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Perceptions of multiple stakeholders on the effectiveness of ability grouping of gifted and talented

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PERCEPTIONS OF MULTIPLE STAKEHOLDERS ON
THE EFFECTIVENESS OF ABILITY GROUPING OF
GIFTED AND TALENTED

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Abstract

Every school in the world has a mission to help children reach their potential. In practice, however, many teachers do not always attend to the needs of gifted students as they think that the students can achieve by themselves and do not need any individual attention. An Australian Parliamentary Senate Inquiry (2001) warned that there is a problem with gifted education in Australia and that the needs of gifted students are not being met. In New South Wales, there are academically selective classes in Years 5 and 6 of primary school (known as “opportunity classes”) and selective high schools for gifted students. However, there is still resistance to ability grouping of gifted students. The purpose of this qualitative study was to investigate the perceptions of students, parents, teachers and principal as to the effects of being in opportunity classrooms on students’ academic performance and their social and emotional well-being by comparing the students’ experiences in their last two years of primary school in an “opportunity classroom” with their prior experiences in comprehensive classrooms. Research has shown that gifted students can perform better when grouped with their like-minded peers resulting in high academic achievement and an increase in social and emotional development (Kulik & Kulik, 1982; Rogers, 2002b). For several years, costs and gains related to ability grouping have been a controversial issue (Neihart, 2007; Slavin & Oakes, 1985). This study aimed to answer the question, What do students, parents, teachers and principals perceive as the effects of being in opportunity classrooms on students’ academic performance and their social and emotional wellbeing, by comparing their experiences in both settings.

A qualitative phenomenological design was designed to address the research questions. This approach utilised dialogue and open-ended questions through personal interviews with the teachers, students and parents to obtain the comprehensive detail and description of the phenomena. The findings of the study indicated that ability grouping allowed improvements in the academic performance of the gifted and talented students, however, social-emotional issues
such as pressure, competition, and bullying were evident. Nevertheless, all participants favoured
the ability group setting over the comprehensive school setting.

Based on the data from the study, it was suggested that future research should focus on
examining the connection of gifted programs, services and needs with gifted and talented
students at the primary level, as they can be vulnerable to underachievement. In area of gifted
education research, motivational theories should be studied to learn more about gifted and
talented students.

Keywords: gifted students, academic achievement, social emotional wellbeing, ability grouping
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List of Abbreviations

DMGT – Gagné’s Differentiated Model of Giftedness and Talent
OC – Opportunity Class selective classes.
DEECD - Department of Education and Early Childhood Development, Department of Education and Training Victoria
IMTD - Integrative model of Talent Development (Gagné, 2018)
G & T - Gifted and Talented
ACARA - Australian Curriculum, Assessment and Reporting Authority
NSW DET - New South Wales Department of Education
SERAP - State Education Research Applications Process
BFLPE - Big Fish Little Pond Effect
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Chapter 1

Introduction

1.1 Background of the problem

Educational policy on gifted and talented students in NSW, Australia, is based on Gagné’s (2000) Differentiated Model of Giftedness and Talent (DMGT). Gagné’s model noted that children have potential or giftedness in one or more domains and that some students may have giftedness but not develop talent either at school or in their lives beyond school. This could be because the catalysts discussed in Gagné’s model may negatively affect the development of talent. In circumstances where the catalysts are not favorable, the question remains as to how students’ progress from potential to performance.

Most schools have a mission to help children reach their potential, but research in Australia has showed that in practice many teachers do not consistently address the needs of gifted students and many believe that gifted students can progress by themselves and do not need particular attention (see, e.g., Walsh & Jolly, 2018). For many teachers, the priority of getting children to achieve their potential is more about lifting the children who are struggling to perform. The Australian Parliamentary Senate Inquiry (2001) noted that there is a problem with gifted education in Australia and that the needs of gifted students are not being met. Walsh and Jolly (2018) commented:

Gifted education in the Australian context has often ebbed and flowed in relation to outside forces, particularly at the federal level (e.g., institution of a national curriculum, lack of federal mandate for gifted education), that impinge on those charged with providing education to those who are gifted and with advanced abilities. (p.87)

The question remains as to how we target the students with high potential and best cater to the needs of these high potential students. One way in which this could be achieved is through ability
grouping classes in NSW. Rogers’ (1991) meta-analysis indicated that full-time grouping is the most effective for accelerating talent development in gifted students. However, ability grouping is resisted by many educators, many of whom view ability grouping as elitist or detrimental to other students’ needs. Hendrick (2009) observed that “in a postmodern constructivist era, children must be seen as individuals. It is not acceptable to disregard the needs of one for the greater good” (p. 3). While research has focused on educator perspectives, the views of students and their parents are under-researched. There is need for a study, therefore, that investigates the impact of ability-grouping in terms of the students’ academic achievement and social-emotional wellbeing among all the key stakeholders, including the affected students and their families.

1.2 Aim of the study
Coleman, Micko, and Cross (2015) emphasized the need for educational researchers to ensure that the perceptions of gifted students on their educational settings was examined in order to fully understand their educational contexts. Following their advice, the aim of the current study was to explore the effectiveness of the academic program from multiple stakeholders’ perspectives, by comparing their present experience of homogeneous classroom settings with the students’ previous heterogeneous setting. Moreover, as there are numerous types of educational programs for gifted students in Australian schools, it was anticipated that this study would contribute to Australian research on the effectiveness of ability grouping through a focus on Opportunity Classes for gifted students in Years 5 (age 10-11) and 6 (age 11-12) of NSW government primary schools. The study aimed to determine the stakeholder perceptions of the best practices for gifted students in relation to their academic achievement and social-emotional development.

1.3 Research Question
The primary research question is:

What do students, parents, teachers and principals perceive as the effects of being in opportunity classrooms on students’ academic performance and their social and emotional wellbeing?
1.4 Theoretical framework

Gifted and talented education creates some debate among educators due to a lack of consensus on definition, identification, programs and provisions. The ability grouping debate is one example of this. Becker, Neumann, Tetzner, Böse, Knoppick, Maaz, et al. (2014) stated that gifted education is complex and warned that it must not be evaluated on one construct only. Further, Fetterman (1988) argued that:

One of the least discussed but most glaring holes in gifted and talented education is the lack of a theory. No overarching theoretical framework exists for the development of gifted and talented programs. The absence of a theoretical base makes the development of gifted and talented programs a vulnerable and shaky proposition at best. (p. 62)

Nevertheless, this study utilised the extensive work of Karen Rogers (2007) along with Gagné’s (1991) Differentiated Model of Giftedness and Talent (DMGT) as a theoretical framework for the research, as their work underpins the view that the individual differences in gifted students require specialised instruction in order to meet their needs and thereby maximise their potential.

1.4.1 Rogers’ best-evidence synthesis

Rogers (2007) has conducted extensive best-evidence syntheses on research related to gifted programming. She has highlighted significant themes in the light of the research literature and recommended that educators consider five lessons, which demonstrate how to best serve these intellectual learners. In the first lesson, Rogers stressed that challenging learning opportunities and environments in their particular area of talent on a daily basis are essential for gifted and talented students. Brighton, Moon, and Huang (2015) argued that the absence of a challenging educational environment has a negative impact on gifted students’ affective and cognitive domains; the researchers found that the students demonstrated their best performance when
provided a consistently challenging environment (Hendrick, 2008).

Rogers’ second lesson was that gifted and talented students frequently prefer to work independently and should be able to work at their own pace. Therefore, instruction strategies and curriculum models such as the Autonomous Learner Model (Betts & Neihart, 2004), the Schoolwide Enrichment Model (Reis & Renzulli, 1985) and the Parallel Curriculum Model (Tomlinson et al., 2009) that assist self-directed learning among gifted students are useful approaches. In the third lesson, Rogers emphasised the use of acceleration in different and appropriate forms such as subject-based and grade-based acceleration (Gross et al., 2004). Acceleration plays an important role in building a sense of social support, gaining early career pathways and achieving academic excellence (Gross, 2004; Kulik, 2004; Lubinski, 2004; VanTassel-Baska, 2004).

She further recommended in the fourth lesson that gifted and talented students must be provided with opportunities to spend regular amounts of time with their like-minded peers. Rogers argued that such grouping has significant impact on the students’ academic and social-emotional well-being and develops their positive association with school and educational programs (Bate & Clark, 2013; Hendrick, 2008; Shield, 2002). In the fifth lesson, Rogers pointed out that differentiated curriculum and instructional delivery are crucial with emphasis on developing faster pace and teaching conceptually (Santangelo et al., 2009; Tomlinson, 2005).

Another meta-analysis by Rogers (2002) provided a conceptual framework for resolving many issues related to grouping. Rogers (2002) investigated 13 research studies that support sustained periods of instruction in like-ability groups for gifted and talented students. Rogers (1998) had previously observed that ability grouping would increase a deeper sense of processing material and help in acquiring advanced knowledge (Adams-Byers et al., 2004; Adodo & Aghayewa, 2011; Rance-Roney, 2010). Rogers proposed important questions to consider in relation to ability grouping include: the range of grouping options, the effect of grouping on academic outcomes,
problems in grouping, and the cost of ungrouping for gifted students. Responding to these questions, she concluded that there are a number of options, ranging from full-time grouping to within-class ability grouping. She further added that gifted students can achieve academic gains by using many of the different grouping options. Finally, she argued that there would be a negative effect on the achievement and attitude of gifted students if they were placed for instruction in heterogeneous grouping (Peterson & Ray, 2006a).

1.4.2 Differentiated Model of Giftedness and Talent (DMGT)

The DMGT (1991, 2000) distinguishes gifts from talent as potential and realisation of potential, respectively. According to the DMGT, later renamed as the Integrative Model of Talent Development (IMTD; Gagné, 2018), giftedness comprises largely innate natural abilities that are transformed into talents under circumstances systematically influenced by a number of catalysts. The three sets of catalysts that have impact on development are: 1) interpersonal factors, such as motivation, personality, and work habits; 2) environmental factors, such as family, school, teachers, programs, provision, and activities for formal and informal learning; and, 3) chance factors. These catalysts play important roles in the transformation of giftedness into talent.

The reason for choosing this model for the research study is that it highlighted the role of the environment, including family, teachers and schools, and programs and provisions, in children’s development. This model suggests that ability exists but there is a need to nurture it with the help of the factors outlined above. Environmental factors related to classrooms and programs are essential in order to understand the needs of gifted and talented students to help them realise their potential into performance. These programs and provisions include enrichment, acceleration, extension and grouping. Massé and Gagné (1983) argued that whatever the field of talent, enrichment should be taken as the basic aim of every provision available for gifted and talented youngsters. According to these authors, we cannot provide equal services to all students who are identified as gifted because while gifts may be equal, the development of talents may not take place equally.
1.5 Significance of the study

In 2014, the Victorian Department of Education highlighted the importance of nurturing gifted and talented children and young people: “The chance to realise their potential, pursue a passion and develop a love of learning…” along with the more common general benefits their talents can contribute to society: “…gifted and talented children and young people are the potential leaders of tomorrow” (DEECD, 2014, p. 5). This statement reflects the importance of nurturing gifted and talented students’ intellect. Thus, this study aimed to play an important role in highlighting provisions that foster gifted students’ intellect.

For educational institutions, this study also aimed to create a sound understanding of the impact of specialist provisions on gifted students’ development and, ultimately, to assist in identifying programs that appropriately address the needs of gifted students. By investigating the way that parents, students, teachers and administrators perceive and experience the Opportunity Classes provided for gifted students in the latter stages of primary schools in NSW, key stakeholders will be able to analyse the pros and cons of the program and have a chance to alter and introduce the most appropriate programs and strategies in the future. Additionally, this study is significant for gifted educators and educational policy makers to design system-wide gifted programs and individualised plans of education appropriate for gifted students in Australia.

1.6 Current research framework

The research framework (see Figure 1.1) was used for the current study’s development, design and its analysis. In the first phase, through a literature review, I identified the gap and then developed research questions. The literature review helped to identify the controversy on ability grouping and its academic and social emotional benefits, along with determining inconsistent results from past research regarding ability grouping.
A phenomenological study approach was used to explore the in-depth understanding of the effectiveness of ability grouping for gifted and talented students through the perceptions of teachers, pupils and parents in opportunity classes. The last phase involved data analysis of the semi-structured interviews and led to the research recommendations and implications for future research.
1.7 Definitions of key terms

**Comprehensive classroom.** A classroom that includes students of all ability levels.

**Gifted.** A student who possesses exceptional cognitive and creative ability requiring special programs and services beyond regular classrooms.
**Gifted education.** The programs and services designed to address the needs of gifted students.

**Gifted underachievement.** This may occur when gifted students’ needs are not met and discrepancies exist between their abilities and achievement levels over a period of time (Siegle et al., 2012).

**Homogeneous grouping.** Students with similar ability levels are placed together to work at their level. Such grouping is also termed “ability grouping”.

**Heterogeneous grouping.** Students are grouped with mixed ability levels in the classroom.

**Instructional practices.** Instructional practices refer to the strategies used by teachers to develop their pupils’ interests and abilities (Dai & Chen, 2013).

**Like-minded peers.** When students work or study with other students at the same intellectual level.

**Opportunity classes (OCs).** In New South Wales, these are self-contained classes for gifted and talented students, with full-time ability grouping, and operating in Years 5 and 6 of primary schooling.

**Selective schools.** “Selective high schools cater for the specific needs of high achieving gifted students who may otherwise be without sufficient classmates at their own academic and social level” (NSW DOE, 2019). Students enter selective high schools in year 7.

### 1.8 Organisation of chapters

The current study was organized into five chapters. Chapter One presented the introduction to the study, including the background context, problem statement and identified research questions. Moreover, I outlined the theoretical framework of the study. The aim of the research and its significance was also discussed in this chapter. Key terms were defined for readers’ understanding and clarity.

Chapter Two details the literature relevant to the research. This involved the analysis of previous research on gifted and talented education in the Australian context, definitions of giftedness, the
educational needs of gifted and talented students, the controversy on ability grouping and the benefits of ability grouping.

The research method is outlined in Chapter Three. This chapter provides descriptions of the research design, site selection, participants and their recruitment, the research tools and procedures used to conduct the current study. A description of the data analysis procedures was also included. Chapter Four presented the results of the data gathered following the data analysis. In Chapter Five, I presented discussions of the current study’s findings and outlines the limitations with recommendations for future practice and research. Finally, the conclusion of this study is presented.
Chapter 2

Literature Review

2.1 Definition of giftedness and policy in Australia for gifted and talented students

The definition of giftedness has been in a state of evolution for a long time within Australia and the rest of the world (Stephens & Karnes, 2000). Reis and Renzulli (2004) commented that the numerous definitions and conceptions in educational research increase the complexity in terms of deciding who is gifted and who is not.

In Australia, the conceptions of the gifted and talented proposed by Tannenbaum (1983), Renzulli (1978) and Gagné (2008) are widely accepted with all mentioned in the Australian curriculum (ACARA, 2016). Tannenbaum’s model incorporates five factors, which include a sliding scale of general intelligence, distinctive special aptitudes, intellective traits, environmental, and chance. The Tannenbaum Model divided the gifted and talented population into two types, producers and performers. These two types of gifted people demonstrate their talent either creatively or proficiently, respectively. Renzulli’s Three-Ring Model (1978) defined giftedness in terms of three basic traits: a) task commitment, b) above average ability, and c) creativity. Moreover, he sees gifted individuals as those who possess or can develop this composite set of traits and apply them to any potentially valuable area of human performance. Reis and Renzulli (2010) argued that the current concept and definition of giftedness has become more multidimensional and broader and ranges from general to more specific based on intellectual and non-intellectual traits.

Gagné (2000) provided the connection between potential achievement and performance in his DMGT model. It is widely accepted in Australia due to its logical connection with the teaching and learning process. Recently this model was renamed as the Integrative Model of Talent Development (IMTD; Gagné, 2018). According to Gagné, giftedness consists of the four domains of natural abilities: intellectual, creative, socio-affective and sensorimotor. Gagné posited that
“these four domains entertain only low or null correlations with one another: thus, intellectually gifted individuals are not necessarily gifted creatively, socially, or physically” (Gagné, 2007, p. 94). He further added that commitment and effort is necessary for giftedness and talent so if the right learning environment is provided the individual may be able to demonstrate abilities in other areas. Gagné did not accept the “one term fits all” use of talent. His model described a broader meaning rather than a description of properties.

Schools must have a clear understanding about the type of gifted programs they can offer and the students attending these programs. In this way teachers can better meet the needs of gifted students who are gifted irrespective of their cultural background, diversity, special needs and behaviour. According to Gagné (2000), when a student participates in systematic learning and practice, talent develops. The talent development process is affected by the catalysts, intrapersonal (physical, motivation, self-management, and personality) and environmental (milieu, persons, provisions, and events). Matthews and Dai (2014) encapsulated Gagné’s idea of giftedness in this statement:

* a dynamic, domain-specific and socially mediated process, resulting from the complex interactions of disposition, aptitudes and social-cultural environment, leading to diverse pathways and outcomes. (p. 347)

Another important aspect of the DMGT model is chance, which Gagné suggests plays an important role in the transformation of giftedness into talent. He further emphasised that training and practice are crucial mediating elements.

Although there has been research into gifted education policy in terms of curriculum, programs, and school reform in the UK and USA, there are fewer studies conducted in Australia. Frydenberg and Mullane (2000) stated that in 1973 the Australian Government observed the “desirability of providing special educational opportunities to students who have demonstrated their abilities in
particular field of studies including scientific, literary, artistic or music studies” (p. 79). The movement for gifted and talented education in Australia gained momentum after the first world conference on gifted and talented in London (Braggett, 1993). Despite all efforts such as the establishment of conferences, out-of-school programmes, associations for gifted and talented children, publications in journals and family counselling, there was at that time a lack of co-ordination on educational policies for gifted and talented in all states and territories because of issues of definition, identification, educational needs, ways of differentiating provisions, state level programs and a source of funding. The Australian Senate considered a national educational policy for gifted and talented students as an “appropriate goal” in 2001. This committee concluded that there had been some positive development since 1989 but much remained to be achieved. In 2008 the Melbourne Declaration on Educational Goals for Young Australians included two goals of “excellence and equity” and “successful learners, confident and creative individuals, and active and informed citizens”. The document recommended that we should “promote a culture of excellence in all schools, by supporting them to provide challenging, and learning experiences and opportunities that enable all students to explore and build on their gifts and talents” (p. 7).

Many states and territories in Australia have updated their educational policies for gifted and talented education but still there is an absence of specific policy at the national level, with disagreement remaining about the equitable educational environment that would best cater for their needs. It is a common assumption in Australian culture that gifted students can do well at school without any exceptional intervention (Porter, 2005). VanTassel-Baska (1992) noted that gifted and talented students have the right to consistently receive educational treatment designed for their academic needs. She outlined that well-informed educational leadership plays a significant role in creating an organised, thoughtful plan of curriculum development. Leadership must understand that high potential learners are effective in increasing the GDP of the country. James Heckman, a Nobel prize winning economist, stated that high ability learners have a significant impact on economy and society (Wai & Worrell, 2017). Since 2000 the performance of Australia in International Mathematics and Science Study (TIMMS) and PISA has been
decreasing significantly which shows high concerns for highly intellectual students (Masters, 2015).

By Year 4, the top 10% of Australian students in mathematics perform at about the same level as the top 40% of students in Singapore, Korea, and Hong Kong. By Year 8, this gap has widened, with the top 10% of Australian students performing at about the same level as the top 50% of students in Singapore, Korea, and Chinese Taipei. (Masters, 2015, para. 4)

Like general education, there should be organised policies and plans for gifted and talented education in Australia.

2.2 Educational provision for gifted and talented students

Gifted and talented educational programs and provisions sometimes are ignored due to insufficient funding and lack of administration (Rogers, 2002) but in Australia despite the variation among state policies and programs, services for gifted and talented have not been completely ignored. Kronborg (2002) noted that the Australian community has more informed understanding and attitudes are becoming more open and accepting to the needs of gifted and talented students.

The second Australian Senate Inquiry on the Education of Gifted Children (2001) highlighted the importance of teacher education, educational provisions for gifted and talented students, identification of high intellectual potential and provision of opportunities to foster talent by avoiding negative outcomes (Collins, 2001; Plunkett & Kronborg, 2007; Roth, 2017). The Australian Curriculum (ACARA, 2016) acknowledges that gifted and talented students “are entitled to rigorous, relevant and engaging learning opportunities drawn from the Australian Curriculum and aligned with their individual learning needs, strengths, interests and goals” (p.1).
For the last 10 years, the number of classes for gifted students has been increased and a mentor links program and talent development project have been introduced. According to the NSW Government Department of Education and Training (2015b), there are selective secondary schools (17 fully and 25 partial selective schools), 75 primary (opportunity classes) and students in rural and remote areas have virtual selective stream (NSW DET, 2015a). These are all provisions which are available on a highly competitive basis. The NSW Department of Education and Training introduced the new policy for gifted and talented education in 2004 with the aim of “identifying gifted students, implementing professional learning, developing school policy and establishment of procedure for evaluation of gifted programs in schools”. This educational policy was revised recently in 2017 and stressed the practice of gifted education in order to provide rich learning environments to foster gifted students. Landrum (2006) commented on the importance of gifted educational provisions:

All aspects of gifted education programming and services…must emanate from highly able students’ recognizable educational needs that manifest themselves in their cognitive, psychosocial and physiological development. (p. 1)

Extensive literature has emphasised that gifted and talented students have the capability to learn more rapidly and at a level of complexity in advance of their age peers, in an appropriately challenging environment that develops their academic skills systematically (Rogers, 2007). Kronborg and Plunkett (2015) conducted a study on high ability students to determine the effectiveness of an Extended Curricular Program. They concluded that these students need appropriate educational provisions including ability grouping, acceleration and differentiated curriculum.

Research has suggested that due to a consistent lack of challenge in the school environment, the intellectual ability and motivation of gifted students may decline as early as the first year of schooling (Karaduman, 2013). This is seen as the cause of increasing gifted underachievement at the elementary or primary level over a period of time (Gibbons et al, 2012).
When Kanevsky and Keighly (2003) interviewed gifted and talented students about their experience of schooling many reported boredom at school. I concluded that gifted students needed more choice and learning control, a higher level of challenge and complexity, and teachers who care. Hence the optimal educational or learning environments are required to provide appropriate educational pathways and challenging experiences such as grouping arrangements, individual research, mentoring, online learning, professional development, along with enrichment, extension and acceleration. VanTassel-Baska stated that “acceleration is appropriate curriculum services at a level commensurate with gifted child’s demonstrated readiness and need. It is a rapid rate of a child’s cognitive process” (cited in Brody, 2004, p. 70). Acceleration includes early entrance at any schooling level, grade skipping, subject-acceleration and advanced placement courses. Further acceleration options include self-paced classes, fast-paced classes, and compressed classes with a goal to cover two years of material in one academic year.

Research evidence (Gross, 2004, 2006; Kulik, 2004) has showed that acceleration has an overwhelming positive effect on the academic achievement of gifted students. Enrichment involves activities that are designed to expand interests and talent identification of gifted children. The goal of enrichment classes is to engage gifted and talented students in more depth as compared to traditional classes (Subotnik et al, 2011). Kim (2016) stated in her meta-analysis that enrichment programs have a positive effect on gifted students’ academic achievement and socioemotional development. Extension activities are beneficial for those gifted students who have already mastered a subject in which others in the class need additional work (Rogers & Vialle, 2009). Additionally, gifted students’ participation in enrichment and accelerated classes create a sense of social support and diminish their feelings of uniqueness and loneliness (Rinn, 2018). Tieso (2005) stressed that it is important that challenging curriculum and enduring concepts are provided for high ability students whether they are in enrichment, honours or regular classrooms.
Gifted teenagers may be affected by psychological distress or boredom when they cannot move forward; their level of stress will be high when they do not find challenging classroom settings. Kulik and Kulik (1992) warned schools that if they eliminated acceleration from classes the damage would be profound. The US Department of Education presented a report in 1993 which stated that the curriculum taught to gifted students in regular classrooms failed to challenge them because they had already “mastered” it with the result that it created boredom, stress and depression for students when they were forced to learn it again. Such academic approaches can lead to a loss of interest, lack of motivation and underachievement (Delisle & Galbraith, 2002).

Therefore, Karnes and Bean (2009) questioned whether “given aspirations for preparing young people to be outstanding contributors, are there pedagogical practices that are appropriate only for gifted children?” (cited by Subotnik, Olszewski-Kubilius, & Worrell, 2011, p. 23).

The purpose of the curriculum should be to provide opportunities at an optimum level for the gifted learner as their needs are different from typical learners and the curriculum must therefore be designed accordingly. VanTassel-Baska and Stambaugh (2006) mentioned the three successful curriculum dimensions, i) content mastery dimension, ii) the process and product dimension, and iii) the epistemological concept dimension, for gifted learners. Appropriate programming and curriculum have a positive effect on student achievement in terms of lifelong learning and talent development (Hendrick, 2008). VanTassel-Baska (2003) highlighted that gifted students’ precocity, intensity, and their complexity are such characteristics that must be considered to plan and develop their curriculum. Rogers (2007) pointed out that “every identified gifted child must be given consistent, progressively more difficult curriculum that has been articulated across grade and building levels and has been consciously delivered” (p. 385). If gifted and talented students are forced to move at the same pace as others, their achievement level would be reduced (Kulik & Kulik, 1992). Tieso (2002) believed that learning suffers when all students are taught one curriculum without understanding their readiness. As mentioned earlier, a challenging curriculum and faster pace contribute significantly to the talent development of gifted students but “time with like-minded peers” is another important factor which can be achieved through cluster grouping,
peer dyads or like-ability co-operative groups. According to Hendrick (2008) “allowing gifted students to have adequate time with their intellectual peers in a challenging and supportive environment promotes enthusiasm for learning and a positive attitude towards school” (p. 84).

Research studies have emphasised that gifted students benefit from spending most of their time with like-performing classroom peers as it helps them take social emotional risks and to spark one another’s potential (Bate & Clark, 2013), to develop innovative ideas, to become more mastery-oriented and self-directed in their approach to learning (Moon et al., 2004). These result in enhancing the gifted students’ cognitive and social skills. Gifted students need an educationally supportive and challenging environment that gives them the opportunity to develop academic talent and enhance social and emotional well-being. Vygotsky’s (1978) concept of the ‘zone of proximal development’ is relevant to the needs of high ability learners. The zone of proximal development is “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (Boblet, 2012, p. 3). In the case of ability grouping, teachers should be careful in delivering curriculum and instruction that is suitable to the gifted and talented students and what these students are capable of, within the zone of proximal development. There are a number of grouping options available such as full-time ability grouping (opportunity classes and selective schools), within-class grouping, cluster grouping, cooperative grouping and pull-out programs to teach gifted and talented students in groups. Rogers (2007) emphasised that “there is no single practice or panacea that will work in every school setting and with every gifted and talented learner” and “there are many different ways in which these options for gifted learners can be offered…it is completely up to schools to select those…work best with its current philosophy, staff and school community” (p. 382).
2.3 Controversy on ability grouping

Ansalone (2000) stated that after the introduction of the Binet Intelligence Test, the practice of ability grouping of students became popular in 1920 in American schools. The implementation of the Harris Plan in public schools that introduced “segregation by ability” had made the history of ability grouping controversial (Ansalone, 2000). According to Loveless (1998), ability grouping lost popularity due to the perceived negative impact on the self-esteem of low ability students. The conflict about ability grouping was exacerbated in the 1980s due to political change rather than pedagogical reasons with the label of “elitist”, “racist” and “socioeconomic inequalities” being often applied to the practices of grouping (Oakes, 1986; Slavin, 1987). Collins and Gann (2013) claimed that low ability students experience poor quality instruction in homogeneous grouping.

The arguments against ability grouping may result in the degradation of educational opportunities and a lack of concern for gifted students who need extra assistance. The attack on ability grouping is due to polemic and socio-political interference rather than evaluative and educational issues (Gross, 2001). Fiedler et al. (2002) clearly warned that “eliminating ability grouping because of inequitable identification procedures is tantamount to throwing out the baby with the bath water” (p. 110).

Opponents of ability grouping label it as “tracking” (Oakes, 1986)). However, research showed that there is a difference between ability grouping and tracking, with the former defined as an organising mechanism (Tieso, 2003; VanTassel-Baska, 1992) by which students of similar ability or achievement level (Miller & Druden, 1992) within a school curriculum are together for instruction. However, tracking is a process that ordinarily implies assignment to a special sequence or program of class with other students of similar general ability for a relatively long period of time. Borland et al. (2002) stated that tracking is a rigid and static practice as compared to ability grouping, which is flexible and involves grouping students according to their needs rather than a “caste like” system or “sorting”. Oakes (1986) stated that there is no gain in ability
grouping and children with low aptitude have negative academic outcomes when in homogeneous grouping (Kelley, 2018). She suggested that ability grouping has devastating effects, overall zero effects on every group of learners, is unsuitable for preparing students for higher education or employment, lowers academic expectation and quality of education, students became disillusioned, demotivated and respond badly under pressure and competition, and restrictive to the opportunity of some students.

Opponents suggest the elimination of ability grouping would improve academic achievements and cultural development in the classroom (Cagnole et al., 2004; Hallam & Ireson, 2005; Slavin, 1986). Slavin (1990a) stated that “I am practically opposed to any school organization plans in which programs for the gifted create de facto ability grouping” (cited by Brody, 2004). The inclusion philosophy is another challenge to the practice of ability grouping for gifted and talented students. Stainback and Stainback (1996) argued in favour of inclusion:

> Exclusion in schools sows the seeds of social discontent and discrimination ... (whereas) inclusive schooling is the practice of including everyone, irrespective of talent, disability, socioeconomic background, or cultural origin, in supportive mainstream schools and classrooms where all student needs are met ... society makes the conscious decision to operate according to the social values of equality for all people with the consequent results of enhanced social peace. (p. 3)

The movement of inclusion emerged with an attempt to ensure that all students with special learning needs get maximum benefit from heterogeneous grouping. Sermier Dessemontet and Bless (2013) advocate for inclusion by stating that disadvantaged students can attain high academic achievement with inclusion in the regular classroom setting. The proponents of the inclusion movement believe that high ability students must learn with students of a diverse range of abilities to get life experience and a sense of community building in the classroom (Bikarian, 2009).
The research literature highlights that placing students in a heterogeneous setting has a negative impact on high ability students. The “one size fits all” strategy of the inclusion movement is not the best practice for the gifted learner. They might become bored and frustrated due to lack of challenges and repetition and as a result fail to reach their potential (Rogers, 1998). On the other hand, low ability students may experience the interruptions and less allocation of time for reading (Heltemes, 2009) with a result of detrimental effects on academic progress and self-esteem of low ability students. Additionally, many teachers cannot meet the needs of such a diverse group in an inclusive classroom. Gifted students should be placed in an appropriate setting according to their needs and abilities (Benson, 2002; Robinson et al., 2000; Rogers, 2002; Shields, 2002). Allan (1991) pointed out that “the thorniest issue concerning grouping and the gifted is whether the gifted are needed in the regular classroom to act as role models for other students and whether this use of gifted students is more important than their own educational needs” (p. 64).

Tieso (2003) was concerned that equity and racism issues for gifted students have degraded their “educational opportunities” and showed a “lack of concern for extra assistance”. She further pointed out that equity is a noble goal but not at the expense of some students. The movement of tracking and inclusion are two major challenges that gifted and talented students are facing today with also issues of identification, provisions and policies. Such practices of grouping of gifted students might detract the educators from basic quality gifted programs (VanTassel-Baska, 1992). Due to a lack of enough stimulation, gifted students are the most disadvantaged group when it comes to meeting their full potential according to some researchers (Braggett, 1985, cited by Merrotsy, 2003). The movements of tracking and inclusion sabotaged the potential, performance and motivation of gifted students and placed them in unchallenging and less productive settings by labelling them “dummies”. The plight of the gifted student has increased with research showing that some schools have completely ignored them. Tolan (1996) best described the state of the disadvantaged gifted child:
A cheetah running forty miles per hour might be impressive to some observers, but it is drastically underachieving in comparison to its potential. Similarly, if a cheetah only has to chase after rabbits who run 20 m.p.h., it won't run 70 m.p.h.… If a cheetah is kept in a small cage and fed only a steady diet of zoo chow, it will cease to run at all. By not providing special instruction, schools offer gifted students the academic equivalent of zoo chow. (p.32)

2.4 Research on ability grouping of gifted and talented students

Research on ability grouping of gifted and talented students consists of several studies and meta-analyses, which shows its effectiveness. Ability grouping is important to fulfil the needs of gifted students whether it is full-time or part-time and where they are engaged in learning by encouragement, stimulus, and expression of their abilities (Vidergor & Azar, 2015). Rogers (2007) stated that “the more time this occurs for gifted children, the more positive the effects” (p. 389).

High ability grouping influences the motivation of students, increases their self-confidence and self-regulation and as a result, teachers are more willing to cover curriculum at faster pace. Hence, students work as a team with equal contributions because they have similar ability levels. Moreover, when teachers use practices like ability grouping, revised and differentiated curriculum to enhance high level thinking skills of gifted students, there are always positive academic gains (Delisle, 1997; Kulik & Kulik, 1990; Wiggins & McTighe, 1998, cited in Tieso, 2005). The meta-analysis by Kulik and Kulik (1992) examined ability grouping for gifted and talented students. This meta-analysis was based on five different instructional programs that grouped students by ability. The purpose of this meta-analysis was to answer the opponents of ability grouping who advocated de-tracking and were calling on schools to eliminate ability grouping. The analysis highlighted that if only multilevel classes were removed then there would be relatively little negativity. The high ability students would face a small decrease in their achievement level in the case of replacement of multilevel classes into mixed ability classes, however, there would be no
effect on the achievement level of other students. If schools eliminated ability grouping programs, the result would be broadly felt and the academic achievement levels of both high ability and low ability students would fall dramatically. This would be a great harm academically and emotionally. Johnson and Johnson (1989) noted that “there are times when gifted students should be segregated for fast paced accelerated work. There are times when gifted students should work alone. There are times when gifted students should compete to see who is best” (p. 1).

However, Brody (2004) pointed out that the achievement of gifted students is negatively affected when they are grouped in heterogeneous settings. Adodo and Agbayewa’s (2011) argument about the effectiveness of ability grouping for high and low achievers challenged the opponents’ views on the disadvantages of ability grouping for low achievers:

When students are grouped heterogeneously, there is the possibility that the low achievers and the slow learners will be denied the opportunity to receive attention from the teacher as the general assumption of the teachers is that all is well with all members of the class. Students are also not motivated to learn because of the personal fear of poor performance. From this study, the average- and low-ability students benefit academically from homogeneous grouping science class settings than the heterogeneous group. (p. 53)

The research on gifted students showed that there is a positive relationship between poor social emotional development and academic underachievement (Blass, 2014). However, advocates of ability grouping argued that high and low ability students can get maximum benefits from social interaction when grouped with like-ability peers and achieve high scores as compared to heterogeneous classrooms for gifted students (Clark, 2013; Cohen et al., 2010; Goldring, 1990; Rogers, 1991, 2001, 2002b). Reis and Renzulli (2004) raised the concern that mismatched environments which are unresponsive to pace and level of gifted students have a detrimental effect on their social and emotional well-being. They described different practices that promote healthy social-emotional relationships including an accelerative learning environment and time to learn.
with others of similar abilities, interest and motivation. Cross and Swiatek (2009) found that if schools provide the opportunity to work with intellectual ability peers then gifted students showed high levels of social acceptance and psychosocial adjustment. There are gains in the social and emotional development of gifted students when their needs are met through appropriate ability grouping practices (Smith & Laura, 2009). Rance-Roney (2010) stated:

When the objective is for learners to work with a problem and achieve consensus on a solution, this homogeneous grouping scheme will maximize chances for all group members to engage in conversation (p.23).

This shows that ability grouping is useful for gifted learners to accept and understand differences (Winebrenner & Devlin, 2001). Many studies raised objections against full-time ability grouping in terms of student isolation, pressure to perform, the Big-Fish-Little-Pond-Effect (Seaton, Marsh, & Craven, 2009), actual reduction in heterogeneity (Slavin, 1987) and social-emotional suffering (Gross, 2004). However, the literature on full-time or part-time ability grouping is scarce but it has a significant impact on school-related interests, academic development, less disruptive behavior, high degree participation, student teacher relationship and socio-emotional support (Delcourt et al., 2007; Hattie, 2002; Neihart, 2007; Rogers, 2007; Vidergor & Azar, 2015; Vogl & Preckel, 2014). Moreover, most of the gifted student participants in the study of Moon et al. (2004) responded that the homogeneous environment was a “safe haven, a place they could be themselves without fear of ridicule” (p. 7). Shield (2002) argued that gifted students in gifted classes showed more development in their career of interest.

2.5 Conclusion

In such a controversial climate, it is difficult to decide the benefits of ability grouping for gifted and talented learners. Some studies (Clark, 2013; Kulik & Kulik, 1992; Rogers, 2002, 2007; Tieso, 2003, 2005) showed the positive effect of ability grouping while other studies (Oakes, 1986; Slavin, 1986, 1990) showed contradictory assertions about ability grouping. Due to the lack of research in the NSW context and the prevailing controversy about ability grouping, research
on ability grouping in this context is essential in the field of gifted and talented education. Moreover, as the students in opportunity classes have come from heterogeneous classroom settings beforehand, they can best compare their experiences. Thus, it is important to investigate the effectiveness of gifted programs (Coleman et al., 2015) such as ability grouping in NSW. The factors of effectiveness such as social-emotional development and academic achievement are not widely researched in previous studies in NSW Australia. There should be individualised educational plans for gifted students. Kanevsky (2013) stated that:

Ideally, every student’s education should be personalized and authentic. It should take full advantage of all of the students’ potentials (academic and nonacademic), passions and interests, strengths, struggles, and preferences. (p.1)
Chapter 3

Method

3.1 Introduction

The purpose of this qualitative study was to investigate the perceptions of multiple stakeholders about the effectiveness of ability grouping of the gifted student in NSW primary schools. This research approach, according to Denzin and Lincoln (2011), helps to make the world visible by exploring complex issues. For several years, the costs and gains related to ability grouping have been a controversial issue (Neihart, 2007; Slavin & Oakes, 1985). This research was especially interested in how ability grouping impacts the social and emotional well-being and academic achievement of gifted students. Research has showed that gifted students can perform better with their like-minded peers, and that ability grouping results in high academic achievement and an increase in social and emotional development (Kulik & Kulik, 1982; Rogers, 2002b). This study helped to answer the question of whether ability grouping is effective for gifted students in terms of their social-emotional well-being and academic development through the perceptions of multiple stakeholders (Parents, Teacher, Students, and Principal). This chapter describes the research design, research questions, setting of the investigation, data collection and analysis. Moreover, it addressed the issues of trustworthiness and ethics. Permission and ethical approval were sought from the University of Wollongong Ethics Committee and from SERAP, Department of Education (NSW).

3.2 Research Design

The research question, as indicated earlier, was What do students, parents, teachers and principals perceive as the effects of being in opportunity classrooms on students’ academic performance and their social and emotional wellbeing? The design of this study sought to gain in-depth understanding of the lived experience of gifted students in full time gifted classes along with their parents and teachers. Creswell and Clark (2007) described the research design as “the
plan of action that links the philosophical assumptions to specific methods” (p. 4). Therefore, the research design of the current study drew on Gagné’s DMGT model and Rogers’ grouping synthesis, and utilised a qualitative research method to explore the relationships among related components.

The study utilized a qualitative phenomenological design, which means that dialogue and open-ended questions were used during the participants’ interviews and comprehensive detail and description of the investigated phenomena were taken (Giorgi, 2008; Moustakas, 1994). In this study, the perceptions of multiple stakeholders regarding their experience in ability grouping was the phenomenon in question. Phenomenology was chosen to gain understanding of the subjective experience of the participants, gaining insight into their motivations and actions (Lester, 1999). The study sought to gain knowledge as to the effect that ability grouping has on the academic and social-emotional outcomes for gifted students. Moustakas (1994) stated that:

the aim of phenomenological research is to determine that what an experience means for the people who have had the experience and are able to provide a comprehensive description of it. From the individual descriptions general universal meaning are derived, in other words the essences or structures of the experience. (p. 13)

In this study, the data collected from multiple stakeholders including families, teachers and administration enabled me to get the broader understanding about the effectiveness of ability grouping in terms of academic and social emotional development. Moreover, the study sought to gather the information that could assist educational researchers, school leadership and teacher to implement the strategies that might helpful in resolving the academic and social emotional issues faced by gifted and talented students.

In line with this approach, I was involved in the whole study. I conducted all data collection, transcription and data analysis processes. Data were collected through open-ended questions and in-depth interviews with participants, including students, teachers, parents, and the school
principal. I audio-recorded interviews with the permission and consent of the interviewees and then transcribed them. The verbal assents were also given by students before starting interview. Member checks by participants were conducted after the completion of recording, and the transcription of their interview to ensure that they agreed on the correctness and accuracy of the work. With strict confidentiality, pseudonyms were used in all note-taking and in the transcription of the interviews. The interviews rested on the framework supplied by research questions mentioned in the introduction of the method chapter. I ensured that I adopted careful listening and understanding of the perceptions of participants, through careful data analysis. I was able to become closer to the core of essence as I moved from details to themes during data analysis.

3.3 Site and participants

In NSW, the Department of Education is responsible for the public, private, non-government and independent schools (DOE NSW, 2015). At the time of writing, there were 76 public schools operating self-contained opportunity classes (OCs) and 22 full selective and 24 partial selective government secondary schools serving gifted and talented students (DOE NSW, 2018). Entrance to these OCs is highly competitive and based on the students’ academic merits as measured by placement tests and assessment tasks in the regular class. Opportunity classrooms represent one form of ability grouping and, as the focus for this study, was how ability grouping was operationalised. The DOE’s educational policy for gifted and talented students was based on Gagné’s DMGT, which defines giftedness as a broad concept and reflects that gifted students vary in nature and abilities such as intellectual, creative, leadership, social and physical skills. The policy emphasised that appropriate opportunity, stimulation and experiences are important to address the students’ potential (DOE NSW, 2004). This model indicated that school communities must be sensitive to the giftedness and talent development of these young students by observing the factors that positively or negatively affect such development.
Currently there are various programs running in NSW schools to deal with the social-emotional and academic development of these high-potential students because of the recognition that without special attention, underachievement may occur. The NSW Education Standards Authority is responsible for teaching accreditation and introduced the requirement for professional learning for all teachers to maintain accreditation. This has led to an increase in professional learning courses in recent years (Howard et al., 2016). While all public schools run staff development days, currently pre-service courses in gifted and talented are limited. As a result, many teachers are not equipped to address the issues faced by gifted and talented students. It is within this political context that the study was conducted and the site selected.

The site was selected from the NSW DOE website, which listed all schools that included OCs for gifted and talented students. The location of the site was a public primary school located in the inner west suburb of Sydney, where the population is highly multicultural. The inclusive learning environment and diverse community that promoted academic achievements and social development was the predominant reason to conduct the study in this specific school. The vision of the school reflects innovative and creative 21st century educational instructional practices in an inclusive, engaging, enriched and supportive classroom environment (School website [deidentified], 2019). The school has been serving gifted and talented students through the OC structure for two years. Its population consisted of 460 students with 75% of the students from a non-English speaking background.

The selection of participants was based on the notion that these stakeholders were experiencing ability grouping so they could better explain the effectiveness of ability grouping compared to their prior experience of heterogeneous grouping. The choice of the participants was made with a view to those who understand the study’s research problem and could therefore respond to the research questions accordingly (Crotty, 1998). By doing this, I was enabled to gain insight and rich information from gifted students, their teachers and their parents. Considering time
availability and travel cost, it was a “convenient sampling” because the school was located conveniently close to the researcher and met the criteria for inclusion in the study.

The participants for this study were ten gifted students from grade 5 (10-11 years old) and grade 6 (11-12 years old), five from each class. The teachers and vice principal invited the students in the OC class to participate through a self-nomination approach. All the participants voluntarily agreed to take part in the study. Ten parents of the gifted students were also invited to participate. Some parent participants found it difficult to schedule an interview due to their working commitments. The population of parents were living in Sydney and came from Asian, European and Australian backgrounds, and most of them were residing near the school. Parents of the gifted students were literate and fully equipped with information in the area of gifted education. Two fathers and eight mothers were interviewed about the effectiveness of ability grouping for their children. The two teachers of the two opportunity classes, who had both completed professional courses in gifted and talented education from universities, were invited for interview. The school principal has also completed a postgraduate degree in gifted and talented education and several other professional training courses in gifted education. For selection of participants purposeful sampling was used. A summary of the participants is illustrated in Table 3.1.
Table 3.2

*Participants’ attributes*

<table>
<thead>
<tr>
<th>No. of Participants</th>
<th>Participants sampling</th>
<th>Gender</th>
<th>Qualifications in gifted education</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>one principal</td>
<td>Administration</td>
<td>F</td>
<td>Postgraduate degree and training courses</td>
<td>Experienced in teaching gifted students, currently supervising OC teachers and running successful projects for G&amp;T students.</td>
</tr>
<tr>
<td>two teachers</td>
<td>Grade 5</td>
<td>F</td>
<td>Professional training</td>
<td>Experienced to teach gifted students, Australian cultural background</td>
</tr>
<tr>
<td></td>
<td>Grade 6</td>
<td>F</td>
<td>Professional training</td>
<td>Experienced to teach gifted students, Australian cultural background</td>
</tr>
<tr>
<td>Ten students</td>
<td>5 from Grade 5</td>
<td>8F</td>
<td>N/A</td>
<td>Asian, European and Australian cultural backgrounds</td>
</tr>
<tr>
<td></td>
<td>5 from Grade 6</td>
<td>2M</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ten parents</td>
<td>5 from Grade 5</td>
<td>8F</td>
<td>Literate, knowledgeable about gifted education</td>
<td>Asian, European and Australian cultural backgrounds, 7 mothers and 2 fathers were full time working parents, 1 mother casual worker.</td>
</tr>
<tr>
<td></td>
<td>5 from Grade 6</td>
<td>2M</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3.4 Data collection tools

The instrument used for data collection in this study was semi-structured interviews. Semi-structured interviews are considered a flexible technique for studies which are conducted at a small scale (Drever, 1995). It is an effective and efficient way to document the “perspectives, feelings, opinions, values, attitudes, and beliefs” (Saldana, 2011, p. 32) of participants. In a structured interview, detailed questions are formulated, however, semi-structured interviews begin from broader and general questions (Arksey & Knight, 1999). During semi-structured interviews, participants are more open and respond independently in their preferred manner. Table 3.2 illustrates the broad interview questions that were posed to the teachers, parents and students.

Table 3.2

Interview Questions

<table>
<thead>
<tr>
<th>Participants</th>
<th>Interview Questions</th>
</tr>
</thead>
</table>
| Teachers     | - What is your experience of the opportunity classes?  
               - What do you think is the benefit of homogeneous classroom settings?  
               - What do you think is the benefit of heterogeneous classroom settings?  
               - What do you think are the disadvantages of being in homogeneous settings?  
               - What do you think are the disadvantages of being in heterogeneous settings?  
               - What do you think about the impact of ability grouping on academic achievement of your students?  
               - What do you think about the impact of ability grouping on social and emotional well-being of your students? |
| Parents      | - What is your experience of the opportunity classes?  
               - What do you think is the benefit of homogeneous classroom settings?  
               - What do you think is the benefit of heterogeneous classroom settings?  
               - What do you think are the disadvantages of being in homogeneous settings?  
               - What do you think are the disadvantages of being in heterogeneous settings?  
               - What do you think about the impact of ability grouping on academic achievement of your child?  
               - What do you think about the impact of ability grouping on social and emotional well-being of your child? |
Students

- What is your experience of being in the opportunity classes?
- What did you like about your previous classes before coming to the opportunity class?
- What didn’t you like about your previous classes before coming to the opportunity class?
- What do you like about being in the opportunity class?
- What don’t you like about being in the opportunity class?
- In which of your classes do you think you learn the best? Why?
- Which of the classes did you enjoy the most? Why?

3.5 Procedure

The procedure undertaken to conduct the study is summarised in Figure 3.1.

![Figure 3.2 Research procedure steps]

3.5.1 Ethical Considerations

To identify the potential level of risk and to ensure human safety, the application for ethics approval was submitted to the Human Research Ethics Committee (HREC) at the University of
Wollongong (UOW) and to the other external ethics agency, State Education Research Applications Process (SERAP). Prior to initiating research in the government school, it was mandatory to seek approval from NSW Department of Education. SERAP is the body responsible to give approval of the application to conduct research. Moreover the body helps to enhance the quality of the research in public schools (SERAP, 2018). The approval from SERAP was sought in August 2018 (application # SERAP2018227). As children and their social emotional issues were involved in the research, the full HREC evaluated and approved the research in July 2018 with approval # 2018/245. It was imperative to maintain transparency during the consideration of ethical issues in the current research (McCarter, 2014). To ensure that the research would be conducted in an ethical and professional manner, I addressed the following ethical considerations in the application submitted to HREC.

3.5.1.1 Consent forms and information sheets

The school principal was approached to gain permission to conduct the research and to determine the method for distribution of consent and participant information sheets. After a period of two weeks, all participants returned signed consent forms. Apart from the time taken to participate in the interview, there was no inconvenience for parents, teachers and principals.

The purpose of the study, duration of the interview and potential cost and no direct benefits of the research to the participants were clearly mentioned on the consent form. I carefully set procedures to behave respectfully with participants for their cultural sensitivity during the whole research. The option to participate was voluntary and participants had the chance to ask any questions of the researcher that they might have had. Participants were not compensated for their participation in the research and without any repercussion had a choice to withdraw from study any time.

3.5.1.2 Research consideration for children participants

The consent form and information sheet were modified as per HREC advice, for example, the language of the consent form and information sheet were made simple and easy to understand.
The interview questions were also modified into easier wording. Children are more vulnerable in any kind of research, so permission was sought from both children and their parents to commence study. Furthermore, the verbal script was also provided to children, and read aloud due to their age to ensure they understood the context of the interview clearly. Before conducting research in a social context, the potential benefits of the study along with personal costs to each participant is a primary issue in ethics, and needs to be considered. According to Cohen et al (2011), the research topic, study context, participants’ nature, data collection processes and type of data and how they are reported may be taken into account. The current study addressed the effectiveness of ability grouping in terms of social-emotional and academic development, so the only foreseeable risk was social-emotional inconvenience especially for students’ participants. However, the counselling service of the school was made accessible in the case of any distress or discomfort to participants.

3.5.1.3 Confidentiality, privacy and data storage

Participants were informed that the findings from this study could be published in academic journals or presented at conferences after ensuring confidentiality through use of pseudonyms and codes. I and my team had access to the participants’ identity and data. Even the school’s identity was also kept confidential. Participant information was kept under lock and key and after transcription of the interviews in hard copy form, the transcripts were moved from my computer to a flash drive and secured in a locked drawer. After the period of 5 years, all the information including notes and flash drive, will be destroyed.

3.5.2 Participant recruitment

Using a qualitative study approach, ten gifted children, two teachers and one principal from opportunity classes and ten parents who were willing to participate were selected purposefully. Recruitment of participants was on a voluntary basis and their decision to participate or withdraw anytime had no effect on their relationship with the school or the researcher. The school principal and teachers helped to approach parents through email, phone and flyers. Some students brought
their parents to school to express their views which made the recruitment process easier and quicker. Each participant’s demographic details were documented at this stage, including age, gender, qualifications, locations, additional information and numbers of participants.

3.5.3 Data collection processes

Considering the convenience of participants, interview location and timing were scheduled so they could respond openly and freely. To avoid any distraction and embarrassment, the interview process was clearly mentioned to the participants to make them comfortable. The duration of the face-to-face interviews was 20 to 30 minutes per participant. I recorded the interviews and then transcribed. As it is difficult to recall the participants’ verbal and non-verbal conversation aspects, audio-recorded interviews are beneficial to gain in-depth meaning of underlying hidden contents (Silverman, 2010). In the interviews with participants, questions were asked to explore the experience of participants in opportunity class; the advantages and disadvantages of ability grouping; and the impact of ability grouping in order to meet the needs of gifted students. The series of interview questions were asked of parents (Appendix A), teachers (Appendix B), students (Appendix C) and the principal (Appendix D) and they occurred in the school library and in some participants’ home. Additionally, the researcher took field notes immediately after and during the interviews to note such aspects as the meeting environment, participants’ body language, facial expressions, and their reactions from the interview and context of the subject.

3.6 Data analysis

After transcribing the interviews, the analysis of data was started. Miles and Huberman (1994) stated that data analysis in qualitative research requires the researcher to apply a set of standard strategies to analyse their notes. They further stated that a high priority of qualitative research is based on the creation, testing and reverse sampling with effective and practical methods of analysis.
3.6.1 Manual coding, evaluation, and interpretation

Saldana (2009) stated that coding is a strategy that helps the researcher to organise similar characteristics of group data into categories. The strategy of “marking” the word or phrase with a highlighter or coloured flags were used after multiple readings of the interview transcriptions and field notes. Finally, all the categories were studied to identify emerging themes. The researcher merged repeating ideas into one group (Silverstein & Auerbach, 2003). As the data were sorted by theme, I looked for the constructs or meaning that would answer the research question. Did this research help to identify ideas about how ability grouping effective for gifted students? I used constant comparative methods of analysis that helped in continuous refinement of the data (Ary et al., 2006). In this process, data were collected and analyzed, then more data gathered, coded and analyzed until the final collection of data was concluded.

3.6.2 Trustworthiness of data

Bloomberg and Volpe (2008) pointed out that trustworthiness of the researcher can be accurately presented through the thinking, feelings, and doings of participants. In order to ensure credibility, several strategies were used. Through the use of field notes, multiple in-depth interviews, and taped remarks, triangulation was employed to check the data validation and involvement of distinct perspectives (Carter et al., 2014). To ensure accuracy, participants were invited to check and read the interview transcripts. A peer debriefing was achieved through the my friends who had already completed their PhD in education. They reviewed the work and offered suggestions and feedback related to the quality of data collection and analysis which further assisted to ensure the study’s dependability.

3.7 Conclusion

In this chapter, the research methods and research design were explained, highlighting the suitability of data collection and data analysis processes to address the research question under the scrutiny of ethics guidelines. A qualitative research method approach was used based on
semi-structured, face-to-face interviews. The focus of the phenomenological study was to
determine the lived experience and perceptions of gifted students, teachers and parents about the
effectiveness of ability grouping. Participants were asked about their experience in
heterogeneous classrooms and homogeneous classrooms and their effect on the social-emotional
and academic development of the gifted students. The data collected through qualitative
methods were compared and contrasted to determine whether the ability grouping WAs
effective for gifted students according to the opinions of gifted students, teachers and parents.
Chapter 4

Findings

The purpose of the current research was to investigate the perceptions of teachers, students and parents on the effectiveness of ability grouping in terms of their experiences in opportunity classes. It explored the perceived benefits of homogeneous and heterogeneous settings, the disadvantages of homogeneous and heterogeneous settings, and the impact of ability grouping on the academic development and social-emotional well-being of the gifted and talented students.

To address the research question, *What do students, parents, teachers and principals perceive as the effects of being in opportunity classrooms on students’ academic performance and their social and emotional wellbeing?* qualitative methods were used. Data were collected from semi-structures interviews with a variety of open-ended questions to gather the comprehensive details of multiple stakeholders. For example, the students were asked: “What do you like about being in the opportunity class? In which of your classes do you think you learn the best”. A total of 23 participants were interviewed, who belonged to diverse cultural backgrounds, including Asians, Australians and Europeans. The sample comprised 80% female and 20% male participants. The data were analysed, and participants’ experiences and opinions were synthesised by the researcher. Data collected in this study provided a unique perspective on the effectiveness of ability grouping for gifted and talented students in New South Wales.

4.1 Teachers’ perceptions

To determine the impact of ability grouping on the academic achievements and social-emotional well-being of gifted and talented students, the voice of gifted teachers were documented. The participants voluntarily took part in the current study. I interviewed the school principal and two teachers, one from the grade 5 opportunity class and the other from the grade 6 opportunity class. The school principal was highly qualified and experienced in gifted and talented education. Many transition programs to cater for the needs of gifted students were running at the school and the
OC teachers were also getting guidance and supervision from the principal. The two teachers from the OC were qualified and had completed professional training in gifted and talented education. They were experienced in teaching gifted students. The role of school leadership and teachers is like a nucleus in the academic and social-emotional development of gifted and talented students. So it was important to discover the experiences and judgements of these teachers and the principal regarding the effectiveness of ability grouping. Table 4.1 summarises the teachers’ experience about ability grouping.

Table 4.4

Teachers’ and principal’s perceptions of ability grouping

<table>
<thead>
<tr>
<th>Experience in OC</th>
<th>Advantages of Homo-geneous settings</th>
<th>Advantages of Hetero-geneous settings</th>
<th>Disadvantages of Homo-geneous settings</th>
<th>Disadvantages of Hetero-geneous settings</th>
<th>Ability grouping effects on academic achievement</th>
<th>Ability grouping effects on social emotional wellbeing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>Like-minded learners</td>
<td>Mentorship</td>
<td>Low self esteem</td>
<td>Lack of challenging environment</td>
<td>Knowledge transformation</td>
<td>Confidence loss</td>
</tr>
<tr>
<td>Challenging environment</td>
<td>Engaged in deeper learning</td>
<td>Diversity</td>
<td>Pressure</td>
<td>Work repetition</td>
<td>Helping students in weak areas</td>
<td>Pressure</td>
</tr>
<tr>
<td>Like minded learners</td>
<td>Easy to meet the needs of gifted students</td>
<td>Sometimes nice to teach different abilities</td>
<td>Want to become perfectionist</td>
<td>Boredom</td>
<td>Working with quick pace</td>
<td>Intense competition</td>
</tr>
<tr>
<td>Curriculum differentiation beneficial</td>
<td>Sharing &amp; understanding advanced knowledge</td>
<td>Competitive environment</td>
<td>Assisting lower ability peers</td>
<td>Self-independent work</td>
<td>Families’ expectations</td>
<td></td>
</tr>
<tr>
<td>Successful acceleration, enrichment &amp; extension practices</td>
<td>Pressure</td>
<td>High expectations from teachers and families</td>
<td>Difficult to cater different needs at same time</td>
<td>Create sense of investigation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.1.1 Experience

The teachers and principal had a positive academic experience of teaching in gifted classes, commenting on the challenging environment, using acceleration and curriculum differentiation.
techniques, and opportunity to teach like-minded learners. However, social-emotional issues were the main concerns of the educators.

The teachers and principal reported that opportunity classes have been quite beneficial for gifted and talented students. On probing further, they indicated that learning with like-minded students in a challenging environment has a significant impact on gifted students. For example, the teacher (T1) from the grade 5 OC stated “I think the benefit is obviously being with like-minded peers who are at same levels, same abilities, they challenged themselves.” The teacher (T2) from the grade 6 OC also reported on the learning advantages thus: “they have the benefit of learning from each other”. Moreover, the principal agreed: “I find, the students actually learn from each other.”

The principal who had been supervising the gifted teachers for the last two years described the significant impact of extension and enrichment tasks and the success of the transition program to enhance the challenging work provided to gifted students in the OC. The gifted teachers reported that acceleration and differentiation are quite dramatic for improving the performance of gifted students. According to T1, “I have students who are much more advanced in maths, some are more advanced in English, so I am still always differentiating curriculum to fit their needs within the class.” T2 added, “My experience is acceleration of the class is quite dramatic rather than they quickly vertically accelerated.”

However, the teachers also raised the issues of social-emotional well-being, citing the anxiety and pressure faced by students in OC. T1 from OC reported, “I found that sometimes in this environment, most of the students have social-emotional issues. They feel pressure.”

4.1.2 Advantages of homogeneous settings

All teachers and the principal perceived the homogeneous setting as being favourable for gifted students. The opportunity to learn with same-level peers, the ease to meet their intellectual needs, the students more engaged in deep learning and chance to share their advanced knowledge with
each other were prominent themes outlined by the OC teachers and principal.

The school principal emphasised that students in the homogeneous classroom assist each other because of their similar intellectual levels: “It’s lots of peer-mentoring, they actually support each other. They can work at their own levels.” T1 and T2 assessed that the needs of the gifted and talented student can be more easily met in the homogenous setting: “You can cater for the needs of all the learners easier. You can access the areas they are interested in.”

The teacher from OC5 reflected about the involvement of students in deep learning process, stating that this more actively takes place in homogeneous settings: “I think with homogeneous grouping, it can be good in a lot of senses, with lots of students we can engage in a deeper conversation especially when there is history, geography and science.” T2 stated “Students are more engaged because you know their... what are their interests”. Sharing and understanding among the gifted students developed more readily in homogeneous settings. T1 reported: “Look in my class, some students are advanced in maths, some are advanced in science, but the good thing is they’re capable of understanding and sharing knowledge with each other.”

Both teachers and the principal again considered that the “pressure factor” in homogeneous settings is negatively affecting gifted and talented students’ performances. T1 had been teaching for two years and shared her positive opinion about homogeneous settings but she was concerned about the social-emotional issues: “Students are capable of understanding and sharing but sometimes, I feel like there is lots of pressure too, I do find in my class, a lot of pressure.”

### 4.1.3 Advantages of heterogeneous settings

Face-to-face interviews with teachers and the principal highlighted that the perceived advantages of heterogeneous settings were the practice of mentorship, diversity and teaching different abilities. Teachers opined that gifted students help others, especially those who have lower abilities. According to T1, “students are able to learn from each other”. T2 stated that “it allows
The teachers indicated that there were some advantages for gifted students in the heterogeneous classrooms. T1 responded: “I think it’s really nice to be with other students of the same age but different ability levels”. T2 reflected on the benefit of students helping each other: “I believe teaching is to be able to explain something to someone and helping them to understand the concepts”. The principal of the school further added that the heterogeneous setting enabled students to learn daily life experience which is beneficial for them to deal with the range of people in the real world. She reported: “The benefit is, I think it’s a true reflection of society, so you know when students go out into the workplace they will be working with many different people. There will be a huge diversity of abilities. I think within the mixed classroom, it does reflect that”.

4.1.4 Disadvantages of homogeneous settings

The teachers reported that grouping with same-ability peers can create a competitive environment; high expectations from family and teachers and a desire to perform the best, were the main cause of pressure experienced in homogeneous settings. Additionally, gifted students in homogeneous settings were vulnerable to stress and disappointment because they often want to perform beyond their actual levels, according to the teachers and principal. By way of illustration, T1 stated: “Work higher, sometime in OC, we continue to push, push, push and students get overwhelmed. For example I have some students who are good in math, but they think they are low, but they are not low in maths. They’re just at the right stage of maths but they think that other students are ahead of them, their confidence sometimes is crushed. It’s disheartening.”

The principal admitted that perfectionist tendencies in homogeneous settings could have a detrimental effect on their self-esteem: “Sometimes children perceive they are not doing so well even though in the grand picture of everything they are actually achieving at the higher level, especially the children who have the perfectionist stripe like they really want to be perfect and want 100% of all of the time. Sometimes they feel that they are not on the top of the class and
they’re not achieving. So, sometimes it’s very hard to get through to them, to explain to them that you are actually doing very, very well. I do feel for those children who have had perfectionist stripe.”

The teacher from grade 6 OC responded that social-emotional issues emerged from family and school whereby the need to show their best performance triggered pressure for gifted and talented students: “Lots of social-emotional issues when grouped together, as they are clever in their certain areas, yet they are pushed by their parents and by schools to demonstrate the best so they feel that like a pressure.”

4.1.5 Disadvantages of heterogeneous settings

The absence of a challenging environment, work repetition and helping lower ability students caused boredom among high ability students in heterogeneous settings. The statements from teachers and principal — such as, “they finished their work earlier”; “students became unstimulated”; “bored of being a student who helped others”; “I think sometimes they aren’t challenged” — showed the negative aspects of heterogeneous settings for gifted and talented students.

The teachers from the OC claimed that catering to the academic and social-emotional needs of different ability students is challenging in mainstream classrooms: “It’s such a challenge to cater for a large ability and to differentiate between their social emotional needs as well and to give them the best attention in the classroom at the same time.”

4.1.6 Impact of ability grouping on academic achievements

Both teachers and the principal agreed that ability grouping played a significant role in the academic performance of higher ability students because they are able to work at a quick pace, transforming their knowledge, investigating their learnings, self-monitoring, and assisting each other in specific subjects. The teacher from OC 6 reported that when students were grouped by
their abilities, it motivated them to keep moving ahead: “They see that their peers are doing very challenging work, right! I also stand to do the same, so it’s reflected in the grades.”

Ability grouping is also useful to assist students who are lower in some learning areas. T1 stated: “We have ability grouping in maths, to help or assist in the areas, they need help in.”

The principal believed that, for students, ability grouping promotes self-independence which further provides opportunity to investigate, drive and transform their knowledge and interest:

“They actually have time to go off and investigate their own interest and that’s where I find the best learning of course when they’re actually driving their own learning and when you see that with the children in OC, you actually sit back and think that, yes, it’s worthwhile. They are transforming knowledge they have learnt. They’re actually self-motivated, they are independent and they’re showing us that they love learning.”

### 4.1.7 Impact of ability grouping on social-emotional wellbeing

However, the social-emotional development of the gifted and talented student was perceived to be negatively affected in ability grouping because they get stressed due to intense competition among same-ability peers and high expectations from families. The principal reported that some students failed to lift themselves in ability grouping, due to competition and the pressure created on them. T2 from 0C6 stated: “They are expected to be able to apply their knowledge so when they get stuck, it’s hard. I know lots of students, they go through extremes in that setting. I think they see their peers are over high levels and they’re below level, they don’t handle that very well. As a result they feel pressure and failed to lift up themselves.”

T1 from OC 5 was also concerned that some students were unable to cope with other students’ ability levels. “Students think sometimes, ‘I am not coping’ but they are, they just have strengths in different areas, but I think it’s hard for them to realise they feel they are smartest in the class. I think they thrive on being the best. I think in some settings ability grouping might be detrimental in a sense that they feel they are better, they are best, but their confidence is crushed.”
The principal added that social-emotional issues are the main reason of underachievement among high ability students: "I had extremely high achieving students in the mainstream class, they’re sometime underachievers, they sometimes don’t show their true colours, because they are so focussed in their social-emotional issues. I think these issues lessened when they are with like-minded peers."

4.2 Students’ perceptions

As the underachievement of gifted students can become a problem, the academic and social emotional issues related to the performance of such students at primary level is important to investigate. The views of students in this regard is essential. In the current research, then, ten student participants were recruited from opportunity classes, five from the grade 5 OC and the other five from the grade 6 OC. The questions were asked in an appropriate form to be understandable and easy to respond to for gifted students at the primary level. All students voluntarily participated in the study. Eight female gifted students and two male gifted students were interviewed. The participants came from Asian, Australian and European backgrounds. Table 4.2 shows a summary of the students’ perceptions of the impact of ability grouping on their academic and social emotional well-being.
Table 4.5

Summary of students’ perceptions

<table>
<thead>
<tr>
<th>Experience in OC</th>
<th>Advantages of Homogeneous settings</th>
<th>Advantages of Heterogeneous settings</th>
<th>Disadvantages of Homogeneous settings</th>
<th>Disadvantages of Heterogeneous settings</th>
<th>Ability grouping effects on academic achievement</th>
<th>Ability grouping effects on social emotional wellbeing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>Challenged</td>
<td>More friends</td>
<td>Pressure</td>
<td>Work repetition</td>
<td>Educational Fun</td>
<td>Bullying</td>
</tr>
<tr>
<td>Challenging environment</td>
<td>Advanced learning</td>
<td>Social interactions</td>
<td>Competition among peers</td>
<td>Boredom</td>
<td>Challenging environment</td>
<td>Pressure</td>
</tr>
<tr>
<td>Like-minded peers</td>
<td>Like-minded peers</td>
<td>Feeling pride</td>
<td>High expectations from teachers and families</td>
<td>Lack of understanding among peers</td>
<td>Like-minded peers</td>
<td>Intense competition</td>
</tr>
<tr>
<td>Enjoyment</td>
<td>Multiple things to learn</td>
<td>Freedom of easy learning</td>
<td>Extra coaching and tutoring</td>
<td>For teachers, difficult to meet needs</td>
<td>Creative learning</td>
<td>Enjoying friendships</td>
</tr>
<tr>
<td>Advanced learning</td>
<td>High self esteem</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More confident</td>
<td>More understanding teachers</td>
<td></td>
<td></td>
<td></td>
<td>Understanding with teachers</td>
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</tr>
</tbody>
</table>

4.2.1 Experience

Students reported enjoyment, challenging learning opportunities, exploring new things and feeling highly confident with their intellectual peers since they had been in the opportunity class. All student participants reported positive experiences. For example, some of the students’ reflections included that they enjoyed their learning with the same level peers: “I think it’s been a good experience because it helped me get to know more people.” According to one student, “I think I fit in here because I learn lots of things everyday” (S1). They perceived that they received more challenging and advanced work in the opportunity class. Student S3 commented, “Now I come here, I feel things are really challenging not just, say, easier all the time. In OC, more advanced stuff which I think is good.”
Students compared their mixed ability classroom with their experience in the OC and expressed the view that they were lucky in the OC and learning new things through technology. For example, S2 stated, “In my previous class, I wasn’t getting much out of it, now I think OC helps me a lot.” S5 commented, “I think I am very lucky to be in [the OC] because not that many people get chosen. We have laptops which is a major good point.”

4.2.2 Advantages of homogeneous setting

The students reported the benefits of being in homogeneous classroom were having understanding teachers, better quality of learning with same-level minds, high self-esteem, challenging environment, and multiple interesting things every time they go to class.

Students responded that because they all are smart and happy that they have similar abilities, it makes it easy to work. For example, S4 stated, We were all smarter, so none of us needed to do much work. Now we’re all smart I guess.” Gifted and talented students preferred to learn and believed they learned better with the same-level peers in the OC. S6 stated, “The range of people over here is at same level, in a way it’s good, in a way you know it can be learned better.” S7 also commented, “I am surrounded by the kids that have same aspects and perspectives.” They felt a high self-esteem level in the opportunity classes, as S9 claimed, “It keeps my self-esteem. I think it’s really fit my energy.”

Gifted students expressed the strong view that they want their teachers to understand them and respond to them appropriately whenever they need help. For example, one of the student participants stated, “The teachers are more understanding and always there to help us.” The student participants also showed their interest in being challenged and doing interesting advanced tasks in the OC: “I am learning much here as compared to my previous class, and it’s all in a new way” (S6). “I am challenged and our work is more interesting and our research topics covered wide range of topics other than being limited to one subject” (S3). “We do interesting
things” (S1). “I am doing multiple new things” (S9).

**4.2.3 Advantages of heterogeneous settings**

The results of the study reflected that students agreed that heterogeneous settings were beneficial in terms of social interactions, more freedom, easy learning, and feelings of pride among lower ability peers. Most of the gifted students perceived the heterogeneous setting was useful only because they had more friends: “Yes, it's just friends I am missing” (S2). “I had lots of friends” (S8).

A few students informed the researcher that they felt proud because they were at higher level among the broader range of students in the heterogeneous class: “I was normally second or first in my previous class, it made me very happy and I felt proud of myself.” They found the work easier and freedom of learning in their mainstream classrooms: “There was more freedom in my previous class” (S4). “I like that they explained more and maybe work was easier” (S10).

**4.2.4 Disadvantages of homogeneous settings**

Like the teacher participants, the students had mixed opinions about the disadvantages of homogeneous settings. Most of them were satisfied in the homogeneous settings in terms of meeting their needs, but at the same time they perceived that such a setting created intense competition which contributed to pressure. Most of the student participants reported no negative issues in the homogeneous settings. A typical response was: “I guess I like everything, there is not particularly anything that is bad.”

Extra coaching and tutoring also exerts pressure on students, as does the need to attain high grades among intellectual peers. Six students opined that their families and teachers had high expectations of them and competition is intense, so they felt high pressure on themselves. “Sometimes there is pressure, always doing well, always beating the others in class. Before I came to the OC my parents didn’t expect me to do that well but now they have high hopes for me
and I feel very pressured because I want to make them proud but it’s looking very hard.” S4 stated, “Maybe there is a little bit too much pressure from teachers, I guess they expect a lot from us.” They further added that they did not like competition: “I think, it’s sometime little bit discomfiting for being such a competitive people.”

Only one student complained about the brevity of descriptions of new concepts provided by the teacher: “Well, some stuff the teachers briefly explain, and you’ve got to go over it again and again, like new concepts.” Another participant from OC 5 found nothing wrong in the OC but was not satisfied with school more generally: “I don’t think there is anything wrong in OC may be, I think it’s school that I dislike.”

4.2.5 Disadvantages of heterogeneous settings

Repetition, unchallenging curriculum, difficulty in learning with low ability students and lack of teacher understanding were the main disadvantages of heterogeneous settings as enumerated by the gifted students. As indicate din Chapter 2, gifted students need to be challenged academically in order to learn but, in the current study, they reported that in the heterogeneous setting they felt they were not challenged: “There were a few people who found work challenging but personally I didn’t find it challenging.”

As students of a range of different abilities were in mainstream classrooms, it affected gifted students’ academic progress, according to the student participants: “I felt I didn’t learn academically, like most of the kids they didn’t think same as me.” Unlike the homogeneous setting, where the gifted students reported learning new things every day, in the heterogeneous setting they found themselves repeating same work on daily basis without any learning advancement and this caused boredom: “Having to do same things again and again, and it was quite boring.”
Some students perceived that studying with mixed-ability peers actually impacted on their own confidence levels: “Lots of people ignored me and it made me feel down....some people didn’t do work as I do, it’s annoying me, I was puzzled.”

Gifted students also claimed that the teachers could not understand their needs in mixed-ability classrooms: “Teachers sometime explained things that were either too easy for me or too difficult for me” (S10). “Teachers are not pushing you, they treat you as a regular student” (S6).

4.2.6 Impact of ability grouping on academic achievement

When the researcher asked the students in which class they learned best, all 10 students responded that in the OC they had the best opportunities which affected their academic development. They learnt new things at a deeper level, without boredom and repetition: “I think I learn the best in this class because other people don’t have to catch up and I don’t have to do the same things again and I learn new things.” They enjoyed learning in a challenging environment: “I think in OC my performance is good because the work is more challenging, because questions are more complex, and we think about this deeper.”

All were satisfied that their teachers were very understanding and explained things well compared to the teachers in their previous class: “I think in my present class, the topic, ideas and the way it’s taught and explained is much better, I feel.” (S2). “I enjoy my present class because in OC they guide you. If you found the work hard and they explain, you have to do it again until you understand” (S10).

They found the education engaging and fun in their present classroom: “In OC we get special advantages like educational excursions to museums, libraries and I think I am learning a lot in history. It’s fun but educational the most.”
4.2.7 Impact of ability grouping on social-emotional wellbeing

Students had differing perceptions about the effects of ability grouping on their social-emotional wellbeing. Seven students were enjoying their present class because they experienced strong relationships with similar-ability friends: “I enjoy writing class and science class in the present classroom with friends” (S1). “I enjoy friendship in the class, we care a lot for each other and that’s very good” (S6). “I enjoy OC. I have made lots of friends, but I still keep the lines that I have made like my entire school life” (S9). “I enjoy this class, there are more people like me” (S3). Ability grouping had helped many of them enhance their social skills: “It really developed my social skills.”

However, three of the students responded that they enjoyed their previous class because they had better friendships there. Some of the three also mentioned being bullied in the OC despite having a friend there: “It’s a bit annoying for me because there a lot of people doing lots of other stuff and saying girls are better than boys and boys are better than girls, sometime people start bullying.” Pressure due to severe competition and high expectations from families and schools were highlighted by the three students as a negative impact on wellbeing.

4.3 Parents’ perceptions

Ten parents of the student participants were recruited for this study. They came from the same multi-cultural backgrounds as their children, and the sample included 8 females and 2 males. Five parents were included from OC 5 and the other five from OC 6. All parents were well educated. They had good understanding about gifted and talented education and were keen to document their experiences of opportunity classes. The teachers and principal of the school helped me to approach the parents. The time and place for interview was settled as per the convenience of parent participants, taking note of their time and work commitments. Table 4.3 provides a summary of the responses from parents about the effectiveness of ability grouping for their
Table 4.6

Summary of parents’ perceptions

<table>
<thead>
<tr>
<th>Experience in OC</th>
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<td>More friends</td>
<td>Pressure</td>
<td>Work repetition</td>
<td>Lifting potential</td>
<td>Bullying</td>
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<tr>
<td>Challenging environment</td>
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<td>Diversity</td>
<td>Competition among peers</td>
<td>Boredom</td>
<td>Challenging environment</td>
<td>Pressure</td>
</tr>
<tr>
<td></td>
<td>Like-minded peers</td>
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<td>Over confident</td>
<td>Lack of understanding among peers</td>
<td>Intellectual peers</td>
<td>Intense competition</td>
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<td>Innovative and creative learning</td>
<td>Assisting lower ability peers</td>
<td>For teachers, difficult to meet needs</td>
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<td>Family expectations</td>
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<td>Advanced learning</td>
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<td>Behavioural issues</td>
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4.3.1 Experience

Nine parents reported positive experience of the OC due to quality teaching, challenging learning tasks, and similar intellectual-level peers: “So, our experience has been pretty good. Our daughter was very unhappy at school previously, she has been happier since she joined the OC” (P2). “My wife was very interested in getting [child’s name] in OC, she felt that it would be better for her in the long term. The teacher is amazing and wonderful in teaching so the overall experience has been positive” (P6). These parents thought that the opportunity class would be effective in the long term for their children because the curriculum and environment were challenging and
sufficiently competitive to meet the needs of their children. Such advantages were completely out of question when their children were in regular classes. Typical parent responses included the following: “Academic-wise, the level of the homework is a little bit higher level than previously” (P3) “They are now challenged academically” (P2). “My experience is quite positive, he [son] is quite happy now. In OC, he is being challenged at his level, so he is actually a settled child” (P10).

They felt that their children’s education had become more structured and they were now on the right learning path. Initially, they were concerned about the settlement of their children in the opportunity classes, but they were satisfied that their children settled down quite quickly and were enjoying their new friends of same abilities and new teachers. A typical response was: “My daughter loved it, she loves being with people that think like her and it’s good to structure her learning a bit more.”

However, one of the parents was not satisfied due to some behavioural issues in the class: “I have a combined experience. My daughter builds up her confidence in OC, she is really confident now, but at the same time behaviour wise it could be better.”

4.3.2 Advantages of homogeneous settings

The majority of parent participants agreed that a homogeneous setting is the right place for their children. They added that studying with same ability levels, with fast pace, built academic engagement and strengths in their children. Nine parents were agreed that the homogeneous setting is beneficial for their gifted children, for example, they are now academically strong due to learning lots of new things that are challenging and more advanced. One parent summed up the sentiments of most other participants with this observation: “The kids push from one level to another level, it puts them in competitive environment. They are getting their potential out of them.”
The parents perceived that as all the children are at the same level of abilities, so they are pushing themselves from one level to another and getting their potential out of themselves. P4 stated, “The kids are more stretched, they are learning a lot from each other...she is now with students who are very keen to learn and have similar interests.”

They reported that their kids are working at a faster pace and understanding work more quickly and they think this is why they are at their right place: “Together they work better and faster... not so much time with nothing happening, there's always something to learn.”

A few of the parents observed that their kids were frustrated, bored and easily distracted in their previous classrooms but were now more engaged: “The kids have better understanding now and don’t get bored.”

### 4.3.3 Advantages of heterogeneous settings

Diversity, helping low ability children and socialisation were the main themes highlighted by the parents in the current study when asked about the benefits of heterogeneous classrooms. Most of the parents attributed positivity to heterogeneous settings in terms of spending time with children of different abilities with different backgrounds, and that this provided practice for their children on how to live in the real world: “Diversity is good. They have different levels, some are good in music and some in sports....The multilevel classroom is more like the real world. She had the opportunity to learn different experiences with children of different abilities” P3 reflected on how heterogeneous settings were beneficial as compared to homogeneous settings: “It was better to meet people from different backgrounds, intellectual levels. I think life is not a bunch of smart people. The biggest benefit is getting used to dealing with, thinking how do I talk, treat other people, how do they treat me, that’s more real world. In OC it’s kind of special bubble.”
Interestingly, four parents reported that their children used to help those who were struggling in the mainstream class but in OC they did not have such an opportunity. The range of parent opinions is reflected in the following responses: “They understand each other, help each other and appreciate each other [in mainstream class]” (P3). “The kids learn very much from each other...my son was a leader in the class before coming to OC” (P5). “Some kids work very hard and it’s good to help them but in OC she doesn’t have this opportunity in OC” (P7).

Half the parents complained that their children got frustrated due to the burden of challenging studies in the present classroom. These parents believed that their children were socially better in mainstream classrooms: “My daughter is a social person, she is quite focused on study in OC, but she is stressed, they lack social skill in OC.”

4.3.4 Disadvantage of homogeneous settings

Parent expressed some concerns regarding the potential detrimental effects of homogeneous settings on their children. They reported, for example, that their gifted children faced intense pressure due to competition among same-level abilities, lower self-confidence, over-confidence and bullying in OC. Six parents felt as all gifted children are smart and at the same level, there is “intense pressure” at such an early age: “All kids are smarter so there is lots of pressure. If a kid is a little bit behind, he has to make extra effort to catch up to the advanced kids.”

P2 and P8 concluded that due to the competitive environment of the OC, their daughters are struggling with their self-confidence because they were bright in Maths in their previous class but now in OC there were more bright students in Maths. Some parents suggested that their child’s peers are under pressure due to their family’s expectations that their child perform at a higher level.

Nevertheless, two parents claimed that their kids take this pressure in a “positive way”: “For a
10-year-old, they do feel pressure, competitive and challenging, but I think it’s just part of their age.”

P3 reported that academically the OC is not problem but her daughter is being bullied in class so that is his bad experience: “Academic performance is not the problem, but children are harder to get along with, they are meaner because they are smarter, they are assertive and aggressive. She feels she is bullied a lot. I think this sense of competition is bullying.”

Two parents saw that their children lacked social skill — “I don’t see any social advancement in my daughter in OC” — or became overconfident since being in OC — “Kids are over confident that we can do this, we are special, we got the chance in OC.”

4.3.5 Disadvantages of heterogeneous settings

Parents responded mainly academic disadvantages in mixed-ability settings for their children, for example, boredom, difficulty in meeting their needs, time wasting, low academic performance, and lack of teacher understanding.

Their children were getting bored because of easy work, were therefore distracted and never pushed themselves in mixed-ability classrooms according to the parents: “The work was quite easy and he finished it quickly and was bored because he already knew things and became distracted. It was hard to meet his needs” and “They have to wait and get bored if the teacher’s not answering their questions.” Their children’s academic progress was hindered due to the teachers not meeting their needs: “Sometimes top-level students don’t get pushed enough. It was quite easy for her and she helped others, so she was not getting further, she was not stretching herself, she was down.” As the classwork was easy for them, the remaining time they did nothing which detrimentally affected their studies: “Lots of time you are not learning, and work was slower, and my daughter was moving with faster pace.” Some parents acknowledged that it was difficult for teachers to cater to the needs of vastly different abilities at the same time: “I think
"it's quite difficult for teachers to track or balance each kid’s needs. It's quite sketchy.”

4.3.6 Impact of ability grouping on academic achievement

Eight parents favoured ability grouping for the academic achievement of their children. According to these respondents, ability grouping was quite effective in raising the children’s self-confidence, broadening their vision and sharing advanced knowledge, making them academically much better than past educational settings: “Academically, much better than previously. She never learned new things in her previous class.”

They reported that in ability grouping their children’s performance level improved because of being with peers of similar abilities. They further added that their children found the opportunity classroom environment challenging and enjoyed exploring new interesting things, which broadened their visions: “They learn new words and new things” (P2). “They are moving towards improvement and if your child is not ready for any subject, it’s achievable in ability grouping” (P7). “Challenging homework, she is pushing herself more” (P5).

Since their children had been learning in opportunity classes in fulltime ability grouping, they have academic discussions and research opportunities, which stretched their children’s minds: “They now have academic discussion that wasn’t in the previous school, there they talked about the weekends” (P2). “They spend time on research and presentations, now quite structured. My daughter found work challenging and interesting” (P3). “It’s positively good for her. It’s really stretched her” (P8).

The majority of parents were satisfied with teaching quality in the OC setting: “The teachers are fantastic and encouraging.”

However, two parents were not satisfied, with the reasons being parent-teacher communication issues and unsatisfactory curriculum: “I am not satisfied with OC curriculum. It’s not meeting
our expectations...lots of academic work, but still we have to do lots of extra study like coaching to get him to the point...we want to know what the kids are doing, how he is progressing.”

4.3.7 Impact of ability grouping on social-emotional wellbeing

Parents had mixed opinions regarding the impact of ability grouping on their children’s social and emotional wellbeing. Stress, pressure and intense competition were the main elements highlighted by the parents.

The competitive environment and pressure in ability grouping settings negatively affected the emotions of their children, according to seven parents: “She was easily social at her old school but now emotionally it’s harder. I think maybe it’s being about everybody is smarter...it’s lots of pressure on a 10-year-old” (P1). Another parent responded: “Intense competition is a problem” (P7).

Lack of social interactions in ability grouping was raised by a few parents: “She was very stressed because of behavioural issues...it’s gonna be a problem if your kid doesn’t interact socially.”

However, parents were also quite optimistic that in ability grouping their children felt confident among same-level friends: “She feels that she found people that fix it. She doesn’t feel an outsider, I think it’s an important benefit” (P6). “He feels how lucky he is to be in OC and it made him feel, he can do more now. He has a positive social impact as well” (P4).

The children had academic discussions and expressed their thoughts about learning and they had understanding teachers, which helped them to settle down quickly: “[My daughter] is emotionally good. In her previous class the teacher didn’t understand her world, she was frustrated and unhappy. They think she is sensitive. Their way of approaching was the problem. Now she is better understood by her teacher and her peers.”
One of the parents claimed that her son did not feel pressure in OC because of family support:

“My son doesn’t get pressure. I didn’t give him too much pressure.”

4.4 Conclusion

The data analysis of the interviews with multiple stakeholders revealed several different themes. I first categorised perceptions of each stakeholder in terms of: a) experience, b) advantages of the homogeneous classroom, c) advantages of the heterogeneous classroom, d) disadvantages of the homogeneous setting, e) disadvantages of the heterogeneous setting, f) impact of ability grouping on academic achievement, and, g) impact of ability grouping on social-emotional wellbeing.

The findings of the current study revealed that teachers, students and parents found opportunity classes beneficial in terms of provision of a challenging environment, quality teaching, like-minded peers, raising self-confidence and innovative creative learning. However, they articulated that the disadvantages in OCs were pressure, intense competition, overconfidence, less social interaction and bullying, negatively affecting gifted and talented students.

Nevertheless, the results regarding the benefits of heterogeneous settings or mixed ability were far less reported by participants, for example, assisting lower ability peers and social interactions. On being asked about the disadvantages of heterogeneous settings, participants recounted many more negative elements including the poorer performance because of lack of challenging work, boredom, repetition of work, difficulty for the teacher to cater to different abilities in the classroom, and a lack of understanding among peers.
Chapter 5

Discussion and Conclusion

This study aimed to investigate what students, parents, teachers and principals perceived as the effects of being in opportunity classrooms on students’ academic performance and their social and emotional wellbeing. Therefore, the advantages and disadvantages of homogeneous settings, the advantages and disadvantages of heterogeneous settings, along with the effects of ability grouping on the academic achievement and on the social emotional wellbeing of gifted and talented students, were assessed by using a qualitative approach. After comparing and contrasting the participants’ data, the following themes emerged.

5.1 Need for a challenging learning environment

The findings showed similarity in all respondents’ perceptions regarding their experience of ability grouping, and the advantages of homogeneous settings. The participants agreed that this type of setting afforded a challenging learning environment for gifted students as well as welcoming the opportunity to work with like-minded peers. This finding confirms the work of Rogers (2007) who stated that a daily challenging environment is essential for gifted learners to nurture their talents and this is more effective when they are grouped by abilities. Research studies demonstrated that gifted and talented students show high performance when they are being challenged in their classrooms. They need such opportunities that expand their critical and creative thinking by stretching their minds and imagination (McKeone & Caruso, 2015) and lack of challenging activities diminishes their motivation to learn which may cause underachievement (Karaduman, 2013). The current study showed that gifted students prefer cognitive challenge and a demanding learning environment rather than work that is too easy and slow that allows them to exert little academic effort. This confirmed other research. For example, Gottfried and Gottfried (2004) suggested that gifted students at elementary level are more stimulated by being challenged as compared to other children. Moreover, students embraced positive and challenging
experiences, demonstrating a strong motivation to learn when they are in high ability groups (Fredricks et al., 2010; Hallihan et al., 2003).

The parents and students also agreed in their perceptions that easy work and low effort were characteristics of heterogeneous settings. Parents reported that their children completed work too quickly because they already knew it, that they were easily bored and distracted, that they finished work earlier, and that it was hard for the teacher to meet their needs. Repeating work that they had already mastered detrimentally affected their progress and motivation. In line with previous research, these findings can lead to psychological issues and inappropriate classroom behaviour in class (Fredricks et al, 2010; Gallagher et al, 1997; Gam et al, 2010; Rogers, 2007). Previous research has suggested that under such circumstances, gifted students failed to reach their potential (Rogers, 1998) because the teachers in regular classrooms believed that gifted students already possess higher order thinking skills and do not need additional attention (Hansen & Feldhusen, 1994; Hong et al., 2011).

The concern of parents in the current study about the compromised academic progress of their children in heterogeneous classrooms also supports previous research. For example, research has shown that gifted students’ performance declined and, in some cases led to drop out, when they found their learning environment and pedagogy unchallenging and unresponsive (Colangelo, Assouline, & Gross, 2004; Kanevsky & Keighley, 2003).

The teachers in this study reported that their use of differentiation and acceleration practices in the opportunity class showed significant academic outcomes for the gifted students. This highlights that educators must use educational approaches that develop interests, creativity, openness, originality and flexibility as well as promote intrinsic and extrinsic motivations. Researchers have concluded that different learning models and programs should be included in teaching-learning practices, for example, problem-based learning (Gallagher, 1997; Stepien & Pyke, 1997), creativity and creative thinking (Cramond, 2005; VanTassel-Baska, 2004).
independent study models (Johnsen & Goree, 2005), metacognitive techniques and application of technology (Pyryt, 2003; VanTassel-Baska, Avery, Little, & Hughes, 2000).

5.2 Role of gifted and non-gifted peers in social and academic context

Teachers, students and parents agreed that the homogeneous classroom setting is significant because it provides the opportunity to learn and spend time with same-level friends; this refutes the notion that gifted students prefer to work alone suggested by some authors (Davis, Rimm, & Siegle, 2011; Manning, 2006). The gifted and talented students in the current study valued the opportunity to work with their intellectual peers and avoided working alone. This study further supported research that concluded that homogeneous classrooms are effective stimulators for socialization, fast pace and challenging environment among gifted students (Adams-Byers et al., 2004; Kitsantas et al., 2017; Samardzija & Peterson, 2015; Walker & Shore, 2011). In the current study, parents and teachers felt that when high ability students were placed together with similar-ability students their academic performance increased and it helped them to build friendships. Gifted students in OC believed that due to grouping by ability they became more mature cognitively, socially and emotionally which supported earlier research findings (Gross, 1994). While parents and teachers agreed on the academic benefits of homogeneous settings, they differed in that parents were more likely to report that their gifted students were socially and emotionally facing challenges when they were grouped with other gifted peers.

All participant groups reported on the positive peer relationships experienced in mainstream classrooms. Some respondents believed that mixed ability classrooms were quite beneficial in terms of the gifted students assisting and helping those who were struggling academically, which does raise some questions of the rights of gifted students to be learning rather than teaching in their classroom environments (Rogers, 2007). Some parents and teachers indicated that heterogeneous settings are a true reflection of society outside school; further, many of the parents, teachers and students articulated that mixed ability classrooms contributes to gifted students’ socialisation skills. Some educational research has observed that gifted and talented students have
deep understanding of the material and therefore develop the tendency to guide and teach the lower ability students in heterogeneous settings (Ballantine & Larres, 2007; Loveless, 2013; Saleh & De Jong, 2005). Others have argued that in settings where gifted students learn academically with others of diverse abilities, the former students inspire the latter’s thoughts and motivate them to explore new perspectives (Rin & Nelson, 2008). Gifford-Smith and Brownell (2003) suggested that gifted students value the relationships with peers in every type of educational setting and this plays an important role in developing their psychosocial skills. However, a few gifted students in the current study raised concerns about the lack of understanding among their non-gifted peers in heterogeneous classrooms.

It is clear that, irrespective of the setting, educators must be careful in decision-making related to the grouping of gifted students whether they are in homogeneous or in heterogeneous classrooms. Gifted learners will develop their social skills with one another if the learning environment addresses their needs and helps them to act as a motivator, supporter, role model and competitor with other students (Lee, 2002).

5.3 Teaching performance

All participants expressed high levels of satisfaction with the teaching quality in the opportunity classes. They reported that teachers were more knowledgeable and fully understood the needs of each of the gifted students. Gifted and talented students were also enjoying their classes due to the daily innovative tasks provided by their teachers that confirmed to the students that they were learning something new each day. The teachers in the two OCs had expertise in their field, and had additional professional training in supporting the social emotional and cognitive aspects of gifted students’ development. Most of the students reported that their teachers used innovative methods, technology-enriched assignments, curriculum extension, challenging tasks and inquiry-based learning among groups. This finding is in line with Hong, Green and Hartzell’s (2011) conclusion regarding the more sophisticated epistemological beliefs and learning-goal orientation among gifted program teachers compared to those of general education teachers.
Further, the parents and students in the current study reported dissatisfaction with the quality of teaching in mixed ability classrooms because the students were not provided ample time to work deeper on new topics (Huss, 2006). Parents and students recognised, though, that it was quite difficult to teach the different abilities of students with different instructional needs in an effective way at the same time, as indicated in previous research (Kauffman, 2011). The views of the teachers on this topic was at odds with this view, however. The teachers believed it is easy to teach gifted students in mixed ability classrooms because they have more locus of control. They further expressed a view that gifted students have more social-emotional issues in homogeneous classrooms. Again, it is clear that in all educational settings, teachers need to use effective strategic tools to deal with the social-emotional needs of gifted students. As researchers have suggested, teachers can implement different activities that would be helpful to gifted students’ development, but they must have professional training in order to do so (VanTassel-Baska & Little, 2011; Weber et al., 2013).

5.4 Pressure

About 80% of the parents, 100% of the teachers and 50% of the gifted students perceived that the homogeneous classroom setting created pressure on students. They claimed that grouping by abilities led to intense competition, extra tutoring, high expectations from families and teachers, and potentially unhealthy perfectionism. The desire to perform highly among their peers could impact their confidence and self-esteem, which echoes prior research on the Big-Fish-Little-Pond effect (Seaton, Marsh, & Craven, 2010). While many participants found this level of pressure to be a disadvantage, there was also the view expressed that in the opportunity classes they had to make a greater effort academically and this would be beneficial for their learning in the long term and that self-esteem levels might be more realistic. Only one parent expressed dissatisfaction with the OC because of perceptions of arrogance and over-confidence in their child, which was reflected in the child’s difficulty to succeed in the class.
Such a competitive environment could be overcome if teachers utilised careful strategies, such as appreciating and commenting on their gifted students’ efforts rather than their intelligence. This could minimise the risks of underachievement, strengthen their motivations, diminish their concerns about their smartness, and as a result they would enjoy the more challenging learning environment (Dweck, 2006, 2007).

Findings from this study highlighted that the role of the family is of equal importance as that of the school for the development of gifted and talented students. Parents sometimes hold unrealistic expectations of their child’s abilities (Shani, 2009) which creates pressure on their gifted child which can in turn sabotage their academic and social-emotional development. In such cases parents should adopt a motivational style that emphasizes a positive attitude in every circumstance to overcome the barriers hindering their child’s progress.

Despite the varied views on the effects of pressure among the study’s participants, the parents were all happy with their choice of opportunity classes and enthusiastic about their child’s progress and future.

5.5 Effectiveness of ability grouping

The effectiveness of ability grouping was perceived by the teachers, parents and students in terms of increased academic performance, superior academic discussions, raised self-confidence, students stretching themselves, academic strength, interesting tasks, challenging work, more teacher assistance and attention, more educational fun, and no repetition and boredom. There was also some indication, particularly from teachers and parents, that meeting the needs of the students is easier in the homogeneous setting, with teachers using differentiation to engage the students in deeper conversation. These findings support other research which has emphasized the value of full-time ability grouping lies in the opportunity to access their areas of interest, to allow acceleration practices to influence academic performance, and for students to be more highly self-motivated and work with rapid pace (Adams-Byers et al., 2004; Berlin, 2009; Moon, Swift, &
Outside full-time homogeneous grouping arrangements, research has shown that grouping by ability in mainstream classrooms is effective for mathematics and thereby has a strong positive effect on the growth of gifted students, and positive effects in science, English and history (Soloman, 2007). As Rogers (2007) indicated, schools can practice ability grouping strategies as per the educational needs of high ability students within heterogeneous classrooms as well as in full-time homogeneous classes.

The gifted students, teachers and parents identified both positive and negative social-emotional issues in full time ability grouping (opportunity classes). For example, a few gifted students reported loss of friends from their previous class (Moon et al., 2002), however, most of them also reported that they had made new friends of similar abilities in the OC. They reported feeling confident and comfortable with their new friends. On a concerning note, a small number of students and their parents highlighted instances of bullying since they had been in the opportunity class. Researchers have emphasized that poor relationships with peers can lead to increased loneliness and isolation in children that negatively affects their achievement (Guay, Boivin, & Hodges, 1999). The findings of the current study also supported the research of Ma, Phelps, Lerner, and Lerner (2009), which reported that bullying negatively affected the academic achievement and competency of students (Peterson & Ray, 2006a). Given the potential impact on self-esteem emanating from bullying, researchers have indicated that self-esteem directly affects the individuals’ academic task persistence, accomplishment and decision-making and feeling towards themselves (Marsh & Hau, 2003). Consequently, schools need to pay attention to the social-emotional needs of gifted students. It is encouraging that in the current study most parents and students were satisfied with the OC teachers who they perceived had better social and emotional understanding and relationships with students.

Some of the gifted students and parents also reported an absence of social activities in the OC classes. This concern reflects research that found if gifted students did not socially fit in the school environment they may disengage and drop out later in their schooling, as they feel isolation,
detachment and self-regulation problems (Carper, 2003; Yoo & Moon, 2006). Schools that have special gifted classes can handle the social emotional-issues by designing and implementing differentiated curriculum and extracurricular activities that include a focus on social-emotional issues. The current study highlights the need for schools and educators to address the social-emotional to avoid underachievement or failure among gifted students in the future.

5.6 Limitations and recommendations

The current study was conducted at one time-point in the academic calendar only, which may have had some impact on the data collected. It is recommended, therefore, that future researchers could investigate the perceptions of parents, teachers and students at the beginning and end of a school year, to get a clearer picture of the contribution of the opportunity classrooms to gifted children’s development.

This study was conducted in one suburban Sydney school that has been running opportunity classes for two years only. There is no other school offering such programs in this area, so the findings would be reflective of the school culture and specific participants from social and economic background of the area. Therefore, caution needs to be taken in generalising the findings to other contexts. Future study could be conducted in multiple schools that have been teaching gifted students in homogeneous settings for an extended time.

The data were collected in the primary opportunity classes only, and it might be possible that perceptions of the effectiveness of ability grouping would vary in selective schools and other schools with self-contained classes. Future research could examine gifted children in these broader contexts.

This study is limited due to the small number of participants because of the constraints of the scope of the project. Consequently, no gender or other demographic details were taken into consideration for data collection and analysis. Therefore future studies could investigate larger
population groups across varied contexts to explore the possible patterns of perceptions across different demographic groups.

This was a qualitative study with the themes interpreted from interview data of the participants and therefore affected by the researcher’s personal experience. The data potentially could have different contextual meanings for people from different backgrounds. To counter this limitation, the researcher made every effort to ensure consensus among codes and categorization. A mixed qualitative and quantitative design for future research could possibly broaden the views of multiple stakeholders’ perceptions.

This study was relatively unique because it explored the experience of all stakeholders, including parents, students, teachers, and principal, at a NSW primary school in a single study. The participation of the leadership made this study distinctive from other studies conducted on gifted and talented students. Involvement of multiple stakeholders helped the researcher to more clearly understand the phenomena in special gifted classes and play an important role in answering the question of how we best cater the needs of gifted and talented students.

Conducting a study about the effectiveness of ability grouping for gifted students particularly at the primary level is important because the possibility of underachievement among gifted students begins at this level (Gibbons et al., 2012; Karaduman, 2013). Delisle (2012) argued that “Gifted students are the best barometers we have to tell us what works and what does not” (p.63). Future research should consider these issues along with examining the connection between gifted programs, services and the needs of gifted and talented students. For example, students served in gifted programs showed significantly better achievement levels and high learning potential development over time and, ultimately, high achievement level is the final measurement tool to compare with regular students. Additionally, in the context of gifted education research, motivational theories should also be considered in future research in this area (Clinkenbeard, 2012).
5.7 Conclusion

This study attempted to determine the effectiveness of ability grouping for gifted and talented students through the lenses of teachers’, students’ and parents’ experience of both homogeneous and heterogenous classroom settings. Overall, the teacher and most student stakeholders agreed that opportunity classes have a positive and significant impact on the academic and social-emotional wellbeing of gifted students. However, a small number of parents and students were concerned about social-emotional issues, such as intense competition, loss of friends, and bullying. Nevertheless, they did acknowledge that they were satisfied with the academic improvement afforded by the homogeneous setting. Teachers also commented on the sensitivity and pressure issues but appreciated the deep involvement and engagement of gifted students in the opportunity classes. This attitude is best reflected in the statement of the principal:

When you see that with the children in the OC, actually sit back and think that, yes, it’s worthwhile, they’re actually driving their own learning. They are actually self-motivated, they are independent, they are showing signs that they love learning and they push themselves to the next level which really takes some up into able students.

The teachers, students and parents also appreciated aspects of the heterogeneous setting, including its diversity, socialisation, and provision of role models. But they also pointed out that in the heterogeneous setting the gifted students made no academic gains because of work repetition, lack of teacher understanding, boredom, insufficient challenge, time wasting and difficulty in catering to different abilities.

In the light of above discussion, it is concluded that in special gifted classes the curriculum should offer instructional strategies and pedagogies such as differentiation, problem-solving, independent self-regulating study, acceleration, and enrichment, as was also proposed by previous research (Robinson et al, 2007; Rogers, 2007; Schneider et al, 2014). LaPrade (2011) also
advocated the homogeneous setting for providing a comfortable learning environment for every student to progress and perform. In ability grouping, the teacher instructs more effectively in the zone of proximal development of gifted students because they have advanced understanding of how to raise their students’ potential, which results in high expectations among teachers regarding the academic achievement of their students (Tieso, 2005).

Parents’ support for ability grouping showed that they are wary of lower learning standards in heterogeneous settings as has been found in previous research (Burris & Welner, 2005). Grouping with like-minded peers increases the likelihood of motivation to learn and to socialise, while activities in the classroom that are too easy or too difficult debilitate motivation, thereby causing detrimental effects on learners. Research supports that low ability peers can impede the learning progress of high achievers (Feldhusen & Moon, 1992). Therefore, one must be careful about the grouping of gifted students. Moreover, Ablard (1997) found that potentially poorer peer relationships among gifted students in adolescence could be balanced by dedicated teachers and family relationships.

The results of the current study also showed some evidence of the Big-Fish-Little-Pond (BFLP) Effect among the parents, teachers and students. Therefore, to counteract the BFLP effect in gifted programming, Marsh et al. (1995) suggested the following effective strategies:

- Expanding the basis for selecting students to include criteria other than standardized test scores. Whereas academic achievement may be important, it appears that students of all ability levels are influenced by the BFLPE. Avoiding a highly competitive environment, typical in some G&T programs, that encourages the social comparison processes underlying the BFLPE. Developing assessment tasks in which students are encouraged to pursue projects which are of particular interest to them. Providing students with feedback in relation to
comparisons based on the performances of other students in the G&T class. Emphasizing to each student that he or she is a very able student and valuing the unique accomplishments of each individual student so that all students can feel good about themselves. Selecting or training teachers who are sensitive to the special needs of G&T students. (p. 315)

The current study indicated that only a well-trained teacher in gifted education may be able to cater for the academic and social-emotional needs of gifted students. It would follow, then, that a further study might examine what courses/topics on gifted education should be included in the training of teachers. Another warranted area that arises from the current study would be the investigation of what constitutes a successful social-emotional curriculum for gifted learners.

Finally, the researcher clearly observed the passion and interest on the faces of these gifted and talented students as they worked in their opportunity classes. These students who “rage to master” (Winner, 1996) are struggling, pushing themselves ahead, uplifting their spirits to demonstrate something extraordinary despite some social-emotional discomforts. In their own words: “I feel lucky, I feel proud I am in OC”; “I enjoy OC, I am surrounded by kids that have the same perspectives like me”; “here I get to meet people smarter as I am”. This sentiment was echoed by parents: “my daughter loved it, because here people think like her”. These students who have extraordinary intelligence need extraordinary care in the academic and psychosocial areas from teachers, counsellors and families.
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Appendices

Appendix 1

1. Perception of multiple stakeholders about the impact of ability grouping

Questions for Parents

Thank you for agreeing to participate in this interview. I am interested to know your experience of the homogeneous and heterogeneous classroom settings at this school and will be recording the discussion and taking some notes to ensure that I gain as much insight as possible. Please feel free to share your experiences.

What is your experience of the opportunity classes?
What do you think is the benefit of homogenous classroom settings?
What do you think is the benefit of heterogenous classroom settings?
What do you think are the disadvantages of being in homogenous settings?
What do you think are the disadvantages of being in heterogenous settings?
What do you think about the impact of ability grouping on academic achievement of your child?
What do you think about the impact of ability grouping on social and emotional well-being of your child?
Appendix 2

2. Perception of multiple stakeholders about the impact of ability grouping

Questions for Teachers

Thank you for agreeing to participate in this interview. I am interested to know your experience of the homogeneous and heterogeneous classroom settings at this school and will be recording the discussion and taking some notes to ensure that I gain as much insight as possible. Please feel free to share your experiences.

What is your experience of the opportunity classes?

What do you think is the benefit of homogenous classroom settings?

What do you think is the benefit of heterogenous classroom settings?

What do you think are the disadvantages of being in homogenous settings?

What do you think are the disadvantages of being in heterogenous settings?

What do you think about the impact of ability grouping on academic achievement of your students?

What do you think about the impact of ability grouping on social and emotional well-being of your students?
Appendix 3

3. Perception of multiple stakeholders about the impact of ability grouping

Questions for Students

Thank you for agreeing to participate in this interview. I am interested to know your experience of the homogeneous and heterogeneous classroom settings at this school and will be recording the discussion and taking some notes to ensure that I gain as much insight as possible. Please feel free to share your experiences.

What is your experience of being in the opportunity classes?

What did you like about your previous classes before coming to the opportunity class?

What didn’t you like about your previous classes before coming to the opportunity class?

What do you like about being in the opportunity class?

What don’t you like about being in the opportunity class?

In which of your classes do you think you learn the best? why?

Which of the classes did you enjoy the most? Why?