minimise the risk of underachievement (Whitmore, 1980). So, the sensitivity of teachers to the issue of eligibility becomes even more critical.

In schools, it is a common practice to group students based on chronological age; however, research suggests that chronological age is not a reliable indicator of a student's academic ability and the common practice of grouping students by chronological age can provide the most restrictive environment for students with exceptionally high learning abilities (Gross, 2001). An Australian study surveying literacy in primary school students found a learning gap equivalent to five years between the top 10% and the bottom 10% (Coorey, 1998). Research also suggests that the span of achievements in mixed ability classes makes individualisation of instruction virtually impossible for the teacher, particularly in the absence of support.

For some GT/EAL students their needs may include special provisions for the development of English language competency in conjunction with gifted services. Most EAL learners will need some form of language support, particularly in the early stages of language acquisition, and this includes those who are gifted and talented (Siegle, Gubbins, O'Rourke,

et al., 2016). Research suggests that many gifted students are rapid learners (Johnsen, 2004) and are more likely to develop advanced language skills, provided they have access to appropriate intervention and support in the early years of their language acquisition (Baldwin, 2005). The common belief that gifted children do not need special help, because they will succeed anyway, is contradicted by research on underachievement and demotivation among gifted children (Montgomery, 2009). Research literature suggests these problems must be avoided because potentially GT/EAL learners are not immune to inadequate support in the educational system so the sensitivity of teachers, policy makers and parents becomes even more critical (Johnsen, 2012; VanTassel-Baska, 2007).

While special programs such as the Early Years Extension (EYE) program for junior primary and the Primary Extension and Challenge (PEAC) programs for middle and upper primary, are available, they are on a part-time basis and held outside school with no guarantee of continuation. According to Gagné (2015), best practice for talent development requires that programs are made available to gifted and talented students on a full-time basis and guaranteed of continuity.

In summary, without adequate and appropriate support, gifted and potentially EAL talented students are particularly at risk. The goal of the identification and access to a gifted program is not to produce fame or fortune on the world stage but simply to fulfil a special need for the development of potential talent. Provisions for GT/EAL students such as acceleration and challenging extension programs, ideally should be an essential part of everyday school curriculum (Gagné, 2018). Equally essential is the need for schools to reach out to parents of gifted children from all backgrounds. Research suggests that the home environment that parents provide can have a significant impact on academic motivation (Garn, Matthews, & Jolly, 2010). Not all parents are accustomed to working with the school educational system especially those who may be new to the system. Additionally, some parents of GT/EAL students may need additional support to meet the distinctive and often complex needs of their gifted children. Hence, appropriate support for GT/EAL students must include services for schools, teachers and parents.

#### The Rationale

A thorough search of the literature suggests that there is a serious gap in research on the identification of, and provisions for GT/EAL students in the Western Australian context. Jolly (2008) describes young gifted children as one of the most underserved groups in

education. The lack of empirical research evidence on the identification practices, and effectiveness of provisions for GT/EAL suggests that traditional beliefs and stereotypes may persist in schools. Research literature reveals that there are often opposing points of views relating to early identification and provision for the gifted and talented because of the complexity of the process (Callahan, 2005; Walsh, Kemp, Hodge, & Bowes, 2012).

Gifted and talented EAL students are not a homogeneous group. There are clearly substantial differences in learning status, rates and styles among individuals of any given age (Callahan, 2005; Ford, Grantham, & Whiting, 2008; Johnsen, 2004). However, regardless of language background, research suggests that early signs of giftedness can be observed in young children (Gagné, 2018; Gross, 1993) but concerns associated with reliability of identification procedures and the impact of early entrance to challenging curriculum have directed attention away from prioritising the needs of GT students (Gagné, 2007; Gross, 1993; Johnsen, 2004). Although early entrance to gifted provisions has never been popular (Gagné, 2018), early identification of exceptional performance and opportunity for growth is widely supported by the literature (Callahan & Hertberg-Davis, 2013; Gagné, 2018). After reviewing 68 studies of early entrance, Rogers (2007) concluded that there was enough conclusive evidence that early entrance to challenging curriculum may benefit most gifted children.

In order to recognise and identify GT/EAL students who require gifted services, teachers and parents need to be made aware of: the characteristics of GT/EAL children (VanTassel-Baska & Johnsen, 2007), the benefits of special provisions and the possible risk to these students if their special needs are not met (Inman & Kirchner, 2016; Olszewski-Kubilius, 2018). In WA, while there are special gifted programs for a few selected students, they are held outside the school sites and it is a part-time solution to a full-time requirement. Accelerated and challenging extension programs for all GT students should be an essential part of every school curriculum (Gagné, 2018). Research suggests several interrelated environmental factors can influence the manifestation of gifts and talent (Gagné, 2004, 2018; Sternberg, 2018a). Children provided with an appropriately enriched, facilitative environment in the home and school stand a far better chance of enhancing achievement and the development of talent than those who are denied such opportunities (Gagné, 2018; Siegle, Gubbins, O'Rourke, et al., 2016).

In the school context, a facilitative and supportive environment includes access to curricula, programs, or services in gifted and talented programs (Siegle, Gubbins, O'Rourke, et al., 2016), as well as effective teaching that is grounded on where the learner is, followed by presentation of learning opportunities that slightly exceed the level already mastered. Vygotsky (1978) called this 'target area' the zone of proximal development (ZPD). Research suggests that ignoring the exceptionality and outstanding achievements, however, can contribute to the achievement gap between those who have access to gifted services and those who do not (Gagné, 2005). In an analysis of a study on the magnitude of individual differences in academic achievement and the growth of students over their first nine years, Gagné (2005) found that within most grade levels, the range between the lowest and highest achievers exceeds the 8-year gap in knowledge between average 1st- and 9th-grade students, and that the achievement gap widens by about 145% between grades 1 and 9.

Gagné (2015) identified seven constituent elements judged essential to 'best' practices for academic talent development (ATD) programs. These include an enriched K-12 curriculum, systematic daily enrichment, full-time ability, grouping, customised/accelerated pacing, personal excellence goals, highly selective access and early introduction.

Tannenbaum (1983) emphasised that "enrichment for gifted is as much an educational imperative as is the 'common core' for the general school population" (p. 424). Gagné (2015) proposed four different types of enrichment, four Ds: Density, difficulty, depth and diversity. The research-based content and instructional modifications could include, for example, abstract concepts, complex contents, subject acceleration, sequence reorganisation and multidisciplinary themes (Gagné, 2018; VanTassel-Baska, 2010; Vialle & Rogers, 2009)

Maker and Schiever (1989) recommend that the curriculum for GT/EAL students should include the development of strengths as well as basic skills and abilities. Additionally, there needs to be a strong multicultural emphasis where differences are regarded as positive attributes. Finally, involvement of parents, the community and mentors may contribute to the successful outcomes of the program. Rogers (2007) suggests that "there is no single practice or panacea that will work in every school setting and with every gifted or talented learner" (p.382). Drawing on findings of a thorough and comprehensive synthesis of the research, covering instructional management options, instructional delivery techniques, and curriculum adaptation strategies, Rogers (2007) concludes that sometimes gifted students should be grouped for their learning and socialisation. At other times, they may need to move ahead in

some form when their learning outstrips the curriculum offered. Additionally, students should also have some opportunities to work independently to fully develop their demonstrated talents. Most importantly, Rogers (2007) added that a variety of options should be accessible for gifted students and selection should be based on what works best for them and the school community.

There is growing concern in the literature that gifted and talented educational programs are poorly adapted to the needs of EAL students and that many barriers may be preventing these students from being identified for gifted programs and services (Blackburn et al., 2016; Harris, Plucker, Rapp, & Martinez, 2009; Siegle, Gubbins, O'Rourke, et al., 2016). Consequently, GT/EAL students may be at risk of underachieving and not fulfilling their full potential (Szymanski & Shaff, 2013). The gap in the literature on the identification of, and provision for GT/EAL students in the Western Australian context provided the rationale for this study.

#### The Purpose

The purpose of this research was to explore teachers' perspectives on the identification of, and provisions for, gifted EAL students in Junior Primary classrooms (Years 1-3) in the Western Australian (WA) Metropolitan State Schools. In addition, the research investigated any perceived barriers to EAL learners' full participation in gifted and talented programs and services.

#### **The Research Questions**

- 1. What are WA teachers' perspectives of gifted and talented English as an Additional Language (GT/EAL) students?
- 2. How do teachers identify GT/EAL students?
- 3. What provisions are currently made for GT/EAL students?
- 4. What do teachers perceive as barriers that could prevent GT/EAL students from full participation in gifted programs?

#### The Potential Benefits of the Research

There are several potential benefits of this research. Firstly, the findings of the study will add to existing knowledge in the field of gifted education because there is very little research in this area and none in the WA context. Secondly, the findings may help to uncover some of the underlying issues, challenges and barriers that prevent gifted and talented EAL students from fully participating in gifted programs. Finally, there is potential for the outcomes of this research, if the recommendations are taken up by teachers and policy makers, to enhance the identification and teaching of this group of students. Hence, not only will the talent potential of these students be more effectively realised, society generally would benefit from increasing the talent pool of our future generation.

#### The Limitations of the Research

Despite rigorous attempts, the study attracted a relatively small sample size, therefore, the results cannot be generalised nor considered representative of schools in Western Australia. Due to time constraint, the study involved only state schools in the Perth metropolitan area with 30% or more of EAL students in the school population. Furthermore, teachers' participation was determined by their school principals. The combination of time constraint and limited access may have had an impact the sample size.

#### **Mitigation against Personal Bias**

To mitigate against any personal bias or interpretations, the researcher engaged in consultative process with her supervisors, a psychologist and field experts to discuss the interpretation, reliability and validity of the findings. The researcher also capitalised on her professional knowledge, training in both EAL and gifted education, four decades of personal and teaching experience with gifted and talented EAL students to help validate reliability, safeguard validity and inform the analysis and interpretation of data.

#### **CHAPTER 2 - LITERATURE REVIEW**

#### **Overview**

This literature review addresses four key areas related to teachers' perspectives on the identification of, and provisions for, gifted and talented English as an additional language (GT/EAL) students. The review begins by discussing gifted education in the context of the demographic changes in the primary school population in Western Australia (WA). This is followed by an investigation into the literature on the conceptual definitions of giftedness from a historical perspective and includes Gagné's (2018) most current integrative model of giftedness and talent (IMGT). Further, identification methods, as well as current practices in WA state schools, are outlined. Subsequently, provisions and programs for gifted and talented EAL students are reviewed.

The final section of this literature review discusses studies on some of the barriers to the development of talent among GT/EAL students. This section also provides an analysis of related studies on the research topic and identifies gaps in the literature on teachers' perspectives on the identification of, and provisions for, GT/EAL students. A thorough search of the literature revealed that studies on teachers' perspectives on the identification of, and provisions for, GT/EAL students in Australia are limited and that this mixed methods study is first of its kind to be conducted in WA. Consequently, the literature review draws on studies mainly in the United States. A summary of the literature review concludes the chapter.

#### **Demographic Changes in WA Schools**

This section discusses the demographic changes in the school population in Perth, WA, which provides the context of the study. According to the Australian Bureau of Statistics (ABS) 2016 Census, WA enjoys the highest cultural and linguistic diversity in Australia. In the Greater Perth metropolitan area, 42.7% of the population were born overseas and 22.2% speak a language other than English in the home (ABS, 2016). Additionally, more than 240 languages are spoken in WA (including Aboriginal languages). Since 2011, the number of Western Australians who speak a language other than English at home has increased by 34.7% (ABS, 2016).

The cultural, social, and linguistic diversity of the population is reflected in the student population in the schools. The population is diverse in terms of the level of English

competency and variety of English used; immigration status; social, cultural and linguistic backgrounds; socioeconomic levels and educational and life experiences (ABS, 2016; DETWA, 2011). As student population become increasingly diverse, the educational system struggles with how best to respond and educate EAL students with exceptional abilities, at the same time providing equitable educational opportunities to develop the talent potential of *all* students (Obi et al., 2014; Olszewski-Kubilius & Clarenbach, 2014). However, a review of the literature reveals that finding the optimal match between the diverse needs of GT/EAL students and provision of high-quality curriculum and instruction is an extremely complex process (Harris et al., 2007). The complexity is compounded by: a plethora of definitions of giftedness and talent (Sternberg & Davidson, 2005); numerous approaches to talent development (Rogers, 2007); and widely ranging views on the training teachers need (Geake & Gross, 2008) and a lack of research into GT/EAL students.

A review of the literature suggests that to effectively identify and adequately provide for the needs of all gifted and potentially talented students, there needs to be clarity of the definitions of giftedness and talent (Gagné, 2004, 2018). Clarity, according to Gagné (2018), means having a clear distinction in the use of the terms, *giftedness* (natural ability belonging to the top 10% of relevant reference group) and *talent* (systematically developed competencies that places an individual at least at the top 10% of learning peers). Borland (1989) supports the value of this distinction because it "allows for the building of a model that permits the operationalisation of the concepts" (p.23).

Secondly, research reveal that best practices for GT/EAL student, require an understanding of both the general/common attributes of giftedness (Frasier & Passow, 1994), as well as the unique characteristics of gifted students who may be different from "mainstream" culture. These differences could be the result of different educational experience, social, cultural and linguistic backgrounds (Ford et al., 2014; Obi et al., 2014). To provide culturally responsive pedagogy, research also reveal that teachers need formal training in both gifted education and multicultural education (Obi et al., 2014) as culturally competent teachers are more likely to be responsive to the needs of GT/EAL students (Davis & Moore, 2017; Ford, 2007). Thirdly, to ensure systemic and equitable approach, there needs to be appropriate and adequate allocation of resources and investment to support talent development (Gagné, 2018; Rogers, 2007; VanTassel-Baska, 2007). Hence, considering the complexity of interacting factors that can influence the effectiveness of the identification

process (Ford, 2014; McBee, 2006), research supports a more holistic multidimensional approach to determining learning potential in order to capitalise on talents and strengths (Siegle, Gubbins, O'Rourke, et al., 2016). Most importantly, Gagné (2018) advocates that the process for identifying and serving the needs of gifted and talented students should begin as early as possible to prevent them from losing opportunities for growth. He states, "postponement policy contradicts a fundamental law of individual differences in the development: precocity can manifest itself precociously" (p.178) by the age of three or four. Gagné (2018) cites the popularity of the Wechsler Preschool and Primary Scale of intelligence (Wechsler, 2003) as evidence that intellectual precocity can be found in very young children.

#### **Western Australian Context**

In Australia, all eight states and territory Departments of Education have developed policies addressing the needs of gifted and talented students. These policies include the definition of giftedness and talent, identification procedures, strategies for differentiating provisions and the type of programs that are available at the state level. In the 80s, the Department of Education in Western Australia introduced programs to service the needs of gifted and talent students in the primary and secondary school (Braggett & Moltzen, 2000). More recently, the Early Years Extension (EYE) program, which caters for the top 5% of junior primary students (ages 5-6), has been added to the service, currently in the North metropolitan area only. Students for the EYE programs are nominated by their teachers. The Primary Extension and Challenge (PEAC) program caters for the top 3% of students in the middle and primary years (ages 10-12). At the secondary level, the top 1.5% of students are offered places in designated schools with programs that cater for students with advanced intellectual needs. These schools also cater for high-ability students in 'non-academic' areas (e.g. music, dance/drama and languages). The PEAC Centres are located throughout WA and the PEAC program is intended to offer experiences to gifted students as part of their normal schooling. Most students are tested in Year 4 and, if they meet the relevant criteria, are selected to attend courses throughout the year. PEAC courses have proved popular with students, teachers and parents (Braggett & Moltzen, 2000).

The WA policy guidelines for gifted and talented students (DETWA, 2011, 2014) recommend that identification processes should: include a combination of objective and subjective approaches, as no single technique allows for accurate identification; be inclusive,

to ensure gifted and talented students from diverse backgrounds are not disadvantaged; be flexible and continuous, to allow for recognition of gifts and talent which may emerge at different stages of schooling; and begin early, to avoid patterns of underachievement in later years.

The Western Australian Department of Education (DETWA, 2011) inclusive education standards directorate states:

If possible, standardised cognitive assessment should be avoided for all culturally and linguistically diverse students during the first four years of a student's attempts to learn English formally' (Section 5.3 page 4).

Standardised assessment must be conducted in the student's dominant language. If, however, appropriate instruments are unavailable in the students' own language, it is critical that a range of informal assessments be conducted' (Section 5.3.3 page 5).

The Western Australian's inclusive policy and guidelines recognise that any assessments of English language learners need to be broad and holistic. Additionally, these guidelines caution against the use of inappropriate standardised assessments. The recommendation is to use both quantitative (objective) and qualitative (subjective) assessments to identify gifted and talented students (DETWA, 2011). However, the definition, identification of, and provisions for GT/EAL students is a complex, multifaceted complex process and will be discussed in the following sections.

#### **Definitions of Giftedness and Talent**

Clarity on the definition of both terms, *giftedness* and *talent*, is of special importance for two main reasons. Firstly, it defines the target population (Gagné, 1995, 2000) and secondly, it helps to operationalise identification practices, program developments and approaches to classroom teaching (Dai, 2018; Gagné, 2000, 2018; Olszewski-Kubilius, Subotnik, & Worrell, 2015). A review of the literature suggests that there are numerous conceptions and countless definitions of *giftedness* and *talent*, with little consensus among scholars today (Gagné, 2018; Renzulli, 2011; Sternberg & Kaufman, 2011). Sternberg and Davidson (2005), for example, found 16 different views of the nature of giftedness. Renzulli (2011) describes the plethora of definitions as a continuum from "conservative" to "liberal,"

based on the degree of restrictiveness used to determine eligibility for special programs and services.

#### **Conservative Definition**

On the conservative end of the spectrum is Lewis Terman's (1926) definition of giftedness, which assigns giftedness to "the top 1% level in general intellectual ability, as measured by the Stanford-Binet Intelligence Scale or a comparable instrument" (Terman, 1926 p. 43, cited in Renzulli, 2011). Terman created the Stanford-Binet Intelligence Scale to identify gifted students and proposed a classification system for use in schools, in which students who scored an Intelligence Quotient (IQ) of 135 or above were considered moderately gifted, above 150 exceptionally gifted and above 180 profoundly gifted (Sternberg & Kaufman, 2011). Terman's definition represents the traditional psychometric view of giftedness, which Renzulli (2011) describes as conservative and restrictive for two reasons. Firstly, it focused on academic performance to the exclusion of other non-academic areas such as music, art and leadership. Secondly, to be considered gifted, the level of performance was restricted to the top 1%, measured by intelligence tests (Renzulli, 2011). Despite much criticism about the inconsistencies and flaws of his longitudinal study of gifted children, Terman's (1926) study continues to influence research in the field of gifted education (Jolly, 2008).

#### Intelligence quotient (IQ) Test

IQ tests remain widely supported by proponents; for example, in a document signed by 52 experts in the study of intelligence, Gottfredson (1997) asserts that intelligence is measurable by IQ tests and that it is probably the single most reliable indicator of potential in educational, occupational, economic and social endeavours. Tannenbaum (2003) suggests that, "While intelligences are not the exclusive influence on capability in education, training and complex work, they are often the most important because general intelligence (g factor) is transferable or applicable from one task to another" (p.49-50). The IQ test continues to be widely used and remains in the top ten psychological instruments used today (Janzen, Obrzut, & Marusiak, 2004). Though there is general consensus that IQ tests are a good measure of intellectual ability, critics assert that they do not always reveal an individual's latent potential, especially when high ability and potential are masked by an individual's language and life experiences (Borland, 2009; Callahan & Hertberg-Davis, 2013; Kogan, 2001; Obi et al., 2014; Renzulli, Siegle, Reis, Gavin, & Reed, 2009; Sternberg & Kaufman, 2011)

Critics also claim that the restrictive nature of the IQ tests does not give a complete picture of the individual nor does it attract students from non-mainstream sections of the community who do not fit the traditional norm (Callahan & Hertberg-Davis, 2013; Kogan, 2001; Naglieri & Ford, 2003; Renzulli, 2011).

#### **Liberal Definition**

In recent years, the conceptions of giftedness and talent have broadened and expanded considerably to produce a more liberal definitions (Colangelo & Wood, 2015; Marland, 1971; Renzulli, 2011; Renzulli & Delcourt, 1986). Paul Witty (1958, cited in Renzulli 2011). Today, the concept of giftedness to includes outstanding potentialities in non-academic fields such as the arts and leadership as well as any "potentially valuable line of human activity that is consistently remarkable" (p.62, cited in Renzulli (2011). While Renzulli (2011) acknowledges the obvious advantage of expanding the conception of giftedness, he cautions against the subjective nature of "potentially valuable" because different societies often have different views on what is considered a valuable human activity.

The broadening of the definition can be seen in the Marland Report in the United States (1971), which defined gifted and talented children as those identified by professionally qualified persons, who by virtue of outstanding abilities are capable of high performance. Children capable of high performance included those who demonstrated achievement and/or potential ability in any of the following areas, singly or in combination: general intellectual ability, specific academic aptitude, creative or productive thinking, leadership ability, visual and performing arts and psychomotor ability (Marland, 1971).

In the liberal definition, giftedness is viewed as multidimensional by major theorists (Gardner, 1993a, 2000; Renzulli, 2011; Renzulli & Delcourt, 1986; Renzulli & Reis, 2014, 2018; Sternberg, 2018d; Sternberg & Davidson, 2005). Callahan (2005) supports the expansion of conceptions of giftedness and maintains that there are different forms of intelligences, particularly those offered by developmental psychologists, Howard Gardner's theory of Multiple intelligence (Gardner, 1993a, 2000) and Robert Sternberg's Triarchic Model of successful intelligence (Sternberg, 2018d; Sternberg & Davidson, 2005). However, Callahan (2005) argues against the use of high-stakes intelligence tests (IQ) as the sole indicator in identifying gifted students, especially where children have not had the opportunity to develop the necessary skills or the cultural experiences to perform well in intelligence tests.

Despite much criticisms and limitations, claims and counter claims, intelligence tests remain widely used but the general agreement is that IQ tests should be used in combination with multiple data, including non-intellectual traits such as task commitment and creativity (Renzulli & Reis, 2018). In addition, the conception of giftedness should consider the child's culture and primary language (Kogan, 2001). These views led to the broadened multidimensional definition of giftedness and talent (Gagné, 2018; Gardner, 2000; Kogan, 2001; Renzulli & Reis, 2018; Sternberg, 2018d).

#### **Contemporary Definition**

Contemporary definitions of giftedness include elements from both conservative and liberal definitions and have evolved from almost a century of research on the phenomena of *giftedness* and *talent*. Today, a result of an IQ test or a purely academic definition of giftedness is no longer acceptable as a single measure for giftedness and the growing popularity of the term *talent development* represents a major paradigmatic change in how *giftedness* and *talent* are viewed. Presently, major theorists in the field such as Gardner (2000), Renzulli and Reis (2018), Sternberg (2018a) and Gagné (2018) generally support the broader, multidimensional conception of giftedness. Indeed, the Gifted Child Paradigm has been replaced by the Talent Development Paradigm for the future of gifted education (Dai, 2015). This paradigm shift is based on the belief that all students have an important role in society and will develop to their full potential if provided with opportunities, resources, and support (Dai, 2015; Gagné, 2018; Renzulli, 1998; Tomlinson & Jarvis, 2014).

#### **Conceptions of Giftedness**

#### Renzulli's Three-Ring Conception of Giftedness

Renzulli's (1977) three-ring conception of giftedness, introduced more than four decades ago, is based on the notion that giftedness is developmental and multidimensional (Renzulli, 1977, 2011; Renzulli & Reis, 2014, 2018). The three-ring conception was designed as a definition that accompanies the Schoolwide Enrichment Model (SEM), which is supported by decades of research (Renzulli, 2004; Renzulli & Reis, 2014, 2018). The research has consistently demonstrated that persons who achieved recognition for their unique accomplishment possess a relatively well-defined set of three interlocking clusters of human traits: above average general ability, high level of task commitment and creativity. Renzulli and Reis (2018) considers "no single cluster makes giftedness" but rather, "each cluster plays an important

role in contributing to the display of gifted behaviors" (Renzulli & Reis, 2018 p.187). *Above-average* ability refers to the top 5% of potential and includes both general and specific ability in any given area measured by traditional intelligence tests; *task commitment* includes "perseverance, self-confidence and a belief in one's ability to carry out important work"; and *creativity* includes "novelty, curiosity, originality, ingenuity, flow and willingness to challenge convention and tradition" (Renzulli & Reis, 2018 p.187-189). Renzulli's concept of giftedness focuses on "how the most able students, access and use information" rather than "how well students accumulate, store and retrieve information" (Renzulli & Reis, 2018 p.197). Hence, the SEM model offers the types of educational services that provide students with the opportunities to develop their intellectual abilities, demonstrate their task commitment and achieve high levels of creativity. The goal of the SEM model is to increase the likelihood of creating individuals who make positive contributions to the world (Renzulli & Reis, 2018).

#### Howard Gardner's Theory of Multiple Intelligence

In 1984, Howard Gardner introduced the revolutionary theory of multiple intelligence (MI). In a more recent version, Gardner (2000) explains that there are different forms of intelligences, which include: verbal-linguistic, mathematical, spatial, musical, kinesthetic, interpersonal, intrapersonal, naturalist, spiritual and existential. At the theoretical level, Gardner (2000) believes that "all individuals cannot be profitably arrayed on a single intellectual dimension" (p.62). At the practical level, he suggests that "any uniform educational approach is likely to serve only a small percentage of children optimally" and therefore, "the educational curricula, pedagogy and assessment must take account of human differences" (p, 62). Gardner (2000) rejects single pen and paper testing and calls for multiple measures of performance observed in a variety of environmental contexts. The MI approach was demonstrated by the 10-year Spectrum Project, dedicated to developing an alternative assessment system for young children and featuring a classroom rich in opportunities to work with different materials. This Spectrum approach yielded information based on meaningful activities that allowed demonstration of strengths of several intelligences.

#### Robert Sternberg's Triarchic Model of Successful Intelligence

Like Gardner, Sternberg (Sternberg, 2007, 2018a, 2018d; Sternberg & Davidson, 2005; Sternberg, Jarvin, & Grigorenko, 2010) supports the multidimensional idea of intelligence. In Sternberg's theory of successful intelligence, intelligence is defined in terms of successful behaviour, referred to as the triarchic model of intelligence, which consists of three key aspects of intelligent behaviour –analytical, creative and practical. Sternberg (2018d) believes that what really matters is not the quantity of abilities, or what intelligence tests measure but rather how an individual is able to leverage the abilities to succeed in a task or environment. Hence, successful intelligence is about the ability to capitalise on one's strengths while compensating for one's weaknesses through a balance of analytical, creative, and practical abilities, in order to adapt, shape, and select environments (Sternberg, 2018a, 2018b). Additionally, gifted individuals are those who can do these things at a higher level than others (Sternberg & Davidson, 2005). More recently, Sternberg (2018a) expanded his theory of successful intelligence and proposed the augmented theory of successful intelligence, or WICS, which argues that successful intelligence includes wisdom, intelligence, and creativity synthesised. Sternberg (2018c) states that wisdom is an essential element for successful intelligence because, over the course of history, including today, not all gifted individuals have had the wisdom to make ethical decisions that impact on people's lives. In a recent article on the Active Concerned Citizenship and Ethical Leadership (ACCEL) model, Sternberg (2017) presented a compelling argument for a new model of giftedness, rejected the conservative, dichotomous view of giftedness (i.e., IQ); listed reasons why IQ tests may have lost their relevance in the current social, economic and political climate and proposed a clear rationale why schools should focus on developing active ethical leadership. Sternberg (2018a) proposes that schools should help "students learn to use their creative, analytical, practical, and wisdom-based and ethical skills to make a positive, meaningful, and enduring difference to the world" (p.17). The strength of Sternberg's models is the emphasis on the practical aspects of intellectual skills and their application in everyday life (Duchesne & McMaugh, 2016).

#### Gagné's Integrative Model of Talent Development (IMTD)

In 1985, Gagné introduced the differentiating model of giftedness and talent (DMGT), in which the concept of giftedness, potential, aptitude, and natural abilities is clearly separated from the concept of talent, performance, achievement, and systematically

developed abilities. Talents, according to Gagné (2018), progressively emerge from the transformation of outstanding natural abilities or gifts into well-trained and systematically developed competencies or talents. More recently, Gagné (2018) merged the DMGT model and his Talent Developmental model into the Integrated Model of Giftedness and Talent (IMGT; Gagné, 2013, 2018). In the IMTD Gagné (2018) explains that talent has a genetic origin, and through a combination of maturation process, various natural mental and physical abilities and environmental catalysts, progressively takes different forms of expression unique to the individual. For some individuals, the long and complex journey leads to top performance (10%) and for others it will not. In both the DMGT and IMGT models, Gagné (2018) distinguishes *giftedness* from *talent* as two different constructs:

"Giftedness is the possession and use of biologically anchored and informally developed outstanding natural abilities or aptitudes (e.g., gifts), in at least one ability domain, to the degree that it places an individual at least among the top 10% of age peers" (p.165).

"Talent is the outstanding mastery of systematically developed competencies (knowledge and skills) in at least one field of human activity to the degree that places an individual at least among the top 10% of learning peers (those having accumulated a similar amount of learning time from either current or past learning)" (p.165).

Gagné's (2018) IMGT model is intended to show that the potential for talent development is a "complex interaction of a diversity of causal factors, whose strength of influence changes not only over the course of the education trajectory, but also from individual to individual" (p.165). Gagné (2018) explains that talent, particularly academic talent has a biological foundation which acts as building blocks for talent development which begins from the embryonic stage. Talent develops through a complex interaction of four groups of behaviourally defined causal influences: outstanding natural abilities or gifts, a long-term talent developmental process, intrapersonal catalysts, and environmental catalytic influences. All children go through the same developmental stages and the only difference for gifted children is the "ease and speed with which they advance through the successive stages" (Gagné, 2018, p.170).

According to Gagné (2018), natural abilities (giftedness) appear spontaneously during the early years of childhood and can be observed when children learn to speak a language,

read or understand new mathematical concepts, and use problem-solving skills or produce original works of art, science and literature. While these natural abilities manifest themselves in all children in varying degrees, Gagné (2018) suggests that the label gifted should only be used when the level of expression is outstanding to a degree that places an individual at least among the top 10% (p.165) and in the school context, students who obtain grades within the top 10 per cent of their class may be labeled academically talented. Gagné (2018) identifies six natural ability domains: four of them belong to the mental realm (intellectual, creative, social and perceptual), and two belong to the physical realm (muscular and motor control). Gagné (2018) suggests that spontaneous abilities must have a genetic origin because they appear without evidence of systematic learning, training, or practices. However, he suggests that these natural abilities are not fixed entities immune from positive or negative environmental influences but that several factors such as geographical, demographic and sociological factors, as well as elements in the immediate home environment or neighborhood, can hinder or promote the transformation of high aptitudes into the welldeveloped talents. According to Gagné (2018), the theoretical definition of Academic Talent Development (ATD) within the IMGT framework "corresponds to progressive transformation through a long-term learning process of biologically anchored, informally developed, and mostly cognitive outstanding natural abilities (gifts) into equally outstanding systematically developed academic competencies (e.g., knowledge and skills-talents), thanks to constant moderating interactions with two large group of catalysts, intrapersonal characteristics and environmental influences" (p.172).

The Western Australian Department of Education has endorsed Gagné's DMGT model since 1994 and used it as the theoretical framework to guide policies regarding identification procedures and program development for gifted and talented students. To ensure optimum match between the needs of the gifted and potentially talented students and the curriculum, the recommendation is to use multiple criteria to identify students who need or who would benefit from gifted services. Students who have been identified may be offered either the Early Year Extension (EYE) program for those in Years 1 to 3 or the Primary Extension and Challenge (PEAC) programs for those in Years 4-6. These part-time withdrawal programs are intended to be part of the school curriculum and have been differentiated to serve the specific needs of gifted students. As current EYE and PEAC programs are offered only on a part-time basis, according to Tannenbaum's (1983) definition, they are "provisions" rather than "programs".

#### **The Identification Process**

In the school context, the first step in the identification process often begins with teachers, who are often required to nominate students for gifted and support services. However, studies on teacher nomination (Hunsaker, Finley, & Frank, 2016; McBee, Peters, & Miller, 2016) reveal that their effectiveness often depends on: firstly, training, concerning universal traits, aptitude, and behaviours that underlie giftedness regardless of students' backgrounds; and, secondly, the provision of research based nomination instruments to assist teachers to recognise manifestations of giftedness. Both conditions were found to be necessary in order for teachers to predict with increased accuracy which students were gifted and potentially talented (Hunsaker et al., 2016). Additionally, studies also reveal that limited understanding of the characteristics of GT/EAL students often results in fewer of these students being referred by teachers for gifted services (Moon & Brighton, 2008; Neumeister, Adams, Pierce, Cassady, & Dixon, 2007). In a mixed method study of primary teachers' conceptions of giftedness, Brighton and Moon (2008), for example, found that teachers in their study continues to hold traditional concepts of talent that shape how they view cultural minority students, non-native English speakers and children with other exceptionalities. Their study also revealed that teachers' beliefs influence the types of academic, social, and programmatic intervention offered to primary grade learners. Brighton and Moon (2008) suggest that teachers in their study often see 'deficit' before identifying the talents. Hence, studies reveal teachers need formal preparation (McBee, 2006; McBee et al., 2016) to help avoid bias in identification procedures; to understand how to adequately recognise the different manifestations of giftedness; and to appropriately serve all students, regardless of cultural backgrounds (Briggs, Reis, & Sullivan, 2008).

A review of the literature reveals that there are many issues concerning the education of high-potential EAL learners (Bernal, 2001; Ford, 1998; Ford et al., 2014) and many of these issues remain unresolved, despite long-standing recognition that gifted children can be found in all groups within society (Carman, 2011; Gagné, 2018; Marland, 1972). These issues include: educational, social and financial inequalities and inadequate resources in the home and/or lack of schooling that can impact on students' educational outcomes (Gonski, 2011). This study, therefore, aims to explore and understand some of the complexities and possible issues of identifying and providing for GT/EAL students from teachers' perspectives in the school context.

#### **Teacher Nominations**

Traditionally, entry into gifted programs and services begins with some method of screening of a target population. In the school context, teacher nomination is among the most common methods of identifying gifted students (Elhoweris, 2008; McBee, 2006; McBee et al., 2016; Worrell & Erwin, 2011) and continues to be the first stage of the screening process, even though reliance on teacher nomination has been found to severely penalise minority children (Frasier, 1989). Research on teachers' ability to recognise gifted and talented students are conflicting. In Australia, Hodge and Kemp (2006) found that teachers were only 57% successful in identifying gifted and talented students. However, in the US teachers were found to be reliable observers of student behaviour when they have been given good guidance and reasonable time to observe behaviour (Pfeiffer & Petscher, 2008; Renzulli, 2004; Renzulli et al., 2009). Generally, students who are not nominated by teachers will not be able to proceed in the identification process if teacher nomination is the only source of identification. However, teacher nomination may be just a part of the matrix used to identify gifted and talented students (Baldwin, 2005; Renzulli, 2004). To exemplify best practices, research recommends that nomination should be sought from multiple sources (Johnsen, 2004; Scott-Carrol, Osman, & Davis, 2009) . This could include nominations from community leaders, administrators, psychologists, parents, peers and others who have contact with the children outside the school to provide a more complete profile of the child (Johnsen, 2004).

As 'gatekeepers' to gifted programs and services, teachers have an indispensable role in the identification and education of young gifted and talented students (Callahan, 2005; McBee, 2006; Siegle, Gubbins, O'Rourke, et al., 2016; Szymanski & Shaff, 2013). Particularly in the junior primary school, teachers play a central role in the identification process because more formal instruments such as standardized testing are less likely to be used in the junior primary year level (Gross, 1993). While there have been many studies on teachers' nomination of gifted students (Brown et al., 2005; Lohman, Korb, & Lakin, 2008; Siegle, Gubbins, O'Rourke, et al., 2016), the accuracy of teachers' nomination has yet to be determined due to the insufficient state of research in this area (Gagné, 1994; McBee, 2006).

Early studies on teacher nomination seem to imply that teachers are not good at identifying gifted students. In an early study on the effectiveness and efficiency of teachers in screening gifted students, Pegnato and Birch (1959), for example, reported that teachers were

ineffective in identifying students with IQ scores above 130. Their widely acclaimed study formed the basis of a widespread belief that teachers are poor judges of student potential (McBee, 2006). Many studies (Ford, 1998; Kaya, 2015; Neumeister et al., 2007) have made similar claims. Neumeister et al. (2007), for example, found that even experienced teachers often hold a "narrow conception of giftedness" and are not aware "how culture and environmental factors may influence the expression of giftedness in minority and economically disadvantaged students" (p. 479). In their study to examine the perceptions of giftedness and identification procedures held by experienced teachers of gifted minorities, they also found that many teachers expressed concerns that a third of their students qualified for gifted programs despite having a skill deficit in one area, poor work habits and behavioural problems. This study suggests that giftedness can easily be overlooked or camouflaged if students fail to conform to traditional behavioural expectations in the school settings.

In 1994, Gagné challenged the view that teachers were ineffective by reexamining Pegnato and Birch's (1959) findings. Gagné (1994) found that teachers were as effective as other methods of identification for gifted students. Other researchers (Hodge & Kemp, 2006; Rohrer, 1995) similarly found that teachers were effective in identifying gifted and talented students. These studies also reveal that for teachers to accurately identify and refer students for identification procedures, they needed a well-developed conception of giftedness and firm understanding of the characteristics gifted students exhibit (Neumeister et al., 2007).

In a recent qualitative study, Kaya (2015) found that without a full understanding of the characteristics and special needs of gifted and talented students, teachers tend to rely on their own conception of giftedness; consequently, many minority students may be overlooked due to stereotypes and biases resulting in under referrals to gifted services. Similar findings were reported by Moon and Brighton (2008) and Neumeister et al. (2007).

Siegle and Powell's (2004) study found that general education teachers tended to rate both gifted and non-gifted students lower and recommended identification less frequently than specialist teachers. They attributed these differences to specialist teachers' tendency to identify and build on strengths and general education teachers to identify and remediate weaknesses. In the US, elements of teacher misconception and biases were revealed in several studies (Elhoweris, Mutua, Alsheikh, & Holloway, 2005; McBee et al., 2016; Pigott

& Cowen, 2000). Pigott and Cowen (2000), for example, found that teachers tended to judge white American children in a more favourable light than other groups of children. Studies also found that teachers can hold traditional beliefs surrounding giftedness and that these beliefs can influence the identification of gifted students from minority groups (Elhoweris et al., 2005; Ford, 2014; McBee et al., 2016; Pigott & Cowen, 2000).

Studies also reveal that teachers find it challenging to identify gifted students from culturally and linguistically diverse backgrounds because of their potentially lower verbal skills in English (Juntune, Kaya, & Ramos, 2011). The results of these studies suggest that while many teachers express a common belief that there are gifted students in all demographic groups, such as ethnic, socioeconomic, and gender groups, many may not actually have much knowledge about the emergence of giftedness in those different groups (Kaya, 2015).

#### Factors that influence teacher nomination

Reviews of the literature on teacher nominations have produced mixed results (Carman, 2011). Studies reveal that many teachers express beliefs about the multidimensional nature of giftedness and recognise the importance of identifying and supporting young gifted students. Studies also have shown that many remain unsure of how to apply these beliefs into practice or may feel unable to do so in the context of broader school requirements (Moon & Brighton, 2008).

To ensure that gifted and talented students are adequately identified and nurtured, VanTassel-Baska (2005) considers teacher standards for gifted education are essential and teacher quality is a 'non-negotiable' key factor in accurate identification of and quality provisions for gifted and talented students. Several empirical studies have shown that gifted education training can influence teachers' understanding of giftedness and attitudes to gifted education (Geake & Gross, 2008; Goodnough, 2001; Hansen & Feldhusen, 1994; Lassig, 2015; VanTassel-Baska, 2005).

In Australia, in a quantitative study on teachers' attitudes towards the gifted, Lassig (2015) found that teachers who received professional development had more favourable attitudes towards gifted students and gifted education. Conversely, in the absence of specific professional learning in gifted education, Kronborg and Plunkett (2013) suggest that teachers may not be equipped to understand, identify or provide for gifted learners, and consequently,

many of these learners may not receive the appropriate educational opportunities and may be at risk of underachievement.

In addition to gifted education training, studies reveal that teachers also need *cultural competence* in order to adequately identify giftedness among the increasingly diverse student population (Wilson, 2014; Cooper, Ha & Levin, 2011. *Cultural competence* is defined as a set of corresponding behaviours, attitudes, and policies that converge to allow professionals in a system to work in a multicultural setting (Wilson, 2014). Studies have also found that strong background, passion and interest in the subject; characteristics, personality and cognitive styles (Mills, 2003; VanTassel-Baska & Johnsen, 2007); and flexibility, creativity, self-assurance, and sensitivity to the needs of culturally different gifted children are critical factors that influence the effectiveness of the teacher (Gallagher, 2006).

#### **Parent Nominations**

Research has consistently shown that parents are significantly more successful than teachers in identifying giftedness in the early childhood years (Levy & Plucker, 2003). In a study of highly gifted young children, Gross (1993) found that parents can recognise their children's extraordinary ability from a very early age. In Gross's study, by the age of two, 90% of parents were able to recognise that not only was their child developmentally advanced but remarkably so. These parents cited high level of memory retention, unusual capacity for abstract thinking, intense curiosity, desire to learn and an advanced sense of humour and in some cases, spontaneous emergence of reading (Gross, 1993). Indeed, 90% of the gifted children in Gross' study were reading by the age of five; however, 30% of parents of these children were reported to be reluctant to tell the teachers or the school because they were afraid that they would be disbelieved. This suggest that teachers' attitude plays a significant part in the identification of gifted students (Gross, 1993; Gross, 1994). Nevertheless, Worrell and Erwin (2011) recommends the use of both parent and teacher nomination forms in the nomination phase of identification as early identification is without doubt critically important for effective placement in the early years of schooling. Numerous studies have shown that when gifted children are permitted early enrolment into kindergarten or school based on intellectual, academic and social readiness, they perform as well as if not better than their older peers (Walsh et al., 2012). Parents not only play a key role in the smooth transition from home to early school placement, but are also a valuable source of information for the construction of a portfolio of their child's work, activities and interests

which can serve as a record of his or her intellectual development (Smutny, Walker, & Meckstroth, 2007). However, to ensure reliability and validity, Ambrose and Machek (2015) recommend the use of a multi-method approach to identification of giftedness to avoid any shortcomings of the nomination forms.

### **Peer Nominations**

Peer nomination has been growing in popularity as a secondary source of information for screening gifted and potentially talented students (Gagné, 1989). Research suggests it can be as an effective assessment tool, along with others such as intelligence tests (Kaya & Delen, 2014). A review of several studies suggests that peers are extraordinarily good at nominating each other for gifted programs (Davis & Rimm, 1994). In a study to determine if the Reynolds Intellectual Assessment Scale (RIAS) scores, as standardised IQ scores, correlate with the children's judgments of their classmates' intelligence, Kaya (2013) found that gifted students in particular are better than their teachers in identifying gifted students, which may be due to familiarity with their peers in the classroom setting.

However, peer nomination instruments have received criticism for their lack of information on the reliability and validity factors. In a review of the literature, Gagné (1989) found that only thirteen studies had assessed the value of peer nominations and many had methodological weaknesses. Nevertheless, Gagné (1989) supports the use of peer nominations because the technique is quite easy to use in a classroom setting; the number of judges is large, usually over 20 or more; and the sources of information are promising, as they show that peers are able to evaluate their fellow peers for their abilities.

### Identification of GT/EAL Students

Identification of gifted English as an Additional Language (EAL/D) learners is one of the most complex elements in the implementation of gifted programs (Pierce et al., 2006). Traditional views of giftedness, characterised by high grades, high scores on standardised achievement and aptitude tests, and strong classroom performance (Briggs et al., 2008; Ford, Harris, Tyson, & Trotman, 2001; Harris et al., 2009), have received much criticism because they often fail to identify students whose gifts may be latent or newly emerging, such as English language learners (Baldwin, 2005; Ford et al., 2001). With the continued emphasis on high stakes, standardised tests and national testing, students who are developing their English language skills are clearly disadvantaged and even regarded as deficient if they fail to

achieve sufficiently high grades for selection into gifted programs (Baldwin, 2005). Even with the introduction of new theories of intelligences (Gardner, 1993a; Sternberg & Kaufman, 2011) and broadened conceptions of giftedness (Gagné, 2015; Renzulli, 2004), high stakes ability test scores continue to dominate the identification process for gifted programs, particularly in the United States (Brown et al., 2005), Britain (Cummins, 2000) and Australia (Angelo, 2013). If standardised tests in English form the only basis for identification (Stein, Hetzel, & Beck, 2012) then it is highly likely that gifted and potentially talented EAL students will be disadvantaged, overlooked and consequently underrepresented in gifted programs (McBee et al., 2016).

In the U.S., the National Association for Gifted Children (NAGC, 2011) developed a comprehensive identification system that recommends the use of multiple assessments as a measure of more equitable identification practices in order to increase program enrolment and retention. In its position statement, the NAGC (2010) outlines that multiple criteria assessment includes a combination of "qualitative and quantitative assessments from a variety of sources, off-level as needed, nonbiased, equitable, dynamic, and technically adequate for their purposes" (cited in Johnsen, 2012, p.2). The recommendations include allowing parents and guardians to access information about the assessment process in their native language. Recommendations also include the integration of the most effective strategies and models found in three fields: gifted education, multicultural education and bilingual education.

# **Methods of Assessment**

### Quantitative Assessments

Quantitative assessments use numbers to describe and understand an individual's strengths or other characteristics and they are much more controlled than qualitative instruments (Ryser, 2004). Miller (2007) identifies two types of quantitative measures: norm-referenced and criterion-referenced. Norm-referenced measures compare an individual's score to others who also took the test, otherwise known as the normative sample. Examples include standardised tests; rating scales; and achievement, aptitude, and intelligence tests (IQ). Criterion-referenced measures compare a person's performance to a specified content domain or exterior criterion.

The reliance on a single test score, such as standardised tests and intelligence tests (IQ) in English, for placement in gifted programs is considered inappropriate for students who are in the early stages of developing English language acquisition (Baldwin, 2005). Critics argue that these tests are biased against culturally and linguistically diverse populations (Ford et al., 2001; Holliday, 2015; Siegle, Gubbins, O'Rourke, et al., 2016). Intelligence tests (IQ), for example, are dependent on the student being able to read the instructions as opposed to receiving instruction orally from the examiner. The underlying assumption is that the student must be able to read in English in order to determine cognitive ability. Most English language standardised tests require students to have an age appropriate mastery of oral, writing, and/or reading skills in English (Callahan, 2005; Harris et al., 2009). Hence, research suggests that students who do not have the same amount of language exposure as the norming group could be disadvantaged (Callahan, 2005; Harris et al., 2009). Although several nonverbal tests exist, the literature reveals that extensive research on the validity and reliability of their use with the GT/EAL population has not been conducted (Harris et.al, 2009). While high-stake tests have been used for identification purposes, Jolly (2015b) cautioned that the unintended consequence of using high-stake standardised tests could impact negatively on students of all abilities, social, economic and cultural backgrounds. Research over 20 years propose the use of a multifaceted approach when to identifying gifted and potentially talented students particularly for students whose first language is not English. The use of both subjective and objective tools would provide different but complimentary information (Ambrose & Machek, 2015; Gross, Merrick, Chaffey, Macleod, & et al., 2005; NAGC, 2011).

### Biases in Standardised Tests

A review of the literature suggests that many critics (Baldwin, 2005; Ford et al., 2008; Siegle, Gubbins, O'Rourke, et al., 2016) are opposed to the use of standardised tests for identification purposes because of inherent biases against students from minority cultural, social and language backgrounds. Biases include: linguistic, communication, cognitive and educator bias.

- Linguistic bias occurs when test errors are due to EAL learners' limited English language proficiency and not to lack of knowledge.
- Communication bias occurs when the student responds to test items in a manner that is culturally different from the norm.

- ➤ Cognitive bias occurs when gifted students are identified using only standardised tests and it is not recognised that some cultural groups may not demonstrate their cognitive ability using traditional assessments (Harris, 2014).
- Educator bias results when the educators' preconceived ideas about what constitutes giftedness results in an inability to recognize indicators of giftedness in EAL learners (Briggs et al., 2008; Siegle & Powell, 2004).

### Qualitative Assessments

Qualitative Assessment is expressed in words; it is dynamic and offers the flexibility to provide information about students' learning and performance ability. It can take the form of either a restricted task that is limited in scope, such as writing on a given topic, or an extended task such as a self-selected short story on a selected topic (Ryser, 2004). Miller (2007) explains that there are three types of qualitative assessments: Performance-based assessments, interviews and observations.

Performance based assessments use direct learning that can be observed while students are engaging in presentation and productions. Performance based assessments can include product, process, or both (Maker, 1996; Miller, 2007). A portfolio, for example, can be used to provide a purposeful collection of students' work, efforts, progress or achievement in a given area and can be assessed using rubrics (Miller, 2007).

Interviews can be either structured or unstructured, with closed and open-ended questions respectively. At the elementary level, interviews can be used to determine learning, motivation and creativity. Miller (2007) predicts interviews holds promise in the field for gifted students, particularly for those from culturally diverse backgrounds, as valuable information may be uncovered which may not always be evident in classroom settings.

Observations allow professionals to gather information about students' behaviour from multiple informants (psychologists, teachers, parents, peers and community members). Observations can be made using rating scales and checklists of gifted characteristics exhibited over a period. Miller (2007) proposes that professionals and parents need to be trained to use the observation tools in order to understand validity issues (Miller, 2007; Olszewski-Kubilius & Thomson, 2015).

### Multiple and Non-traditional Assessments

The use of multiple criteria and non-traditional assessments is advocated for identification of giftedness, especially for GT/EAL students (DETWA, 2011; Callahan, 2005). In the US, the National Association for Gifted Children (2011) recommends that best practice requires the use of multiple criteria in assessment to help overcome bias which is inherent in both qualitative as well as quantitative assessments. Multiple criteria involve the use of formal and informal assessment instruments which must be fair, non-biased, equitable and technically adequate for the purpose they serve (Johnsen, 2004). A review of the literature suggests that multiple sources of data should also consider the student's cultural, social and linguistic background (Harris et al., 2009). In addition, effectiveness of the identification procedure can be increased if teachers are informed of alternative forms of assessment, such as non-verbal measures of cognitive and dynamic assessment instruments, which are considered culturally fairer and more equitable for EAL learners (Baldwin, 2005; Braggett & Moltzen, 2000; Johnsen, 2004; Naglieri & Ford, 2003; Pierce et al., 2006).

Many promising alternative instruments and dynamic procedures have been successfully used for identifying GT/EAL students; for example, DISCOVER performance-based assessment developed by Maker, Rogers and Nielson (1994) is based on the general framework of Gardner's (1983) theory of multiple intelligence and Maker's (1996) definition of giftedness. DISCOVER is an acronym that stands for Discovering Intellectual Strengths and Capabilities through Observation while allowing for varied Ethnic Responses (Sarouphim, 1999). The DISCOVER process is a performance-based assessment designed to identify gifted students from culturally diverse groups (Sarouphim, 1999). The process consists of five activities through which linguistic, logical-mathematical, and spatial intelligences are appraised. Studies conducted on the effectiveness of the DISCOVER assessment have yielded mostly positive results and revealed that the identification rates of gifted minority students were found to be higher using DISCOVER assessment compared with those of traditional, standardised tests (Sarouphim, 1999).

In the U.S., the Using Science, Talents, and Abilities to Recognise Students ~ Promoting Learning for Underrepresented Students (U-STARS~PLUS) is another form of dynamic assessment based on the culture of excellence within the school by supporting K-3 teachers in providing high quality integrated science instruction that helps them recognise and nurture the potential of children from diverse backgrounds (Coleman, 2016). The U-

STARS~PLUS approach was found to be particularly helpful in helping teachers address the needs of students with an increasing range of backgrounds and experiences. It addresses these educational challenges by creating a strength – based (versus a deficit) approach to the instruction of educationally vulnerable students, aimed at nurturing the high potential of young students. There are five components: *High-end learning opportunities* where children have access to meaningful learning and appropriately challenging learning experiences; *Systematic observations of students* using systematic and intentional observation folders; *Hands-on, inquiry based science*, which integrates the science curriculum in the learning environment to promote thinking skills; and family and school partnerships, in which families are actively engaged as an important support system. Coleman (2016) study using the U-STAR PLUS, involving 230 teachers from 25 schools, found that the method was effective in identifying gifted students from diverse backgrounds and had increased the participation rate of families in the students' education by 90%.

#### Non-verbal Assessment Instruments

There are several non-verbal assessment instruments which are considered appropriate for EAL students; these include:

- ➤ Raven's Coloured Progressive Matrices (for students younger than eight years). This test has been shown to demonstrate high reliability with students exposed to Australian culture for four years (Lewis, DeCamp-Fritson, Ramage, McFarland, & Archwamety, 2007).
- ➤ Universal Nonverbal Intelligence Test (UNIT) (1998). This test is administered using gestures rather than language (Lakin, 2012). This test was designed to be used with students with limited English language proficiency and deaf children.
- Leiter International Performance Scale-Revised (1997). This is a nonverbal test that emphasises fluid intelligence or the speed of the working memory (Hooper & Bell, 2006).

#### Verbal Assessment Instrument

➤ Stanford Verbal Ability Test (1998). This test measures English Language proficiency and combined overall verbal ability. It is available in English with equivalent versions in 18 other languages (cited in Janzen et al., 2004).

Harris (2014) proposes that non-verbal tests should be used as part of a more comprehensive identification process, which includes non-traditional, culturally sensitive procedures such as the DISCOVER assessment discussed earlier. In addition to teacher referrals, Lohman et al. (2008) similarly explain that the use of non-verbal tests would provide a level playing field for EAL learners, particularly if they are used in conjunction with multiple sources of information gathered from all school personnel (both teaching and non-teaching). Researchers claim that using nonverbal tests is fairer for linguistic minority children because they are less linguistically demanding thus minimising the linguistic obstacles (Lohman et al., 2008).

### **Summary**

Identification of GT/EAL students is considered a very complex process and is influenced by several factors. These include the identifiers' definition of *giftedness* and *talent*; the assessment methods and procedures; the appropriateness of identification instruments and teachers' knowledge, attitude and beliefs. Current government policies are available to guide identification practices but research suggests that many systemic barriers, including political and funding issues, are preventing exemplary practices from being fully implemented.

### **Provisions for Gifted Students**

The increasing amount of research in the field in recent years has generated renewed understandings of the needs of gifted and talented students. Today, the need for taking educational measures for gifted student students is recognised worldwide (Dai, 2015; Frydenberg & O'Mullane, 2000; éé, 2015, 2018; Harris et al., 2009; Sękowski & Łubianka, 2015). Gifted students need a curriculum set at a level, pace, and degree of abstraction and complexity which would be beyond the reach most of their classmates (Gagné, 2004). Schools with gifted programs across Europe, the United States, Australia and Asia are responding to this need. However, the development of talent is a complex process involving the interweaving of many factors (Bloom & Sosniak, 1985; Gagné, 2004, 2015, 2018). Research suggests that family situation; and institutional, individual, and intrapersonal forces all appear to shape individual talent development (Gagné, 2018; VanTassel-Baska & Olszewski-Kubilius, 1989).

Bloom and Sosniak (1985) study on the lives of 35 eminent individuals revealed that talent development is a life-long process influenced by many different variables at different stages of an individual's life. It begins with a nurturing and a supportive family; having the most effective teacher; and accessing the best educational opportunity to develop a passion for the talent area to the appropriate standard or level. Similarly, in a study on talent development of prodigies, Feldman (2003) observed that a supportive network, including parents, peers, teachers, and mentors who encouraged the prodigy, was prerequisite for talent development. Additionally, studies also reveal that early exposure and opportunity to develop talent is critically important for prodigious development (Gross, 1993; Morelock & Feldman, 2003).

Success and realization of talent, whatever the age, also involve internal characteristics of commitment to hard work, perseverance and a need for creative expression of talent (Gagné, 2004, 2015). Finally, a valuable part of the talent development is having the opportunity to demonstrate it through exhibition, performance or publication (VanTassel-Baska, 2005). Hence, how talent develops is credited to a combination of influences related to the home, school, special educational opportunities, training and personality variables that facilitate that process (VanTassel-Baska & Olszewski-Kubilius, 1989). The process of talent development in an individual may be slow and deliberate or quick and unexpected (VanTassel-Baska, 1995). Whatever forms it takes, there is consensus that gifted students need educational experiences in the form of effective programming, in order to develop their full potential (Hoekman, McCormick, & Gross, 1999). In the school context, the heart of effective programming for gifted students lies in the integration of advanced curricula with effective instructional strategies to develop gifted students' learning potential (Callahan, Moon, Oh, Azano, & Hailey, 2015). In the field of gifted education, there are many models that provide frameworks for curriculum and effective instructional strategies for gifted students (Kaplan, 2005; Maker, 2001; Renzulli & Reis, 2014; Tomlinson, 2001; VanTassel-Baska, 2010) but empirical evidence on the effectiveness of these models is still evolving (VanTassel-Baska & Brown, 2007).

#### **Curricular and Instructional Models**

Tomlinson's (2001) differentiated instruction, Renzulli's (1985) schoolwide enrichment models and Kaplan's model (2005) of depth and complexity of curriculum development articulate guidelines for both curricular and instructional modifications of the

curriculum through choice of content and skills to be offered to gifted students. Strategies include greater depth and complexity of ideas presented, greater abstraction of content, more open-ended problem solving, inclusion of more complex concepts, critical thinking beyond grade level, and the use of more sophisticated and advanced resources (Callahan et al., 2015). The common themes across these models is the focus on more complex concepts and principles within and across disciplines, emphasis on advanced processing skills, interdisciplinary thinking, and modification of content that supports the development of greater depth of learning (Callahan et al., 2015).

### Tomlinson's Differentiated Instructional Model

Differentiated instruction (Tomlinson, 2001) has been widely recommended to meet the diverse learning needs of students in the classroom. It is grounded in modifying three key elements of the curriculum – content, process, and product – based on the student's level of readiness, interest and learning profile. This model attempts to match the pace of learning, degree of challenge, and the interests of students to the instructional tasks and allows students to create their own products that demonstrate and reflect their learning (Callahan et al., 2015; Tomlinson, 2001). There is considerable theoretical support for this model because it is based on the developmental theories that state that optimal learning is achieved when students are exposed to tasks slightly above their current level of performance (Chickzentmihalyi, 1990; Krashen & Terrell, 1983; Vygotsky, 1962, 1978). Positive effects of using a differentiated model were also revealed in a study on differentiated reading programs (Shaunessy-Dedrick, Evans, Ferron, & Lindo, 2015). In this study, 786 elementary school students in the United States participated in a Renzulli's school wide enrichment program for reading (SEM-R). The participants were from diverse backgrounds which included Hispanic, African American and Caucasian students. At the end of the academic year, the results of the study revealed that the differentiated reading approaches had a positive impact on the students' reading comprehension and attitude.

#### Renzulli's Schoolwide Enrichment Model

The Schoolwide Enrichment Model (SEM) has been widely documented as one of the most popular approaches to gifted programming (VanTassel-Baska & Brown, 2007). This program approach is based on Renzulli's (1977) enrichment triad model but it encompasses broader modifications, ranging from learning environment to instructional modification for high ability learners (Callahan et al., 2015). The SEM promotes student engagement through

a) exposure to extension of traditional content within the context of real-world professionals; b) process skills with application to solving real problems; c) in-depth investigations into solving real problems in the area of student interest and ability. Modification of the curriculum provides gifted students with an opportunity to explore a broader range of topics than they would normally with greater depth, sophistication and investigative skills than what is typically expected for their grade level (Renzulli & Reis, 2014). This student-centred approach is intended to develop self-directed life-long learning skills with intrinsic motivation to learn (Callahan et al., 2015). Additionally, the open-ended nature of the product cultivates a variety of modes for student assessment, thus capturing authentic assessment (Wiggins, 1998).

#### Kaplan's Depth and Complexity Model

The depth and complexity model (Kaplan, 2005) emphasises a disciplinary approach in developing the curriculum. This model employs a standards-based curriculum as the foundation to promote academic rigour and develops understanding by integrating elements of depth and complexity (Callahan et al., 2015). The depth of study may involve exploring details, patterns, rules, big ideas, unanswered questions and ethical issues, whilst the complexity of the disciplines may involve exploring multiple perspectives, interdisciplinary connections, and changes over time. This model paves the way for students to make connections and relationships across disciplines or area of study (Callahan et al., 2015).

The effectiveness of SEM has been studied through field testing; for example, in a reading intervention Reis, McCoach, Little, Muller, and Kaniskan (2011) found SEM to have applicability in serving all students, including high ability learners.

#### An Integrated CLEAR Model

In a recent study in the United States, Callahan et al. (2015) developed the Integrated CLEAR model to provide a framework for curricular and instructional modifications for gifted students based on the critical components from the (Tomlinson, 2001) differentiated instruction model, Reis and Renzulli's SEM (1985), and (Kaplan, 2005) depth and complexity model. The CLEAR model integrates all the components of these models with five foundational elements as the theoretical and philosophical underpinnings for curricular development. The five elements include Continual Formative Assessment, Clear Learning Goals, Data-Driven Learning Experiences, Authentic Products, and Rich Curriculum (p.143).

Callahan et al. (2015) suggest that each of these elements is crucial for enhancing student learning (Gallagher, 2015; Kaplan, 2005; Reis & Renzulli, 1985; Tomlinson, 2001; Wiggins, 1998). The CLEAR model is designed to make learning goals clear, meaningful and important, which not only aligns with national standards but also makes knowledge, skills, and principles central to the field of study (Callahan et al., 2015; p. 144).

The underlying assumptions in the CLEAR model are that advanced learners are not a homogenous group in term of readiness levels, interests and learning styles and that potentially talented learners learn best when their individual needs are effectively accommodated through content differentiation which reflects more advanced, complex, and abstract concepts. The study involved a total of 1,215 gifted students recruited through national advertisement at state and district levels. The participants included gifted students from pull- out classes as well as self-contained classrooms. At the start of the academic year, teachers were given two CLEAR model units to implement and complete by the end of the year. Teachers were supported with training and various resources by the research team. The research team observed and interviewed teachers in comparison classrooms in order to identify differences in critical components of the CLEAR model units. The findings suggest that the CLEAR model had positively affected learning for advanced students. Callahan et al. (2015) concluded that the CLEAR model, which incorporated rich curriculum and responsive instruction driven by the components of the three existing curricular and instructional models, is a viable option to enhance student learning. The researchers, however, acknowledged that the main limitation of the study is that certain racial groups were not represented in the classrooms in the same proportion as the general student population.

# Barriers to GT/EAL Students' Participation in Gifted Programs

Despite a rapid rise in the number of EAL students in Australia and an increased awareness of the need to identify GT/EAL students (Senate References Committee, 2001), the literature on identification practices and provisions for these students in Australia is limited. Even in the US, serious attention has only recently been drawn to the educational needs of these students (Bernal, 2001). This critical weakness in the literature on identification and provisions for GT/EAL students suggests that these students may not be receiving the educational services needed, which may lead to overall underachievement (Siegle, Gubbins, O'Rourke, et al., 2016).

### Erroneous Beliefs

Callahan (2005) suggests that "inadequate opportunities for talent development are the result of erroneous beliefs translated into detrimental practices" (p. 99). Callahan (2005) identified two erroneous beliefs. The first is that giftedness is static (once gifted, always gifted) and applies to only a small minority. Programs based on the dichotomous, conservative view of giftedness are intended to serve only those identified as gifted. The second erroneous belief is that students who lack prerequisite basic skills or abilities, such as those from linguistic minority groups or from disadvantaged backgrounds, are highly unlikely to exhibit gifted behaviours (Frasier, Passow, & Garcia, 1995). As a result of these erroneous beliefs, Callahan (2005) suggests that these children are often offered instruction that focuses on low-level skills, mundane and repetitive drilling and practice; and not given the exposure nor opportunity to explore their ability to be creative, critical, analytical, and high-level thinkers and problem solvers. These children are also frequently categorised as "less able" and "at risk" (Callahan, 2005).

Similarly, Braggett and Moltzen (2000), suggest that common misunderstandings and misconceptions about giftedness include myths about giftedness. Additionally, the wariness of elitism and concerns around supposed negative effects of acceleration are barriers to talent development.

### Inadequate Sources of Information

Gallagher and Coleman (1994) identify two barriers during the identification process. The first is the poor communication between teachers of gifted and talented students and teachers of English as an Additional language learners. Consequently, an incomplete profile of the student results because valuable information from multiple sources and settings is not communicated. The second barrier involves lack of valid and reliable identification procedures for GT/EAL. Similarly, Callahan (2005) suggests that the lack of coordination of the curriculum with identification and placement procedures could serve as barriers to talent development.

In a recent qualitative study in the U.S., Allen (2017) found that the language barrier was a major issue as some teachers possessed a deficit mindset towards culturally and linguistically diverse (CLD) students and, consequently, overlooked them for referrals to gifted programs. The study also found that teachers tended to over rely on high-stakes test

results as key indicators of giftedness. Hence, students with lower test scores were less likely to be referred for gifted programs even if they demonstrated gifted potential (Allen, 2017). This study reinforces the need to use multiple sources of information and culturally sensitive assessment practices to ensure equity in talent development opportunity. Allen's (2017) study is supported by previous research; for example, Callahan and Hertberg-Davis (2013), similarly, suggest that gifted and talented students whose primary language is not English often face additional challenges and barriers to their inclusion in gifted programs. These include inadequate identification practices, single paper-pencil standardised assessments, inherent biases and lack of coordination of policies and procedures. Callahan (2003) concludes that any of these factors may contribute to the erosion of potential talents.

### Inadequate Professional Knowledge and Skills in Gifted Education

Geake and Gross (2008) suggest that teachers may play a key role in the identification process because they are often the gatekeepers to students' access to special programs. However, Maker (1996) questions the reliability of teachers' decisions on the premise that teachers may be influenced by their beliefs, underlying assumptions, pedagogical knowledge, skills, training and experiences, as well as cultural, social and linguistic backgrounds. Similarly, Kogan (2001) suggests untrained teachers may use traditional identification practices or misuse intelligence tests to make decisions about actual or potential giftedness, which can lead to discriminatory tracking of bilingual children and obscure their giftedness. To what extend these claims are applicable to Western Australian State schools remains to be investigated.

### **Conclusion and Summary**

The main purpose of identifying GT/EAL students is to maximise learning potential (Gagné, 2018; Gross, 2001), minimise underachievement (Whitmore, 1980) and provide the best opportunity for the development of talent (Gagné, 2018). However, many barriers stand in the way of valid, reliable and fair identification practices and hinder the opportunity for the development of talent. These include: attitudes and erroneous beliefs about EAL students (Callahan, 2005; De Wet & Gubbins, 2011); conservative definitions of giftedness and talent (Callahan, 2005; Gagné, 2018); the inherent bias and inappropriate use of traditional single measure standardised tests (Callahan, 2005; Frasier et al., 1995; Siegle, Gubbins, O'Rourke, et al., 2016); insufficient knowledge and skills in gifted education (Geake & Gross, 2008; VanTassel-Baska & Johnsen, 2007); lack of resources (VanTassel-Baska & Stambaugh,

2005); lack of cultural competence (Cooper, He, & Levin, 2011; Ford, 2007; Wilson, 2014); and lack of coordination of the curriculum with identification and placement procedures (Callahan, 2005).

In recent years, however, the conceptions of giftedness and talent have broadened and given way to the talent developmental view (Gagné, 2018; Gardner, 2000; Renzulli & Reis, 2018; Sternberg, 2018a; Tannenbaum, 2003). Proponents of this view recognise that giftedness is not a single trait but may consist of single or multiple domains and is more than precocious behaviour (Gagné, 2018; Harris et al., 2009); and acknowledge that gifted children can be found in all social, cultural and linguistic groups (DETWA, 2011; VanTassel-Baska, 2007). The talent development paradigm accepts that the emergence of giftedness is influenced by several environmental catalysts (Gagné, 2018). Hence, the removal of any barriers must be the overriding priority. This begins with clarity in the definition of giftedness and talent (Gagné, 2018), followed by early identification which encompasses valid, reliable and fair identification procedures (Rogers, 2007). This requires the use of authentic assessment instruments and tools (Siegle, Gubbins, O'Rourke, et al., 2016); continuous assessments using multiple criteria (Johnsen, 2004) and the recognition that there may be different manifestations of giftedness in different social, cultural and linguistic groups (Harris et al., 2009). Additionally, talent development programs need to be culturally inclusive and responsive to address diverse needs of the potentially gifted student population (VanTassel-Baska, 2007). Finally, talent development must aim to achieve personal excellence goals (Gagné, 2018); hence, the identification procedure needs to match the curriculum and services (Callahan, 2005; Callahan & Hertberg-Davis, 2013). However, Gagné (2018) expresses concern that "most school systems fall very short of answering the educational need of their academically talented..." (p.179) and that the low priority in most schools remains a serious obstacle to Academic Talent Development promoters.

# **Conceptual Framework**

A conceptual framework has been created to take into consideration the research questions, factors that could influence teachers' perspectives on the identification of, and provisions for GT/EAL students and the developmental phases of talent development (Figure 1 p. 10).

Figure 1 is a diagrammatic representation of the factors that could influence teachers' perspectives. These include: Attitudes, Values and Beliefs; Knowledge and Skills acquired through professional training and development; Experiences from personal and professional contact with GT/EAL students; and, Educational Policy that encompasses accountability, resources and support. These factors could inform Teaching Practice regarding identification, nomination, screening and selection of students; recognition of GT/EAL students' characteristics; consideration of social, cultural and linguistic influences; and, effective use of multiple assessment strategies. Effective identification serves to determine program goals and implementation of strategies that best meet the needs of the identified GT/EAL student. Strategies could include: Acceleration (either for specific subject or grade), Compacted Curriculum (for single or multiple domains), Extension or Enrichment and Mentoring. Finally, environmental influences from the home, school, wider community, community and circumstances could enhance opportunities or impose barriers on GT/EAL students' talent development.

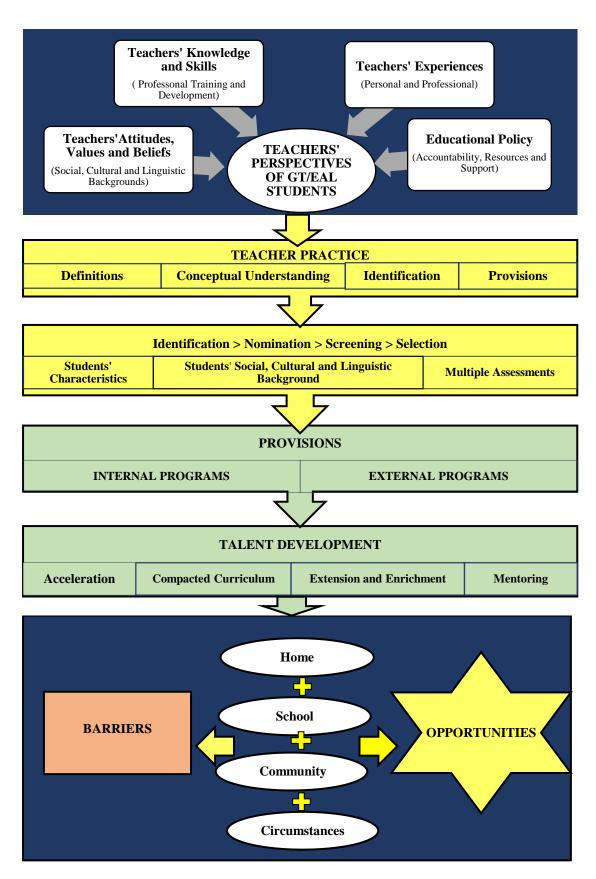


Figure 1: Conceptual Framework

# **CHAPTER 3 - METHODOLOGY**

### Introduction

Chapter 3 describes the research methodology, and is divided into four sections. Section 1 describes the research design, the rationale and the theoretical framework; Section 2 describes the context and the participants; Section 3 describes the research instruments and procedures; and Section 4 describes the data analysis, limitations, validity, reliability and ethical considerations. The chapter concludes with a summary.

# The Research Design

#### Theoretical Framework

This study was informed by the interpretative phenomenological approach (Johnson & Christensen, 2012) in order to construct new understandings of teachers' perspectives about the identification of, and provisions for, gifted and talented EAL (GT/EAL) students. The interpretative phenomenological approach reflects the researcher's belief that human thoughts and behaviours are dynamic, complex and partially predictable; and are influenced by multiple factors, such as the environment/nurture and biology/nature, as well as chance/fortuity (Johnson & Christensen, 2012). Hence, this approach was used to guide this mixed methods research study, which adheres to the philosophy of pragmatism. Pragmatism focuses attention on the research problem and uses pluralistic approaches to derive knowledge about the problem (Morgan, 2014). Using both quantitative and qualitative data for the current study provided a multiple lens and allowed both objective and subjective realities of the research problem to be revealed. These realities are believed to occur in social, historical, political and other contexts (Creswell & Plano Clark, 2018; Morgan, 2014). The main strength of this approach is that it provides a deeper understanding of the research phenomena. The main weakness is that the knowledge produced by the small sample cannot be generalised (Creswell & Plano Clark, 2018) to the wider population of teachers in different teaching contexts.

### **Explanatory Sequential Mixed Methods**

This study used the explanatory sequential mixed methods research design (Creswell & Plano Clark, 2018) to investigate teachers' perspectives on the identification of, and provisions for, gifted and talented English as an additional language (EAL) learners. In this study, the mixed methods design consisted of two distinct phases: first, collecting and analysing the quantitative data; second, collecting and analysing the qualitative data.

### Stages in Sequential Mixed Methods Design

The following Figure presents the sequence of the stages used in this mixed methods study

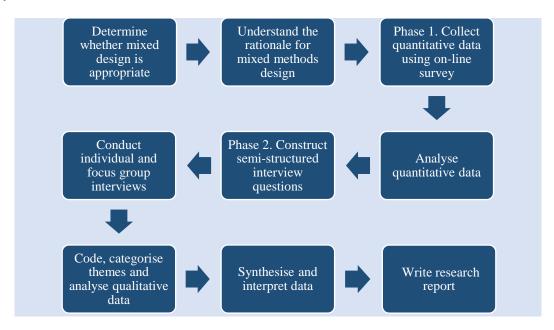


Figure 2: Mixed Methods Design

#### The Rationale

The rationale for choosing this mixed methods design was to increase the overall strength of the study. As neither quantitative nor qualitative methods were likely be enough by themselves to understand and explain the research problem, this mixed methods design helped to override the limitations and biases inherent in any single method (Creswell, Hanson, Clark Plano, & Morales, 2007). The quantitative data provided a broad, general picture of the research problem from a relatively large number of teachers and the qualitative data explained and gave a deeper understanding of the research problem from a small group of the teachers who participated in Phase 1. To optimise data interpretation, the results from both quantitative and qualitative approaches were analysed and then compared.

#### The Participants

The participants were primary school teachers drawn from 30 state schools in the North metropolitan area of Perth in Western Australia. The schools selected for this study had 30% or more of EAL students in their population. The selection of schools with this high percentage of EAL students assumed that these schools were more likely to have a proportionally higher percentage of GT/EAL students than schools with fewer EAL students. Primary teachers in this study included those teaching in Years 1, 2 and 3 in mainstream classrooms; teachers in Intensive English Centres; and one teacher from the Early Years Extension (EYE) program. The purpose of accessing the perspectives of teachers from three different contexts was to provide a more balanced and comprehensive perspective and to determine whether the teaching contexts were an influencing factor.

### **Procedure and Instruments**

### Phase 1 Procedure for Quantitative Data

Prior to data collection, ethics clearance was obtained from the Human Research Ethics Committee of Edith Cowan University, Western Australia, and research approval was granted by the Department of Education, Western Australia. Following these approvals, an information letter (Appendix 1), a consent form (Appendix 2) and a link to an online survey for teachers were sent to the Principals of the 30 state schools. Once permission was granted by the Principals, and consent forms signed, all Principals were contacted by phone and by email as a matter of goodwill and cooperation. Principals who agreed to participate in the study were thanked and acknowledged for their participation. The online survey was sent to these school principals, who were asked to forward the link to their teachers. Prior to commencing the survey, teachers were provided with an information letter (Appendix 3) and a consent form (Appendix 4). The information letter included the identity of the researcher, the purpose of the research, and the risks and benefits of the research study. Participants were informed of their rights to withdraw from the research without penalty with assurance of anonymity and non-traceability of their identity in the research. The general purpose of the questionnaire was described at the start of each section. At the end of the survey, participants were invited for a follow-up interview. Participants who agreed to be interviewed for Phase 2 of the study were able to provide their contact details for the follow-up interview.

### Questionnaire

In Phase 1, the Qualtrics software was used for the online survey. It was used because it has been specifically designed for research purposes and has several advantages, which include: economy of the design, convenience of access, monitoring data collected, generating results, and reporting and downloading data into a spreadsheet for further analysis. The survey consisted of 30 items divided into six sections, with the aim of providing the answers to each of the research questions below.

# Research Questions for Quantitative Data

- 1. What are WA teachers' perspectives of gifted and talented English as an Additional Language (GT/EAL) students?
- 2. How do teachers identify GT/EAL students?
- 3. What provisions are currently made for GT/EAL students?
- 4. What do teachers perceive as barriers that could prevent GT/EAL students from participating in gifted programs?

#### Construction of the Survey Questions

The survey questions were constructed to answer the all research questions.

Section A: Demographic Information of teachers, teaching experience, professional training, qualifications and language backgrounds.

Section B: Teachers' experiences with gifted and talented English as an additional language students.

Section C: Teachers' understandings of the terms, *giftedness* and *talent* 

Section D: How teachers identify gifted and talent English as an Additional

language students.

Section E: How teachers provide for gifted and talented English as an

additional language students in their classrooms.

Section F: Possible issues or challenges when identifying gifted and talented

English as an additional language students.

Section G: Teachers' perspectives on the identification process and provisions

for gifted and talented English as an additional language students.

A combination of Likert scales, and closed and open-ended questions were used to gather as much information from participants as possible. Demographic questions at the start

of the questionnaire provided background information about respondents. The Likert scales provided 'continuous' response options: agreement scales (strongly disagree to strongly agree) and frequency scales (not at all to most frequently). Open-ended comments sections provided opportunities for respondents to add further comments. The findings from the quantitative data provided material for further exploration and the development of the semi-structured interview questions for Phase 2 of the study.

### Phase 2 Procedure for Qualitative Data

In Phase 2, teachers who had completed the questionnaire and had agreed to be interviewed were contacted. Principals' permissions were first obtained before interviews could be conducted on the school site. Teachers were contacted by phone and email to arrange the time and place for the interviews to be conducted. Most of the interviews were held after school to minimise disruption to teachers' schedules. Some teachers were interviewed individually and others were interviewed in small groups of three.

#### **Interviews**

Open-ended interview questions were used to guide all the interviews. Individual interviews lasted between 30 to 45 minutes and group interviews lasted 60 to 90 minutes. Participants were given time to read the information letter and sign the consent form prior to their interviews. They were also assured of full confidentiality and anonymity because individual responses were grouped into one of three categories: Early Years Extension (EYE) teachers; mainstream teachers and Intensive English Centre (IEC) teachers. The interviews provided opportunity to clarify, and further explore the statistical findings from Phase 1 of the study.

#### **Interview Questions**

- 1a) What do you understand by the term *giftedness*?
- b) What do you understand by the term *talent*?
- 2a) How would you identify gifted and talented students?
- b) How would you identify gifted and talented EAL students?
- 3a) How would you provide for gifted and talented students?
- b) How would you provide for gifted and talented EAL students?

- 4a) Are there any barriers that prevent gifted and talented students from accessing gifted programs?
- b) Are there any barriers that prevent gifted and talented EAL students from accessing gifted programs?

# **Data Analysis**

#### Phase 1 Quantitative Data

The Qualtrics software provided a summary and visual representations of the results in the form of Tables and Figures. These were very helpful in providing clarity regarding patterns in the data for analysis. Descriptive statistics in terms of frequencies and percentages were used to describe common trends in the data. In Phase 1, to improve the content validity, the questionnaire was constructed with the aim of answering each of the research questions. To ensure construct validity, percentage scores were used, as this was easier than numeral scores, more meaningful and useful for comparing teachers' responses in the context of this study. In addition, to ensure the quality and variety of measurements used, the questionnaire included a combination of categorical and continuous scale questions with nominal, ordinal and interval scales. Reliability means individual scores from the instruments should be nearly the same or stable on repeated administrations of the instruments and that they should be free from sources of measurement error (Creswell et al., 2007). In Phase 1, the scores were generated by the Qualtrics online system, which minimised measurement errors and ensured consistency of data collected. Statistical scores for the results of the survey were calculated, recorded and summarised into tables and figures.

### Phase 2 Qualitative Data

To obtain qualitative data, the interview questions were carefully designed to explore the participants' thoughts, experiences and understanding of the topic in greater depth (Creswell & Plano Clark, 2018). The qualitative results were also visually represented in Tables and Figures to facilitate analysis of the data. Interview transcripts were first coded, and then themes were identified and categorised. The frequency of teachers' comments and themes were scored in percentages. Responses from teachers from the three different school settings were compared, contrasted, analysed and reported. In Phase 2, qualitative validity was ensured through using the same interview protocol for all interviewees. The time, date, name of the interviewee and place of the interviews were recorded. All the interviewees were

provided with same information and consent forms prior to the interviews. The letter was included as part of the survey and contained essential information about: a) the purpose of the study; b) sources of data collected; c) what would be done with the data to protect confidentiality and anonymity; d) length of the interview/s; and e) a reminder to sign the consent form before the interview. All interviewees were given enough time to read the information and to ask any questions for clarification before signing the consent form and proceeding with the interviews. The semi-structured interview questions were used to help guide the interviews and all the interviews were recorded. Field notes were used for clarification. The audio-recorder was checked and extra batteries were available to ensure the equipment was in proper working order. Finally, the sites for the interviews were checked ahead of time to ensure that the rooms were accessible, quiet and suitable for the interviews to take place.

In Phase 2, to maximise the reliability of the interview data, the same uniform conditions were replicated as best as possible. Hence, the same interview protocol was observed for all interviewees; clear and explicit instructions were given; the information and consent forms were well laid out and perfectly legible; participants were given sufficient time to read and ask for clarification; informed consent forms were signed and the interview sites were carefully examined in advance. When necessary, the interviewer re-affirmed the interviewee's statements and made written notes.

Supervisors were engaged in discussions and data interpretation to help mitigate against any possible biases. Reliability and credibility of the data were further assured through methodological consistency, comprehensiveness and detailed descriptions of data in this mixed methods research study. Interview transcripts and observation notes were thoroughly examined to develop a deep understanding of the dataset. The initial coding included all relevant, meaningful and interesting segments of the data to help answer the research questions. A list of codes generated was rigorously revised to ensure it was sufficiently comprehensive, consistent, thorough, logical and accurate. Next, common themes were constructed from the codes which provided the entry point to the analysis (Willig & Rogers, 2017).

### Limitations

The study involved a small sample size and was focussed on state schools where the number of EAL students in the school population was 30% or higher. Hence, the results of

the sample represented a sub-group of teachers in Western Australia and therefore, cannot be generalised to the wider teaching community in Western Australia. Additionally, access to the teachers was through the school principals and this may have limited the number of teachers who were able to participate in the study. Despite the small number of participants, 18 schools from a total of 30 in the Perth metropolitan area took part, which is a response rate of 60%. Schools with the highest percentage of EAL students who responded were mostly from the North metropolitan area. It is acknowledged that the researcher's experience, training and professional background may have influenced how meaning was interpreted from the participants' responses.

### **Ethical Considerations**

To ensure that the research study was conducted in an ethical manner, approval to conduct the study was obtained from the Human Research Ethics Committee at Edith Cowan University and the Department of Education, Western Australia. As mentioned before, all participants were provided with information letters and consent forms and given a brief summary of the purpose of the research. Signed consent forms preceded participation in the study. Participants were also informed of their right to withdraw from the study without penalty. All participants were assured of confidentiality and anonymity.

# **Summary**

The sequential explanatory mixed methods design in this study involved both quantitative data and qualitative data. The rationale for using both quantitative and qualitative data was to seek a deeper understanding of teachers' perspectives through qualitative research. The quantitative method in Phase 1 provided the opportunity to gather data from a larger number of teachers compared with Phase 2 and provided the statistical data for an overall picture of the research phenomena. The qualitative method in Phase 2 that followed provided opportunity to explore in depth the perspectives of a few teachers. The qualitative quotations, for example, from the interviews, helped explain the statistical results from the survey (Creswell, 2009).

# **CHAPTER 4 - QUANTITATIVE FINDINGS**

### **Overview**

The previous chapter addressed the methodology and rationale of the mixed method approach used for this research project. This chapter reports on the findings from the analysis of the quantitative data in Phase 1 of the research. The report begins with the teachers' demographics, followed by teachers' responses to the survey, and concludes with a summary of key findings. In the survey, some of the respondents did not answer all the questions but, in many cases, these respondents added comments in the open-ended sections.

# **Teachers' Demographics**

# **Teaching Levels**

Figure 3 represents the responses from the 50 teachers. Most teachers (62%) indicated that they had multiple teaching levels, roles and responsibilities, ranging from school administration to classroom teaching, and taught across several age ranges. The administrative and specialist roles included Primary Extension and Challenge (PEAC) program coordinators and Language, Science and Music teachers teaching Year levels 1 to 6. The remaining teachers were classroom teachers, including Year 1 (19% of the teachers), Year 2 (13%) and Year 3 (6%).

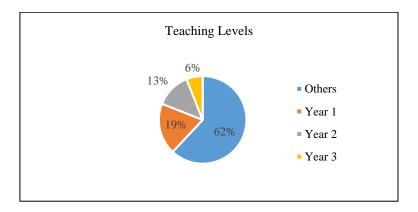


Figure 3: Teaching Levels

### Teaching Experience

Figure 4 represents the findings from the 50 teachers who responded to the survey. Many teachers (32%) had more than 26 years of teaching experience, followed by 16-25 years (28%) and 6-15 years (26%). Teachers with fewer than five years of experience (14%) were in the minority. Thus, most of the teachers who responded to the survey were very experienced.

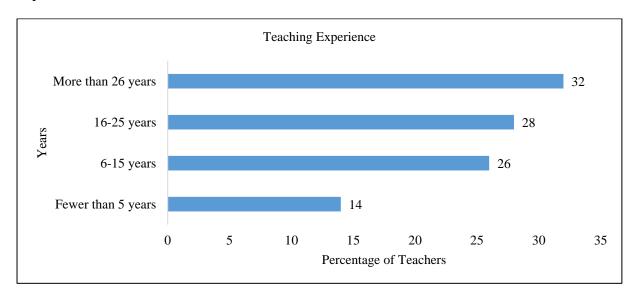


Figure 4: Teaching Experience

#### **Teaching Qualifications**

The findings from the 50 teachers who responded showed that 11% of teachers had a Master degree; 54% had a Bachelor degree in Education (45% in Primary Education; 9% in Early Childhood); 28% had a Graduate Diploma (19% in Primary; 9% in Early Childhood); and 6% had a Certificate in Primary Education. Thus, most teachers (82%) in Phase 1 were professionally qualified teachers and a small number had higher degrees.

#### EAL Qualifications

Figure 5 represents the 46 teachers who responded to the question about EAL qualifications. The majority (65% of teachers) had no formal training in teaching EAL but just over a third (35%) either had formal qualifications or had attended professional development.

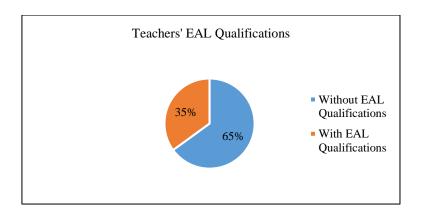


Figure 5: Teachers' EAL Qualifications

### Training in Gifted Education

Regarding training in gifted education, 47 teachers responded. Most of these teachers (74%) indicated that they had had no training in gifted education but 26% indicated they did have training. There was no mention of formal qualifications in gifted education.

### Teachers' Experience with GT/EAL Students

Regarding teachers' experience with GT/EAL students, 44 teachers responded. Most of these teachers (80%) indicated that they had had GT/EAL students in the past but 20% indicated that they had had no experience with these students.

### Teachers' Language Backgrounds

Figure 6 presents the findings from the 45 teachers who responded to this part of the survey. Most respondents (92%) were monolingual and native English language speakers. Only 8% of the teachers were bilingual. Languages spoken by the bilingual teachers were Farsi (Persian), Creole (Mauritian) and Teochew (Chinese).

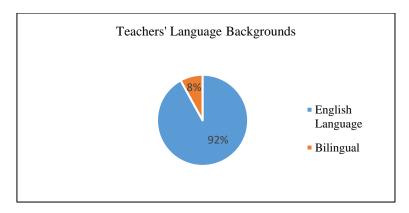


Figure 6: Teachers' Language Backgrounds

# **Teachers' Perspectives of Giftedness (Quantitative)**

Figure 7 presents the responses from the 38 teachers who either agreed or strongly agreed with the list of statements about giftedness. Teachers' responses were grouped into the following categories: Different domains of giftedness (100%); Influenced by environment (53%); Hereditary (37%); All individuals can be gifted (34%); and Achieved through diligence (8%).

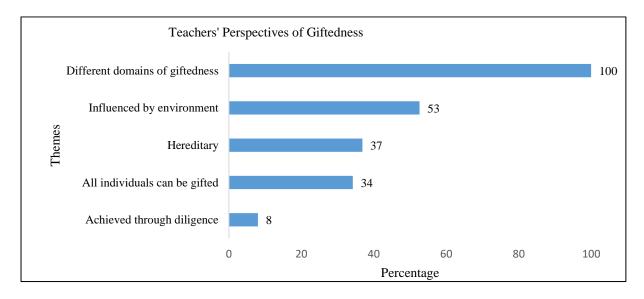


Figure 7: Teachers' Perspectives of Giftedness

# Teachers' Comments about Giftedness

With reference to Table 1, there were 34 comments about giftedness and five themes were identified: Natural ability (41% of the total comments), High Performance (26%), Multiple Domains (20%), Specific Domain (11%) and Environment (2%).

Table 1: Teachers' Comments about Giftedness

Themes/Frequency of Comments		Examples of Teachers' Comments on Giftedness
Natural ability	41%	Exceptional natural ability; born with a gift; God given; innate ability; natural disposition; hereditary; high potential; high intelligence
High Performance	26%	Achieve significantly above peers; beyond average; high results; exceed peer ability
Multiple Domains	20%	Have ability in more than one area; succeed in many areas
Specific Domain	11%	Ability in a specific area; excel in a field
Environment/Developmental	2%	Developed over time through environmental influence

# Teachers' Perspectives of Talent

Figure 8 presents the responses from the 38 teachers who agreed or strongly agreed with the list of statements about talent. The list given was like that for giftedness. The statements were grouped into the following categories: Different domains of talent (97% of teachers agreed/strongly agreed); All individuals can be talented (66%); Influenced by the environment (48%); Achieved through diligence (24%); and Hereditary (21%).

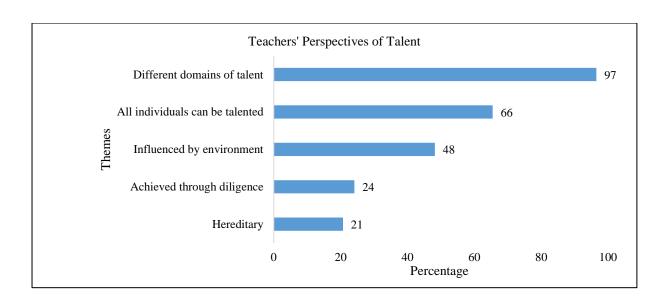


Figure 8: Teachers' Perspectives of Talent

# Teachers' Comments about Talent

There were 65 open-ended comments on *talent* and three themes were identified: Natural ability (44%), Developmental (32%) and High Performance (24%). (Table 2)

Table 2: Teachers' Comments about Talent

Themes/Frequency		Examples from Teachers' Comments on Talent
Natural Ability	44%	Special natural ability or flare; Naturally exceptional in one area; Something to be born with; Personal characteristics that enhance or accelerate a person's expertise
High Performance	24%	Over and above average in several areas; Do something extremely well; Shine in a special task; Exceptionally good; Polished diamonds; excellence in one or two areas
Environment/Developmental	32%	Nurtured and moulded through learning; Influences by intrapersonal and environmental factors; Hard work, practised over a long period

# **Identification Methods used for GT/EAL students**

Figure 9 presents the responses from 42 teachers who responded on how they identified GT/EAL students in their classrooms. Teachers were required to indicate whether they: *never*, *rarely*, *sometimes*, *most of the time*, or *always* used the identification methods given on the list. In Figure 9, observations were the preferred method of identification, with 85% of the respondents indicating that they used this method *most of the time* or *always*. The next preferred methods were teacher nomination (62%); standardised tests (57%); and school reports (42%); checklist (24%), English as an Additional Language/Dialect Progress Map (21%); IQ tests (19%); parent nomination (14%); peer nominations (14%) and finally, 33% mostly or always used other methods not listed.

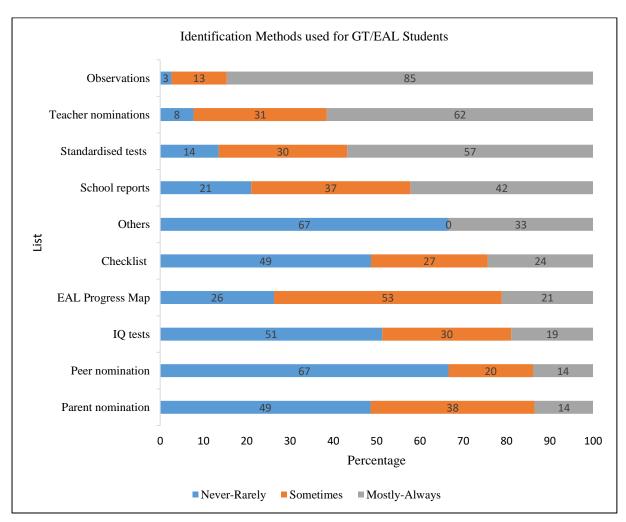


Figure 9: Identification Methods used for GT/EAL Students

### Teachers' Perspectives about the Identification Process

Figure 10 presents the responses from 39 teachers. Respondents were asked to indicate whether they *strongly disagreed*, *disagreed*, *neither agreed nor disagreed*, *agreed*, or *strongly agreed* with the list of statements about the identification process. The results represent the responses from teachers who *agreed* or *strongly agreed* with the following statements: Important to identify GT/EAL learners (87% of respondents); Responsibility of classroom teachers (77%); Responsibility of specialist teachers (38%); Demanding on time (37%); and Difficult process (34%).

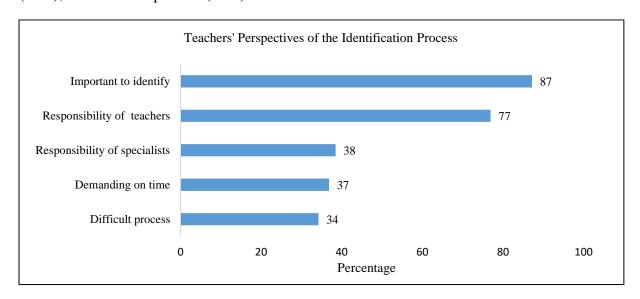


Figure 10: Teachers' Perspectives of the Identification Process

### Teachers' Perspectives on the Characteristics of GT/EAL Students

Of the 50 teachers from the survey, 42 teachers responded to a list of statements about the characteristics of GT/EAL students. Teachers were asked to indicate whether they strongly disagreed, disagreed, neither agreed nor disagreed, agreed, or strongly agreed with the statements. Figure 10 presents the responses from teachers who agreed or strongly agreed with the statements: High IQ (88%); Rapid learners (84%); High Level of Mathematical Skills (75%); High level of language proficiency (69%); High task commitment (66%); High Academic Achievers (66%); Highly creative (59%); Prefer to work independently (53%); Need little support (44%); Emotionally sensitive (38%); High level of English language proficiency (34%); High level of All-round Excellence (25%); Very well-behaved (19%), and Over-bearing socially (13%).

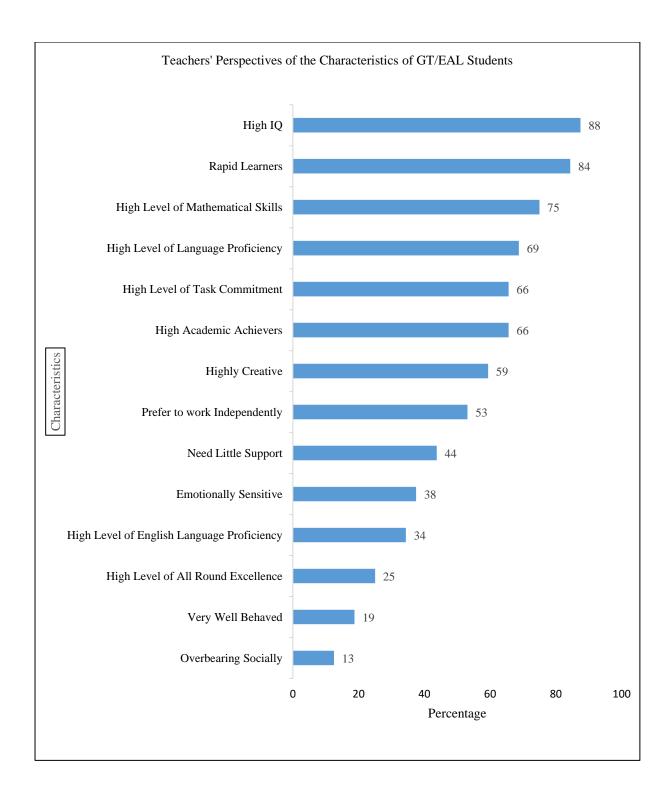


Figure 11: Teachers' Perspectives of the Characteristics of GT/EAL Students

### Teachers' Comments on the Characteristics of GT/EAL Students

There were 27 comments in the open-ended section of the survey. Most comments were about behavioural characteristics. Examples of comments included: high levels of task commitment, perseverance, motivation, curiosity and independence; positive attitude and love for learning; confidence and strong leadership skills; a sense of humour, risk taking behaviours and perfectionism. There were also two comments suggesting that it was not possible to make generalisations because gifted students are not a homogeneous group.

# Teachers' Perspectives of Provisions for GT/EAL Students

Of the 50 teachers from the survey, 39 teachers responded to a list of statements about provisions for GT/EAL students. Figure 12 presents responses from teachers who either *agreed* or *strongly agreed* with the following provisions for GT/EAL students: Engagement in in-depth work in an area of interest (93% of respondents); Opportunity to work independently (90%); Rapid movement through basic skills (66%); Engagement in higher order thinking tasks (62%) and Working with other gifted students (62%) (Figure 12).

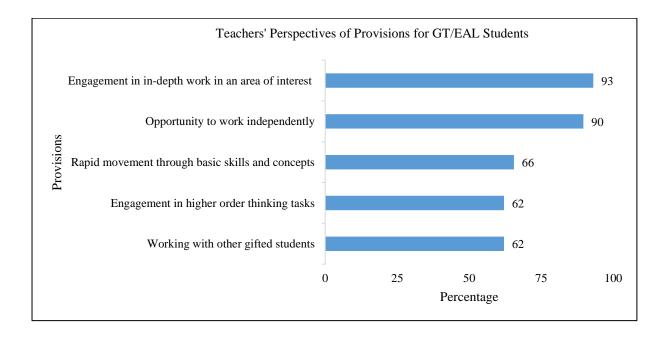


Figure 12: Teachers' Perspectives of Provisions for GT/EAL Students

### Strategies for GT/EAL Students

Of the 50 teachers who responded to the survey, 39 teachers responded to the list of strategies they had used to support GT/EAL students. These teachers were asked to indicate whether they used the strategies given *frequently*, *occasionally* or *not at all*. Figure 13 presents the responses from teachers who *frequently* used the following: Differentiated curriculum (62% of respondents); Extension activities within the classroom (59%); Extension beyond the classroom work (21%) and Compacted Curriculum (7%). Finally, 57% of the respondents indicated that they did not use any of the other strategies given (Figure 13).

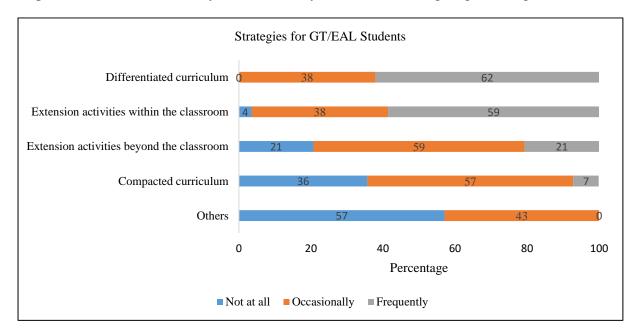


Figure 13: Strategies for GT/EAL Students

### Programs Used to Support GT/EAL Students

With reference to Figure 14, of the 50 teachers, 38 responded to a list of statements about gifted programs used to support GT/EAL students. Teachers were asked to indicate whether they used the programs in the list *frequently*, *occasionally* or *not at all*. Teachers who indicated that they *frequently* used the programs listed, included: the EAL Support program (29%); PEAC (27%); Withdrawals/Pull-out programs (11%); and Early Years Extension (9%). In addition, 80% of respondents indicated that they were *not at all* involved in any other programs for GT/EAL students; 71% claimed that GT/EAL students were not involved in the EYE programs; 46% suggested that they were not involved in PEAC

programs and 32% indicated they were not involved in EAL support programs. A minority of 20% of teachers indicated that they *occasionally* used their own programs.

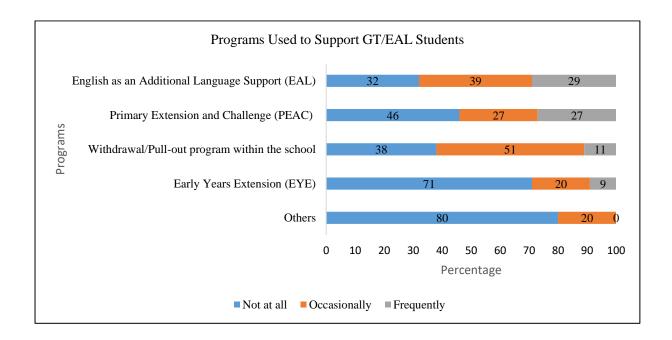


Figure 14: Programs Used to Support GT/EAL Students

# Teachers Perspectives of Gifted Programs for GT/EAL Students

With reference to Figure 15, of the 50 teachers, 38 responded to a list of statements about gifted programs for GT/EAL students. Teachers were asked to indicate whether they strongly disagreed, disagreed, neither agreed nor disagreed, agreed, or strongly agreed with the statements. The responses were from teachers who agreed or strongly agreed to the following statements: Opportunity to work with like-minded peers (92%); Opportunity to engage in activities beyond the classroom (90%); Will miss classroom work (24%) and Unlikely to make a lot of difference (8%). Only one teacher indicated that gifted programs were elitist and discriminatory.

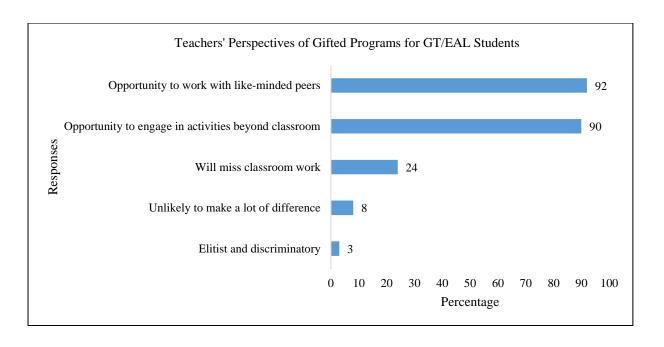


Figure 15: Teachers' perspectives of Gifted Programs for GT/EAL

# Teachers' Comments about Programs for GT/EAL Students

There were 20 comments on provisions and two themes identified: *differentiation* to develop students' creative and thinking skills (76% of total comments) and *support* (24%). Comments included opportunity to provide enrichment activities, particularly in mathematics, science and English. Almost a quarter of comments were about supporting and developing GT/EAL students' English language skills. One teacher cautioned that it was important not to make assumption about GT/EAL students that it was necessary to avoid the temptation to give less support because they were gifted students.

# Teachers Perspectives of the Identification Process

With reference to Figure 16, of the 50 teachers, 38 teachers responded to the questions about the identification process. Teachers were required to indicate whether they *strongly disagreed, disagreed, neither agreed nor disagreed, agreed, or strongly agreed* with the given statements. Figure 16 represents teachers who *agreed* or *strongly agreed* with the following statements about identification: Important to identify (90% of the 38 respondents); Responsibility of teachers (83%); Difficult process (36%); Responsibility of specialist teachers (34%) and demanding on time (32%).

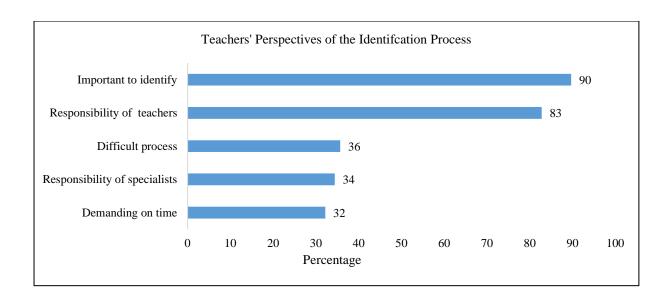


Figure 16: Teachers' Perspectives of the Identification Process

# Teachers' General Comments about the Identification of, and Provisions for, GT/EAL Students

With reference to Table 3, there were 36 comments and from these four themes were identified: Inadequate Professional Development (39%), Language Issues (36%), Limited Resources (14%) and Low Priority (11%).

Table 3: Teachers' General Comments

Themes	Frequency	Examples of Teachers' Comments
Inadequate	39%	I do not have much experience with gifted and talented
Professional		EAL learners; difficult to assess these children; deficit
Development		model is used with EAL students; often overlooked; not
		easily picked up.
Language	36%	Gifted and talented EAL learners can sometimes be
Barriers		overlooked due to language barriers.
Limited	14%	Under catered for in our present educational system and
Resources		made worse by reduced funding; limited time to meet
		needs.
Low Priority	11%	I think that very little attention is given to gifted and
		talented as it is often assumed that these students will
		succeed on their own regardless of support, and gifted ones
		are neglected and not extended; teacher's attention is
		demanded elsewhere

Most teachers in this study had at least 16 years of teaching experience; had English as their first language and had a minimum of a Bachelor's degree in teaching. Many teachers understood *giftedness* to be an inherited or natural ability; that gifted students learn rapidly and have high intelligence. However, while most teachers acknowledged that there were many different domains of giftedness, the characteristics associated with giftedness were mainly in the academic domain. Some teachers believed that some children were born with the ability for high performance while others considered that high ability was the result of a combination of diligence and environmental factors. There was a tendency for several teachers to use the terms *giftedness* and *talent* synonymously and interchangeably. Most teachers associated positive characteristics with both giftedness and talent.

Teachers had many different perspectives about *talent*. Most teachers believed that there were many domains of talent and associated talent with high academic performance and positive learning behaviours, but their views about how talent was developed varied. Most teachers believed that students were born with the natural ability to excel while others believed that the environment played a role in talent development. Some teachers also believed that talent was the result of hard work or diligence. Teachers' comments about talent reaffirm that there may be some confusion about the two terms *giftedness* and *talent*.

Regarding the identification methods, most teachers indicated a strong preference for informal observations but indicated that they also used other forms of identification methods. While most teachers agreed that it was important to identify GT/EAL students, some teachers felt that this should be the responsibility of specialist teachers. Almost a third of teachers also acknowledged that they found identification difficult and demanding on their time.

Regarding provisions for GT/EAL students, most teachers were supportive of providing opportunities for these students to engage in-depth in an area of interest and to work independently. Teachers were also supportive of formal gifted programs for GT/EAL students and agreed that these programs would provide opportunities for students to not only to work with their like-minded peers, but also to engage in activities beyond those offered in the classrooms. Some teachers included English as an Additional Language support for GT/EAL students as part of the gifted program. Only one teacher thought that gifted programs were elitist.

Finally, more than a third of teachers' comments were about their lack of experience with GT/EAL students and the difficulty they have with identifying these students due to language barriers. Comments were also made about insufficient resources, funding, time and the low priority directed to GT/EAL students.

# **CHAPTER 5 – QUALITATIVE FINDINGS**

# Introduction

This chapter presents the qualitative findings from the 15 teachers who were interviewed in Phase 2 of the study. Semi-structured interview questions were used to guide the interviews, aiming to further explore teachers' perspectives on the identification of, and provisions for, gifted and talented English as an Additional Language (EAL) students. During the interviews, additional questions were asked only when further clarification was needed. Eight mainstream teachers and one teacher from the Early Years Extension (EYE) program were interviewed individually. Teachers from the Intensive English Centres (IECs) were interviewed in two groups of three. The discussion in this chapter is presented in two sections: 1) teacher information and 2) findings from the interviews. The chapter concludes with a summary of the key results.

# **Teacher Information**

# The Participants

A total of 15 junior primary teachers who participated in the survey questionnaire in Phase 1 of the study also volunteered to be interviewed. These included eight mainstream classroom teachers, six IEC teachers and one teacher from the EYE program. All the interviewees were from Perth metropolitan state schools in Western Australia.

# Teaching Experience

Teachers' teaching experience ranged from less than five years to more than 15 years. There were four teachers with less than five years' experience; four teachers had more than five years, and seven teachers had more than 15 years; two teachers reported that they were planning to retire (see Table 4). All the teachers had experience working with English as an Additional Language students.

Table 4: Teaching Experience

	Eight Mainstream Teachers	Six Intensive English Centre (IEC) Teachers	One Early Years Extension (EYE) Teacher	Total n=15
Years of	<5 years (n=3)	<5 years (n=1)	>15 years (n=1)	4
experience	>5<15 years (n=1)	5>15 years (n=2)		4
		>15 (n=3)		_

# Teaching Qualifications

All 15 teachers interviewed were graduates with Bachelor's Degrees in Education and had been trained in Australia. Two teachers had additional overseas teaching qualifications, one from Iran and the other from Mauritius. Only one teacher had training in gifted education. Seven teachers had EAL qualifications but none of the teachers had formal qualifications in both gifted and EAL education (see Table 5 below).

Table 5: Teaching Qualifications

Teachers' Formal Qualifications	Eight Mainstream Teachers	Six Intensive English Centre (IEC) Teachers	One Early Years Extension (EYE) Teacher	Total (n=15)
Bachelor's Degree	8	6	1	15
Gifted Education	0	0	1	1
English as an Additional Language (EAL)	1	6	0	7

# **Key Findings from the Interviews**

Question 1: What are WA teachers' perspectives of gifted and talented English as an Additional Language students?

# Question 1a. What do you understand by giftedness?

A total of 76 comments were generated from 15 teachers and four themes were identified. The predominant theme was Performance (57% of total comments), followed by Characteristics (30%) and Innateness/Environment (13%).

# Theme 1: Performance

There was a total of 43 comments (65%) on the performance of gifted students. A total of 14 teachers defined giftedness as demonstrable high performance that is "above and

beyond the norm". All eight mainstream teachers believed that gifted students perform "above and beyond the norm". Two of these teachers suggested this could be in any domain and four teachers considered giftedness to be specifically related to high academic performance. Mainstream teachers also reported that gifted students often demonstrate good thinking skills. These skills were described by one comment on the ability to "apply knowledge"; two comments on ability to "think outside the box"; one comment on ability to "think at a deeper level"; and one comment on ability to "engage in difficult tasks".

All six IEC teachers similarly believed that gifted students perform "above and beyond the norm". In addition, five of these teachers suggested that this could be in any domain. There were four comments on students' ability to "expand" information and two comments for each for the abilities to "apply" and "connect information". In addition, there were two comments on "good memories" and "extensive knowledge". For example, a Year 2 IEC teacher recalled having a "very bright" Filipino student who was able to name, distinguish and describe the different types of clouds and weather conditions he had experienced in the Philippines. The teacher remarked that during the class discussion on weather, the young Filipino child eagerly shared how he was able to predict weather conditions by observing changes in the clouds.

The EYE Teacher suggested that giftedness is often manifested as high ability in a single or multiple domain.

#### Theme 2: Characteristics

There was a total of 23 comments (30%) on the characteristics of giftedness, nine were about gifted students' ability to "learn quickly". Most of the comments on gifted students' characteristics were very positive. Two mainstream teachers suggested that gifted students "learn quickly". A Year 1 teacher explained that, "they get the point and want to move on while other children are still learning to read the first question." Similarly, a Year 3 mainstream teacher said that, "you need only to model it once and they get it". One mainstream teacher described gifted students as "fantastic little learners" and another suggested that gifted students are often "proactive in answers". Two mainstream teachers described gifted students as "socially and emotionally mature" when compared to their peers. One mainstream teacher added that gifted students are those who "can be extended" and another commented that gifted students often "excel" when given the opportunity. However,

one Year 2 mainstream teacher noted that gifted students can also "get easily bored with routine".

All six IEC teachers described gifted students as fast learners. Most of the IEC teachers' comments about gifted students were also very positive: Three teachers commented that gifted students often demonstrate a "high level of enthusiasm for learning", two IEC teachers shared the same views as mainstream teachers and described gifted students as "fantastic little learners". One IEC teacher also observed that they demonstrate a "high level of curiosity". However, one IEC teacher also commented that gifted students can be "demanding" because of the need to constantly keep pace with their learning needs in every lesson. The EYE teacher suggested that the most common characteristic among gifted students is their ability to "learn quickly".

#### Theme 3: Innateness versus Environment

There was a total of 10 comments (13%) on innateness versus environment. Four mainstream teachers suggested that gifted students "excel just naturally"; one mainstream teacher suggested that it was "God given", another described it as an "innate/genetic ability". In contrast, one mainstream teacher suggested that, "it all depends on how they are brought up", implying that environment had a key role to play. Two IEC teachers suggested that gifted students "excel naturally". The EYE teacher described giftedness as "the innate genetic abilities that you are born with", and reiterated Gagné's (2004) definition of giftedness.

Table 6: Teachers' Perspectives of Giftedness (Qualitative)

		Fr	equency of Tea	chers' Com	ments
Themes/Frequency	Examples of Comments	One	Eight	Six	Total
		EYE	mainstream	IEC	comments
		teacher	teachers	teachers	
	Above and beyond the norm	-	8	6	14
High Performance	High ability in any domain	1	2	5	8
	High academic ability	-	4	-	4
	Able to expand information	-	-	4	4
	Able to apply knowledge	-	1	2	3
	Able to connect information	-	-	2	2
	Have extensive knowledge	-	-	2	2
	Have good memory	-	-	2	2
	Able to think outside the box	-	2	-	2
	Able to complete difficult tasks	-	1	-	1
	Able to think at a deeper level	-	1	-	1
n=43; 57%		1	19	23	43
Characteristics	Learn quickly	1	2	6	9
	Enthusiastic about learning	-	-	3	3
	Fantastic little learners	-	1	2	3
	High level of curiosity	-	-	1	1
	Socially and emotionally mature	-	2	-	2
	Proactive with answers	-	1	-	1
	Can be extended	-	1	-	1
	Can excel	-	1	-	1
	Easily bored with routine	-	1	-	1
	Can be demanding	-	-	1	1
n=23; 30%		1	9	13	23
	Excel naturally	-	4	2	6
Innateness	God given	-	1	-	1
	Innate/genetic ability	1	1	-	2
Environment	How they are brought we		1		1
Environment	How they are brought up	_	1	-	1
n=10; 13%		1	7	2	10
TOTAL=76	Total Number of Comments	3	35	38	76

In summary (see Table 6), there was a range of teacher perspectives of what *giftedness* meant. Most teachers related giftedness with high performance that is "above and beyond the norm" and "rapid learning" abilities. Additionally, most of the teachers' comments about giftedness were positive. There were only two negative comments, which included: "can be demanding" and "easily bored". The main difference between mainstream and IEC teachers was their focus on different domains of giftedness. Half of the mainstream teachers suggested that giftedness can be manifested as high ability in the *academic* domain.

In contrast, nearly all the IEC teachers suggested that giftedness can be manifested as high ability in *any* domain. Except for one, most teachers suggested that giftedness is "innate".

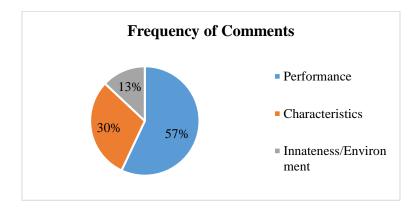


Figure 17: Teachers' Comments about Giftedness

# Question 1b. What do you understand by talent?

With reference to Table 7 (p.72), a total of 34 comments were generated from 15 teachers and three themes were identified. The predominant theme was Performance (53% of total comments), followed by Development (21%) and Synonymy with giftedness (12%). Some teachers (15%) had difficulty articulating what they understood by talent.

# Theme 1: Performance

The predominant theme was *Performance* (18 Comments), which accounted for 53% of teachers' comments. Teachers' understandings of talent varied widely; however, their views of talented students were all positive.

Mainstream teachers generated a total of 12 comments on talent. Three comments were about "the ability to do well in a field" and another three comments were about "skills they have achieved". Two comments were about "excelling in a particular area" but, in contrast, two comments were about "excelling in multiple areas". There was one comment each about "being good in an area of interest", achieving at a "higher academic level than most" and excelling in "a distinct area of strength".

The IEC teachers generated a total of five comments on talent. Many comments were like those of the mainstream teachers; for example, one teacher added that talent is about "a distinct sort of strength". However, her comment referred to a strength in any area and not necessarily within the academic context.

The EYE teacher said her understanding of talent was based on Gagné's (2004) definition and, thus, defined "talent as an expression of gifts" and explained that "it is a developmental process" which "grows with persistence". The EYE teacher also articulated her concern that some potentially talented children may be "under the radar" because their "hidden abilities" may not recognised. She added that, "if a child isn't showing any high ability, that doesn't mean they haven't got it, but that . . . you haven't seen it". She suggested that the students who are most at risk of not being identified are often the "underachievers" and these may include some English language learners.

# Theme 2: Development

There was a total of seven comments on the theme development. Mainstream teachers made three comments on development. Two teachers commented that talent is a, "developmental process" and one teacher added that it means students "can be extended.

There were two comments from IEC teachers on development. One comment was that it was a "developmental process" and the second was that students have "to work at it".

The EYE teacher suggested that individuals must be first be gifted in order for talent to develop, and added that, "no matter how hard you practise you are not going to be a concert pianist if you don't have an understanding of music, the dexterity and the brain power". "To become talented", the EYE teacher explained, "you must have the gift and the mindset … talent will grow with persistence". However, she also stated that, "even if you are not talented, with persistence you can still be highly able". The EYE teacher repeated that her definition was based on the definition of Gagné (2004), who differentiated between gifts (natural abilities) and talents (systematically developed from gifts).

# Theme 3: Synonymy

Four mainstream teachers believed that talent was synonymous with giftedness. Comments included, "close together with gifted", "can't separate it from giftedness" and "synonymous with giftedness".

#### Theme 4: Unable to articulate

Five IEC teachers were hesitant and had difficulty articulating the differences between giftedness and talent.

Table 7: Teachers' Perspectives of Talent

			Frequency of	Comments	
Themes/Frequency	Examples of Comments	One	Eight	Six IEC	Total
		EYE	mainstream	teachers	comments
		teacher	teachers		
Performance	Ability to do well in a field	-	3	1	4
	Skills they have achieved	-	3	1	4
	Excel in an area	-	2	1	3
	Excel in multiple areas	-	1	1	2
	An expression of gifts	1	-	-	1
	Being good at an area of interest	-	1	-	1
	Higher academic level than most	-	1	-	1
	Excel in whatever they do	-	1	-	1
	A distinct sort of strength	-	-	1	1
n=18; 53%	Number of Comments	1	12	5	18
Development	Developmental process	1	2	1	4
	Can be extended	-	1	-	1
	Grows with persistence	1	-	-	1
	You must work at it	-	-	1	1
n=7; 21%	Number of Comments	2	3	2	7
Synonymy	Close together with gift	-	1	-	1
	Synonymous with giftedness	-	2	-	2
	Can't separate it from giftedness	-	1	-	1
n=4; 12%	Number of Comments	0	4	0	4
Unable to articulate	I can't think of it right now	-	-	1	1
	I don't know	-	-	2	2
	Not able to articulate	-	-	1	1
	Maybe		-	1	1
n=5; 15%	Number of Comments	0	0	5	5
n=34; 100%	<b>Total Number of Comments</b>	3	19	12	34

There were many similarities as well as differences in teachers' understanding about *talent*. Most teachers tended to use the two terms, *giftedness* and *talent*, interchangeably and synonymously, and five IEC teachers had difficulty articulating the differences between giftedness and talent. Except for the EYE teacher, none of the other teachers in this study mentioned Gagné's (2004) definitions of the terms, *giftedness* and *talent*. For most teachers, high demonstrable performances were an indicator of both giftedness and talent. Most teachers also identified many of the *positive* characteristics of gifted and talented students and these characteristics were generalised for GT/EAL students. The IEC teachers provided much anecdotal evidence of working with gifted and talented students; however, they expressed uncertainty and doubt about their understandings of the terms, *giftedness* and *talent*.

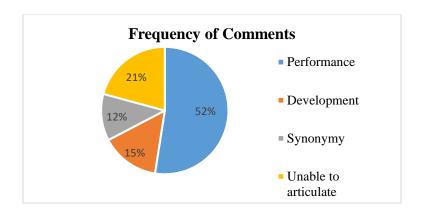


Figure 18: Teachers' Comments about Talent

# Question 2: How do teachers identify GT/EAL students

# Question 2a. How do you identify gifted and talented students?

A total of 82 comments were generated from the 15 teachers. The predominant themes were *Informal Observations* (53 comments), which accounted for 65% of total comments; *Formal Assessments* (16 comments; 20%) and finally *Multiple Data Sources* (13 comments; 16%) as documented in Table 8 (p.76).

# Theme 1: Informal Observations

Out of the 15 teachers in the study, 14 indicated a preference for using informal observations to identify their gifted and talented students.

There was a total of 32 comments generated by eight mainstream teachers. All these teachers commented that gifted and talented students, "stand out" and "performed above and beyond expectations". Teachers commented that gifted students often demonstrate "critical thinking skills" during discussions, were "well-spoken" and have "high vocabulary". Other observations included maturity to engage in independent and innovative tasks. Teachers also made the comment that GT/EAL students were often proactive and sociable.

The six IEC teachers generated a total of 20 comments and reported a preference for informal observations. While some of the comments were similar to the mainstream teachers', such as being "fast learners" and "proactive", more than half of the comments from IEC teachers were about students' demonstration of "thinking" and "problem solving skills". In addition, there were comments on: "good processing and creative thinking skills", "higher order thinking", "ability to extrapolate", "explain", "deduce" and "see the whole picture".

Unlike mainstream teachers, IEC teachers' comments included observations of exceptional performance in both academic and in the non-academic domains such as art, music and sports.

The EYE teacher suggested that observation of strong language ability in general is often a good indicator of giftedness.

#### Theme 2: Formal Assessment

There was a total of 16 comments on formal assessments and five of these were generated by mainstream teachers. These teachers included NAPLAN as one of the standardised tests used for identifying gifted and talented EAL students. In addition, there was a comment on using classroom tests and performance-based tests but the specific details of these tests were not clarified.

There were three comments on formal assessments from the IEC teachers. These included the problematic aspects of formal assessment, such as "insufficient English", "language skills may hinder performance" and "standardised testing or IQ tests would be inappropriate".

The EYE teacher suggested the possible use of standardised tests such as the NAPLAN and Standard Progressive Matrices (SPMs) as well as the use of creativity tests, dynamic assessments, classroom tests and graphic organisers.

#### Theme 3: Multiple Data Sources

There was a total of 13 comments on the use of multiple sources of data to identify gifted and talented students. Mainstream teachers made eight comments about the variety of sources they used, including, "observations", "work samples" and "academic performance record".

One IEC teacher mentioned using the EAL/D English Progress Map as her main resource for monitoring and assessing students' English language progression across different phases of language development.

The EYE teacher made four comments, which included the use of "multiple sources of data", "lots of observations", "lots of indicators" and "[consulting] parents". Regarding informal observations, the EYE teacher added that these do not always have to be "pen and paper tests", and noted that boys do not like writing essays. The EYE teacher also suggested

that the gathering of multiple data is an essential part of the identification process as the data serve to provide a more accurate profile of students' true potential. In the closing remarks, the EYE teacher added "Yes, collect as much data as possible because even if the child isn't showing any high ability that doesn't mean he or she hasn't got it, but that you haven't seen it".

Table 8: How Teachers Identified Gifted and Talented Students

			Examples of Con	nmen	its		
Themes Frequency	One EYE Teach	ner	Eight Mainstream Teachers	1	Six IEC Teachers		Total Comments
Informal Observations	Strong language ability	1	They stand out Above and beyond expected standard Critical thinking skills Good in mathematics Well spoken Being mature Fast learners Good in writing High vocabulary Independent Innovative Proactive Sociable	8 8 2 2 2 1 1 1 1 1 1	Good problem-solving skills Artistic, musical or good in sports Abilities above and beyond peers Fast learners Able to extrapolate Think at a higher level Able to explain in different ways Good processing skills Creative thinking skills Ability to deduce Ability to see whole picture Proactive Show initiative	3 3 2 2 2 1 1 1 1 1 1	
n=53; 65%		1		32		20	53
Formal Assessments	Standardized tests (SPM) Creativity tests School data NAPLAN IQ tests Classroom tests Graphic organisers Dynamic Assessment	1 1 1 1 1 1	Standardized NAPLAN tests Classroom tests Performance based assessments	3 1 1	Insufficient English Language skills may hinder performance Standardised testing or IQ tests would be inappropriate.	1 1 1	
n=16; 19%		8		5		3	16
Multiple Data Sources	Multi sources Lots of observations Lots of indicators Parents	1 1 1 1	Observations Work Samples/Tests Academic performance records	5 2	EAL/D English Progress Map serves as a monitoring and observation tool.	1	
n=13; 16%		4		8		1	13
Total n=82; 100%		13		45		24	82

The findings suggest that teachers' perspectives on the identification of gifted and talented students varied widely. Most teachers' comments (65% of total) were about informal observations. There were several similarities as well as differences in how teachers identified gifted and talented students. Mainstream teachers focussed mainly on students' observable, positive learning behaviours, as well as academic performance within the classroom contexts. In contrast, the six IEC teachers focussed on students' thinking skills and the application of their knowledge (in any domain) in different contexts. The EYE teacher indicated a preference for a comprehensive approach, which included: informal observations, in different contexts and from different sources; a range of formal assessments, such as standardised and creativity tests; and information from parents. According to the EYE teacher, the use of comprehensive data provided not only strong evidence but also helped minimise the risks of overlooking the "hidden" potentials of gifted and talented students. This included students whose giftedness may have been masked by either learning or language needs.

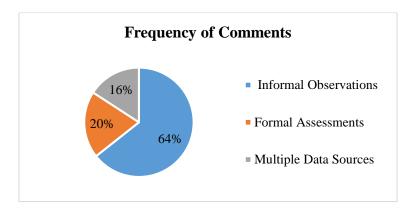


Figure 19: How Teachers Identified Gifted and Talented Students

# Question 2b: How do you identify GT/EAL students?

The purpose of this question was to clarify whether teachers identified GT/EAL students differently from other gifted and talented students. This question was added during the interview when it became apparent the mainstream teachers were commenting on gifted and talented students in general, with little distinction of the GT/EAL group of students. A total of 68 comments were generated from 15 teachers. There were three themes: Informal Observations (68% of total comments), Uncertainty (23%), followed by Formal Assessments (9%).

# Theme 1: Informal Observations

There were 42 comments (68% of the total) about informal observations. The eight mainstream teachers generated a total of 25 comments. Seven of these comments were that GT/EAL students often get "easily bored"; four comments were about the ability to "express themselves well in English". Other comments included observations about students' ability to demonstrate high academic performance such as producing "good work samples"; demonstration of "high level of comprehension during reading"; effective use of "high level vocabulary"; "good oral language skills"; and "good mathematical problem-solving capabilities". Additional comments included performance in other domains such as the "ability to think outside the box"; "artistic"; and "observable mature behaviours".

One mainstream teacher commented that, "they [EAL students] don't communicate like a 'normal' [native speakers] ...child... so we misunderstand and think they don't understand". The teacher recalled making the erroneous assumption that one of her students who had remained silent for several weeks, had language difficulty, only to discover later that the child was exceptionally bright but extremely shy.

The six IEC teachers, similarly, indicated a strong preference for informal observations and generated a total of 16 comments. There were six comments on "good artwork" as a possible expression of giftedness. There were also two comments each on observations of students' performance in music, sport and maths. Two IEC teachers commented that some EAL students' academic performances may be "hindered by the lack of English", especially in the early stages of learning the language. One teacher noted that some students who are excellent in mathematics may struggle with the "language in maths". Hence, these students were encouraged to express themselves through artwork, music and sports, thus allowing giftedness and potential talent to manifest in different ways. Oral

language and effective communication skills were considered indicators of giftedness and potential talent.

The EYE teacher suggests the use of a comprehensive collection of data to identify giftedness, especially for GT/EAL students. According to her, comprehensive assessments would help determine the nature of giftedness and the specific domain of potential talent as well as possible learning needs that may require additional support.

#### Theme 2: Formal Assessments

None of the mainstream teachers suggested formal assessment for GT/EAL students. As previously mentioned, the IEC teachers said that they avoided using formal assessments because they felt these tests were inappropriate for early learners of English. However, these teachers added that, as a monitoring tool, they would prefer to use the English Additional Language/Dialect (EAL/D) Progress Map. All six IEC teachers agreed that the speed at which students achieved each level in the EAL/D Progress Map was a possible indicator of giftedness.

The EYE teacher acknowledged that some traditional standardised tests may not be appropriate for early learners of English and suggested alternatives, such as non-verbal IQ tests. Additionally, she proposed the strategy of pre-testing, explicit teaching and post-testing. Students' performance during each of these stages could provide evidence of giftedness and potential talent.

# Theme 3: Uncertainty

There was a total of 15 comments suggesting there may be some uncertainty regarding identifying GT/EAL students. There were five comments from mainstream teachers and these included: "that is a difficult one", "I struggle with this", "I don't know how to" and "I could translate into Vietnamese", "ask for help" and "consult previous teachers".

IEC teachers generated four comments and each of these comments also suggests some degree of uncertainty. These included: "very difficult", "focus has been on lower ability", "not sure how to" and "don't know, haven't had any PD".

The EYE teacher commented that it was "difficult" but added "I am not sure if I have the tools other than what I have explained". She elaborated, saying that all sources of

information are relevant, including consulting parents and using interpreters, if necessary, to help develop an accurate profile of the GT/EAL student.

Table 9: How Teachers Identified GT/EAL Students

	Frequency of Comments						
Themes	One EYE Teache	er	Eight Mainstream	l	Six IEC Teachers		Total Comments
Frequency			Teachers				Comments
Informal observations in the process and product of learning	Find out more Use interpreters Ask parents	1 1 1	Often easily bored Express themselves well in English Good work samples Good reading comprehension High vocabulary and sight words Mature Oral language Reads widely Think outside the box Perform beyond expected level Good mathematically Artistic	7 4 2 2 2 2 2 1 1 1 1 1 1	Good in artwork Good in music or sport May be hindered by lack of English Good in maths May struggle with language in maths High ability in oral language High ability in first language Coordination skills	6 2 2 2 1 1 1	
n=44; 68%		3		25		16	44
Formal	Non-verbal IQ	3		23	On entry tests	10	44
Assessments	test Standard Progressive Matrices [SPM] Dynamic testing Pre-test, post test	1 1 1 1			EAL/D English Progress Map	1	
n=6; 9%		4		0		2	6
Uncertainty	That is difficult I am not sure if I have the tools other than what I have explained	1	That is a tricky one I struggle with this I don't know how to I haven't had any GT/EAL students Could translate into Vietnamese Ask for help from admin. Consult previous teachers	1 1 1 1 2 2	Very difficult Focus has been on lower ability Not sure how to Don't know haven't had any professional development	1 1 1	
n=15; 23%		2		9		4	15
Total n=65; 100%		9		34		22	65

In summary, the findings suggest that most teachers viewed GT/EAL students differently from their non-EAL gifted and talented peers. While most teachers preferred informal observations, the focus of their observations varied widely.

Mainstream teachers tended to focus on students' high academic performance and positive learning behaviours. IEC teachers tended to focus on observations of creative and thinking skills across different domains. The EYE teacher suggested that comprehensive assessment should precede formal identification of all gifted and talented students, including GT/EAL students, to avoid the risk of overlooking "hidden giftedness". Finally, the EYE teacher acknowledged that identifying GT/EAL was difficult, but possible, through comprehensive assessments.

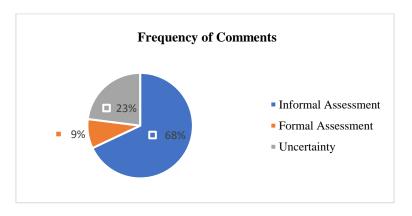


Figure 20: How Teachers Identified GT/EAL Students

# Question 3: What provisions are currently made for gifted and talented EAL students?

A total of 67 comments were generated from 15 teachers (Table 10 p.86). The predominant theme is Provisions within the Regular Classrooms (42 comments; 63% of total comments), followed by Provisions Outside School (17 comments; 25%) and finally Provisions within School (8 comments; 12%).

# Theme 1: Provisions within the regular classroom

There was a total of 42 comments on provisions within the classroom; 26 of these were from eight mainstream teachers. All the comments acknowledged that provisions for gifted and talented students were needed and necessary to not only serve their academic needs but also to prevent these students from "getting bored" in the classroom. Mainstream teachers suggested a range of classroom provisions, which included: opportunity to "work at

their own pace", "open-ended" and "independent" work; engagement in "research", "problem solving" and "critical thinking" tasks; "extension in talent area"; development of a "higher skills set" in "reading", "spelling", and "writing" and, if necessary, "scaffolding language needs". One teacher remarked that she would continually encourage GT/EAL students to "perform over and above in whatever they were doing" and "reassure them that it is "all right to be gifted". The teacher provided no explanation as to why reassurance was needed. Finally, one teacher voiced difficulty in providing for gifted students, particularly in heterogeneous classroom settings. She explained, "The demands of a large class...are difficult...so you have to be very well organized...to give extra to gifted and talented students. I find it difficult to do it in class when you don't get enough support".

The IEC teachers shared similar concerns and explained that they were often faced with the challenges of providing for a wide spectrum of abilities in their classroom. Five teachers reported that they were often faced with "balancing and juggling priorities" between their weakest and their highest ability students, which was more difficult without support. One IEC teacher recalled that one of her students had "incredible talent" in mathematics while at the same time needed considerable support to develop his English language skills. The teacher explained that prioritising students' language needs often left little time for extension activities, especially in the absence of in-class support. Another teacher added that the focus had always been on developing students' English language competencies.

The general assumption among the IEC teachers is that mainstream teachers will adequately provide for students who are gifted and talented when they exit the IECs. As one teacher explained, "Their time in the IEC is so short and so intensive...there is just not enough time...so if they are gifted and talented...they would probably exit the IEC sooner". However, not all IEC teachers shared this view. Two teachers said that they would prefer to work with gifted children directly. The first teacher explained, "I set other children to work and then work one to one with that child. I would then report that the child is gifted and talented". The teacher added that her GT/EAL student was, "shining in every way" and added that, "I have seen him through two phases so he is just ready...probably these are few and far between". Both teachers added they would try to "formally record his high performance in the exit report" to ensure the GT/EAL students will be adequately provided for in the mainstream. The second teacher, similarly, recalled having a student from Syria who had exceptional skills in mathematics but was new to learning English. In contrast to the first teacher, her focus was to provide enrichment and extension activities in mathematics. This teacher

remarked that she was pleasantly surprised to see how rapidly the student's English language improved concurrently with overall confidence in all areas of the curriculum.

To balance opposing needs, one IEC teacher added, "I rotate [time allocation] every time I get a support person. I give her the two lowest groups one week and in the following week...the two highest [achieving groups] ...so everyone gets a turn". In contrast, another IEC teacher said she would prefer to send her five "talented ones" out with the support teacher, in order to focus on students with lower abilities. Another teacher added, "It doesn't matter whether they are lower ability or gifted...if they are in small groups...and getting support...that will extend them...it makes a huge difference. They all need support...but again, it is always about balancing your time and the curriculum." Finally, an IEC teacher remarked that in her experience, mathematically gifted students who exit the IEC early often become "excellent students once they become confident users of the English language". She remarked, "Maths is a universal language... for some [GT/EAL students] ...a slow beginning without any English but ...when they exit IEC...and as their English improves... and... are confident...they are fantastic!" Finally, the EYE teacher made no comments about provisions within the regular classroom.

#### Theme 2: Provisions outside the school

There were 17 comments on provisions outside the school. None of the mainstream teachers made any comments about outside school provisions. All six IEC teachers, as mentioned before, said that high performing students were often transferred to the mainstream as soon as they meet expected competency in English. Evidence of their learning abilities formed part of their exit report.

The EYE teacher engages in gifted programs mainly outside the mainstream school for a select group of gifted and talented students nominated by teachers, who are usually from the mainstream. According to the EYE teacher, the Early Years Extension (EYE) Program operates outside the mainstream schools and the program is currently only available to gifted and talented junior primary students in the North Metropolitan State Schools in Western Australia. Places are therefore competitive, geographically limited and limited to a highly select group of gifted students who have been identified and nominated by mainstream classroom teachers. Selection is based on strong evidence of the student's abilities and the program is differentiated from the mainstream curriculum by the pace of work and program design. Students are offered a variety of enrichment and extension programs that are planned

to capitalize on their strengths as well as interests. Some of the many activities include using "an interest vote" to determine specific area of interests and having "a genius hour" for students to demonstrate their strengths, as well as providing opportunities for students to engage in "an independent area of research". Students are given pre-tests and post- tests to determine their achievements and outcomes of the program. Gifted students with special needs are also provided with the appropriate support in consultation with other relevant specialists.

#### Theme 3: Provisions within the school

There was a total of eight comments on provisions within the school, all coming from the IEC teachers. These teachers reported that provisions for academically gifted students within the school often depended on the availability of resources; for example, their specialist Art teacher had seen several artistic gifted and talented students excel. When additional support services were available selected students were supported in small groups for an hour or more on a weekly basis. IEC teachers reported that some gifted students, if nominated, may be provided with extension in writing and mathematics but nominations for academic extension rest entirely with the classroom teachers. One IEC teacher remarked that students who received support in small groups often make huge gains academically, regardless of their ability.

Table 10: Provisions for GT/EAL Students

Themes/ Frequency			Frequency of Comme	nts		
Trequency	The EYE teacher		Eight Mainstream Teache	ers	Six IEC teachers	
Provisions within the regular classroom			Academic extension Need independence Work at their own pace They get bored Research activities Problem solving Critical thinking Extension in talent area Open ended activities Higher skills set Graphic organisers Harder spelling words Reading activities Harder concepts in writing Scaffold language needs Difficult without support	8 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	English language support Balance priorities Individual support Maths problem solving Enrichment Extension	6 5 2 1 1 1
42; 63%				26		16
Provisions outside the school	Support all students Enrichment Extension Interest vote Genius hour Independent research Acceleration An area of interest	1 1 1 1 1 1 1			Exit IEC sooner Leave it to mainstream Formally recorded in exit report	6 1 2
17; 25%		8				9
Provisions within school					Individual support Support teacher Group work Need extension in writing or mathematics Enrichment in Art	2 2 2 1 1
8; 12%						8
TOTAL 67; 100%		8		26		33

There was a total of 67 comments on provisions for GT/EAL students. All the teachers in the study acknowledged that provisions for gifted and talented EAL students were necessary, not only to extend their high abilities but also to prevent boredom. Teachers were able to suggest a range of possible provisions, including language support for GT/EAL students. A common concern, raised by both mainstream and IEC teachers, was that the provision for GT/EAL students had been difficult, particularly in the absence of additional in-

class support. IEC teachers shared the common concern of having to balance priorities of students in the opposite ends of the ability spectrum. These teachers said that lower ability students were often given priority on the assumption that gifted and talented students were more likely to manage on their own. Not all IEC teachers agreed with this. One of them remarked that GT/EAL students need extension, such as in writing and/or mathematics, but also careful supervision and full support. The teacher remarked that additional support could make an enormous difference to students' learning regardless of whether students are gifted or not.

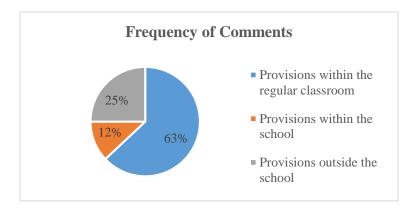


Figure 21: Provisions for GT/EAL Students

# Question 4: Are there any barriers that prevent GT/EAL students from accessing gifted programs?

A total of 73 comments were generated from 15 teachers. The predominant theme is Lack of Resources (29 comments; 40%), followed by Lack of Teacher Knowledge (22 comments; 30%), Parent Issues (10 comments; 14%), Language Issues (6 comments; 8%) and Not a Priority (6 comments; 8%).

# Theme 1: Lack of Resources

There were 29 comments, 40% of the total number of comments, about the lack of resources. Most teachers perceived lack of resources, particularly lack of in-class support, as a major barrier to GT/EAL students' full participation in gifted programs.

One mainstream teacher suggested that "it would be good to have a school-based program for gifted students" but added that "we don't have the funding or resources for gifted programs".

The IEC teachers generated a total of 20 comments, and 13 comments were with reference to the lack of support. In the absence of support, two teachers mentioned that sometimes they would use gifted students as teacher helpers, for example: "I get gifted students to teach", adding that it would help build their confidence. Other comments included: "need more support for "professional development" and "need whole school support". A year one IEC teacher added, "Extra books, extra games and extra resources don't mean as much to me as having an extra body in the classroom. I would prefer to have an extra person in the classroom anytime". The teacher added that the school has support for students at educational risk (SAER) and questioned why gifted and talented students do not have the same level of support.

The EYE teacher also indicated that funding cuts and lack of resources may have had an impact on the number of available places in gifted programs. The EYE teacher explained, "selection into gifted programs is severely limited ... only the top 3% of students, although Gagné (2004) recommends the top 10%". She added, "many... identified gifted students have to miss out on gifted programs and... not all schools in Western Australia have access to the Early Years Extension programs".

# Theme 2: Lack of Teacher Knowledge

There was a total of 19 comments which suggested that lack of teacher knowledge could be a barrier. The eight mainstream teachers generated nine comments, which included the following: "they are difficult to identify"; "too hard for teachers"; "will be missing out on normal work"; "this makes it even more difficult for students to catch up"; "too hard for teachers"; "EAL students wouldn't get the full benefit from gifted programs" and "stereotyped" could be a barrier.

IEC teachers suggested that they would be in a better position to adequately provide for their GT/EAL students if they had the support and necessary training. One teacher explained, "First, it is having the knowledge ... then providing them with what they need...and knowing how to support them...having PDs... then whole school support... Imagine, if you can grab them from this age......if they are gifted and talented...they could be sky...rocketing!" The teacher implied that the sky was the limit as to what students could achieve. IEC teachers shared several anecdotes of working closely with gifted and talented students and observed that many GT/EAL students have "flourished" when they were provided with the appropriate extension or enrichment activities.

The EYE teacher remarked that many GT/EAL students "may be under the radar", meaning unidentified. She explained that often "the underachievers and twice exceptional [gifted and talented students with a disability] are overlooked". She suggested, "We need to train teachers to better identify", and explained that, "good kids might be high achievers but they are not necessarily the gifted kids.... teachers need to recognise giftedness.... but I don't see much of a change in that.... also, we can only accept the top 3%... there are limited places...selection is based on very strong evidence". She pointed out that it was possible that, "teachers are too busy to fill out the paper work". She also added that, "this tedious exercise is just too much for an untrained teacher; as a result, many students are not selected due to insufficient evidence". After deliberating, the EYE teacher said, "I think to expect teachers to effectively differentiate in the classroom is a really a big ask. It is very difficult".

#### Theme 3: Parent Issues

There was a total of 10 comments; four were from the mainstream teachers. Comments included, "disapproved of their children going out of the classroom"; "no support at home"; "unable to provide transport" and "unaware of gifted programs".

The IEC teachers generated six similar comments; for example, "some parents "don't want them to go"; "cannot provide transport"; "not informed about gifted programs" and "unaware they have to collect evidence".

The EYE teacher remarked that parents are an invaluable resource for developing an accurate profile of gifted and potentially talented students.

# Theme 4: Language Issues

There were six comments on language issues, two from mainstream teachers and four from the IEC teachers, that because students spoke EAL, this acted as a language barrier, which made it difficult to identify giftedness and talent.

# Theme 5: Low Priority

There was a total of six similar comments, one from a mainstream teacher and five from the IEC teachers, suggesting that lower ability students were often given priority.

Table 11: Barriers for GT/EAL Students

Themes	Frequency of Comments							
/Frequency	The EYE Teacher		Eight Mainstream Teachers	Six IEC Teachers				
Lack of Resources	Accept top 3% only	1 1 1 1 1	No school-based GT program	1	It is good if they have another teacher to extend and support them  I get the gifted students to teach  Need professional development  Need whole school support  Not having appropriate resources  Lack of funding  Not having a person in charge	13 1 2 1 1 1		
n= 29;40%		7		2		20		
Lack of Teacher Knowledge	They are not identified and they are under the radar	1 1 1	They are not identified	2 1 2 1 2	Having the knowledge to provide them with what they need	5 2 1 1		
n=22; 30%		4		9		9		
Parent Issues			There is no support at home	1 1 1 1	Parents are not informed about gifted programs Parents don't want them to go	2 2 1 1		
n=10;14%				4	-	6		
Language Issues n=6;8%			Language barrier	2	Language barrier	4		
Priority			Priority for lower ability	1	Priority to support lower ability	5		
n=6; 8%				1		5		
Total = 73; 100%		11		18		44		

Many teachers had difficulty articulating the differences between the two terms giftedness and talent. The preferred method of assessment for identification purposes was informal observations; however, the focus of teacher observations varied widely among the teachers. Mainstream teachers focussed on observations of giftedness and talent in the academic domain whilst IEC teachers focussed on observations of the non-academic domains. Many teachers identified mainly the positive characteristics of giftedness, which were generalised for gifted and talented EAL students. Both mainstream and IEC teachers prioritised the needs of less able students in heterogeneous classroom settings, especially in the absence of in-class support. From the teachers' perspectives, there were many internal and external barriers which may prevent GT/EAL students from participating in gifted programs. These included the lack of resources and support as well as lack of professional development. The comments suggest that there was a general awareness for a need to identify, and adequately provide for, GT/EAL students. Finally, there were also suggestions that professional development in gifted education, combined with appropriate support and resources, could help teachers with the identification of, and provision for, GT/EAL students. From the teachers' perspectives, there were many barriers that could possibly prevent the identification of, and provisions for, GT/EAL students. These included: the lack of adequate resources, lack of teacher knowledge, lack of parent support, language issues and low priority. All teachers in this study commented about funding, and the lack of resources, including places in gifted programs and the inadequate availability of support. IEC teachers acknowledged that they could be better informed about gifted education and welcomed the opportunity to engage in whole school professional development in gifted education. Parents and language issues were also identified as concerns. Finally, most IEC teachers (n=5) reported that they often must prioritise the language needs of their lower ability students and those who are less able to manage on their own. The EYE teacher suggested that many gifted students are "under the radar" and have been overlooked because of inadequate identification procedures and lack of teacher knowledge.

# **CHAPTER 6 - SUMMARY AND DISCUSSION**

# Introduction

This chapter provides a summary and discussion of the key research findings from both the quantitative and qualitative data in relation to the four research questions and relevant literature. It begins by restating the research problem and the research questions. The main section is organised under the sub-headings of the four research questions and includes key findings synthesised from the data in Phases One and Two. Using a sequential mixed methods design (as discussed in Chapter 3), the quantitative and qualitative data are compared, contrasted and combined in the analysis to help provide interpretation and possible explanations. The key findings are then discussed considering relevant literature. Finally, a summary with the links between each of the research questions concludes this chapter.

# The Research Problem

In recent years, schools in the Perth Metropolitan area of Western Australia have witnessed a rapid rise in the number of students who use English as an Additional Language (EAL). In many schools, almost a third of the population are from EAL backgrounds (DETWA, 2017). These students are not a homogeneous group but are culturally, socially and linguistically diverse, with varying degrees of abilities, language proficiencies and educational needs. Some of the EAL students require services beyond those offered within the regular classrooms, including those students who are gifted and talented (GT). The responsibility of recommending GT/EAL students for special services often rests with teachers. However, there is limited research about how teachers in the mainstream and in the IECs identify and provide support for G/EAL students.

# The Aim of the Research

The aim of this sequential, explanatory mixed methods study is to investigate teachers' perspectives on the identification of and provisions for gifted and talented English as an Additional Language (GT/EAL) students in the Western Australian school contexts and to determine if there are any barriers that could impact on the identification process and provisions for these students. In Phase One, the quantitative data were obtained from a survey questionnaire completed by a total of 50 teachers from 18 primary schools. In Phase Two, the qualitative data were obtained from interviewing 15 teachers. The following research questions were used to frame the investigation.

# **Key Findings**

Research Question 1.

What are WA teachers' perspectives of gifted and talented English as an Additional language (GT/EAL) students?

# Key Findings:

- 1. Teachers had some uncertainties about the terms giftedness and talent.
- 2. Teachers had a broad understanding of giftedness and talent but tend to generalise the characteristics of GT/EAL students.

This discussion of results in relation to Research Question 1 is based on the participants' understanding of gifted and talented English as an Additional Language (GT/EAL) students through the survey. The interviews provided an opportunity for further exploration of these understandings. This is the first time that research, particularly in WA, has distinguished between the perspectives of mainstream teachers and IEC teachers in the field of gifted education. This was achieved through differentiating the comments between mainstream, Intensive English Centre teachers and the Early Years Extension teacher in relation to GT/EAL students.

# Teachers had some uncertainties about the terms, giftedness and talent

Regarding teachers' understanding of *giftedness* and *talent*, both the quantitative and qualitative data showed that teachers had difficulty differentiating between the two terms and seemed uncertain about the definitions. In the open-ended section of the survey, analysis of teachers' comments revealed the tendency to use the terms *giftedness* and *talent* interchangeably. In the interviews, except for the EYE teacher, all six IEC and eight mainstream teachers were uncertain about their understandings of the terms, expressing doubts and a lack of ability to articulate the definitions.

Analysis of IEC teachers' comments in the interviews revealed that, despite their doubts, many of their understandings about *giftedness* and *talent* were in line with Gagné's (2004) developmental model of giftedness and talent (DMGT). In contrast, analysis of the mainstream teachers' comments revealed that these teachers tended to use the terms *giftedness* and *talent* either interchangeably or synonymously.

A probable explanation for these uncertainties about the terms *giftedness* and *talent* may be a lack of training in gifted education. Indeed, the quantitative data showed that 74% of the 50 teachers in this study had not received training or professional development in gifted education. In a similar trend, the qualitative data revealed that all but one of the teachers interviewed had had no training or professional development in gifted education. In terms of EAL qualifications, more than half of the teachers did not have training or professional development in teaching EAL (65% of teachers from the quantitative data and 53% from the interviews). Of most importance, however, is the finding that none of the teachers in this study had had training in *both* gifted education and teaching EAL.

It is possible that the combination of a lack of training and the competing priorities of teaching in heterogeneous classrooms may detract teachers' attention away from accessing policy guidelines for the gifted and talented. It is likely that, in the absence of training, teachers have had to rely on their experiences, values, beliefs and cultural backgrounds to conceptualise giftedness and talent. This could explain why teachers had uncertainties about their understandings of the terms, *giftedness* and *talent*.

Misconceptions and uncertainty about the definitions of *giftedness* and *talent* have also been found in previous studies (Kaya, 2015; Neumeister et al., 2007). In a more recent study, Taylor (2016) found that most teachers in her study were "either not aware of the definition of giftedness used by their school or reported that their school did not use a definition" (p. 250). Gagné (1999) found that researchers, too, have difficulty defining the two constructs *giftedness* and *talent*, and there remains no consensus of their exact meaning.

Teachers had a broad understanding of giftedness and talent but tend to generalise the characteristics of GT/EAL students

Synthesis of the findings from the quantitative and qualitative data suggests that, despite many uncertainties about the terminology, most of the teachers (98%) who participated in this study have a broad understanding of the terms giftedness and talent and were able to identify many of the positive characteristics of gifted and talented students. However, amongst the mainstream teachers there was also a tendency to extrapolate the characteristics of their GT/monolingual English-speaking children to their EAL students, possibly because the teachers did not consider the subtle cultural differences between students. In other words, the mainstream teachers generalised the characteristics of GT/EAL students.

The quantitative data revealed that all 50 teachers agreed that there are different domains of giftedness and talent. However, teachers' conceptual understandings of *giftedness* and *talent* varied widely. Views were divided on the influence of hereditary versus environmental factors. When commenting specifically on giftedness and talent, approximately a third of respondents (37%) considered that *giftedness* is largely due to *hereditary* factors and a quarter (26%) thought that *talent* was also *hereditary*. In contrast, half of the respondents (53%) perceived that *giftedness* was the result of the *environment* and more than half of the respondents (61%) understood that *talent* was also influenced by the *environment*. In terms of how teachers perceived their students, over a third of the teachers (34%) believed that *all* students can be gifted and 68% believed *all* can be talented. In addition, a small minority of teachers (8%) believed that giftedness and talent can only be achieved through diligence.

Despite uncertainties about the terms and conceptions of giftedness and talent, teachers in this study were agreed with the list of possible characteristics of GT/EAL students. The main characteristics identified by respondents to the survey included: high IQ scores (88% of teachers indicated this), rapid learning (81%), high levels of achievement in mathematics and language (69%) and task commitment (69%). These quantitative data corresponded well with the qualitative data, because in the interviews, three of the main characteristics identified by *both* IEC and mainstream teachers included students' ability to: learn rapidly at a level above the norm; think deeply, creatively and laterally; and learn independently and manage on their own. Additionally, IEC teachers indicated that curiosity could be one of the traits of giftedness. In contrast, mainstream teachers noted that some gifted students tend to become bored easily.

Most of the teachers' in this study identified the positive characteristics of GT/EAL students and are similar to those found in the literature (Johnsen, 2004; Sternberg, Jarvin, & Grigorenko, 2011). However, previous studies have also identified numerous characteristics such as rapid code-switching between two or more languages (Allen, 2017; Johnsen, 2004), that were not reflected in the more traditional expectations of teachers in this study. The results pertaining to this study have not been reported before; however, the findings are consistent with a previous study by Moon and Brighton (2008), who found that many primary teachers had mistaken beliefs about the gifted and talented students. This suggests that while teachers who participated in the current research have a broad understanding of the characteristics of giftedness and talent, they may not have been aware of the different

manifestations of giftedness and talent specific to GT/EAL students and therefore, may have tended to generalise the positive characteristics.

While both IEC teachers and mainstream teachers in this study shared similar views about the characteristics of GT/EAL students, they also had many different perceptions of their high ability students. These differences were often revealed during the interviews. For example, IEC teachers included *curiosity* as a characteristic trait and mainstream teachers noted that their gifted students tended to get *bored easily*. It is possible that the context of the learning environment may have had an influence on the teachers' perceptions of their GT/EAL students. For example, the main goal in IECs is to develop students' communicative competence and thus the intensive interactive language programs may provide more opportunities for teachers to observe students' behaviours. Students who learn rapidly may be able to demonstrate high level *curiosity* by engaging actively and more productively. In contrast, one of the goals of the mainstream teachers is to develop students' academic skills. Students who can master the basic skills at a faster pace are more likely to get bored if they are not provided with appropriate extension activities.

The characteristics identified by both IEC and mainstream teachers have been amalgamated under three generalisations and are discussed in the following section.

Generalisation 1. Ability to learn rapidly at a level above the norm (IEC/mainstream teachers)

In this study, 88% of teachers in the survey considered high IQ as one of the characteristics of giftedness. Additionally, 84% of the teachers also identified the ability to learn rapidly at a level above the norm as a characteristic of GT/EAL students. Achievements above the norm, when identified by the eight mainstream teachers interviewed, were in the context of academic achievements, particularly in language and mathematics. In contrast, IEC teachers identified high achievers in more general terms.

These findings are congruent with the literature (Johnsen, 2004); for example, studies on multiple intelligence suggest that students who do not demonstrate high academic achievements may still be gifted and potentially talented in other domains (Gardner, 1993b). In addition, although the ability to learn rapidly are traits common to gifted students (Johnsen, 2004), there are other notable factors such as students' age, gender, ethnicity, and social and cultural backgrounds that can influence how gifts are manifested (Frasier & Passow, 1994;

Obi et al., 2014). This characterisation has important consequences for identification purposes.

A common observation among the mainstream teachers in the current study was that because gifted and talented students learn quickly, they have the tendency to get bored easily. This finding corresponds with previous studies which showed that boredom is not uncommon amongst GT students (Kanevsky & Keighley, 2003; Little, 2012; Rogers, 2007). However, research on the causes of boredom reveal that it is a complex phenomenon and can result from both "under challenge" as well as "over challenge" in the classroom environment (Acee et al., 2010; Preckel, Gotz, & Frenzel, 2010). In addition, high achievement can, and often does, vary across high-potential children over time (Gagné, 2010). A number of factors, such as low motivation, social and emotional problems (Siegle, Gubbins, O'Rourke, et al., 2016), absence of a challenging or engaging environment and lack of support, can impact on students' achievements (Chickzentmihalyi, 1990; Reis & McCoach, 2016) and affect a teacher's perceptions of students' potential talents.

# Generalisation 2. Ability to think deeply, creatively and laterally (IEC/mainstream teachers)

All teachers who were interviewed identified their GT/EAL students as rapid learners who can think deeply, creatively and laterally. However, the six IEC teachers reported that some of their GT/EAL students may not be able to verbalise creative and thinking skills during the early stages of learning English, but may still be able to demonstrate these skills in other ways. This finding is similar to Ford et al. (2014), who found that these cognitive characteristics may be demonstrated differently in different students. Some English language learners have been known to experience a *silent period* during which students remain silent for weeks or even months without speaking (Gibbons, 1985). During this *silent period*, students are still learning and comprehending but their silence can easily be misunderstood if the teacher is unaware of some of the characteristics of early language acquisition. This was highlighted by a Year 1 mainstream teacher in the current study who acknowledged making an error of judgement on one of her high ability students who remained silent for several weeks before she uncovered his true abilities.

# Generalisation 3. Ability to learn independently and manage on their own (IEC/mainstream teachers)

The majority (93%) of teachers who were interviewed believed that GT/EAL students could learn independently and manage on their own in the classroom. This finding is consistent with Johnsen's (2004) work, which found that the ability to work independently is one of the characteristics of gifted and talented students. However, other studies also suggest that not *all* gifted students can manage on their own and that a large percentage may have social and emotional problems (Silverman, 1993), drop out (Marland, 1972), be referred to juvenile courts (Seeley, 1993), or fail to realise their full potential (Gallagher, 2006; McCoach & Siegle, 2003; Neihart, Reis, Robinson, & Moon, 2002; Reis & McCoach, 2002; Whitmore, 1980). Hence, the generalisation that *gifted students can manage on their own* may prevent some teachers from recognising the unique educational needs of GT/EAL students.

## **Summary**

In summary, the findings have revealed that there were many uncertainties regarding the terms and the conceptions of *giftedness* and *talent*. These uncertainties suggest teachers in this study do not have a shared understanding of *giftedness* and *talent*, and that the formal definitions of giftedness and talent endorsed by the Department of Education, WA may not have been conveyed to the teachers in this study. The diversity of views expressed by teachers indicates that the identification of and provisions for GT/EAL students may be inconsistent across classrooms and possibly across schools in WA. However, despite these uncertainties and diverse views, teachers appeared to have a broad understanding of *giftedness* and *talent* and were able to identify many of the characteristics as stated in the literature. Most of the characteristics identified by the teachers were positive though the tendency to generalise gifted characteristics was common among teachers in this study.

It was also interesting to note that there were distinct differences as well as some similarities in the perspectives of the IEC and the mainstream teachers. Both groups of teachers were very positive about GT/EAL students but their approach to identifying and providing for GT/EAL students' needs varied widely. It is very likely that these differences were influenced by the context of the teaching environment and the priorities directed to the student population. Except for the EYE teacher, all the teachers interviewed indicated that they have had no training in gifted education. In the absence of training, teachers were also

found to rely on their own experiences, values and beliefs about giftedness and talent. In conclusion, the findings from Research Question 1 revealed that despite uncertainties in the terminology, teachers in this study have a broad understanding of the terms *giftedness* and *talent* but may not be aware of all their different manifestations. Teacher understanding of gifted and talented characteristics have implications for identification. The next section explores this issue.

#### Research Question 2.

How do teachers identify GT/EAL students?

#### Key Finding:

Teachers' identification practices for GT/EAL students varied widely, particularly in terms of how they used multiple sources of assessment (formal, informal or a combination of both).

Both the quantitative and qualitative findings indicated that the identification practices of the teachers in his study varied widely. These variations included the use of formal 'tests' such as the Intelligence Quotient (IQ) test, other standardised tests such as the National Assessment Program for Literacy and Numeracy (NAPLAN), informal assessments such as observations, and/or a combination of these. However, none of these identification practices adheres strictly to the recommended identification standards of the National Association for Gifted Children (NAGC, 2011) or the gifted and talented guidelines of the Department of Education, Western Australia (DETWA, 2011).

The discussion of findings in relation to the above research question are from both the quantitative and qualitative data. There are three parts to this section, each pertaining to the form of assessment used by teachers in this study to identify GT/EAL students: formal assessments, informal assessments and multiple sources of data. The implications of the findings and a summary conclude this section.

### Identification using Formal Assessments

The quantitative findings derived from 50 teachers revealed that 57% of them preferred to use the NAPLAN standardised tests results rather than IQ tests to identify GT students. Only a small minority of teachers (19%) used psychometric measures or IQ tests to

identify giftedness. Although IQ tests were not widely used by the teachers in the study, 88% of teachers in the survey identified high IQ scores as one of the characteristics of giftedness.

The qualitative findings derived from 15 teachers indicated that the EYE teacher was the only teacher who reported using IQ tests to identify giftedness. In addition, all eight mainstream teachers indicated a preference for using NAPLAN test results rather than IQ tests for formal assessment. This finding is congruent with the quantitative data. The six IEC teachers, however, opposed the use of IQ tests because traditional IQ tests are strongly language based. These teachers noted that, firstly, some GT/EAL students may not have the pre-requisite English language skills to read the questions in the IQ test; secondly, that some GT/EAL students may lack test-taking experience; and thirdly that traditional IQ tests are unlikely to capture the range of GT/EAL students' potential abilities. The IEC teachers also emphasised that a lack of English language competency is not a reflection of a lack of high ability, but that traditional forms of assessment are inadequate for early learners of the English language. The findings of this study stand in sharp contrast to an early study by Hadaway and Marek-Schroer (1992), who found that teachers assumed that students who lack English language proficiency are not gifted. However, this current study is consistent with more recent views; for example, Blackburn et al. (2016) stated that while GT/EAL students may share the same characteristics as their mainstream peers, "both their full abilities and true potential may be masked behind the language barriers" (p. 339).

Concerns about the appropriateness of IQ tests for students in the early stages of English language acquisition, as highlighted in the current study, align with previous studies. For example, some traditional IQ tests can underestimate the intellectual potential of students who come from culturally, linguistically and socio-economically diverse backgrounds (Frasier & Passow, 1994; Lohman et al., 2008). However, previous studies have also shown that more recently developed intelligence tests (McBee, 2006) are not culturally biased (Naglieri & Ford, 2003) but are extremely reliable (Jensen, 2015) and valid predictors of potential in educational achievements (McCallum, 2003; Sarouphim, 1999; Subotnik, Olszewski-Kubilius, & Worrell, 2018). According to (Gagné, 2015), the Wechsler Pre-school and Primary Scale of Intelligence (WPPSI-III) tests, for example, suggest that early intellectual precocity of 3 or 4-year-old children (Gagné, 2015) is easily visible and may manifest itself even earlier (Gross, 1993). Thus, the literature suggests that early diagnosis is critical to ensure talent development.

Despite dozens of studies on the validity and predictability of IQ tests (Gagné, 2015), most teachers in this study preferred not to use IQ tests. In addition to those explanation given by the six IEC teachers, there are many plausible explanations for the apparent unpopularity of IQ tests. Drawing from the results, 74% of teachers from the quantitative data and 93% of the interviewees revealed that they had had no training in using IQ tests for identification of giftedness. Hence, in the absence of training, teachers may feel inadequately prepared to administer IQ tests and may not be aware of the availability of the many alternative, culturally sensitive IQ tests. In addition, in the context of the competing demands of mixed ability classrooms, administering IQ tests is unlikely unless teachers have access to qualified professionals and additional resources.

The interviews revealed that none of the IEC teachers conducted formal assessments of their high ability students for gifted programs. There was a general assumption that formal assessment for giftedness is the responsibility of the mainstream teachers. Mainstream teachers, on the other hand, may not see the need to refer GT/EAL students for formal assessment if they seem to be able to *manage on their own*. Without formal training, it is difficult for teachers to recognise giftedness and, therefore, they are unlikely to identify all the potentially gifted students for gifted services (Gross et al., 2005). The findings in this study suggest that gaining access to gifted services depends largely on teacher nomination. This finding supports McBee's (2006) study in which teacher nominations had a direct impact on students' access to gifted services.

In this study, mainstream teachers (57%) preferred to use the NAPLAN results for formal identification purposes. However, in addition to IQ tests, other standardised measures (if correctly administered) can also validly predict potential achievement (Subotnik, Olszewski-Kubilius, & Worrell, 2011). It has been shown that training can influence teachers' attitude, identification practices and provisions for gifted students (Carman, 2011; Geake & Gross, 2008; Lassig, 2015; Plunkett & Kronborg, 2011). Hence, if teachers in this study had had appropriate training, they may have viewed IQ tests more favourably and/or at least have referred more students for formal assessments.

The most probable reasons for mainstream teachers preferring to use NAPLAN results could be that they do not incur additional expense for the school or families and teachers require no further assistance to administer the tests. However, NAPLAN test results are only available for students in Years 3, 5, 6 and 9. Hence, the practice of using NAPLAN test results may exclude potentially gifted students in the gap years. In addition, other researchers

have raised concerns that using high stakes tests such as NAPLAN raises questions for identifying giftedness, due to possible validity and reliability factors (Jolly, 2015a).

### **Summary**

In summary, NAPLAN tests were a preferred form of formal assessment by mainstream teachers in this study. IQ tests were not widely used to identify GT/EAL students, possibly due to a combination of factors. These factors include the lack of teacher training, time, financial resources and the competing demands of regular classrooms. IEC teachers in this study did not use formal assessments and standardised tests to identify GT/EAL students because of inappropriateness of these instruments for early learners of English.

#### Identification using Informal Assessments

Commenting on the quantitative findings, 85% of teachers surveyed in this study indicated strong preferences for using informal observations as a means of identifying giftedness in their students. The qualitative findings revealed a similar trend, with more than half of interviewed teachers also indicating a preference for informal observations. Teachers generally reported that students' observable learning and social behaviours within the regular classroom served to determine their eligibility for special services. These findings align with Wortham (2006) research, which showed that teachers used observations to identify giftedness. However, Wortham (2006) also warns that informal observations may increase the risk of observer bias and the validity of the observation, especially if the teacher's interpretation of gifted behaviour is incomplete or inaccurate. Similarly, the NAGC (2011) highlighted that any form of observation runs the risk of possible bias and stereotyping unless the teachers have been adequately trained. The EYE teacher in this study suggested that to avoid bias, teachers need to use research-based checklists for informal observations on the basis that they can provide rich evidence of students' abilities. In addition, informal observations are valid if students have been observed in a variety of settings and perspectives have been gathered from multiple sources (Matthews & Peters, 2018).

In this study, both mainstream teachers and IEC teachers identified a multitude of GT/EAL students' learning behaviours based on informal observations. However, observations made by teachers were limited to the regular classroom environment and did not include perspectives from multiple sources such as parents and peers. The quantitative data revealed that only a small minority of teachers (14%) considered using parent and/or peer nominations. The qualitative findings revealed similar trends. Apart from the EYE teacher, no

other interviewees involved parents in the identification process. Language issues could be a possible reason for not involving parents, because some parents from non-English speaking backgrounds may require the services of an interpreter. Engaging professional interpreters and/or translating documents may place additional demands on teachers' time and schools' limited financial resources. Another possible explanation is that competing demands in classrooms may prevent teachers from conducting comprehensive observations beyond the regular classroom environment.

Teachers' observations in this study may not have been as comprehensive as recommended by the literature (NAGC, 2010). Teachers identified GT/EAL students who demonstrated high academic achievements and observable, positive learning behaviours but only these were restricted to the context of the classroom. However, not all gifted students demonstrate positive learning behaviours and/or high academic performance: many highly gifted students may underachieve (Cavilla, 2017; Gross, 1993; Reis & McCoach, 2016). In this field, underachievement, according to Colangelo and Assouline (2000), is a "discrepancy between assessed potential *and actual* performance" (p.595). Consequently, when teachers use informal observation to identify giftedness, it is essential to consider circumstances related to the home, school and /or peer pressure (Callahan & Hertberg-Davis, 2013; McBee et al., 2016; Pfeiffer, 2012).

In the current study, teachers identified, and possibly only expected, mainly positive characteristics from gifted and talented students. This could mean that students who did not conform to teachers' expectations may have been overlooked. This could include underachievers. The findings in this study are similar to previous studies that found that teachers' beliefs and expectations can influence how gifted and talented students are identified (Siegle & Powell, 2004). A mixed method study, on the identification of giftedness in early years of schooling, also found that Australian teachers were only successful in identifying giftedness 57% of the time through observations and formal tests (Hodge & Kemp, 2006). Despite this, McBee (2006) found that teachers' referrals were superior to, and more accurate than, other referral sources such as parents, peers and self-nominations. Previous studies have also shown that training can make a significant difference to teachers' ability to make accurate observations (Siegle, Moore, Mann, & Wilson, 2010). In addition, to ensure the reliability and validity of teachers' observations, teachers need time to make these observations (Pfeiffer & Petscher, 2008; Renzulli et al., 2009).

Teachers in the interviews made no mention of performance-based assessments, which is another form of informal assessment. For example, for GT/EAL students these alternative assessments (VanTassel-Baska, 2008) include the DISCOVER performance-based assessment (Sarouphim, 1999) which is based on the general framework of (Gardner, 1993a) theory of multiple intelligence and Maker's (1996) definition of giftedness. More recently, the U-STAR~PLUS (Using Science, Talents, and Abilities to Recognise Students ~ Promoting Learning for Underrepresented Students) approach offers high-end learning environments in which teachers work in partnership with parents, observing young children with potential as they engage in science activities (Coleman, 2016).

### **Summary**

In summary, the findings suggest there was much support for informal observations but in the absence of training teachers may not be aware of all aspects of observation. Additionally, the competing demands of classroom teaching and lack of resources may prevent teachers from conducting comprehensive observations as recommended by the literature. Consequently, teachers' observations may not be sufficiently accurate to identify GT/EAL students.

#### Identification using Multiple Criteria

The findings from the current study suggest that most teachers recognised the limitations of a single measure and reported that they used multiple measures to identify giftedness. In the quantitative data, 69% of the respondents equated high academic achievement with giftedness and 85% indicated a strong preference for using informal observations. In the interviews, however, all eight mainstream teachers tended to focus on students' outstanding academic performance, classroom learning and social behaviours as signs of giftedness. These teachers indicated a preference for using NAPLAN results and/or school achievement reports for formal assessments, and observations for informal assessment. In contrast, the six IEC teachers in this study did not mention using NAPLAN results but reported using the EAL/D English Progress Map (Department of Education, 2014) for formal assessment and that rapid progress in the EAL/D English Progress Map was a possible sign of giftedness. IEC teachers commented that students with less than two years of formal English learning are exempt from NAPLAN testing. All six IEC teachers also indicated a strong preference for observations for informal assessment. However, unlike the eight mainstream teachers, IEC teachers in this study focussed on the demonstration of high levels of creativity

and thinking skills in any domain as a possible sign of giftedness. Finally, the EYE teacher recommended that multiple sources of data could include IQ tests, school achievements, NAPLAN results, portfolios, research-based checklists, interviews and any relevant information from both teachers and parents. Again, in this study, there were distinct differences between the forms of assessment by the mainstream, IEC and EYE teachers. These differences between teachers in different teaching contexts have not been reported in the literature to date as far as it can be ascertained.

While teachers in this study reported using multiple assessments to identify giftedness, the sources of data, instruments, assessment tools and techniques used for identifying giftedness varied widely. This finding has not been reported in WA before and is a critical aspect of understanding how and why some GT/EAL students in this State may not have been identified. This raises questions about the consistency, fairness, validity and reliability of multiple identification data pertinent to this study.

In the current study, the eight mainstream teachers identified giftedness from the perspective of *outstanding academic achievement*. Previous studies have also shown that there is a correlation between high academic performance, or IQ test scores, and identification of giftedness and talent (Chamorro-Premuzic & Furnham, 2006; Colangelo, Assouline, Cole, Cutrona, & Maxey, 1996; Fletcher & Hattie, 2011). However, critics suggest this form of traditional academic giftedness serves to identify only a fraction of the potentially talented students, particularly those from diverse backgrounds (Baldwin, 2005; Ford et al., 2001; Frasier & Passow, 1994).

In contrast to the mainstream teachers, the six IEC teachers in this study identified giftedness from the perspective of *potential to excel*. These teachers reported that some GT/EAL students might not have had the opportunity to demonstrate high academic achievement. IEC teachers suggested that language issues might mask giftedness, especially for students in the early stages of learning English. Hence, for IEC teachers, the purpose of multiple sources of data was to provide evidence of *potential talent* rather than high academic achievement. For these teacher, informal observations, high levels of creativity and thinking skills were more important than current levels of academic achievement. This *potential talent perspective* parallels the contemporary talent development perspectives mentioned in the literature (Gagné, 2018; Renzulli & Reis, 2014; Sternberg et al., 2011) and is also consistent with Gagné's (2007) DMGT model and his more recent Integrative Model for Talent Development (Gagné, 2018).

According to Gagné's (2007) DMGT model, identification practices must take into consideration the influence of environment and intrapersonal catalysts and chance factors. The NAGC (2010) also recommends that schools need to develop comprehensive, cohesive and ongoing procedures for identifying and serving GT students. In the current study, the findings suggest the identification practices might not have been sufficiently comprehensive because observations were restricted to the classrooms. The use of NAPLAN data suggests there may be inconsistency in formal assessment as NAPLAN results apply only to students in Years 3 and 5 in the primary school. Comprehensive assessment of GT students entails identification processes across all grade levels to ensure no child is overlooked; in addition, gifted programs should be cohesive and ongoing in each of the talent areas throughout schooling (Jensen, 1998; Whitmore, 1989). Teachers in this study provided extension activities in the regular classrooms because gifted programs were not available in their schools.

The current study suggests that while all the teachers reported using a combination of identification measures, the measures they used were insufficiently consistent, comprehensive and non-cohesive. They did not comply with the recommendations by the NAGC (2010) and ACARA (2018). Secondly, the identification measures used by the teachers were not cohesive as not all identified students had equal access to programs throughout schooling. GT/EAL students who transfer from the IEC to mainstream school may not have access to programs due to lack of resources and trained teachers. Finally, the identification process is unlikely to be ongoing if most teachers are untrained to recognise gifted characteristics. Research suggests that, in the absence of training, teachers may have to rely on their own perceptions of the characteristics of giftedness, beliefs and understandings (Ford, 2014; Gagné, 2015, 2018; McBee et al., 2016; Pierce et al., 2006). This situation further disadvantages those students who do not conform to teacher expectations, beliefs and perceptions of giftedness (Moon & Brighton, 2008). In addition, studies have also shown that biases, stereotypes and deficit views of non-native English language learners are common among those who are unaware of cultural differences (Ford, 2014; Siegle, Gubbins, O'Rourke, et al., 2016). A lack of cultural competence can result in misguided classification of GT/EAL students as at risk or disadvantaged (Cooper et al., 2011).

#### **Summary**

Teachers in this study were prepared to use multiple sources to identify giftedness, despite expressing many concerns about the processes they used. The findings suggest that

although teachers equated high intelligence with high IQ test scores, in practice, IQ tests were not widely used, possibly due to lack of training, time and resources as well as a belief that IQ tests are inappropriate. Most of the mainstream teachers in this study preferred to use the results of the NAPLAN standardised tests for formal assessment. There was also an overwhelming preference for informal observations, which were restricted to observable learning and social behaviours within the context of the regular classroom. This suggests teachers' observations may not be as comprehensive and consistent as recommended by the literature.

#### Research Question 3.

What provisions are currently made for gifted and talented English as an Additional Language students?

#### Key Findings:

- 1. Teachers supported special programs for GT/EAL students.
- 2. Provisions for GT/EAL students were within the regular classroom by means of extension activities.

Synthesis of the findings from the quantitative and qualitative data suggests that teachers in this study supported special programs for GT/EAL students. Provisions for GT/EAL students were within the regular classroom by means of extension activities because of an absence of special programs. Hence, gifted students in this study remained in heterogeneous classrooms on a full-time basis and the regular classroom teacher was responsible for all the students. Most teachers interviewed (93%) reported that they did provide extension activities for their GT/EAL students, but only after they had completed regular basic work. All but one of the teachers interviewed were in support of 'pull-out' gifted programs. These include the part-time, outside school Early Years Extension (EYE) and Primary Extension and Challenge programs (PEAC) administered by the Department of Education, Western Australia. However, one mainstream teacher remained doubtful about the benefits of these programs for GT/EAL students, because of a concern that students would be "missing out" on their regular classwork.

#### Teachers supported special programs for GT/EAL students

The quantitative findings revealed that 92% of teachers in the survey thought that special programs for GT/EAL students would provide great opportunity for students to work with their like-minded peers and 90% understood that special programs would offer a curriculum beyond that offered within the regular classrooms. However, 24% of teachers were concerned that students would miss classroom work; 8% were doubtful that special programs would make a difference; and 3% thought that special programs would be discriminatory. In the open-ended section of the survey, respondents expressed concerns about the lack of attention given to the needs of GT/EAL students. Comments included: provision for GT/EAL students seemed insufficiently important to invest in appropriate funding and resources; current misconceptions that gifted students can manage on their own; deficit models could prevent students from participation in gifted programs; and, teachers acknowledged that they are insufficiently equipped with the knowledge to identify and adequately provide for GT/EAL students. The qualitative findings revealed similar concerns among the teachers interviewed. The main concern was the difficulty of addressing the needs of all the students in the absence of in-class support, time and resources.

# Provisions for GT/EAL students were within the regular classroom by means of extension activities.

Most interviewed teachers (93%) reported that they work in classrooms where there is a wide spread of abilities among the students. These teachers reported that they would provide extension activities to gifted students only after they had completed basic classwork. These activities were additional work or extension activities, which students needed to manage on their own. Both mainstream and IEC teachers said that the demands of mixed ability classrooms often prevented them from planning for their gifted students. Extension activities offered to supplement the regular curriculum in this study could be defined as *provisions* and not *programs*: according to Tannenbaum (1983), "A program is a comprehensive offering sequenced over a long period of time, usually designed as a requirement, and very much a major part of the total school curriculum. A provision, on the other hand, "is more fragmentary, an ad hoc offering, relatively brief in duration, often designed by an individual teacher with special abilities rather than a curriculum committee, and supplemental to the major offerings, not integral with them" (p. 515). Gagné (2018)

endorses Tannenbaum's (1989) differentiation and proposed that an effective academic talent development program should constitute seven key elements: enriched K-12 curriculum, systematic daily enrichment, full-time ability grouping, customized accelerated pacing, personal excellence goals, highly selective access and early introduction. In this study, teachers used the terms 'extension activities', 'programs' and 'provisions' synonymously. Based on the above definitions, the EYE teacher appears to be the only teacher in this study to offer some of the elements of a differentiated program for gifted students. However, the EYE and PEAC programs are not available on a full-time basis.

The qualitative findings also revealed that, in mixed ability classroom settings, the needs of GT/EAL students were a low priority, based on the assumption that these students are more likely to manage on their own. However, mainstream teachers in this study reported that they often needed to provide extension activities to prevent boredom because their high ability students often completed their work at a much faster pace than their peers. These extension activities were designed to engage students in higher order thinking tasks. The six IEC teachers suggested that GT/EAL students should be allowed to work at an accelerated pace with a support teacher or assistant. In the absence of support, IEC teachers said that they would often assign GT/EAL students the task of being teacher helpers in the classroom.

The findings from the interviews suggest that teachers in the current study were aware of the need for differentiated provisions for GT/EAL students in the classrooms. However, it is not entirely clear whether the practice of providing extension activities was motivated by the need to keep students busy, or to prevent boredom, or genuine attempts to develop potential talent, or a combination of these. The finding that teachers were aware of the need to provide for all their students is in accordance with (ACARA, 2016) guidelines. Nevertheless, Braggett (1994) cautioned that if these extension activities refer to more additional work simply to keep gifted students occupied, some gifted students may perceive this to be a disincentive to working quickly. Under these conditions, Braggett (1994) suggests some students may underachieve to avoid more of the same type of work. The findings suggest that the teachers in the current study may not be fully equipped with the knowledge of gifted education to adequately make appropriate, sufficiently rigorous and relevant modifications to the regular curriculum to meet the needs of GT/EAL students. In the interviews, the teachers reported that there were no gifted programs in their schools. It is possible that if there were comprehensive gifted programs, it could make a difference to more potentially talented students. This is based on a review of research, (Rogers, 2007), in which Rogers concluded

that "...an average of one third to one half an additional year's achievement growth should be possible within a school program for talent development when the child participates in the growth area on a daily basis" (p. 383). Within the constraints of available resources and training requirements, teachers in the current study appeared to be providing the best available options to their GT/EAL students in the regular classrooms. However, other researchers have shown that gifted students need to experience greater breadth in learning, beyond what is in the standard curriculum (Freeman, Freeman, & Ramírez, 2008; Gagné, 2018) and daily opportunity to advance their knowledge and skills at their own pace (Gagné, 2007, 2018). If these extension activities, however, are only more of the same, or work to prevent boredom, it would be a great disservice to GT/EAL students (Braggett, 1994; Gross, 2001). Teachers in the current study did not provide details of the exact nature and regularity of the extension activities they offered. In contrast, the EYE teacher commented that, without training and support, it would be unreasonable to expect regular teachers to plan differentiated provisions for gifted students.

During the interviews, the six IEC teachers reported that *time* is often against them as it is a common practice to allow high performing students to exit from the IECs into mainstream schools as soon as they have reached the expected competency in English. The general assumption is that mainstream teachers will be in a better position to provide for the needs of GT/EAL students. However, one respondent expressed concern in the survey that GT/EAL students could easily be overlooked in the mainstream if the mainstream teachers fail to account for language differences.

In Western Australia, the only available alternative to provisions in the regular classroom are the part-time pull-out Early Years Extension (EYE) and Primary Extension and Challenge (PEAC) programs. The findings suggest that due to limited places, many GT/EAL students who could benefit from gifted programs may not have the opportunity to do so and therefore, may have to depend entirely on the regular classroom teachers to provide for their needs in the regular classrooms. EYE and PEAC programs as well as provisions in the regular classrooms are still only part-time solutions to the long-term challenges of ensuring best practices for talent development as recommended by Gagné (2015).

Restating the findings, most teachers in this study supported pull-out programs, which suggests that teachers recognised the benefits of these programs. However, one mainstream teacher was concerned that when students participate in outside school programs, they often "miss out on regular classroom work" and have to "catch up", causing unnecessary stress.

However, studies have shown stress was substantially higher when gifted students were placed in unchallenging classroom settings (Hoekman et al., 1999; Preckel et al., 2010). It is possible that the teachers, who was concerned about the pull-out programs, may not have viewed the pull-out program as alternative to the regular curriculum, hence, making up for missed work could be considered an unnecessary inconvenience.

As stated earlier, most teachers in this study, reported that they found it very difficult to meet the needs of all their students when working under the conditions of heterogeneous classrooms. The findings in this study are supported by similar findings in a previous study by Taylor (2016). Even teachers with many years of experience and commitment reported that they found it difficult to meet the needs of all their students in the absence of support. During the interviews, most of the teachers shared that they often try to balance the needs of students on both ends of the ability spectrum.

In the absence of in-class support/specialist teacher assistance, the six IEC teachers reported that they often are compelled to prioritise the needs of the weakest students in their classrooms. Gifted and talented students are often left to "manage on their own" with "extension work". The most probable explanation for the low priority directed to gifted students is that teachers perceived that weaker students have greater needs than those who are gifted. It may also reflect the egalitarian-excellence dilemma (Tannenbaum, 2003). The qualitative findings suggest that teachers in this study need more in-class support. This finding confirms the view that to make instruction of the gifted effective, teachers need support in the regular classroom (McDaniel, 2002). Most teachers (93%) who were interviewed reported that allocating an equal amount of time and attention to individual students is practically impossible daily. This difficulty is compounded by the lack of time and resources and the absence of adequate training. Consequently, teachers felt that they are left with little alternative but to prioritise and assume that GT/EAL students will "manage on their own".

Time, according to the six IEC teachers, was their major constraint because IEC students are expected to acquire the necessary English language within two years and then transition to the mainstream schools. Teachers in the IECs reported that they are expected to place highest priority on developing students' English competency in the shortest possible time. Previous studies similarly found that time is often a major obstacle for teachers to provide adequately for gifted students (Taylor, 2016). The assumption is that mainstream schools are better equipped to provide extension and enrichment programs.

Finally, all eight mainstream teachers similarly agreed that more in-class support would make a difference and welcomed the opportunity to work with support/specialist resource teachers. Teachers in the interviews expressed concerns that provisions in regular classrooms may not always cater for the needs of all GT/EAL students. Under the present working conditions of heterogeneous classrooms, the provision of a defensible comprehensive model for GT/EAL students (Gagné, 2018) is likely to remain a major challenge for teachers unless a whole school approach is adopted with adequate funding for talent development (Braggett, 1994; Renzulli, 2012).

#### **Summary**

In summary, the findings from this study suggest that most teachers provided extension activities to their GT/EAL students in classrooms. However, teachers may not have been fully aware that provisions alone may not be adequate or rigorous to meet the needs of all gifted students in heterogeneous classrooms. Under the present working conditions of these classrooms, extension activities appear to be the only available options for GT/EAL students. The provision of a comprehensive model for talent development (Gagné, 2018) is likely to remain a major challenge unless a whole school approach is adopted with adequate funding to support it (Braggett, 1994; Renzulli, 2012).

#### Research Question 4.

Are there any barriers that prevent GT/EAL students from participating in gifted programs?

#### *Key Findings:*

- 1. Teachers lack adequate training in gifted and EAL education.
- 2. Low priority directed to the needs of GT/EAL students as result of both internal and external barriers.

#### Teachers lack adequate training in gifted and EAL qualifications

The findings from this study revealed that teachers in this study lack adequate training in both gifted and EAL education. Analysis of the data suggests that the low priority directed to the needs of GT/EAL students was influenced by both internal and external factors. This

section begins with a discussion of the key findings, based on both the quantitative and qualitative data, in relation to the literature. It concludes with a summary.

The findings revealed that none of the teachers in the current study had had training or professional development in *both* gifted education and EAL. However, most of the teachers had been trained in one of these fields: either gifted education or EAL. The quantitative findings revealed that less than a quarter (21%) of the 50 teachers who completed the survey had been formally trained in gifted education and a third (35%) of the teachers had been trained in teaching EAL students. From the qualitative data, however, it was revealed that the EYE teacher was the only interviewee with formal training in gifted education. None of the other interviewees (eight mainstream and six IEC teachers) had received any training or professional development in gifted education. This finding supports a recent South Australian study that indicates that, in most schools, less than one third of teachers have completed any professional development related to teaching gifted students (Henderson & Jarvis, 2016). Additionally, only half (53%) of all the teachers interviewed in the current study had EAL qualifications.

The quantitative data also showed that over half (65%) of the teachers reported having gifted students and the large majority (80%) of teachers reported having EAL students in their classrooms. This finding suggests that even though teachers had gifted and EAL students in their classrooms, not all the teachers were adequately prepared for the challenges of teaching GT/EAL students. Although teacher training and professional development are available for Western Australian teachers (DETWA, 2018), the current study appears to be the first time that teachers in WA have acknowledged that they have not been adequately prepared to cater for students who are both gifted *and* from EAL backgrounds.

The inadequacy of training and professional development in *both* gifted education and EAL may have resulted in teachers in the current study holding a variety of definitions and conceptualisations about the two terms *giftedness* and *talent*. These conceptualisations are critical in identifying the unique needs of GT/EAL students. During the interviews, the teachers reported that there was no coordinated approach to serving the needs of both gifted and EAL students in their schools. According to Gagné (2015), best practice for gifted students should include full-time ability grouping with a trained teacher as this is an effective way "to create appropriate classroom conditions for sustained daily enrichment" (p. 176). In the current study, teachers reported that they had to provide for *all* their students, including those who are gifted, in heterogeneous classrooms. In addition, teachers reported that they felt

compelled to prioritise the needs of their weaker students due to limited resources in terms of time and support. All teachers in this study acknowledged that much more is needed in terms of professional knowledge, time and support services. To ensure best practices for gifted students as identified by the literature (Gagné, 2015; Gross, 2001; Renzulli & Reis, 2014; VanTassel-Baska & Brown, 2007), professional development needs to be systematically and centrally supported to raise general awareness of *all* teachers (Senate Committee, 2001). The current study suggests that *not all* teachers in WA have had access to adequate professional development despite having been entrusted with the full responsibility for GT/EAL students in regular classrooms.

The quantitative data from the current study revealed that 39% of teachers have had little experience with GT/EAL students. It is possible that these teachers may not have recognised the different manifestations of giftedness, or, as the IEC teachers clearly articulated, the high potentials of many GT/EAL students may have been masked by language issues or inequitable educational experiences. This masking of potential has also been reported by previous researchers, particularly in the US (McBee et al., 2016; Moon & Brighton, 2008). All teachers are expected to be able to teach students of all abilities and backgrounds and as most gifted students and EAL students are taught in the mainstream, effectively all teachers are teachers of gifted students (Henderson & Jarvis, 2016; Moon & Brighton, 2008) and EAL students. The Senate Committee on the Education of Gifted Children (2001) acknowledged that giftedness is found in all socio-economic and ethnic groups. Their recommendation is that for teachers to identify gifted children, especially those from disadvantaged groups, they need adequate training. In response to this recommendation, the Gifted Education Research, Resource and Information Centre (GERRIC) at the University of New South Wales has introduced online courses as well as professional development in gifted education, which are available to all WA teachers (DETWA, 2011). The current study, however, reveal that most teachers interviewed remained unaware of these professional development packages in gifted education. There may be many possible reasons for this: time constraints due to heavy workloads; teachers may not see the need to develop their knowledge and skills in gifted education; and gifted education may not be a priority.

The current study supports previous studies in which many teachers were unaware of the availability of professional development packages (Fraser-Seeto, Howard, & Woodcock, 2016). Despite the knowledge that gifted education is not only integral in meeting the needs of gifted students, it can also serve to improve general education for the entire school and

achieve equity and excellence for all (Henderson & Jarvis, 2016). However, a recent study by Peters and Jolly (2018) found that professional development does not necessarily guarantee that teachers will effectively implement all of the recommended instructional practices for gifted students.

Other researchers have shown that most gifted students will not develop their potential commensurate with their capacity without careful nurturing, not only from the school, but also from the home and the community at large (Callahan & Hertberg-Davis, 2013; Gagné, 2015; Kronborg & Plunkett, 2015; Moon & Callahan, 2001; Renzulli & Reis, 2014; Siegle, Gubbins, O'Rourke, et al., 2016; VanTassel-Baska & Brown, 2007). Having adequately trained teachers is essential, but research on talent development suggests that the home and the environment outside school are just as important (Gagné, 2015; Renzulli & Reis, 2014; VanTassel-Baska & Brown, 2007). Some GT/EAL students may not have had opportunities to develop the academic skills needed for advanced content due to circumstances in the home and the environment. For example, the six IEC teachers in the current study reported that many students, particularly those from refugee backgrounds, lacked access to a variety of support, including social and emotional development and enriched extracurricular programs outside school. Thus, the tendency to focus on developing EAL students' English competency as a prerequisite to accessing enriched content areas such as science and maths may have prevented some students' potential talent from surfacing. Indeed, both IEC and mainstream teachers in this study reported that, despite language difficulty, many GT/EAL students demonstrate strengths in areas such as mathematics and art. It is possible that if GT/EAL students were given access to enriched content in areas such as mathematics, science or the arts whilst at the same time being fully supported to develop their English language skills, more latent talents may surface. This has been confirmed by research on front-loading whereby students are first explicitly taught the required skills before being tested (Briggs et al., 2008). Students' rapid learning abilities after exposure to required knowledge and skills are then used as measures of giftedness and potential talent.

# Low priority directed to the needs of GT/EAL students as a result of both internal and external barriers

All the teachers in the current study revealed that there was a tendency to direct a low priority to the needs of GT/EAL students. The findings revealed that the low priority was the result of a combination of internal and external barriers: Internal barriers were broadly related to time constraints within the school, including: opportunities for training, planning for and

conducting comprehensive assessments, meeting the diversity of needs, and collaboration between the EYE, mainstream and IEC teachers. External barriers relate broadly to financial constraints influenced by political factors, including: support in the form of in-class assistance, professional development, curriculum materials; specialist services for both gifted and EAL students in the schools. These were the common themes found in both the quantitative and qualitative data. In the interviews, while teachers indicated that they did provide extension activities for their high ability learners, this was often viewed as a low priority, particularly when faced with the wide spectrum of ability levels in their classrooms. Similarly, all six IEC teachers reported that in the absence of in-class support, their priority was directed towards students of lower English language abilities so that these students would be able to transition into the mainstream within the two-year period or earlier. The EYE teacher expressed the concern that the combination of budget constraints and lack of resources (trained teachers) restricted the number of places available in gifted programs. In WA at the time of the study, only the top 2.5% of Year 4 students who sat for the PEAC formal tests were selected for gifted services. According to Gagné (2004), 10% of a given student population could be potentially gifted and in Renzulli's Schools Enrichment Model (Renzulli & Reis, 2014), a talent pool consisting of the top 15-20% of students in a given school should be offered gifted programs. Hence, under the current selection process in WA, it is unlikely that all identified gifted students, including GT/EAL students, would gain access to gifted services.

In the interviews, mainstream teachers articulated the need to prepare students for NAPLAN tests. In addition, they reported having difficulty planning for the wide spectrum of abilities in their classrooms, particularly given the very limited allocation of resources. Under these conditions, it is unlikely that teachers would be able to conduct comprehensive assessments and provide for a differentiated curriculum for GT/EAL students. IEC teachers in this study added that high ability learners were often transferred to the mainstream schools as soon as they had reached minimal competency in the English language, leaving the teachers little time to consider enrichment or extension activities. The general assumption is that the mainstream teachers were responsible for screening students for gifted services. However, if mainstream teachers are unaware of students' potential or unable to conduct comprehensive assessment for reasons stated earlier, then it is unlikely that these GT/EAL students will be identified and selected for gifted programs. Research literature from the U.S. has consistently shown that students from socially, culturally and linguistically diverse backgrounds have

commonly been underrepresented in gifted programs (Baldwin, 2005; Erwin & Worrell, 2012; Harris et al., 2009; McBee, 2010; Naglieri & Ford, 2003). The findings in this study suggest that it is possible that some GT/EAL students may have been overlooked for gifted programs because of the low priority directed to their needs and, hence, may not have had access to the level of support recommended by major researchers in the field on talent development (Gagné, 2015, 2018; Johnsen, 2004; Rogers, 2007; VanTassel-Baska & Stambaugh, 2005)

## **Summary**

In summary, the current study suggests that there may be many internal and external barriers that prevent GT/EAL students from being identified and provided with opportunities to participate in gifted programs. In addition to a lack of adequate professional knowledge amongst the teachers, the main barrier seemed to be the low priority directed to the needs of GT/EAL students. Mainstream and IEC teachers acknowledged that they were inadequately prepared for the challenges of meeting the needs of GT/EAL students. This low priority was evident both internally and externally to the schools. Internal barriers included time and the lack of other resources. In the current study, teachers in heterogeneous classrooms had the tendency to focus on the needs of students in the lower ability spectrum. External barriers included budget constraints and lack of specialist services and support, resulting in restricted access to gifted programs. Hence, many GT/EAL students who could possibly benefit from gifted services may not have been identified and appropriately provided for based on the recommended best practices (Gagné, 2018) for gifted students.

#### **CHAPTER 7 - CONCLUSION**

The aim of this research was to investigate teachers' perspectives on the identification of, and provisions for, gifted and talented English as an Additional Language (GT/EAL) students using a mixed methods approach. The participants were selected from schools in which 30% or more of the students came from an EAL background. The teachers included those from the mainstream, Intensive English Centres (IECs) and the Early Years Extension (EYE) program. In Phase 1, an on-line survey questionnaire was used to gather quantitative data. A total of 50 teachers from 18 state primary schools in metropolitan Perth, Western Australia, responded. In Phase 2, 15 teachers from the survey agreed to participate in semi-structured interviews, which provided the qualitative data. Four research questions provided the framework for the investigations and the synthesis of the findings provided the basis for the conclusion.

## **Research Questions**

- 1. What are WA teachers' perspectives of gifted and talented English as an Additional Language students?
- 2. How do teachers identify GT/EAL students?
- 3. What provisions are currently in place for GT/EAL students in regular classes?
- 4. What do teachers perceive as barriers that could prevent GT/EAL students from participating in gifted programs?

The next section in this final chapter consists of a summary of the key findings from the research and conclusions from the findings, together with limitations of the research, recommendations, implications of the study and concluding remarks.

## **Summary of Key Findings**

Most teachers had difficulty in articulating the differences between *giftedness* and *talent* and tended to use the two terms interchangeably and synonymously. Teachers tended to generalise the positive characteristics of gifted students and failed to recognise the different manifestations of giftedness, particularly for GT/EAL students.

None of the teachers in the study had training in *both* gifted and EAL education. In Phase 2, the qualitative findings revealed that most of the EAL trained teachers were found in the IECs and only one mainstream teacher had a formal EAL qualification. The EYE teacher was the only teacher trained in gifted education.

While the perspectives of IEC, mainstream and EYE teachers varied widely, they also shared many similarities. Teachers' perspectives were influenced by the context of their teaching environment, and their training and experiences. During the interviews, the main concern of IEC teachers was that the lack of English language competency could easily mask the giftedness of some GT/EAL students. Consequently, when identifying giftedness, IEC teachers avoided using single measure Intelligence Quotients (IQ) tests, which they believed were inappropriate for students in the early stages of learning English. To identify giftedness, IEC teachers focussed on observing students' creative and thinking skills in mainly non-academic domains. In contrast, mainstream teachers tended to focus on the academic performance of GT/EAL students, particularly in numeracy and literacy in the English language. All the teachers acknowledged that some GT/EAL students may have been overlooked because of their "lack of English". The EYE teacher suggested using non-verbal IQ tests to identify giftedness for students who may not yet have the required competency in English language.

Teachers in the study used a range of assessment instruments to identify giftedness and talent. Most teachers preferred to use informal observations. The criteria for giftedness were based on teachers' own perceptions of giftedness and positive learning behaviours within the classroom contexts.

Provisions for GT/EAL students were mostly in the form of extension activities to prevent boredom. Teachers acknowledged that low priority was often directed to the needs of gifted students, particularly in heterogeneous classrooms. There was a common assumption among teachers that gifted students can manage on their own.

Teachers identified many internal and external barriers to GT/EAL students' participation in gifted programs. Internal barriers included: the lack of access to professional development in gifted education, absence of full-time gifted programs within the schools, and inadequate resources, for example, time, funding and specialist in-class support. External barriers include: an apparent low priority at a systemic level, because professional training for teachers in gifted education was inadequate, as was funding to support full-time gifted and EAL specialist teachers in the schools. Teachers reported that the professional development they have had tended to focus on the needs of students with learning difficulties or behavioural issues.

## **Conclusions from the Key Findings**

In this current study, none of the teachers had qualifications in teaching both gifted and EAL students; therefore, it is possible that some GT/EAL students may not have been recognised and provided for. Teachers play a pivotal role in recognising and developing the talent of students from diverse backgrounds (Pfeiffer, Shaunessy-Dedrick, & Foley-Nicpon, 2018; Stronge, 2018) but in order to recognise and develop the talents of GT/EAL students, teachers need knowledge of the various characteristics of giftedness as well as knowledge, understanding, awareness, and appreciation of their students' cultures (Frasier et al., 1995; Stronge, 2018; Tomlinson, Ford, Reis, Briggs, & Strickland, 2004). Hence, teachers will need cultural competence in order to be better prepared for an increasingly diverse society (Ford & Whiting, 2007). Cultural competence is defined as a "set of congruent behaviours, attitudes, and policies that come together in a system, agency, or professional and enable that system, agency, or professional to work together effectively across cross-cultural situations" (Cross, 1989). While provisions such as extension activities for gifted students in the regular classrooms may help teachers deal with the diversity of students' needs in the short term, these provisions may not be sufficiently rigorous to meet the needs of GT/EAL students in the long term. According to Gagné (2018) best practices for academic talent development require a comprehensive programming system. In the context of GT/EAL students, this includes creating a culturally and linguistically relevant pedagogy (Ford et al., 2008; Ford & Trotman, 2001; Pereira & de Oliveira, 2015).

Teachers' attitudes towards gifted students were positive but more adequate training and professional development may be needed to help them provide the most facilitative environment for GT/EAL students within regular classrooms. A facilitative environment in the most current talent developmental model (Gagné, 2018) is an appropriate environment for all students and it embraces a total-school approach (Renzulli & Reis, 2014). In this study, most teachers had not been given adequate training or professional development in *both* gifted and EAL education. Consequently, teachers articulated difficulty distinguishing between the terms *giftedness* and *talent* and recognising the different manifestations of giftedness, particularly amongst students from socially, culturally and linguistically diverse backgrounds. Teachers also reported finding it difficult to provide gifted students with full-time, enriched, accelerated and sustained curricula tailored to the individual, because of competing demands in their classrooms. Most teachers acknowledged that they lacked

adequate training and welcomed the opportunity to engage in professional development and a whole school approach to support GT/EAL students.

Several internal and external barriers had restricted teachers' abilities to meet the needs of GT/EAL students. These barriers, particularly funding for professional development and resources, suggest that low priority has been directed to the needs of GT/EAL students. Hence, GT/EAL students may be disadvantaged and at risk of not reaching their full potential.

#### Limitations

Although this research attracted a range of teachers in terms of age, experience, training and teaching contexts, the results cannot be considered representative of schools in Western Australia for the following reasons. Firstly, this study was limited to Perth metropolitan State Primary schools which had more than 30% of EAL students in the schools' population. Secondly, the approval for teacher participation within the school was determined by the school principal. Thirdly, the participation was voluntary and self-selection suggests that teachers who volunteered were more likely to have been motivated and interested to participate in this research. The fact that teachers were very positive could suggest they either held positive attitudes about giftedness or believed that this was expected of them. Finally, the current study focussed on the perspectives of teachers in the junior primary (Years 1-3) and, therefore, cannot be generalised for teachers teaching in the middle or upper primary years. Further research may be needed to determine the perspectives of teachers of older students in Western Australia and across Australia.

#### Recommendations

#### Recommendation 1

Teachers should be encouraged to access adequate training and on-going professional development in *both* gifted and EAL education which may help them to better identify and support GT/EAL students in the classrooms. Talent development is a life-long process and it is applicable to students as well as teachers. For teachers to appropriately respond and meet the challenges of our increasingly diverse student population, they will need full support at the classroom, school, local, state and federal levels.

#### Recommendation 2

Priority should be directed to early identification, intervention and the provision of appropriate curriculum for GT/EAL students. Early intervention allows gifted and talented students to be identified and provided with the most appropriate programs to serve the individual needs of GT/EAL students.

#### Recommendation 3

Provide more opportunity for EYE teachers, EAL and mainstream teachers to engage in collaboration and consultation as part of the identification process and planning for most appropriate programs for GT/EAL students.

## **Implications**

This research suggests teachers and schools need more support with the identification of, and provisions for, GT/EAL students in the Perth metropolitan state primary schools. Several suggestions for future research have been developed from this study. The first direction is to widen the investigation of the study of teachers' perspectives through random, stratified samples from Western Australian schools, including independent, private and Catholic schools. This could provide valuable insights into some of the successful practices in the development of GT/EAL students in schools. The second direction is to obtain parents' perspectives regarding identification of and provisions for GT/EAL in Western Australian schools. Once again, understanding parents' perspectives could pave the way for greater parental involvement, collaboration and collegial partnerships for the development of talents.

The third direction is to gather the perspectives of gifted students, including those from EAL backgrounds, to understand and support their abilities, interests, expectations and goals for the full development of talent.

# **Concluding Comments**

Identifying and understanding the characteristics of giftedness and talent is about providing the best possible opportunities for the development of outstanding potential. Talent development is a life-long process and in a school context, the delivery of best practice for gifted students often rests with the teachers. Therefore, teachers need to be supported and fully equipped with the professional knowledge and a shared understanding of the ultimate

goals of gifted education. While the development of full potential of all students has been widely acknowledged, the current study suggests that not all teachers had been adequately equipped with the professional knowledge in gifted and EAL education to meet the specific needs of GT/EAL students. Additionally, the current study also revealed that there had not been enough focus and priority directed to support teachers in identifying and providing for these students in heterogeneous classroom settings. Consequently, teachers had to prioritise the needs of students with learning difficulty, thus reducing the opportunity for greater talent development for those with high abilities. Current provisions for GT/EAL students appear to be limited and may not have kept pace with the rapidly changing demographic of our school population. This is reflected by the finding that none of the teachers in the study had received training in both gifted and EAL education. Furthermore, previous English language support programs and specialist services for schools have been severely restrained. Current services provided by the IEC centres focus mainly on EAL students who are in the early stages of learning the English language, but there have been no educational services to support the needs of EAL students who are gifted and talented. This lack of support and low priority directed to the needs of GT/EAL students appears to be the main barrier that could seriously impact on the talent development of these students.

In conclusion, teachers play a key and pivotal role in the development of all students, whatever their individual abilities, needs and circumstances. To achieve our goal of excellence and equity for our schools, teachers need to be fully supported and empowered with the appropriate skills and knowledge in order to respond to the diverse needs of all students, including those who are gifted and potentially talented.

It is wishful thinking to suppose that hard-working teachers without sufficient content knowledge, without special knowledge of gifted children, without time to plan programs, and with limited assistance from supervisory personnel, will be able to alter the educational situation for gifted children to any meaningful degree (Rogers, 1989, p. 149).

#### REFERENCES

- ABS. (2016). Census of Population and Housing: Nature and Content, Australia, 2016 (Cat.no 2008.0). Canberra: Australian Bureau of Statistics.
- ACARA. (2016). Review of the Australian curriculum: a statement by the Australian Curriculum, Assessement and Reporting AuthorityPANDORA electronic collection. [Sydney]: Australian Curriculum, Assessement and Reporting Authority.
- Acee, W. T., Kim, H., Kim, J.-I., Chu, H.-N., Kim, M., Cho, Y., & W. Wicker, F. (2010). *Academic boredom in under- and over-challenging situations* (Vol. 35).
- Allen, J. K. (2017). Exploring the Role Teacher Perceptions Play in the Underrepresentation of Culturally and Linguistically Diverse Students in Gifted Programming. *Gifted Child Today*, 40(2), 77-86.
- Ambrose, L., & Machek, G. R. (2015). Identifying Creatively Gifted Students: Necessity of a Multi-Method Approach. *Contemporary School Psychology*, 19(3), 121-127. doi: 10.1007/s40688-014-0020-z
- Angelo, D. (2013). NAPLAN implementation: implications for classroom learning and teaching, with recommendations for improvement. *TESOL in Context*, 23(1/2), 53-73.
- Baldwin, A. Y. (2005). Identification concerns and promises for gifted students of diverse populations. *Theory into Practice*, 44(2), 105-114. doi: 10.1207/s15430421tip4402\_5
- Bernal, E. M. (2001). Three ways to achieve a more equitable representation of culturally and linguistically different students in GT programs. *Roeper Review*, 24(2), 82-88.
- Blackburn, A. M., Cornish, L., & Smith, S. (2016). Gifted English language learners: Global understandings and Australian perspectives. *Journal for the Education of the Gifted*, 39(4), 338-360.
- Bloom, B. S., & Sosniak, L. A. (1985). *Developing talent in young people*. New York: Ballantine Books.
- Borland, J. H. (1989). *Planning and implementing programs for the gifted*. New York: Teachers College Press, Teachers College, Columbia University.
- Borland, J. H. (2009). Myth 2: The Gifted constitute 3% to 5% of the population. moreover, giftedness equals high IQ, which is a stable measure of aptitude: Spinal tap psychometrics in gifted education. *Gifted Child Quarterly*, 53(4), 236-238.
- Braggett, E. J. (1994). *Developing programs for gifted students: A total-school approach*. Australia: Hawker Brownlow Education.
- Braggett, E. J., & Moltzen, R. I. (2000). Programs and practices for identifying and nurturing giftedness and talent in Australia and New Zealand *International handbook of giftedness and talent* (pp. 779-798). Australia.
- Briggs, C. J., Reis, S. M., & Sullivan, E. E. (2008). A national view of promising programs and practices for culturally, linguistically, and ethnically diverse gifted and talented students. *Gifted Child Quarterly*, *52*(2), 131-145. doi: 10.1177/0016986208316037
- Brown, S. W., Renzulli, J. S., Gubbins, E. J., Siegle, D., Zhang, W., & Chen, C.-H. (2005). Assumptions underlying the identification of gifted and talented students. *Gifted Child Quarterly*, 49(1), 68-79. doi: 10.1177/001698620504900107

- Burke, D. (1990). Students from non-English speaking backgrounds and writing across the curriculum. Paper presented at the ESL Workshop Participants Manual.
- Callahan, C. M. (2005). Identifying gifted students from underrepresented populations. *Theory into Practice*, 44(2), 98-104.
- Callahan, C. M., & Hertberg-Davis, H. L. (2013). Fundamentals of gifted education: considering multiple perspectives. New York, NY: Routledge.
- Callahan, C. M., Moon, T. R., Oh, S., Azano, A. P., & Hailey, E. P. (2015). What works in gifted education: Documenting the effects of an integrated curricular/instructional model for gifted students. *American Educational Research Journal*, *52*(1), 137-167. doi: 10.3102/0002831214549448
- Carman, C. A. (2011). Stereotypes of giftedness in current and future educators. *Journal for the Education of the Gifted*, 34(5), 790-812.
- Castellano, J. A., & Diaz, E. I. (2002). Reaching New Horizons: Gifted and Talented Education for Culturally and Linguistically Diverse Students: ERIC.
- Cavilla, D. (2017). Observation and analysis of three gifted underachievers in an underserved, urban high school setting. *Gifted Education International*, *33*(1), 62-75.
- Chamorro-Premuzic, T., & Furnham, A. (2006). Self-Assessed Intelligence and Academic Performance. *Educational Psychology*, 26(6), 769-779.
- Chickzentmihalyi, M. (1990). The Psychology of Optimal Experience. New York: Harper Collins.
- Colangelo, N., Assouline, S., Cole, V., Cutrona, C., & Maxey, J. (1996). Exceptional Academic Performance: Perfect Scores on the PLAN. *Gifted Child Quarterly*, 40(2), 102-110.
- Colangelo, N., & Assouline, S. G. (2000). Counseling Gifted Students *International handbook of giftedness and talent* (pp. 595-607): Elsevier.
- Colangelo, N., & Wood, S. M. (2015). Counseling the gifted: Past, present, and future directions. *Journal of Counseling & Development*, 93(2), 133-142. doi: 10.1002/j.1556-6676.2015.00189.x
- Coleman, M. R. (2016). Recognizing young children with high potential: U-STARS~PLUS. *Annals of the New York Academy of Sciences, 1377*(1), 32-43. doi: 10.1111/nyas.13161
- Cooper, J. E., He, Y. D., & Levin, B. B. (2011). *Developing critical cultural competence : a guide for 21st-century educators*. Thousand Oaks, CA: Corwin Press.
- Coorey, M. (1998). Notebook. The Australian, 18.
- Creswell. (2009). Editorial: Mapping the field of mixed methods research: SAGE Publications Sage CA: Los Angeles, CA.
- Creswell, & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (Third edition. ed.). Thousand Oaks, California: SAGE.
- Creswell, J. W., Hanson, W. E., Clark Plano, V. L., & Morales, A. (2007). Qualitative research designs: Selection and implementation. *The counseling psychologist*, *35*(2), 236-264.

- Cross, T. L. (1989). Towards a Culturally Competent System of Care: A Monograph on Effective Services for Minority Children Who Are Severely Emotionally Disturbed.
- Cummins, J. (2000). *Language, power and pedagogy : Bilingual children in the crossfire*. Bristol, GB: Multilingual Matters.
- Dai, D. Y. (2015). A Jeffersonian vision of nurturing talent and creativity: Toward a more equitable and productive gifted education. *Asia Pacific Education Review*, 16(2), 269-279. doi: 10.1007/s12564-015-9364-y
- Dai, D. Y. (2018). A history of giftedness: A century of quest for identity *APA handbook of giftedness and talent*. (pp. 3-23). Washington, DC: American Psychological Association.
- Davis, G. A., & Rimm, S. B. (1994). *Education of the gifted and talented* (Vol. 3rd). Boston: Allyn and Bacon.
- Davis, J. L., & Moore, J. L., III. (2017). Gifted children of color around the world: diverse needs, exemplary practices, and directions for the futureAdvances in race and ethnicity in education; 3 (First edition. ed.). United Kingdom: Emerald.
- De Wet, C. F., & Gubbins, E. J. (2011). Teachers' beliefs about culturally, linguistically, and economically diverse gifted students: A quantitative study. *Roeper Review*, 33(2), 97-108.
- Department of Education, W. A. (2014). *English as an Additional Language/Dialect Progress Map*. West Perth, Australia: WestOne Services
- DETWA. (2011). Gifted and talented policy. Perth: Government of Western Australia.
- Duchesne, S., & McMaugh, A. (2016). *Educational psychology for learning and teaching* (5th edition. ed.). South Melbourne, Victoria: Cengage Learning Australia.
- Elhoweris, H. (2008). Teacher judgment in identifying gifted/talented students. *Multicultural Education*, 15(3), 35.
- Elhoweris, H., Mutua, K., Alsheikh, N., & Holloway, P. (2005). Effect of Children's Ethnicity on Teachers' Referral and Recommendation Decisions in Gifted and Talented Programs. *Remedial and Special Education*, 26(1), 25-31.
- Erwin, J. O., & Worrell, F. C. (2012). Assessment practices and the underrepresentation of minority students in gifted and talented education. *Journal of Psychoeducational Assessment*, 30(1), 74-87. doi: 10.1177/0734282911428197
- Feldman, D. H. (2003). A developmental, evolutionary perspective on giftedness. *Rethinking gifted education*, 9-33.
- Fletcher, R., & Hattie, J. (2011). *Intelligence and intelligence testing* (First edition. ed.). London, England ;: Routledge.
- Ford, D. Y. (1998). The underrepresentation of minority students in gifted education: Problems and promises in recruitment and retention. *The Journal of Special Education*, 32(1), 4-14. doi: 10.1177/002246699803200102
- Ford, D. Y. (2014). Multicultural issues: Gifted education discrimination in McFadden v. Board of Education for Illinois School District U-46: A clarion call to school districts, state departments of education, and advocacy organizations. *Gifted Child Today*, *37*(3), 188-193. doi: 10.1177/1076217513509622

- Ford, D. Y., Coleman, M. R., & Davis, J. L. (2014). Racially, ethnically, and linguistically different gifted and talented students. *Gifted Child Today*, *37*(3), 133-134.
- Ford, D. Y., Grantham, T. C., & Whiting, G. W. (2008). Culturally and linguistically diverse students in gifted education: Recruitment and retention issues. *Exceptional Children*, 74(3), 289-306.
- Ford, D. Y., Harris, J. J., Tyson, C. A., & Trotman, M. F. (2001). Beyond deficit thinking:Providing access for gifted African American students. *Roeper Review*, 24(2), 52-58. doi: 10.1080/02783190209554129
- Ford, D. Y., & Trotman, M. F. (2001). Teachers of gifted students: Suggested multicultural characteristics and competencies. *Roeper Review*, 23(4), 235-239.
- Ford, D. Y., & Whiting, G. W. (2007). Multicultural Issues: Another perspective on cultural competence: Preparing students for an increasingly diverse society. *Gifted Child Today*, 30(2), 52-55.
- Fraser-Seeto, K., Howard, S. J., & Woodcock, S. (2016). Preparation for teaching gifted students: An updated investigation into university offerings in New South Wales. *Australasian Journal of Gifted Education*, 25(1), 58.
- Frasier, M. M. (1989). Identification of gifted black students: Developing new perspectives. In J. C. S. Maker, S.W (Ed.), *Critical Issues in Gifted Education* (Vol. 11, pp. 213-225). CITY, United States: PUBLSHER.
- Frasier, M. M., & Passow, A. H. (1994). Towards a new paradigm for identifying talent potential. research monograph 94112.
- Frasier, M. M., Passow, A. H., & Garcia, J. H. (1995). A review of assessment issues in gifted education and their implications for identifying gifted minority students (Vol. 95204): DIANE Publishing.
- Freeman, Y. S., Freeman, D. E., & Ramírez, R. (2008). Diverse learners in the mainstream classroom: strategies for supporting all students across content areas, English language learners, students with disabilities, gifted/talented students. Portsmouth, NH: Heinemann.
- Frydenberg, E., & O'Mullane, A. (2000). Nurturing talent in the Australian context: A relective approach. *Roeper Review*, 22(2), 78.
- Gagné, F. (1989). Peer nominations as a psychometric instrument: Many questions asked but few answered. *Gifted Child Quarterly*, 33(2), 53-58.
- Gagné, F. (1994). Are teachers really poor talent detectors? Comments on Pegnato and Birch's (1959) study of the effectiveness and efficiency of various identification techniques. *Gifted Child Quarterly*, *38*(3), 124-126.
- Gagné, F. (1995). From giftedness to talent: A developmental model and its impact on the language of the field. *Roeper Review*, 18(2), 103-111.
- Gagné, F. (2000). A differentiated model of giftedness and talent. Year 2000 update.
- Gagné, F. (2004). Transforming gifts into talents: the DMGT as a developmental theory 1. *High Ability Studies*, 15(2), 119-147. doi: 10.1080/1359813042000314682
- Gagné, F. (2007). Ten commandments for academic talent development. *Gifted Child Quarterly*, *51*(2), 93-118.

- Gagné, F. (2010). Motivation within the DMGT 2.0 framework. *High Ability Studies*, 21(2), 81-99. doi: 10.1080/13598139.2010.525341
- Gagné, F. (2013). The DMGT: Changes Within, Beneath, and Beyond. *Talent Development and Excellence*, *5*(1), 5-19.
- Gagné, F. (2015). Academic talent development programs: a best practices model. *Asia Pacific Education Review*, 16(2), 281-295. doi: 10.1007/s12564-015-9366-9
- Gagné, F. (2018). Academic talent development: Theory and best practices *APA handbook of giftedness and talent.* (pp. 163-183). Washington, DC: American Psychological Association.
- Gagné, F. (2005). From noncompetence to exceptional talent: Exploring the tange of academic achievement within and between grade levels. *Gifted Child Quarterly*, 49(2), 139-153. doi: 10.1177/001698620504900204
- Gallagher, J. J. (2006). According to Jim: Best and worst of gifted education. *Roeper Review*, 29(1), 10.
- Gallagher, J. J., & Coleman, M. R. (1994). A Javits Project: Gifted Education Policy Studies Program. Final Report.
- Gallagher, S. A. (2015). The role of problem-based learning in developing creative expertise. *Asia Pacific Education Review, 16*(2), 225-235. doi: 10.1007/s12564-015-9367-8
- Gardner, H. (1993a). *Frames of mind: the theory of multiple intelligences* (Vol. 2nd). London: Fontana.
- Gardner, H. (1993b). *Multiple intelligences: the theory in practice*. New York, NY: Basic Books.
- Gardner, H. (2000). *Intelligence reframed: Multiple intelligences for the 21st century*. New York, USA: Basic Books.
- Garn, A. C., Matthews, M. S., & Jolly, J. L. (2010). Parental Influences on the Academic Motivation of Gifted Students: A Self-Determination Theory Perspective. *Gifted Child Quarterly*, *54*(4), 263-272.
- Geake, J., & Gross, M. U. M. (2008). Teachers' negative affect toward academically gifted students. *Gifted Child Quarterly*, 52(3), 217-231.
- Gibbons, J. (1985). The silent period: An examination. Language Learning, 35(2), 255-267.
- Gonski, D. (2011). *Review of funding for schooling: Final report*. Canberra: Australian Government.
- Goodnough, K. (2001). Changing teacher beliefs about giftedness and differentiation practices. *Gifted and Talented International*, 16(2), 115-121. doi: 10.1080/15332276.2001.11672973
- Gottfredson, L. S. (1997). Mainstream science on intelligence: An editorial with 52 signatories, history, and bibliography: Citeseer.
- Gross, M., Merrick, C., Chaffey, G., Macleod, B., & et al. (2005). Gifted and talented education professional development package for teachers: extension and specialisation modules. Sydney: Gifted education research UN.
- Gross, M. U. M. (1993). Exceptionally gifted children. New York; London;: Routledge.

- Gross, M. U. M. (1994). Changing Teacher Attitudes to Gifted Students through Inservice Training. *Gifted and Talented International*, *9*(1), 15-21. doi: 10.1080/15332276.1994.11672784
- Gross, M. U. M. (2001). *Gifted students in primary schools: differentiating the curriculum*. Sydney: GERRIC.
- Hadaway, N., & Marek-Schroer, M. F. (1992). Multidimensional Assessment of the Gifted Minority Student. *Roeper Review*, 15(2), 73-77.
- Hansen, J. B., & Feldhusen, J. F. (1994). Comparison of trained and untrained teachers of gifted students. *Gifted Child Quarterly*, 38(3), 115-121. doi: 10.1177/001698629403800304
- Harris, B., Plucker, J. A., Rapp, K. E., & Martinez, R. S. (2009, 2009 Spring). Identifying gifted and talented English language learners: a case study. *Journal for the Education of the Gifted*, *32*, 368+.
- Harris, B., Rapp, K. E., Martínez, R. S., & Plucker, J. A. (2007). Identifying English language Learners for gifted and talented programs: Current practices and recommendations for improvement. *Roeper Review*, 29(5), 26-29.
- Harris, G. (2014). Addressing giftedness in LBOTE student populations: Issues in identification, professional development and home—school partnerships. *Journal of Student Engagement: Education Matters*, 4(1), 35-40.
- Henderson, L., & Jarvis, J. (2016). The gifted dimension of the Australian professional standards for teachers: Implications for professional learning. *Australian Journal of Teacher Education*, 41(8), 60-83.
- Hodge, K. A., & Kemp, C. R. (2006). Recognition of giftedness in the early years of school: Perspectives of teachers, parents, and children. *Journal for the Education of the Gifted*, 30(2), 164-204.
- Hoekman, K., McCormick, J., & Gross, M. U. (1999). The optimal context for gifted students: A preliminary exploration of motivational and affective considerations. *Gifted Child Quarterly*, *43*(3), 170-193.
- Holliday, A. A. (2015). *Identification of underrepresented populations for gifted programs*. (Dissertation/Thesis), ProQuest Dissertations Publishing. Retrieved from https://digital.lib.washington.edu/researchworks/bitstream/handle/1773/33747/Hollida y\_washington\_0250O\_15028.pdf?sequence=1
- Hooper, V. S., & Bell, S. M. (2006). Concurrent validity of the universal nonverbal intelligence test and the Leiter International Performance Scale—Revised. *Psychology in the Schools*, *43*(2), 143-148. doi: 10.1002/pits.20136
- Hunsaker, S. L., Finley, V. S., & Frank, E. L. (2016). An Analysis of Teacher Nominations and Student Performance in Gifted Programs. *Gifted Child Quarterly*, 41(2), 19-24. doi: 10.1177/001698629704100203
- Inman, T., & Kirchner, J. (2016). Parenting gifted children 101: An introduction to gifted kids and their needs: Sourcebooks, Inc.
- Janzen, H. L., Obrzut, J. E., & Marusiak, C. W. (2004). Stanford-Binet Intelligence Scales. *Canadian Journal of School Psychology*, 19(1/2), 235.
- Jensen, A. R. (1998). The g factor and the design of education. *Intelligence, instruction, and assessment: Theory into practice*, 111-131.

- Johnsen, S. K. (2004). *Identifying gifted students: A practical guide*: Prufrock Press Inc.
- Johnsen, S. K. (2012). Standards in gifted education and their effects on professional competence. *Gifted Child Today*, 35(1), 49-57.
- Johnson, B., & Christensen, L. B. (2012). *Educational research: quantitative, qualitative, and mixed approaches* (4th ed. ed.). Thousand Oaks, Calif.: SAGE Publications.
- Jolly, J. L. (2008). Lewis Terman: Genetic study of genius--Elementary school students. *Gifted Child Today*, *31*(1), 27-33.
- Jolly, J. L. (2015a). The cost of high stakes testing for high-ability students. *Australasian Journal of Gifted Education*, 24(1), 30-36.
- Jolly, J. L. (2015b). The cost of high stakes testing for high-ability students. *Australasian Journal of Gifted Education*, 24(1), 30.
- Juntune, J., Kaya, F., & Ramos, S. (2011). Another look at high ability students from low SES populations. *Tempo*, *32*(4), 14-19.
- Kanevsky, L., & Keighley, T. (2003). To produce or not to produce? Understanding boredom and the honor in underachievement. *Roeper Review*, 26(1), 20-28.
- Kaplan, S. (2005). Layering differentiated curricula for the gifted and talented. *Methods and materials for teaching the gifted*, 107-132.
- Kaya, F. (2013). The role of peer nomination forms in the identification of lower elementary gifted and talented students. *Educational Research and Reviews*, 8(24), 2260. doi: 10.5897/ERR2013.1674
- Kaya, F. (2015). Teachers' conceptions of giftedness and special needs of gifted students. *Egitim ve Bilim*, 40(177).
- Kaya, F., & Delen, E. (2014). A computer-based peer nomination form to identify gifted and talented students. *Australasian Journal of Gifted Education*, 23(2), 29-36.
- Kogan, E. (2001). Gifted bilingual students: a paradox? (Vol. 17.). New York: P. Lang Pub.
- Krashen, S. D., & Terrell, T. D. (1983). The natural approach: Language acquisition in the classroom.
- Kronborg, L., & Plunkett, M. (2013). Responding to professional learning: how effective teachers differentiate teaching and learning strategies to engage highly able adolescents. *Australasian Journal of Gifted Education*, 22(2), 52-63.
- Kronborg, L., & Plunkett, M. (2015). Providing an optimal school context for talent development: An extended curriculum program in practice. *Australasian Journal of Gifted Education*, 24(2), 61.
- Lakin, J. M. (2012). Assessing the cognitive abilities of culturally and linguistically diverse students: Predictive validity of verbal, quantitative, and nonverbal tests. *Psychology in the Schools*, 49(8), 756-768. doi: 10.1002/pits.21630
- Lassig, C. (2015). Teachers' attitudes towards the gifted: The importance of professional development and school culture. *Australasian Journal of Gifted Education*, 24(2), 6-16.
- Levy, J. J., & Plucker, J. A. (2003). Theory and Practice: Assessing the psychological presentation of gifted and talented clients: a multicultural perspective. *Counselling Psychology Quarterly*, *16*(3), 229-247. doi: 10.1080/09515070310001610100

- Lewis, J. D., DeCamp-Fritson, S. S., Ramage, J. C., McFarland, M. A., & Archwamety, T. (2007). Selecting for ethnically diverse children who may be gifted using Raven's Standard Progressive Matrices and Naglieri Nonverbal Abilities Test. *Multicultural Education*, 15(1), 38.
- Little, C. A. (2012). Curriculum as motivation for gifted students. *Psychology in the Schools*, 49(7), 695-705.
- Lohman, D. F., Korb, K. A., & Lakin, J. M. (2008). Identifying academically gifted English-language learners using nonverbal tests: A comparison of the Raven, NNAT, and CogAT. *Gifted Child Quarterly*, 52(4), 275-296. doi: 10.1177/0016986208321808
- Maker, C. J. (1996). Identification of Gifted Minority Students: A National Problem, Needed Changes and a Promising Solution. *Gifted Child Quarterly*, 40(1), 41-50. doi: 10.1177/001698629604000106
- Maker, C. J. (2001). DISCOVER: Assessing and developing problem solving. *Gifted Education International*, 15(3), 232-251.
- Maker, C. J., & Schiever, S. W. (1989). *Defensible programs for cultural and ethnic minorities*. Austin, Tex.: Pro-Ed.
- Marland, S. P. (1971). Education of the Gifted and Talented-Volume 1: Report to the Congress of the United States by the US Commissioner of Education.
- Marland, S. P. (1972). Education of the gifted and talented (Report to the Subcommittee on Education, Committee on Labor and Public Welfare, US Senate). *Washington, DC: Government Printing Office*.
- Matthews, M. S., & Peters, S. J. (2018). Methods to increase the identification rate of students from traditionally underrepresented populations for gifted services *APA handbook of giftedness and talent*. (pp. 317-331). Washington, DC: American Psychological Association.
- McBee, M. T. (2006). A descriptive analysis of referral sources for gifted identification screening by race and socioeconomic status. *The Journal of Secondary Gifted Education*, 17(2), 103-111,122.
- McBee, M. T. (2010). Examining the probability of identification for gifted programs for students in georgia elementary schools: A multilevel path analysis study. *Gifted Child Quarterly*, *54*(4), 283-297.
- McBee, M. T., Peters, S. J., & Miller, E. M. (2016). The impact of the nomination stage on gifted program identification: A comprehensive psychometric analysis. *Gifted Child Ouarterly*, 60(4), 258-278. doi: 10.1177/0016986216656256
- McCallum, R. S. (2003). Handbook of Nonverbal Assessment. Boston, MA:: Springer US:.
- McCoach, D. B., & Siegle, D. (2003). Factors that differentiate underachieving gifted students from high-achieving gifted students. *Gifted Child Quarterly*, 47(2), 144-154.
- McDaniel, T. (2002). Mainstreaming the gifted: Historical perspectives on excellence and equity. *Roeper Review*, 24(3), 112-114.
- Miller, A. (2007). Identifying gifted students: A practical guide. *Journal for the Education of the Gifted*, 30(4), 524-530,537.

- Mills, C. J. (2003). Characteristics of Effective Teachers of Gifted Students: Teacher Background and Personality Styles of Students. *Gifted Child Quarterly*, 47(4), 272-281. doi: 10.1177/001698620304700404
- Montgomery, D. (2009). *Able, gifted and talented underachievers* (Vol. 2nd). Malden, MA; Chichester, West Sussex;: Wiley-Blackwell.
- Moon, T. R., & Brighton, C. M. (2008). Primary teachers' conceptions of giftedness. *Journal for the Education of the Gifted*, 31(4), 447-480. doi: 10.4219/jeg-2008-793
- Moon, T. R., & Callahan, C. M. (2001). Curricular modifications, family outreach, and a mentoring program: impacts on achievement and gifted identification in high-risk primary students. *Journal for the Education of the Gifted*, 24(4), 305.
- Morelock, M., & Feldman, D. (2003). Extreme precocity: Prodigies, savants, and children of extraordinarily high IQ. *Handbook of gifted education*, *3*, 455-469.
- Morgan, D. L. (2014). Integrating qualitative and quantitative methods: a pragmatic approach. Thousand Oaks, California: SAGE Publications, Inc.
- NAGC. (2011, 2011 Winter). The National Association for Gifted Children released new Pre-K-Grade 12 Gifted Programming Standards at its annual meeting in Atlanta. *Gifted Child Today*, 34, 8.
- Naglieri, J. A., & Ford, D. Y. (2003). Addressing Underrepresentation of Gifted Minority Children Using the Naglieri Nonverbal Ability Test (NNAT). *Gifted Child Quarterly*, 47(2), 155-160. doi: 10.1177/001698620304700206
- Neihart, M., Reis, S. M., Robinson, N., & Moon, S. (2002). *The social and emotional development of gifted children: What do we know?*: Sourcebooks, Inc.
- Neumeister, K. L. S., Adams, C. M., Pierce, R. L., Cassady, J. C., & Dixon, F. A. (2007). Fourth-grade teachers' perceptions of giftedness: implications for identifying and serving diverse gifted students. *Journal for the Education of the Gifted*, 30(4), 479-499.
- Obi, S. O., Obiakor, F. E., Obi, S. L., Banks, T., Warner, S., & Spencer, N. (2014). Giftedness as it relates to culturally and linguistically diverse students *Gifted education: Current perspectives and issues* (pp. 71-100): Emerald Group Publishing Limited.
- Olszewski-Kubilius, P. (2018). The role of the family in talent development *Handbook of giftedness in children* (pp. 129-147): Springer.
- Olszewski-Kubilius, P., & Clarenbach, J. J. D. (2014). Closing the opportunity gap: program factors contributing to academic success in culturally different youth. *Gifted Child Today*, *37*(2), 102-110.
- Olszewski-Kubilius, P., Subotnik, R. F., & Worrell, F. C. (2015). Conceptualizations of Giftedness and the Development of Talent: Implications for Counselors. *Journal of Counseling & Development*, 93(2), 143-152. doi: 10.1002/j.1556-6676.2015.00190.x
- Olszewski-Kubilius, P., & Thomson, D. (2015). Talent development as a framework for gifted education. *Gifted Child Today*, 38(1), 49-59. doi: 10.1177/1076217514556531
- Pegnato, C. W., & Birch, J. W. (1959). Locating gifted children in junior high schools: A comparison of methods. *Exceptional Children*, 25(7), 300-304.

- Pereira, N., & de Oliveira, L. C. (2015). Meeting the Linguistic Needs of High-Potential English Language Learners What Teachers Need to Know. *Teaching Exceptional Children*, 47(4), 208-215.
- Peters, S. J., & Jolly, J. L. (2018). The influence of professional development in gifted education on the frequency of instructional practices. *The Australian Educational Researcher*. doi: 10.1007/s13384-018-0260-4
- Pfeiffer, S. I. (2012). Current Perspectives on the Identification and Assessment of Gifted Students. *Journal of Psychoeducational Assessment*, 30(1), 3-9.
- Pfeiffer, S. I., & Petscher, Y. (2008). Identifying young gifted children using the gifted rating scales—Preschool/kindergarten form. *Gifted Child Quarterly*, 52(1), 19-29.
- Pfeiffer, S. I., Shaunessy-Dedrick, E., & Foley-Nicpon, M. (2018). APA handbook of giftedness and talentAPA handbooks in psychology; APA handbooks in psychology. (First edition. ed.). Washington, DC:: American Psychological Association. Retrieved from PsycBOOKS http://dx.doi.org/10.1037/0000038-000.
- Pierce, R. L., Adams, C. M., Neumeister, K. L. S., Cassady, J. C., Dixon, F. A., & Cross, T. L. (2006). Development of an identification procedure for a large urban school corporation: Identifying culturally diverse and academically gifted elementary students. *Roeper Review*, 29(2), 113-118.
- Pigott, R. L., & Cowen, E. L. (2000). Teacher race, child race, racial congruence, and teacher ratings of children's school adjustment. *Journal of School Psychology*, 38(2), 177-195.
- Pit-ten Cate, I. M., Krolak-Schwerdt, S., & Glock, S. (2016). Accuracy of teachers' tracking decisions: short- and long-term effects of accountability. *European Journal of Psychology of Education*, 31(2), 225-243. doi: 10.1007/s10212-015-0259-4
- Plunkett, M., & Kronborg, L. (2011). Learning to be a teacher of the gifted: The importance of examining opinions and challenging misconceptions. *Gifted and Talented International*, 26(1-2), 31-46. doi: 10.1080/15332276.2011.11673587
- Preckel, F., Gotz, T., & Frenzel, A. (2010). Ability grouping of gifted students: effects on academic self-concept and boredom. *Br J Educ Psychol*, 80(Pt 3), 451-472. doi: 10.1348/000709909X480716
- Reis, S. M., & McCoach, D. B. (2002). Underachievement in gifted students. *The social and emotional development of gifted children: What do we know*, 81-91.
- Reis, S. M., & McCoach, D. B. (2016). The Underachievement of Gifted Students: What Do We Know and Where Do We Go? *Gifted Child Quarterly*, 44(3), 152-170.
- Reis, S. M., McCoach, D. B., Little, C. A., Muller, L. M., & Kaniskan, R. B. (2011). The Effects of Differentiated Instruction and Enrichment Pedagogy on Reading Achievement in Five Elementary Schools. *American Educational Research Journal*, 48(2), 462-501. doi: 10.3102/0002831210382891
- Reis, S. M., & Renzulli, J. S. (1985). The Secondary Level Enrichment Triad Model: Excellence Without Elitism. *NASSP Bulletin*, 69(482), 31-38. doi: 10.1177/019263658506948205
- Renzulli, J. S. (1977). *The enrichment triad model : a guide for developing defensible programs for the gifted and talented.* Wethersfield, Conn.: Creative Learning Press.
- Renzulli, J. S. (1998). A Rising Tide Lifts All Ships: Developing the Gifts and Talents of All Students. *Phi Delta Kappan*, 80(2), 104-111.

- Renzulli, J. S. (2004). *Identification of students for gifted and talented programs* (Vol. 2): Corwin Press.
- Renzulli, J. S. (2011). What Makes Giftedness? Reexamining a Definition. *Phi Delta Kappan*, 92(8), 81-88.
- Renzulli, J. S. (2012). Reexamining the role of gifted education and talent development for the 21st century: A four-part theoretical approach. *Gifted Child Quarterly*, 56(3), 150-159.
- Renzulli, J. S., & Delcourt, M. A. B. (1986). The Legacy and Logic of Research on the Identification of Gifted Persons. *Gifted Child Quarterly*, *30*(1), 20-23.
- Renzulli, J. S., & Reis, S. M. (2014). *The Schoolwide Enrichment Model: A how-to guide for talent development:* Sourcebooks, Inc.
- Renzulli, J. S., & Reis, S. M. (2018). The three-ring conception of giftedness: A developmental approach for promoting creative productivity in young people *APA handbook of giftedness and talent*. (pp. 185-199). Washington, DC: American Psychological Association.
- Renzulli, J. S., Siegle, D., Reis, S. M., Gavin, M. K., & Reed, R. E. S. (2009). An investigation of the reliability and factor structure of four new scales for rating the behavioral characteristics of superior students. *Journal of Advanced Academics*, 21(1), 84-108.
- Rogers, K. B. (2007). Lessons learned about educating the gifted and talented: A synthesis of the research on educational practice. *Gifted Child Quarterly*, *51*(4), 382-396.
- Rogers, M., Theule, J., Ryan, B., Adams, G., & Keating, L. (2009). Parental Involvement and Children's School Achievement. *Canadian Journal of School Psychology*, 24(1), 34-57.
- Rohrer, J. C. (1995). Primary teacher conceptions of giftedness: Image, evidence, and nonevidence. *Talents and Gifts*, 18(3), 269-283.
- Ryser, G. (2004). Qualitative and quantitative approaches to assessment. *Identifying gifted students: A practical guide*, 23-40.
- Sarouphim, K. (1999). DISCOVER: A Promising Alternative Assessment for the Identification of Gifted Minorities. *Gifted Child Quarterly*, 43(4), 244-251.
- Scott-Carrol, J. M., Osman, R., & Davis, J. L. (2009). Bringing Best Practices in Gifted Education for Culturally Diverse Learners to Developing Countries. *The International Journal of Learning: Annual Review, 15*(12), 105-110. doi: 10.18848/1447-9494/CGP/v15i12/46045
- Seeley, K. (1993). Gifted students at risk. Counseling the gifted and talented, 263-276.
- Sękowski, A. E., & Łubianka, B. (2015). Education of gifted students in Europe. *Gifted Education International*, 31(1), 73-90. doi: 10.1177/0261429413486579
- Senate References Committee, (Employment, Workplace Relations, Small Business and Education). (2001). *The education of gifted children*. (0642711569 9780642711564). Canberra: The Commonwealth of Australia Retrieved from http://www.aph.gov.au/senate/committee/eet\_ctte/gifted/report/contents.htm.

- Shaunessy-Dedrick, E., Evans, L., Ferron, J., & Lindo, M. (2015). Effects of Differentiated Reading on Elementary Students' Reading Comprehension and Attitudes Toward Reading. *Gifted Child Quarterly*, 59(2), 91-107. doi: 10.1177/0016986214568718
- Siegle, D., Gubbins, E. J., O'Rourke, P., Langley, S. D., Mun, R. U., Luria, S. R., . . . Plucker, J. A. (2016). Barriers to underserved students' participation in gifted programs and possible solutions. *Journal for the Education of the Gifted, 39*(2), 103-131. doi: http://dx.doi.org/10.1177/0162353216640930
- Siegle, D., Moore, M., Mann, R. L., & Wilson, H. E. (2010, 2010 Spring). Factors that influence in-service and preservice teachers' nominations of students for gifted and talented programs. *Journal for the Education of the Gifted*, *33*, 337+.
- Siegle, D., & Powell, T. (2004). Exploring Teacher Biases When Nominating Students for Gifted Programs. *Gifted Child Quarterly*, 48(1), 21-29. doi: 10.1177/001698620404800103
- Silverman, L. K. (1993). Counseling the gifted and talented: ERIC.
- Smutny, J. F., Walker, S. Y., & Meckstroth, E. A. (2007). *Acceleration for gifted learners, K-5*. Thousand Oaks, CA: Corwin Press.
- Stein, J. C., Hetzel, J., & Beck, R. (2012). Twice Exceptional? The Plight of the Gifted English Learner. *Delta Kappa Gamma Bulletin*, 78(2), 36-41.
- Sternberg, R. J. (2007). Cultural Concepts of Giftedness. Roeper Review, 29(3), 160-165.
- Sternberg, R. J. (2017). ACCEL: A New Model for Identifying the Gifted. *Roeper Review-a Journal on Gifted Education*, 39(3), 152-169. doi: 10.1080/02783193.2017.1318658
- Sternberg, R. J. (2018a). 21 Ideas: A 42-Year Search to Understand the Nature of Giftedness. *Roeper Review-a Journal on Gifted Education*, 40(1), 7-20. doi: 10.1080/02783193.2018.1393609
- Sternberg, R. J. (2018b). Context-Sensitive Cognitive and Educational Testing. *Educational Psychology Review*, 30(3), 857-884. doi: 10.1007/s10648-017-9428-0
- Sternberg, R. J. (2018c). Speculations on the role of successful intelligence in solving contemporary world problems. *Journal of Intelligence*, 6(1), 4.
- Sternberg, R. J. (2018d). Theories of intelligence *APA handbook of giftedness and talent*. (pp. 145-161). Washington, DC: American Psychological Association.
- Sternberg, R. J., & Davidson, J. E. (2005). Conceptions of giftedness (2nd ed. ed.). Cambridge, U.K.; Cambridge University Press. Retrieved from http://public.eblib.com/choice/publicfullrecord.aspx?p=258496.
- Sternberg, R. J., Jarvin, L., & Grigorenko, E. L. (2010). *Explorations in Giftedness*. New York, US: Cambridge University Press.
- Sternberg, R. J., & Kaufman, S. B. (2011). *The Cambridge Handbook of Intelligence* Retrieved from http://ECU.eblib.com.au/patron/FullRecord.aspx?p=713034
- Stronge, J. H. (2018). Qualities of effective teachers: ASCD.
- Subotnik, R. F., Olszewski-Kubilius, P., & Worrell, F. C. (2011). Rethinking Giftedness and Gifted Education: A Proposed Direction Forward Based on Psychological Science. *Psychological Science in the Public Interest*, *12*(1), 3-54. doi: 10.1177/1529100611418056

- Subotnik, R. F., Olszewski-Kubilius, P., & Worrell, F. C. (2018). Talent development as the most promising focus of giftedness and gifted education *APA handbook of giftedness and talent*. (pp. 231-245). Washington, DC: American Psychological Association.
- Szymanski, T., & Shaff, T. (2013). Teacher perspectives regarding gifted diverse students. *Gifted Children*, 6(1), 1.
- Tannenbaum, A. J. (1983). *Gifted children: Psychological and educational perspectives*: Macmillan College.
- Tannenbaum, A. J. (2003). Nature and nurture of giftedness. *Handbook of gifted education*, *3*, 45-59.
- Tassel-Baska, J. B. (1995). The development of talent through curriculum. *Roeper Review*, *18*(2), 98-102. doi: 10.1080/02783199509553708
- Taylor, T. (2016). Gifted Students: Perceptions and Practices of Regular Class Teachers.
- Tomlinson, C. A. (2001). Differentiated Instruction in the Regular Classroom: What Does It Mean? How Does It Look? *Understanding Our Gifted*, 14(1), 3-6.
- Tomlinson, C. A., Ford, D. Y., Reis, S. M., Briggs, C. J., & Strickland, C. A. (2004). In Search of the Dream: Designing Schools and Classrooms That Work for High Potential Students from Diverse Cultural Backgrounds. *National Association for Gifted Children (NJ3)*.
- Tomlinson, C. A., & Jarvis, J. M. (2014, Sep 2014). Case Studies of Success: Supporting Academic Success for Students With High Potential From Ethnic Minority and Economically Disadvantaged Backgrounds. *Journal for the Education of the Gifted*, 37, 191-219.
- VanTassel-Baska, J. (2005). Gifted Programs and Services: What are the nonnegotiables? *Theory into Practice*, 44(2), 90-97.
- VanTassel-Baska, J. (2007). Leadership for the future in gifted education: Presidential address, NAGC 2006. *The Gifted Child Quarterly*, *51*(1), 5-10.
- VanTassel-Baska, J. (2008). Alternative assessments with gifted and talented students. Waco, Tex.:: Prufrock Press.
- VanTassel-Baska, J. (2010). *Content-based curriculum for high-ability learners*: Sourcebooks, Inc.
- VanTassel-Baska, J., & Brown, E. F. (2007). Toward Best Practice An Analysis of the Efficacy of Curriculum Models in Gifted Education. *Gifted Child Quarterly*, *51*(4), 342-358.
- VanTassel-Baska, J., & Johnsen, S. K. (2007). Teacher education standards for the field of gifted education: A vision of coherence for personnel preparation in the 21st Century. *The Gifted Child Quarterly*, 51(2), 182-205.
- VanTassel-Baska, J., & Olszewski-Kubilius, P. (1989). *Patterns of influence on gifted learners: the home, the self, and the school*. New York: Teachers College Press.
- VanTassel-Baska, J., & Stambaugh, T. (2005). Challenges and possibilities for serving gifted learners in the regular classroom. *Theory into Practice*, 44(3), 211-217.
- Vialle, W., & Rogers, K. B. (2009). *Educating the gifted learner*. Terrigal NSW: David Barlow Publishing.

- Vygotsky, L. S. (1962). Language and thought. *Massachusetts Institute of Technology Press, Ontario, Canada*.
- Vygotsky, L. S. (1978). Interaction between learning and development. *Readings on the development of children*, 23(3), 34-41.
- Walsh, R. L., Kemp, C. R., Hodge, K. A., & Bowes, J. M. (2012, Jun 2012). Searching for Evidence-Based Practice: A Review of the Research on Educational Interventions for Intellectually Gifted Children in the Early Childhood Years. *Journal for the Education of the Gifted*, *35*, 103-128.
- Wechsler, D. (2003). *Wechsler intelligence scale for children-WISC-IV*: Psychological Corporation.
- Whitmore, J. R. (1980). Giftedness, conflict, and underachievement: Allyn & Bacon.
- Whitmore, J. R. (1989). Four leading advocates for gifted students with disabilities.
- Wiggins, G. P. (1998). Educative assessment: designing assessments to inform and improve student performance (Vol. 1st). San Francisco, Calif: Jossey-Bass.
- Willig, C., & Rogers, W. S. (2017). *The SAGE handbook of qualitative research in psychology*: Sage.
- Wilson, P. C. (2014). The relationship between teachers' levels of cultural competence and the nomination/referral process for gifted identification of culturally and linguistically diverse students. (Dissertation/Thesis), ProQuest Dissertations Publishing.
- Worrell, F. C., & Erwin, J. O. (2011). Best practices in identifying students for gifted and talented education programs. *Journal of Applied School Psychology*, 27(4), 319-340.
- Wortham, S. (2006). Learning identity: The joint emergence of social identification and academic learning: Cambridge University Press.

## **APPENDIX A: PHASE 1 QUESTIONNAIRE**



Teachers' Perspectives on the Identification of and Provision for Gifted and Talented English as an Additional Language (EAL) learners.

Please answer the following questions by putting a tick in the box or writing the answer in the space provided. Be assured that your answers will be kept strictly anonymous and that they will used for research purposes only. This

questionnaire will take approximately 20 minutes to complete. Thank you very much for agreeing to answer these questions. Your opinion is highly valued.

A.	Th	is section is about you as a teacher.
	1.	How long have you been a teacher?
		Less than 5 years 5>10 years 10>15 years 15>20 years 20>25 years 25>30 years More than 30 years
	2.	Which year level do you presently teach?
		Year 1 Year 2 Year 3 Other: Please specify:
	3.W	Thich teaching qualifications have you attained?
		Certificate in Education Primary
		Diploma in Education  Primary  Early Childhood  Primary
		Bachelor of Education
		Master Degree/Doctorate
		Other. Please specify:
	3.	Have you had any training in Gifted Education?  Yes No
	4.	If YES, which of the following qualifications have you completed?
		Professional Development
		Certificate
		Diploma
		Bachelor Degree
		Master Degree/Doctorate
		Other. Please specify

5. Do you have any formal training in the Teaching English to Speakers of Other Languages and /or in the Teaching English as a Second/Additional Language?

	Yes No
6.	If YES, which of the following qualifications have you completed?
	Professional Development Certificate Diploma Bachelor Degree Master Degree/Doctorate Other. Please specify
7.	Have you taught gifted and talented students in your classroom?
	Yes No
8.	Have you taught students who use English as an Additional Language (English is not their primary language) in your classroom?
	Yes No
9.	Have you taught gifted and talented students who use English as an Additional Language?
10	Yes No
10.	What is your first language?
	English language
	Other. Please specify:
11.	How many languages do you speak?
	Please specify the language(s):

B.	This section is about the students you teach.				
	1. How many students are in your classroom?				
	Girls Boys				
	2. How many students in your classroom have been identified as gifted and talented?				
	Girls Boys				
	3. How many students in your classroom use English as an additional language?				
	Girls Boys				
	4. How many students in your classroom have been identified as <b>both</b> gifted and talented and uses English as an additional language?				
	Girls Boys				
C.	This section is about what you understand about gifted and talented English as an additional language				
	(EAL) learners.				
	1. Gifted and talented EAL learners are usually high academic achievers.				
	Agree Unsure Disagree				
	2. Gifted and talented EAL learners can be found in all cultural, social and linguistic backgrounds.				
	Agree Unsure Disagree				
	3. Gifted and talented EAL learners learn rapidly.				
	Agree Unsure Disagree				
	4. Gifted and talented EAL learners demonstrate a high level of English language proficiency.				
	Agree Unsure Disagree				
	5. Gifted and talented EAL learners usually demonstrate a high level of task commitment and motivation.				
	Agree Unsure Disagree				
	6. Gifted and talented EAL learners demonstrate the ability to learn many different languages.				
	Agree Unsure Disagree				
	7. Gifted and talented EAL learners are highly capable students who need little support.				
	Agree Unsure Disagree				
	8. Gifted and talented EAL learners are often emotionally sensitive.				
	Agree Unsure Disagree				

9.	9. Gifted and talented EAL learners are a diverse group with very different needs.				
		Agree	Unsure	Disagree	
10.	Gifted and talented EA	L learners may	be overbearing	g when working with others.	
		Agree	Unsure	Disagree	
11.	Gifted and talented EA	L learners are	usually from hi	gher social and economic back	grounds.
		Agree	Unsure	Disagree	
12.	Gifted and talented EA	L learners gen	erally prefer to	work individually.	
		Agree	Unsure	Disagree	
13.	Gifted and talented EA	L learners are	mostly well bel	naved in the classroom.	
		Agree	Unsure	Disagree	
14.	Gifted and talented EA	L learners are	generally good	test takers but may lack creative	vity.
		Agree	Unsure	Disagree	
15.	Gifted and talented EA	L students hav	e high language	e proficiency but not necessaril	y in English.
		Agree	Unsure	Disagree	
D. This section is about how you would identify gifted and talented EAL students in your classroom.					
D. This	s section is about how y	ou would ide	ntify gifted and	talented EAL students in yo	our classroom.
	<u> </u>	methods do y		fy gifted and talented students	
	Which of the following	methods do y	ou use to identi	·	in your classroom?
	Which of the following	methods do y an one).	ou use to identi	fy gifted and talented students	in your classroom?
	Which of the following	methods do y an one).	ou use to identi nt of Education sed tests (Exam	fy gifted and talented students  Checklist for gifted and talente	in your classroom?
	Which of the following	methods do yan one).  Department	ou use to identi nt of Education sed tests (Examp	fy gifted and talented students  Checklist for gifted and talente	in your classroom?
	Which of the following	methods do y an one).  Departme Standardis School rep	ou use to identi nt of Education sed tests (Examp oorts hade tests	fy gifted and talented students  Checklist for gifted and talente	in your classroom?
	Which of the following	methods do y an one).  Department Standardis School reputation Teacher many Observation	ou use to identi nt of Education sed tests (Examp oorts hade tests	fy gifted and talented students  Checklist for gifted and talente	in your classroom?
	Which of the following	methods do y an one).  Departme Standardis School rep Teacher m Observation Parents' N	ou use to identi nt of Education sed tests (Examp ports hade tests	fy gifted and talented students  Checklist for gifted and talente	in your classroom?
	Which of the following	methods do y an one).  Departme Standardis School rep Teacher m Observation Parents' N	ou use to identi nt of Education sed tests (Examp oorts hade tests ons fomination Nomination	fy gifted and talented students  Checklist for gifted and talente	in your classroom?
	Which of the following	methods do y an one).  Departme Standardis School rep Teacher m Observatio Parents' N Teacher's Peers' Not	ou use to identi nt of Education sed tests (Examp oorts hade tests ons fomination Nomination	fy gifted and talented students  Checklist for gifted and talente  ple: NAPLAN, On-entry Asses	in your classroom?
	Which of the following	methods do yan one).  Departments Standardis School rep Teacher m Observation Parents' N Teacher's Peers' Not	ou use to identiant of Education sed tests (Example orts and e tests ons formination with Momination set test (IQ by a page of the context of	fy gifted and talented students  Checklist for gifted and talente  ple: NAPLAN, On-entry Asses	in your classroom?  ed students.  ssments)

7. Do you have gifted and talented English as an additional language learners in your present classroom or have had them in the past?					
Yes, Section E					
No, I have never had gifted and talented English as an additional language learners Section F					
E. This section is about how you provide for gifted and talented EAL learners in your classroom. Do you use or have used any of the following strategies in your classroom?					
18. Provide extension activities so that gifted and talented EAL learners can work independently.					
Yes Sometimes No					
<ol> <li>Organise challenging activities that allow gifted and talented EAL learners to pursue their area of interests.</li> </ol>					
Yes Sometimes No					
20. Compact the curriculum and teach only what is relevant to the student's need.					
Yes Sometimes No					
21. Group students of similar abilities and let them work together by themselves.					
Yes Sometimes No					
22. Offer additional resources, including time, to gifted and talented EAL students to meet their needs.					
Yes Sometimes No					
23. Differentiate programs specifically for the gifted and talented EAL leaners in the classroom.					
Yes Sometimes No					
24. Give additional mainstream classroom activities to gifted and talented EAL learners in the classroom.					
Yes Sometimes No					
25. Engage students in activities that demand higher order thinking and critical skills in the classroom.					
Yes Sometimes No					
26. Allow opportunities for gifted and talented students to work together in an area of interest.					
Yes Sometimes No					
27. Offer pull-out/withdrawal programs for gifted and talented EAL students within the school.					
Yes Sometimes No					
28. Involve and engage parents in the planning and delivery of gifted and talented programs.					
Yes Sometimes No					
29. Engage and involve the wider community to provide activities for gifted and talented EAL learners.					
Yes Sometimes No					

learners.					
30. The identification process is often demanding and time consuming.					
Agree Unsure Disagree					
31. Without training and support, it is difficult to effectively identify and provide for gifted and talent EAL learners.					
Agree Unsure Disagree					
32. Classroom teachers rarely have access to additional resources and support for gifted and talented EAL learners.					
Agree Unsure Disagree					
33. Gifted and talented EAL learners are already advantaged, therefore, resources should be directed to students with real learning needs.					
Agree Unsure Disagree					
34. Gaining the support of parents and/or caregivers is generally difficulty due to language difficulties.					
Agree Unsure Disagree					
35. Gifted and talented EAL students often miss out on classroom activities when they engage in off-site Early Years Extension (EYE) and Primary Extension and Challenge (PEAC) programs.					
Agree Unsure Disagree					
36. Interpreters and translation services are often inaccessible; therefore, it is difficult to keep parents of gifted and talented EAL learners informed about gifted programs.					
Agree Unsure Disagree					
37. Gifted and talented EAL learners have special needs and should be supported by specialists in this field to reach their full potential.					
Agree Unsure Disagree					
G. This section is about your thoughts about the identification process and provision for gifted and talented EAL learners.					
40 Designing programs specifically for gifted and talented EAL learners is elitist and discriminatory.					
Agree Unsure Disagree					
41 High proficiency in a language (not necessarily in English) is essential for selection and participation in any gifted programs.					
Agree Unsure Disagree					

F. This section is about possible issues when identifying and providing for gifted and talented EAL

42	All-round academic excellence is a prerequisite for selection and participation in gifted programs
43	Agree Unsure Disagree  Gifted and talented EAL learners are highly capable students and are unlikely to benefit from additional support.
	Agree Unsure Disagree
44	Giftedness and talent are essentially hereditary traits and the environment is unlikely to have an impact on their natural development.
	Agree Unsure Disagree
45	All individuals have the potential to be gifted and talented under the right circumstances.
	Agree Unsure Disagree
46	Giftedness is hereditary but the development of talent is largely influenced by environmental factors.
	Agree Unsure Disagree
47	Giftedness and talent can only be achieved through hard work, commitment and diligence.
	Agree Unsure Disagree

THANK YOU FOR TAKING PART IN THIS SURVEY!

# APPENDIX B: INFORMATION LETTER FOR THE SCHOOL PRINCIPAL



Re: Research Project

Title: Teachers' Perspectives on the Identification of and Provision for Gifted and Talented English as an Additional Language Learners.

#### INFORMATION LETTER FOR THE SCHOOL PRINCIPAL

#### Dear Principal,

My name is Lucy Hands, and I am a Master of Education (J44) student at Edith Cowan University conducting a research project on 'Teachers' Perspectives on the Identification of and Provision for Gifted and Talented English as an Additional Language (EAL) learners' as part fulfilment for completion of the degree. You are invited to take part in the project, which has been approved by the Human Research Ethics Committee and the Department of Education, Western Australia.

I am requesting permission to invite your teachers in Year 1, 2 and 3 and EYE/PEAC\* teachers to participate in my project.

#### **Background to the Research Project**

In recent years, many Western Australian State schools have seen a sharp rise in the number of students who use English as an Additional Language (EAL) but proportionally, these students are still poorly represented in gifted programs.

#### What is the Purpose of the Research?

The purpose of this research is to investigate teachers' perspectives on the identification of and provision for gifted and talented English as an Additional language learners. Understanding classroom teachers' perspectives may help shed light on possible underlying issues.

#### What does participation in the research project involve?

Participation in the project requires the researcher to have access to teachers in the Junior Primary (Year 1, 2 & 3) and Early Years Extension (EYE) and Primary Extension and Challenge (PEAC) teachers to complete a short 20-minute survey online.

In addition, some of teachers who have completed the survey may be invited for a **follow-up interview** for Phase 2. The interview will be held at a place and time convenient to the teachers and will take approximately 30-45 minutes. The interviews will be audio recorded. The teachers will be asked about their perspectives on the identification and provision for gifted and talented English as an Additional Language learners in the classroom context.

# To what extent is participation voluntary, and what are the implications of withdrawing that participation?

Participation in this project is entirely voluntary and participants can withdraw from the research up to the point of completion of the thesis with no consequences whatsoever to the participants or the school.

If any teacher decides to participate and then later has a change of mind, he or she can withdraw from participation using a coding system in the online survey. All contributions that have made to the research will be destroyed unless explicitly agreed to after the intent to withdraw has been indicated.

If the project has already been published at the time a participant decides to withdraw, their contribution that was used in reporting the project cannot be removed from publication.

#### Are the any risks?

There are no anticipated risks associated with this research. The data will be reported collectively. No individual responses or identifying information will be reported as outlined in the University Privacy Policy.

#### What will happen to the information collected, and is privacy and confidentiality assured?

The identity of the participants and the school will not be disclosed. The privacy and anonymity of respondents are assured and all data will be used **only** for research. The information will be stored for a minimum of 5 years, after which it will be destroyed. This will be achieved by shredding the hard copy of the data and erasing the electronic copy.

Consistent with the Department of Education policy, a summary of the research findings will be made available, to the participating schools on request and to the Education Department by December 2017.

At the end of the survey in Phase 1, the participants will be issued a code which they will be asked to save. Should they wish to withdraw, they will need to contact the researcher with their unique code and then their data can be removed.

The data for Phase 2 will be maintained in a way that enables the re-identification of an individual's data and thus it can be destroyed if participation is withdrawn. By using a system of individual codes, known only to the researcher, which is used to link everyone's consent form to all data that relate to that individual.

The identity of participants and the school will not be disclosed at any time, except in circumstances that require reporting under the Department of Education and Training *Child Protection* policy, or where the researcher is legally required to disclose that information.

Participant privacy, and confidentiality of information disclosed by participants is always assured. The data will be used only for this project, and will not be used in any extended or future research without first obtaining explicit written consent from participants.

This research maybe published in a journal book, reported in the thesis and disseminated at conference presentations. Neither the participants nor the school will be identified in any way. Consistent with the Department of Education and Training policy, a summary of the research findings will be made available to the participating schools and the Department. This is will be available in 2017.

What are the potential benefits of the research?

The findings of the research may add to existing knowledge in the field of gifted education, inform current practice and policy decisions on gifted education, and identify possible issues on the identification of and provision for gifted and talented English as an additional language learners.

Participating schools will be provided with a report of the findings, which will identify areas in which

professional learning may be beneficial to staff.

Research and ethics approval

This research has been approved by the Edith Cowan University Human Ethics Research Committee

and the Department of Education, Western Australia.

Who do I contact if I wish to discuss the project further?

If you wish to discuss any aspect of this research, please do not hesitate to contact me at

lhands@our.ecu.edu.au Telephone

You may also contact: My principal supervisor, Professor Caroline Barratt-Pugh at c.barratt-

pugh@ecu.edu.au Telephone: 9370 6346, Faculty of Education and Arts, Edith Cowan University.

Or Kim Gifkins, Research Ethics Officer at k.gifkins@ecu.edu.au Telephone: 6304 2170, Research

Ethics Office, Edith Cowan University.

How do I indicate my willingness for our school to be involved?

If you have had all questions about the project answered to your satisfaction, and are willing for the teachers in your school to participate, please complete the **Consent Form** on the following page and return it to me at the postal or email address below. Please pass this information letter with the attached

card to your teachers. Their consent will be confirmed through completion of the online survey.

I look forward to your participation and support for this research project at Edith Cowan University,

Western Australia.

Best regards,

Lucy Hands

School of Education, Faculty of Education & Arts,

Edith Cowan University, Western Australia

Phone: (08)

Email: lhands@our.ecu.edu.au

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# APPENDIX C: CONSENT FORM FOR SCHOOL PRINCIPAL



# **Re: Research Project**

Title: Teachers' Perspectives on the Identification of and Provision for Gifted and Talented English as an Additional Language Learners.

CONSENT FORM FOR SCHOOL PRINCIPAL					
	I have read the information letter and understand the aims and procedures.				
	I have been made aware of the opportunity to ask questions regarding this research project.				
	I understand the research project has been approved by the Edith Cowan University Ethics Committee and the Department of Education, Western Australia.				
	I understand the privacy and confidentiality of my teachers' responses will be safeguarded to the fullest extend within the law in accordance with the Edith Cowan University Ethical Standards.				
	I am willing for this primary school to become involved in the research project as described.				
	I understand that participation in the project is entirely voluntary.				
	I understand that I am free to withdraw my school's participation up to the point of completion of the thesis, without affecting the relationship with the research team or Edith Cowan University.				
	I understand that research findings may be reported at conferences, in journal articles, book chapters and a publicly accessible thesis. The participants or the will school will not be named.				
Name (print	e of Principal ted):				
Signature:			Date:		

#### APPENDIX D: INFORMATION LETTER FOR TEACHERS



#### **Research Project:**

Teachers' Perspectives on the Identification of and Provision for Gifted and Talented English as an Additional Language Learners.

#### INFORMATION LETTER FOR TEACHERS

Dear Teachers,

My name is Lucy Hands and I am a postgraduate student in a Master of Education (J44) degree course at Edith Cowan University. I am conducting a research project that aims to investigate "Teachers' Perspectives on the Identification of and Provision for Gifted and Talented (G/T) English as an Additional Language (EAL) Learners."

This project is being conducted as part of fulfilment for completion of this research degree.

I would like invite you to take part in this project. Your school is one of the 30 Perth Metropolitan Sate Schools in Western Australia approached for participation.

#### What does participation in the research project involve?

Participation in the project requires you to complete a short 20-minute survey online about your perspectives on the identification of and provision for Gifted and Talented English as an Additional Language learners.

In addition, you may be invited for a **follow-up in-depth interview** for Phase 2 of the research. The interview will take approximately 30-45 minutes and will be held at a time and place convenient to you. The interview will be audio recorded and questions asked will be about your perspectives in identification of and provision for G/T EAL Learners in your classroom.

# To what extend is participation voluntary, and what are the implications of withdrawing that participation?

Participation in this project is entirely voluntary and you can withdraw from participation up to the point of completion of the survey with no consequences whatsoever to you or the school. The data will only be collected at the end of the survey once the summit button has been clicked.

At the end of the online survey in Phase 1, if you wish to register for a follow-up interview, you will need to provide your name and contact details which will not be passed on the any third party. This personal information will also be collected separately from your survey responses, which will remain anonymous.

#### What will happen to the information collected, and is privacy and confidentiality assured?

The privacy and confidentiality of information is always assured. This is assessable by the researcher and her supervisors working on this research project. The data will be securely stored for a minimum period of 5 years, after which it will be destroyed. This will be achieved by shredding hard copy and erasing electronic data.

Neither your identity nor the school will not be disclosed at any time except in circumstances that require reporting under the Department of Education *Child Protection* policy, or where the research team is legally required to disclose information.

The findings of this research will be reported in the thesis and may be published in a journal article, book chapters and disseminated at conference presentations. Consistent with Department of Education policy, a summary of the research findings will made available to the participating schools and the Department on completion of the project. You can expect this to be available in June 2018.

#### Is this research approved?

This research has been approved by the Ethics Committee in Edith Cowan University, and has met the policy requirements of the Department of Education as indicated in the attached letter.

#### Does the researcher have a Working with Children Check?

Yes. Under the Working with Children (Criminal Record Checking) Act 2004, people undertaking work in Western Australia that involves contact with children must undergo a Working with Children Check.

#### What are the potential benefits of the research?

The findings of the research may shed light on factors influencing the identification of and provision for Gifted and Talented English as an Additional Language Learners in the classroom context. The findings may help establish an understanding of the identification practices and provisions for G/T EAL students. Participating schools will be provided with a report of the findings, which may identify areas in which schools may benefit from additional resources and/or support.

#### Who do I contact if I wish to discuss the project further?

If you wish to discuss any aspect of this research, please do not hesitate to contact the researcher at <a href="mailto:lhands@our.ecu.edu.au">lhands@our.ecu.edu.au</a> Telephone

You may also contact: Professor Caroline Barratt-Pugh at <u>c.barratt-pugh@ecu.edu.au</u> Telephone: 9370 6346, Faculty of Education and Arts, Edith Cowan University.

If you wish to speak with an independent person about the conduct of the project, please contact Ms Kim Gifkins, Research Ethics Officer at <a href="mailto:k.gifkins@ecu.edu.au">k.gifkins@ecu.edu.au</a> Telephone: 6304 2170, Research Ethics Office, Edith Cowan University.

### How do I indicate my willingness to be involved?

If you have had all questions about the project answered to your satisfaction and you are willing to participate in this project, please click on the link below and submit the completed survey.

Thank you for your participation.

Best regards,

Lucy Hands Masters by Research Candidate Edith Cowan University Western Australia

# **APPENDIX E: CONSENT FORM FOR TEACHERS**



Research Title: Teachers' Perspectives on the Identification of and Provision for Gifted and Talented English as an Additional Learners.

	CONSENT FORM FOR PARTICIPATING TEACHERS					
	I have read the information letter and understand the aims and procedures.					
	I have been made aware of the opportunity to ask questions, and I am satisfied with the answers I received.					
	I am willing to become involved in the research project, as described.					
	I understand that participation in the project is entirely voluntary.					
	I understand that I am free to withdraw from the study up to the point of completion of					
	the thesis, without affecting the relationship with the research team or Edith Cowar					
	University.					
	I understand the privacy and confidentiality of participants will be safeguarded to the					
fullest extend within the law in accordance with the Edith Cowan University Ethio						
	Standards.					
	I understand that findings may be reported at conferences, journal articles and book					
	chapters and publicly accessible thesis.					
	I understand that at the conclusion of the online survey, I will be issued with a unique					
	code that I will use if I wish to withdraw my participation in this project.					
	I understand that by proceeding with this online survey, I am giving my consent to					
	participate in this research project.					
	I understand that the follow-up interview will be audio-recorded.					
I agree	to complete the survey online.  YES  NO					
I am w	illing to take part in a follow-up interview. YES NO					

### **APPENDIX F: PHASE 2 INTERVIEW QUESTIONS**



# **Phase 2- Semi Structured Interview Questions**

(Information letter and consent used in Phase 1 will be used again for Phase 2).

Teachers' Perspectives on the Identification of, and Provision for, English as an Additional Language learners				
Time of Interview:		0 0		
Place:				
Interviewer:				
Interviewee:				
Audio recording:	YES	NO NO		
Hand written notes:	YES	NO NO		
pening: Prior to interview: -				

- 1) Provide information letter and consent form;
- 2) Explain the purpose and benefits of the study;
- 3) Ensure the anonymity of the responses;
- 4) Describe how the data will be stored and protected;
- 5) Give estimated length of the interview.
- 6) Have the consent form signed.

#### **Questions:**

- 1. Can you explain what you understand by giftedness and talent?
- 2. Could you tell me how you would identify gifted and talented students in your classroom?
- 3. Could you tell me how you would identify a gifted and talented student who uses English as an additional language?
- 4. Could you tell me some of the ways you would support a gifted and talented student in your classroom?
- 5. Can you think of any barriers/issues or difficulties that could prevent a gifted and talented student from participating in gifted programs for example in the Early Years Extension (EYE) programs offered by the Department of Education in Western Australia?
- 6. Is there anything else you would like to add with regard to the identification of, and provisions for, gifted and talented English as an additional language learners?

**Closing:** Once again thank you for your time, cooperation and participation in this study.