

From “the saddest sound” to the D Major chord: The gift of accelerated progression.

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Abstract

Although the academic acceleration of gifted and talented students is probably the most comprehensively studied and evaluated of all educational interventions, many teachers are reluctant to accelerate gifted students for fear they will suffer social or emotional damage. Yet research suggests that “the bird that’s tethered to the ground” is at much greater risk of social isolation and emotional maladjustment through inappropriate grade placement with age-peers.

This session looks at how gifted students differ from their age-peers in many aspects of their social and emotional development and explains why well-planned programs of acceleration enhance these students’ self-esteem, their love of learning, their acceptance of themselves and their gifts, and their capacity to form warm and supportive friendships. For many gifted students, acceleration replaces discord with harmony.

Thirty-five years ago the author W.K. Durr included in his book *The Gifted Student* a telling illustration of the under-utilisation of an effective and thoroughly tested educational procedure. He was keenly aware that many people do not view educational problems as seriously as they view problems in other areas of life so, to increase the immediacy and impact of his message, he placed his illustration not within an educational setting but in one involving medical or surgical intervention.

“Over forty years ago, physicians reported experiments proving the effectiveness of a procedure that was seldom used. Since then it has been tested on many groups. The averages of these tests have almost always shown it to be helpful, and have not shown it to be harmful. Leading physicians praise it highly and continually recommend that it be used in conjunction with other procedures. Yet despite the research and the respected professional endorsements, only a small percentage of physicians permit its use, even though when properly prescribed it would be beneficial.”

Retrieved from http://www.hoagiesgifted.org/d_major_chord.htm

(Durr, 1964, p. 96)

Having thus gained his readers' attention, Durr continues:

"This situation is pure fiction, but if it were true it is almost certain that we should be shocked when it was uncovered. The proven effects of acceleration and its lack of use by most educators is an *exact* parallel of this hypothetical situation! In fact, if you will return to the above paragraph and substitute the word "educators" or "teachers" for the word "physicians", you will have a relatively brief summary of the status of acceleration in our schools."

(Durr, 1964, p. 96)

Let us do as Durr suggests, and reread his first paragraph but, this time, altered as he recommends.

"Over forty years ago, educators reported experiments proving the effectiveness of a procedure that was seldom used. Since then it has been tested on many groups. The averages of these tests have almost always shown it to be helpful, and have not shown it to be harmful. Leading educators praise it highly and continually recommend that it be used in conjunction with other procedures. Yet despite the research and the respected professional endorsements, only a small percentage of teachers permit its use, even though when properly prescribed it would be beneficial."

Durr's proposal, published in 1964, referred to research on accelerated progression which had been conducted, and freely disseminated, more than 40 years before that. It is now 1999. Thus we have, for our assistance and guidance, more than three quarters of a century of accumulated research on the academic and psychosocial benefits of accelerated progression for gifted and talented students. Why has this wealth of knowledge had so little impact on Australian educational practice?

Certainly, we must acknowledge that educational provision for intellectually and academically gifted students has improved significantly in Australia over the last few years - including the thoughtful, well-monitored use of acceleration. Victoria has a highly successful Accelerated Learners Program with 18 state secondary schools permitting cohorts of academically gifted students to telescope the six years of high school into five. New South Wales has successfully accelerated more than 8000 gifted and talented students since 1991 through a wide variety of procedures.

Nonetheless there is still a tremendous wariness of acceleration among Australian teachers and this is translated into active opposition in many schools - indeed, perhaps the majority of schools. Durr's case, made 35 years ago, still stands - acceleration is a highly effective educational procedure which is seriously underutilised. The gifted students who *have* been accelerated in the last few years are hugely outnumbered by students of equal ability whose schools have either refused them access to this procedure or have not even thought of offering it.

I would like to briefly outline for you a number of highly successful cases of accelerated progression.

Examples of successful acceleration

Since 1983 I have conducted a longitudinal study of exceptionally gifted young Australians - children and adolescents of IQ 160+. Young people of this level of intellectual capacity appear in the population at a ratio of fewer than 1 in 10,000. I have published regular reports on the intellectual, academic, social and emotional development of the 53 students in this study (see, for example, Gross, 1992, 1993, 1994, 1998).

By coincidence, two of these remarkably gifted young people, Christopher Otway and Sally Huang are both currently enrolled in doctoral study at Cambridge University, after completing their undergraduate studies in Australia. Chris entered university at age 16, Sally at 13½, both having been radically accelerated through primary and high school. Both gained First Class Honours degrees, despite being considerably younger than the other students in their years, and both gained scholarships to Cambridge. Chris is 22 and about to enter his fourth year of PhD study; Sally is 18 and about to enter her second PhD year.

I visited England earlier this year and it was a delight to get together again with Chris and Sally. They are thoroughly enjoying their doctoral studies, just as they loved their undergraduate work. They enjoy high levels of academic success and full and active social lives. Sally has become closely involved in the rowing scene - a strong Cambridge tradition - while Chris serves on the Committee of the university's Science Fiction club, a longterm passion. The fact that they are several years younger than the other students in their programs is quite simply not an issue, either for themselves or for their many friends within and outside the university.

In general, when Australian teachers talk to me about acceleration, the picture they seem to hold in their minds is the type of program undertaken by Sally and Chris - very early entry into university by young people of extreme intellectual ability. Yet this particular form of acceleration - radical acceleration - in which the gifted student graduates from high school three or more years younger than is customary, is by its very nature the *least* common accelerative modality, as it is suitable only for young people of truly exceptional intellectual and academic ability. Most forms of acceleration are very much more moderate.

Nonetheless, programs such as these successfully undertaken by young Australians Christopher Otway and Sally Huang should cause us to pause for a moment and consider; when we have the evidence, from very many years of longitudinal research, that such radical acceleration as this can work, and work superbly, why do we hold back so fearfully from much more modest interventions, for example permitting a 7-year-old to work with 8-year-olds, or a 13-year-old to do maths with 14-year-olds?

There are no fewer than thirteen accelerative interventions which we can use with gifted students (see, for example, Rogers, 1992; Benbow, 1998) but, to save time in this presentation, I will outline only five of the more commonly used modalities. The details of these accelerative programs are true in all respects, and they are being undertaken by Australian students as we speak, but I've taken the liberty of changing the children's names and replacing them with names with which you'll become well familiar over the next few days (the keynote speakers at this conference).

Grade advancement

Nick, in an independent primary school, has been grade-advanced. He left Year 3 in December 1998 and entered Year 5 in February 1999. He is very highly able in a range of academic subjects.

Alternatively, Nick could have spent February to June 1998 in Year 3, accelerated to Year 4 from July-December of that year, and entered Year 5 in 1999 with his Year 4 class.

Early entry to secondary school

Joyce accelerated into secondary school two years ago. Like Nick, she has a wide range of talents across several subject areas. When she was in Year 5, her state primary and high school consulted as to how the grade-skip should be organised: should she leave primary school at the end of Year 5 and enter Year 7 with other "new" high school students, or should she wait a year, complete Year 6, and enter high school at Year 8? Joyce preferred the former option and the schools agreed.

Cohort acceleration

Arthur is a member of an accelerated cohort in a state high school. He and his class are telescoping Years 7 and 8 into one year. They will complete the six years of secondary school in five years and leave school a year earlier than they otherwise would have. (Some other accelerated cohorts telescope Years 7, 8 and 9 into two years, with the same result.)

Early enrolment

John was reading fluently before his fourth birthday and had already mastered basic addition and subtraction. His parents and the local Catholic primary school were confident that he was ready, academically and emotionally, to enter school, which he did at 4 years 5 months of age.

Subject acceleration

Miraca's special talent is maths. Her teachers and parents don't feel she is ready for a full grade-skip, but she clearly needs to accelerate in her talent area. She stays with

her Year 4 class for most subjects but goes to Year 5 for maths. Her Year 4 and Year 5 teachers program maths for the same time each day.

Nick, Joyce, Arthur, John and Miraca (or, rather, their real-life counterparts!) are enjoying well-planned, thoughtfully monitored and highly successful programs of acceleration, designed in response to their individual academic and social needs. Unfortunately, however, many other equally gifted students who want to accelerate and who are academically, socially and emotionally ready to do so, have this opportunity withheld from them.

Gifted students who have been denied acceleration

Tanya

'Tanya' entered Year 5 of her state primary school already knowing most of the maths work which would be taught that year. When she discovered this, the teacher told Tanya that she would have a special rôle in the classroom that year: she would serve as "maths assistant". She found, to her dismay, that the teacher meant this quite literally. She was given no new material and spent maths periods helping her teacher with marking, or assisting children who had difficulties with maths. When her mother, at a parent-teacher interview, gently commented that, while she did not mind Tanya assisting from time to time, for the girl to spend a year learning *nothing* new in maths seemed a little counterproductive, the teacher replied that to assist Tanya to achieve still further when there were other children in the class who might never reach her *current* level of achievement, would be a violation of the principles of social justice.

Carol

"Carol", a Year 8 student in a church-affiliated secondary school, made a request to her school principal that she be allowed to grade-advance to Year 9. Although Carol had the support of her school's Head Teachers of Maths and Science, the principal refused her request and said that she was not prepared even to discuss the issue as the school had never accelerated a student and would never do so. Carol despairingly commented to me: "Her attitude seems to be that if God had wanted me to be in Year 9, he would have had me born a year earlier!"

Sandy

By the time "Sandy" was 10 years old it was obvious that she had was very highly gifted in several fields. She is a remarkably talented pianist, she swims at state competitive levels and she is a brilliant writer. Some of her work, written when she was 11, appears in my book *Exceptionally Gifted Children* (Gross, 1993); in its skill and maturity it could be mistaken for that of a talented young adult.

Sandy's independent K-12 school accelerated her in music and in sport. When she was 11, she was already playing with the Senior School orchestra and her reputation as an

unusually gifted young musician attracted large audiences to the school's public concerts. Simultaneously, she was incorporated in the school's senior swimming teams to train and compete with students several years older. The school refused, however, to allow her any form of academic acceleration, on the grounds that "acceleration could lead to social or emotional difficulties in later years".

It is ironic that Sandy's school readily accelerated her informally in those fields where the school itself benefitted directly from her training and performing with older students but which, importantly, would not require them to permit her to leave school earlier. By contrast, they were unwilling to offer her any form of formal acceleration, particularly in her principal areas of talent - the academic fields of writing, reading and Maths; such a formal acceleration would have led to the school losing her services earlier than they might have wished.

I would draw your attention to the fact that both the examples I have presented where acceleration has been effectively employed and the examples where it has been unjustifiably withheld, cover all levels of schooling and all educational systems. Furthermore, I would emphasize that although some of the opposition to special provision for gifted students does, sadly, arise from a resentment of high potential - the "knock down the tall poppies" syndrome for which our nation is so unhappily renowned (Feather, 1989) in many cases it arises from a genuine fear among well-meaning teachers that if we allow students to progress faster and further than their age-peers, we will be placing them at risk of social or emotional damage.

Joyce VanTassel-Baska alerts us to the fact that teachers who refuse even to consider the use of acceleration with academically gifted students are blinding themselves to one of the most predominant characteristics of such students.

"Unfortunately some people deny the fundamental role of acceleration in a program for the gifted. In so doing, they are in effect denying who and what defines the gifted at any stage of development - children who exhibit advanced intellectual development in one or more areas."

(Van Tassel-Baska, 1992, p. 68)

Why should schools use accelerated progression with gifted students?

In considering the place of academic acceleration in the education of intellectually gifted children, it is helpful to review three basic premises of learning.

Premise #1: *Learning is a sequential, developmental process. Attainment of skills, understanding in different domains of knowledge, and strategies for solving problems, are all acquired gradually, and in sequences that are more or less predictable (Robinson, 1983).*

The stages of speech acquisition, for example, are fairly predictable. In general, the child first uses single words, then links them into pairs, then develops phrases, and finally speaks in sentences. Intellectually gifted children often seem to “skip” stages - the child’s “first words” may be a lengthy phrase or a complete sentence (Robinson, 1987; Gross, 1993) - but the stages are seldom reversed.

Premise #2: *There are substantial differences in learning status and learning rates among individuals of any given age. Individual differences characterize both the rate of development (i.e. general intelligence) and the acquisition of specific skills (e.g. reading), and even in the earliest years of school we can note a quite remarkable spread of achievement in reading or math among children in the same school class (Robinson, 1983).*

Grouping by chronological age is a relatively modern administrative procedure, introduced within the last 70-80 years. It was brought in to cope with large numbers of students from previously disenfranchised groups entering a school system which had previously catered to comparatively small numbers of children. Previous to this time, children had progressed through the school grades on the basis of their mastery of the work of the different grade levels. Acceleration, for example, was a common (and accepted) procedure for ensuring that academically gifted students were presented with work that was appropriate to their developmental needs.

We are encouraged, in today’s schools, to group students by chronological age because it seems to be administratively convenient, because we have become accustomed to doing so, and because we wrongly assume that chronological age is an accurate index of academic development. However, many years of empirical research on student development and learning has shown us that chronological age is *not* a reliable indicator of the level at which a child can, and should, be working.

Let us briefly examine three studies undertaken in recent years which demonstrate this most forcefully.

(1) In Australia, only last year, research surveying literacy in primary school children found “a learning gap” equivalent to at least five years of schooling between the top and bottom 10 per cent of children in each Year 3 class surveyed in the study (Coorey, 1998).

(2) Gagné (1986) reports a study conducted by Deslaurier in Montreal which graphically illustrates the management problems faced by a teacher who seeks to individualize the curriculum of a mixed-ability classroom. Deslaurier wanted to investigate the learning status, at the beginning of the school year, of students entering any particular grade level. He was interested to discover how many children, like Tanya discussed earlier, already knew a substantial proportion of the work that was to be presented to them.

Accordingly, at the beginning of the school year, Deslaurier administered, to 96 randomly selected 5th grade students, the maths test and the French test that would

normally be given at the end of the school year. (French is the first language of most students in Quebec.) The results were disturbing. Fully three per cent of the children scored 85 per cent or higher on at least one of the tests, a further three per cent scored between 80 and 84 per cent, and seven per cent scored between 75 and 79 percent. In other words, fully 13 per cent of the students - almost one-seventh of this 5th grade group - knew three-quarters of the 5th grade material in two key learning areas before the work of the school year had started. Indeed, Deslaurier found that 45 per cent of these 5th graders knew more than 60 per cent of the work.

(3) In the United States Flanders (1987) analyzed the content of three of the best-selling school mathematics textbook series to see how much new material was taught each year. He found that the texts required teachers to revise, revise and re-revise previously taught maths work to such an extent that, in 4th and 5th grade, less than 50% of the work children are given was new to them, while in 6th grade fully 62% of the work was revision of work undertaken in previous years.

Bearing in mind the enormous range of ability and achievement found in the mixed-ability classroom, the pre-existing knowledge of many of our abler students, and the pressure on teachers to revise and re-revise work to ensure that less able students achieve mastery, it is no wonder that many of our most able students are left unstimulated and unchallenged by the regular school curriculum.

In his book *Gifted Children Speak Out* Delisle records the feelings of an 11-year-old boy in Michigan who mimics, in his poem, the continual repetition of already learned material to which he is subjected. He sees the teacher as a time-thief!

“All the time I just sat there

sat there

Waiting for something to happen.

My teachers should have ridden with Jesse James,

My teachers should have ridden with Jesse James

For all the time they stole from me.”

(Delisle, 1984, p. 71).

With all of this in mind, let us examine the third key premise of student learning.

Premise #3: *Effective teaching must involve a sensitive assessment of the individual student's status in the learning process, followed by the presentation of problems that **slightly exceed** the level already mastered. (Tasks that are too easy produce*

boredom; tasks that are too difficult cannot be understood). Vygotsky (1976) calls this "target area" the zone of proximal development.

The problem, of course, is that in the average mixed-ability classroom of thirty students, there will be thirty different "zones of proximal development"!

If, as educators, we recognize and accept these three fundamental principles of effective learning and effective teaching, then we must ask ourselves this question:

If it is true, that learning is a developmental and sequential process, that there are striking differences in developmental rate among individuals of the same age, and that effective teaching must be grounded where the learner is, then how do we justify an educational system that ignores competence and achievement, and utilizes chronological age as the primary, or only, factor in student placement?

Teacher Perceptions of Academic Acceleration

"Acceleration and grouping are the lightning rod issues that test the level of acceptance that gifted programs enjoy in a local school district. The greater the commitment to serving gifted students, the greater the acceptance of advancing and grouping them appropriately" (VanTassel-Baska, 1992{REF# 7}, p. 68) .

As we discussed earlier, the under-utilisation of acceleration with gifted students in both Australian and American schools arises largely from a genuine lack of awareness, among teachers and administrators, of the research support for this intervention. Indeed, there are few issues in gifted education in which the discrepancy between what research reveals, and what classroom teachers believe, is so remarked.

Southern, Jones and Fiscus (1989), surveying American educators' attitudes towards acceleration, listed four major concerns of teachers regarding the possible maladaptive effects of acceleration on gifted students. Teachers feared that accelerated students would lose their academic advantage in later school years, experience difficulties in social and emotional development, lack the physical and emotional maturity to work effectively with older children, and become arrogant and elitist in their attitudes towards others. The most frequently expressed concern, however, related to the possibility of social and emotional damage resulting, in childhood and later adulthood, for students who had been accelerated.

The majority of teachers are quite unaware of the positive findings on acceleration from the many research studies which have been undertaken. Southern, Jones and Fiscus (1989) found that the majority of teachers in their survey gleaned their opinions on acceleration not from professional reading but from the popular press, from colleagues or, even more disturbingly, from their experiences with children who were neither gifted nor accelerated!

Significantly, this study also found that teachers who had personal or professional contact with students who had been accelerated tended to be much more positive in their attitudes. Teachers who had taught an accelerated student, or who taught in a school where a student had been accelerated, and teachers whose own children had been accelerated or who themselves had been accelerated, saw it in a much more positive light than teachers for whom acceleration was an unknown quantity (Southern, Jones and Fiscus, 1989)..

The provision of factual information about acceleration can help to reduce teachers' wariness of this provision. A few years ago I surveyed 90 Australian and New Zealand teachers entering specialist graduate study in gifted education and compared these educators' attitudes towards various aspects of gifted education with the attitudes of teachers not in specialist study (Gross, 1994). Predictably, teachers entering specialist study held much more positive attitudes towards special provisions for the gifted than did their professional colleagues. However their attitudes towards acceleration still displayed a considerable degree of ambivalence. Only when they were actually involved in training, when they had become familiar with many of the empirical research studies documenting the positive academic and social effects of acceleration, and when they had been able to meet and talk with gifted children who had been accelerated, did the teachers' attitudes towards grouping and acceleration begin to improve.

In Australia and overseas I regularly conduct professional development seminars with teachers and other educators on the uses of accelerated progression. I have a quick survey activity that I like to use shortly after the start of the seminar. I ask participants to raise their hands if their school has accelerated *more than one* gifted student. In general, almost half the hands are raised. I then ask them to raise their hands if their school has *never* accelerated a gifted students. Again, almost half the hands go up! Very few teachers say that they accelerated only one student and then did not go on to accelerate others.

This powerfully demonstrates the power of knowledge and of positive experience. Schools which give themselves the opportunity to observe the positive academic and social results of acceleration by using it with a gifted student then go on and use it with subsequent students. Schools which have never used this strategy have no opportunity to see its advantages, and thus remain unconvinced that it will work. The fear of the unknown is very powerful!

Research Findings on Acceleration

Possibly because of the wariness with which the educational and lay community alike regard acceleration, it has been studied, evaluated, and written about more consistently, and over a longer period, than any other intervention used with gifted students - indeed, probably more than any single educational intervention employed with *any* population (VanTassel-Baska, 1992). The results, across different eras and timeframes, among different nations and educational systems, and with different age groups, are remarkable in their consistency. There is *no* evidence that acceleration, undertaken

with intellectually gifted students, and properly conducted and monitored, results in academic, social or emotional difficulties (Benbow and Stanley, 1997). Indeed, longitudinal studies of gifted students such as those conducted by Stanley, Benbow and their colleagues (e.g. Richardson and Benbow, 1990; Lubinski and Benbow, 1994), by VanTassel-Baska (1986) and by Gross (1992, 1992, 1993, 1994) indicate that accelerated students are satisfied with their acceleration both in the short-term and in the long-term, and report enhanced achievement motivation, increased friendship choices and a greater enjoyment of school and learning.

Studies of the academic effects of acceleration provide strong evidence of positive outcomes for accelerated students. A best evidence synthesis of 81 studies, undertaken by Rogers (1991), found significant academic effect sizes ($ES > +.30$) for 9 of the 12 forms of acceleration studied. Interestingly, of the three accelerative procedures for which significant effect sizes were *not* found, two (concurrent enrolment and Advanced Placement) involve the gifted student spending the majority of his or her time in the mixed-ability classroom! Academic effect sizes were largest for grade-skipping (.78), credit by examination (.75) and grade telescoping (.56). When researchers compare academic outcomes for accelerated and non-accelerated gifted students, the results tend to favour accelerands over non-accelerands, regardless of which accelerative modality is employed (Swiatek and Benbow, 1991) and the academic advantages remain apparent not only in adolescence and young adulthood but even after many years (Cronbach, 1996). Kulik and Kulik's (1984) meta-analytic review of studies comparing gifted accelerands with equally gifted age-peers who have not undertaken acceleration concluded that gifted accelerands gained almost nine-tenths of a grade-equivalent school year over their equal ability age-peers who were not accelerated, and were no different in their performance to their new classmates who were one year older.

Social-emotional maturity in intellectually gifted children

Teachers who fear that gifted children may face social and emotional problems as a result of acceleration have often not taken into consideration that intellectually gifted students differ from age-peers of average ability in their emotional maturity almost as much as in their intellectual ability. In children and adolescents emotional maturity is more closely related to mental age than to chronological age. Teachers with a special responsibility for intellectually disabled children are particularly sensitive to the developmental delay which is readily apparent in both their cognitive and affective development; however many teachers are unaware that intellectually gifted children are characterised by *advanced* affective (as well as cognitive) development.

The most comprehensive longitudinal study ever undertaken in human psychology - the Terman study - is also one of the landmark studies in gifted education. At its commencement, almost 80 years ago, this study contained 1528 children of IQ 135+ (Terman, 1925). The sixth and latest volume of the study, *The Gifted Group in Later Maturity*, was published only four years ago (Holahan and Sears, 1995). The authors discuss, frankly and comprehensively, the influence of *mental age* on the subjects'

cognitive and affective attitudes and behaviors through childhood and adolescence, and the influence of their high intellectual ability on their relationships, interests and career paths in early, mid and later adulthood.

“Mental age as behavior determinant. Through the school years and into adolescence these children’s interests, attitudes and knowledge developed in correspondence with their mental age rather than with their chronological age. Their academic achievement as measured by tests, their interest and liking for various future occupational careers, their knowledge about and interest in games, their choice of recreational reading materials, and their moral judgments about hypothetical conduct were all characteristic of older non-gifted children whose mental age-range was approximated by this much younger and brighter group. Even the intellectual level of their collections was more mature than that of their chronological age-mates.”

(Holahan and Sears, 1995, p. 16)

In both their cognitive and socio-affective development, intellectually gifted children resemble older children much more closely than they resemble their age-peers.

In her book *Counseling the Gifted and Talented*, Linda Silverman (1993) proposes an interesting exercise.

“Imagine that you live on another planet in another solar system in which everyone is convinced that in order for children to have appropriate social adjustment they must be grouped with children who are of similar height. That way no one feels bigger or smaller than anyone else, and it is easier to play team sports. You happen to be extremely short. In fact, you are in the bottom two percent in height, so you have been grouped with children three years younger than you who are the same height. You are nine years old and they are six. You will be with this group for the next 12 years. There is no way out of this situation because everyone on the planet agrees that this is best for your social adjustment.

What does this feel like to you?

What do you do to survive?

(Silverman, 1993 p. 295)

I regularly lead teachers through this exercise in professional development inservices. Some teachers are so appalled at the prospect of a child being subjected to such as a serious grade misplacement, on such inappropriate criteria, that they find it difficult to engage in the task. In general, however, the task groups come up with responses very similar to those that Silverman encounters when she herself asks teachers to engage in this exercise.

The more mature child will have to learn:

- (a) How to explain ideas in simple terms that the other children can understand
- (b) How to wait patiently while the others struggle with concepts he or she has known for some time.
- (c) How to delay the gratification of answering all the teachers' questions, so that the others have the opportunity to participate.
- (d) How to fit in socially with children whose games are uninteresting, and who play by rules that seem crude and unfair.
- (e) **How to live without any real friends or understanding from others.**

At the close of the exercise Silverman reveals the truth of the scenario through which she has just led us. This is not a story about a 9-year-old misplaced in a class of 6-year-olds - a scenario which would scarcely exist in real life. It is a story about a highly gifted 6-year-old with a mental age of 9 - *mis*placed in a mixed-ability class of 6-year-olds with a mental age of 6. And the frustration, the days after days after days of "waiting for something to happen", the loneliness and the feelings of profound difference, indeed of alienation, are exactly what many gifted children experience in such a situation.

These children spend much of their schooling feeling like fish out of water or, more tellingly, like the captive bird in Simon and Garfunkel's *El Condor Pasa* which, tethered to the ground, gives the world its saddest sound.

The loss of friendship

One of the saddest elements in the grade misplacement of gifted children, to which Silverman (1993) referred earlier, is the loss of friendship. Stephanie Tolan (1987) portrays the dilemma of the young gifted child who is so far beyond her classmates in her play interests and preferences that there is virtually no common ground on which friendships can be built.

"One of the problems gifted children often face in school has to do with their being developmentally out of synch with their chronological peers . . . A gifted six-year-old first grader may have reached the level of development (normally reached between the ages of eight and nine) at which she especially likes games with complex rules. She plays the simpler games the other six-year-olds like to play on the playground, and then she suggests that they play one of her favorites. The other children refuse. How does she interpret this rejection? Seldom with a sense that she is better than they. She is more likely to think, "They don't like me." And it is a very short step from 'they don't like me' to 'I'm not likeable' . . ."

(Tolan, 1987, p. 185).

Many gifted children find themselves in a forced-choice dilemma (Gross, 1989). They have to decide whether to keep searching for other children who may enjoy playing the more mature, sophisticated games they prefer, or whether to adopt the immature play patterns of their age-peers and engage in games which they grew out of two or three years before, simply for the sake of having people to play with. In the classroom they are faced with a parallel situation. Should they keep on striving to work, in class, at the levels of which they know they are capable, or should they adopt the standards and achievement levels of their classmates in order to be socially accepted?

The following poem by 12-year-old Anna Westbrook describes the anger and frustration of the gifted child caught in the forced choice dilemma. Should she “climb” - strive to achieve her potential knowing that her success attracts peer envy and resentment - or should she “fall” - conceal her abilities and perform at the level of the class to ensure her acceptance by the peer group?

I fall . . .

I fall . . .
For I have nowhere to go.
I see . . .
For the masks have fallen.

Clouded before,
Now harshly real
Searing with truth
I do not want to know.

Will you fall?
And taste the sweetness
Will you climb?
And taste the bile

I fall
Because I want to.
Life has played me
All too long.

Intellectually gifted children differ from their age-peers of average ability not only in their cognitive capacities but on virtually every socio-affective variable yet studied (Gross, 1993; Silverman, 1993).

- Their play interests tend to be those of *older children*
- Their reading interests tend to be those of *older children*. (Alice, one of the exceptionally gifted children in my own longitudinal study, had by age 8, learned to conceal her advanced reading interests from her classmates. When her

teacher asked her, in class, what she was reading for pleasure at home, Alice told her, truthfully, that it was “a book about bunnies”. It was *Watership Down*.)

- They often display an early and quite passionate concern with ethical and moral issues, which more usually appears in children *some years older* (Hollingworth, 1942; Silverman, 1993; Gross, 1993)
- Their conceptions of friendship are those more generally held by children *some years older*.

A current Australian study investigating primary school children's conceptions of friendship has found that, at ages when children of average ability are still choosing friends on what Selman (1981, p. 251) calls the “fair-weather-friends” basis of similarity of sporting or play interests (when the shared interest fades the friendship cheerfully dissolves), their intellectually gifted age-peers have already moved on to conceptions of friendship in which friends are perceived as people who will understand the way they feel, people to whom they can talk about their deepest feelings, and people who will accept them as they are rather than expecting them to adopt social masks (Gross, 1998). These are the friendship conceptions more usually held by children *some years older* and it is one of the reasons why gifted children very often seek older students for companionship and friendship.

The gifted child who is retained with age-peers, with little or no access to children who are closer to her own mental age and who are at similar stages of socio-affective development - “the bird that's tethered to the ground” - may find it difficult, if not impossible, to find friends. The “failure” to find someone with whom to engage in the affective bonding which gifted children seek as an important element of friendship (Gross, 1998) can intensify the child's growing feelings of isolation and alienation.

Elizabeth, a highly gifted young woman of 18, is at university, in her final year of undergraduate study, having been radically accelerated through elementary and high school. She affirms that she would have grown up very differently if she had been retained in the regular classroom with no access to intellectual peers, withdrawing into herself and mimicking social interactions rather than participating in them.

“I can't imagine that I would still be me if I had to sit through that many years of school and still have so many left to go . . . I think I could have kept my mind intact, but only with a very small, narrow channel through which my thoughts could be communicated to the outside world. I was building a veritable fortress around myself, and I think it would have continued growing and growing, setting me further and further apart from the rest of the world, making the world more and more of a stage for me to watch and try and make my life alone in the castle resemble . . .”

Elizabeth is certain that if she had not been permitted to accelerate, she would have retreated into a secret place within herself, observing life being enacted, as it were, on a stage, but playing little part in it herself. Acceleration has given her friends, self-

confidence and self-acceptance. She is in the world, and *of* it, rather than apart from it as she had been in her earlier school years.

Piechowski (1991) describes the intensity with which many gifted young people approach their intellectual and emotional lives. Many gifted children experience both joy and pain with a greater immediacy and poignancy than do their age-peers.

“One of the basic characteristics of the gifted is their intensity and an expanded field of their subjective experience. The intensity, in particular, must be understood as a qualitatively distinct characteristic. It is not a matter of degree, but of a different quality of experiencing: vivid, absorbing, penetrating, encompassing, complex, commanding - a way of being quiveringly alive (Piechowski, 1991, p. 181).

This intensity of feeling, is visible in the passionate love of learning which characterises many gifted students . Dante called it “the mind in love” (Dante, date uncertain). The need for intellectual challenge; the burning desire to acquire new knowledge; the longing, when it is once experienced, to be caught up again in the almost sensual ecstasy that Csikszentmihalyi (1993) calls “flow”; the joy in intellectual argument and the meeting of like minds; the fascination with the nuances of language; the passionate engagement with learning for learning’s sake; the desire and need for intellectual stimulation, can be almost overwhelming. And it is this desire, and this passion, that intellectually gifted children must deny when they conceal their giftedness for peer acceptance.

Self-acceleration: The urge to move forwards

Leta Hollingworth, the great psychologist who wrote two seminal books (Hollingworth, 1926; Hollingworth, 1942) on gifted education, as well as many articles and chapters in edited books, and who conducted a highly influential study on profoundly gifted children (children of IQ 180+) experienced this emotional intensity from an early age.

“Before I was seven I still recall the sobs that used to overcome me when the sweetness of birds’ singing or the silence of evening laid their message on my inarticulate, childish soul . . . The pain of my own experience is yet very clear to me. It was pain because there was no means or outlet for its expression because it gripped me too young . . . before I knew the medium of sentences or of written words that can make a sunset burn or a flower bloom forever.”

(Leta Stetter Hollingworth in Hollingworth, 1943)

The young Leta knew, objectively, as she moved through childhood, that she was, as people often describe highly gifted children “too old for her years”. That caused her no concern. She simply decided to do something about it. One afternoon when she was 10 years old she decided, calmly and objectively, to “skip” the rest of her childhood. Some years later she wrote, retrospectively about this, to the man she later married.

“It seems uncanny to me now, noting many children, that when I was less than ten years old I had taken a look at life and decided that . . . some period of it must be left out. I had read in some book that man’s life is divided into stages and this put the uncanny idea of omitting one of them into my head. Nobody but you knows or ever knew of that solemnly held compact with life - that if I left out part of childhood I should be granted other values which seemed more to be desired . . . I decided to grow up there and then, solemnly renouncing the rest of childhood . . . Nor has life failed thus far to keep the compact.”

(Leta Stetter Hollingworth in Hollingworth, 1943)

Leta’s “renouncement” of what remained of her childhood was not a thrusting away or a denial of her youthful years, but rather a reaching forward, an acceptance of what she knew would come eventually but which she passionately wanted to come sooner, rather than later. She had so much that she knew she wanted to do, and she quite simply wanted to get on and do it.

Many gifted children know they are “older than their years” and they long to move forward, to be what they can be, to use the gifts they have within them. The drive to *do* and to *create* - to strive and to achieve - can be overwhelming.

The author and poet Dorothy Sayers expressed this urge and exultation in one of her early poems when she began to accept both her gift for writing and what she saw as a moral obligation to use and develop it.

“I will build up my house from the stark foundations
If God will give me time enough,
And search unwearying over the seas and nations
For stones and better stuff.

Though here be but the mortar and rough-hewn granite
I will lay on and not desist
Till it stand and shine as I dreamed it when I began it
Emerald, amethyst.”

(Sayers, 1916, p 10)

From “the saddest sound” to the D Major chord

I spoke earlier about the bird that’s tethered to the ground, whose grief and yearning to return to its element gives the world its saddest sound.

I alluded earlier to my longitudinal study of exceptionally gifted children of IQ 160+. These 53 young people are scattered through the length and breadth of Australia. A minority have experienced exemplary educational programs, but the majority are spending their entire schooling in the inclusion classroom with little or no access to

academic work commensurate with their ability, and with no access to children whose abilities and interests are *anything* like theirs (Gross, 1992, 1992, 1993, 1994, 1998, 1998).

One of these children is Lainie, aged 10. She has no one with whom she can share her passion for maths, her delight in the novels of Jane Austin, and her love of music. She is lonely, friendless and socially isolated. One day in early May last year, she phoned me. Her mother, saddened by the death of Frank Sinatra a few days before, had been playing his records over and over, and Lainie had been fascinated by one song - "haunted by it" as she described it - which seemed to put into words her own feelings of loneliness and yearning. She told me that she had changed some of the words to bring her own truth to it, and asked if she could sing it to me. This is her song, offered by Lainie with acknowledgement to the original writer of the sad, exquisite *In the Wee Small Hours of the Morning*.

*"In the wee small hours of the morning
When the whole wide world is fast asleep
I lie awake and dream of having friends
And never ever think of counting sheep.*

*There's a friend out somewhere, some day, somehow.
I'd be so glad if only she could call.
In the wee small hours of the morning,
That's the time I need her most of all."*

As I listened to this sad, sensitive little girl singing of her yearning for friendship, I remembered another phone call from a child in my study, which also associated friendship and music, but in a very different way.

I have told Tessa's story elsewhere (Gross, 1998). Briefly, eight-year-old Tessa had been intellectually and socially isolated in the regular classroom, friendless and unhappy. Her teacher interpreted her inability to form friendships with her age-peers as emotional immaturity. Actually, like many other highly gifted children, she had already passed through the "fair-weather friend" stage of friendship development appropriate to her chronological age, and was already seeking the "intimate and mutually shared relationships" (Selman, 1981, p. 251) and affective bonding that characterizes close friendships between girls several years older.

Fortunately, the primary school principal sensed that something was flawed in the teacher's judgement, and arranged for Tessa to be assessed. She was identified as highly gifted, and was accelerated and placed in a fulltime self-contained class of gifted

children in a local primary school where she found two other highly gifted girls with whom she developed a deep and lasting friendship.

Tessa phones me quite frequently to share her joy in how her life has changed. One evening last year she told me, eagerly: "You know, Jacquie and Clare and me - well, it's like music! Each of us is a different note - we've each got our own voice and our own qualities - but put us together and it's like a D major chord! Something beautiful and better happens."

I told this story last year when I was keynoting at the Wallace Research Symposium on Gifted Education at Nicholas Colangelo's Centre at the University of Iowa, and two music teachers came up to me afterwards and deeply moved, asked if I realised (since I had not specifically mentioned it) that D Major is recognised as a key which most potently expresses joy and exultation. Handel wrote many of his great "in praise of God" oratorios in D Major.

A few weeks ago I was telling Tessa's story to a good friend, the great concert pianist Lorin Hollander, and he pointed out, in addition, that Beethoven wrote his wonderful 9th Symphony in D minor, but for the choral movement, the "Song of Joy" he modulated to the tonic major, D major. Tessa surely chose a wonderful metaphor to express both the quality of her new friendship, and her joy in it.

As educators, we have no excuse for allowing any child to cry in the night for friendship when through an appropriate grade placement with children at similar stages of intellectual and emotional development we can allow something beautiful and better to happen.

For gifted children acceleration can replace discord with harmony. We can transform the saddest sound into the song of joy.

Text Reference	References
+26 Sayers, 1916	Sayers, D.L. (1916). <i>Opus 1</i> . Oxford: Blackwell.
+13 Benbow, 1998	Benbow, C.P. (1998). Acceleration as a method of meeting the academic needs of intellectually talented children. In J.VanTassel-Baska (Ed.) <u><i>Excellence in Educating Gifted & Talented Learners</i></u> (pp. 279-294). Denver: Love Publishing.
72 Csikszentmihalyi, 1993	Csikszentmihalyi, M. (1993). <i>Flow: The psychology of happiness</i> . London: Rider.
+11 Delisle, 1984	Delisle, J.R. (1984). <i>Gifted children speak out</i> . New York: Walker and Company.
+2 Durr, 1964	Durr, W.K. (1964). <i>The gifted student</i> . New York: Oxford University Press.
+7 Feather, 1989	Feather, N.Y. (1989). Attitudes towards the high

- achiever: The fall of the tall poppy. *Australian Journal of Psychology*, 41(3), 1-30.
- 152 Gross, 1989 Gross, M.U.M. (1989). The pursuit of excellence or the search for intimacy? The forced-choice dilemma of gifted youth. *Roeper Review*, 11(4), 189-194.
- 156 Gross, 1992 Gross, M.U.M. (1992). The use of radical acceleration in cases of extreme intellectual precocity. *Gifted Child Quarterly*, 36(2), 90-98.
- 159 Gross, 1993 Gross, M.U.M. (1993) *Exceptionally Gifted Children*, London: Routledge.
- 163 Gross, 1994 Gross, M.U.M. (1994). Radical acceleration; Responding to the academic and social needs of extremely gifted adolescents. *Journal of Secondary Gifted Education*, 5(4), 27-34.
- +6 Gross, 1998 Gross, M.U.M. (1998). 'Fishing' for the facts: A response to Marsh and Craven, 1998. *Australasian Journal of Gifted Education*, 7(1), 16-28.
- +15 Gross, 1998 Gross, M.U.M. (1998). *Conceptions of friendship among average ability, moderately gifted and highly gifted children*. Paper presented at the 45th Convention of the National Association for Gifted Children, Louisville, Kentucky, November 14.
- +1 Holahan and Sears, 1995 Holahan, C.K. and Sears, R.R. (1995). *The gifted group in later maturity*. Stanford University Press: Stanford, CA..
- 183 Hollingworth, 1926 Hollingworth, L.S. (1926) *Gifted children: Their nature and nurture*. New York: Macmillan.
- 189 Hollingworth, 1942 Hollingworth, L.S. (1942) *Children above IQ 180: Their origin and development* New York: World Books.
- +25 Hollingworth, 1943 *Leta Stetter Hollingworth: a biography*. Lincoln, NE: University of Nebraska Pres.
- 293 Piechowski, 1991 Piechowski, M.M. (1991). Giftedness for all seasons: Inner peace in time of war. In N. Colangelo, S.G. Assouline and D.L. Ambrosion (Eds.), *Talent development: Proceedings from the 1991 Henry B. and Jocelyn Wallace National Research Symposium on Talent Development*. Unionville, NY: Trillium.
- +9 Roninson, 1983 Robinson, H. (1983). A case for radical acceleration: Programs of Johns Hopkins University and the University of Washington. In C.P. Benbow and J.C. Stanley (Eds.) *Academic precocity: Aspects of its development* (pp. 139-159). Baltimore: Johns Hopkins University Press..
- +10 Robinson, 1987 Robinson, N. (1987). The early development of precocity. *Gifted Child Quarterly*, 31(4), 161-164.
- +12 Rogers, 1992 Rogers, K.B. (1992). Acceleration: What we do vs.

- what we know. *Educational Leadership*, October, 58-61
- +14 Selman, 1981 Selman, R.L. (1981). The child as a friendship philosopher. In S.R. Asher and J.M. Gottman (Eds.) *The development of children's friendships*, (pp. 242-272). Cambridge: University of Cambridge Press.
- 362 Silverman, 1993 Silverman, L.K. (1993). *Counseling the Gifted and Talented*. Denver: Love.
- 375 Southern, Jones and Fiscus, 1989 Southern, W.T., Jones, E.D. and Fiscus, E.D. (1989). Practitioner objections to the academic acceleration of gifted children. *Gifted Child Quarterly*, 33(1), 29-35.
- 409 Terman, 1925 Terman, L.M. (1925). *Genetic studies of genius* (Vol. 1). *Mental and physical traits of a thousand gifted children*. Stanford, CA: Stanford University Press.
- 419 Tolan, 1987 Tolan, S.S. (1987). Parents and "professionals"; A question of priorities. *Roeper Review*, 9(3), 184-187.
- 435 VanTassel-Baska, 1992 VanTassel-Baska, J. (1992). Educational decision making on acceleration and grouping. *Gifted Child Quarterly*, 36(2), 68-72.