This conference panel presentation includes five papers on the implications of inclusive education for gifted and talented children. "The Case for Ability Grouping of Gifted Students" (Carolyn Yewchuk) summarizes research results showing that greatest gains were found in programs that grouped high ability children together and provided a differentiated curriculum matched to their abilities and skills. The beneficial effect of homogeneous grouping with differentiated instruction was also evident for students of medium ability and low ability. "Implications of Alberta Education Policies and Practices for Gifted Students" (Lorraine Wilgosh) points out that the policies of Alberta (Canada) Education seem to offer the promise of educating children with disabilities in regular classrooms with nondisabled peers while promising to provide specialized programs for the brightest and most capable students, leading to policy conflicts. "Implications of Inclusive Education for Gifted and Talented Children: A Parent's Perspective" (Conna Rankin) makes recommendations for helping underachieving gifted students.

"Inclusive Education: Teachers' Perspectives" (Tracey Schaufele and Susan MacDonald) presents the common view of a teacher in an inclusive classroom and a teacher of a self-contained gifted class that gifted students' needs will not be met in inclusive settings. "Inclusive Education--Good for All??" (Debra Chinchilla) contends that ability grouping is necessary for gifted children. (JDD)
PANEL

Implications of Inclusive Education for Gifted and Talented Children

Moderator
Carolyn Yewchuk

Panel Members
Lorraine Wilgosh
Donna Rankin
Tracey Schaufele
Susan MacDonald
Debra Chinchilla
The Case for Ability Grouping of Gifted Students
Carolyn Yewchuk
University of Alberta

The move towards inclusive education is flowing through the educational establishment like a huge tidal wave, sweeping all before it. It appears to be interpreted as an "all-or-none" practice: all children back in the regular classroom (Stainback & Stainback, 1992). This wave is in danger of capsizing the lifeboats which have kept gifted children afloat in the schools - differentiated instruction in groups of like-minded peers.

There is incontrovertible evidence accruing that gifted children achieve best when grouped with their intellectual peers for instructional purposes. For a long time, we have known from anecdotal and first-person accounts about the damaging and frustrating effects that regular classrooms can have on gifted students. Now we also have evidence from research which shows very clearly that the academic performance of gifted children improves with differentiated instruction in grouped programs.

In this brief article, I will summarize the results of exemplary research on the effects of grouping on academic performance conducted by James and Chen-lin Kulik. They have been analyzing the educational effects of grouping for the past decade. Their article in the Spring 1992 issue of Gifted Child Quarterly is a very clear and concise description of findings relative to gifted students. Unless indicated otherwise the data reported here are derived from this source.

To begin with, what is meant by "ability grouping"? Put simply, ability grouping is the provision of separate instruction for students of similar ability or achievement level. It is sometimes called homogeneous grouping, but is not equivalent in meaning to "tracking". In the American literature tracking refers to the assignment of students to programs on the basis of ability and/or
achievement, from which they do not move during one school year or from one year to another. Ability grouping, on the other hand, does not imply permanence of assignment; it refers to placement of students with others whose learning needs are similar to theirs, for whatever time arrangement is most appropriate (Fiedler, Lange & Winebrenner, 1993).

There are many different ways of grouping students by ability for instructional purposes. As we shall see from the research evidence described below, the way students are grouped and the type of curriculum that is followed have differential effects on academic performance. The effects are not the same across different kinds of ability grouping.

When Kulik and Kulik began investigating the effects of grouping on performance they had available to them a new statistical technique called meta-analysis (Glass, McGaw & Smith, 1981). This is a method of summarizing the results of many different studies conducted by different researchers. Typically the meta-analytic researcher locates all of the studies which have been done in the past on a particular topic; in the case of ability grouping, the research base includes more than 700 studies (Kulik & Kulik, 1982). Only those studies which report using a control group of students in addition to an experimental group are suitable for meta-analysis. The summarized difference between experimental and control groups is reported as "effect size". An effect size of 0.20 is considered small, 0.50 is in the medium range, and 0.80 is considered large. Effect size can be interpreted on a grade equivalent scale, with 0.10 equatable to one month of achievement on standardized achievement tests. A positive effect size indicates that the performance of the grouped students exceeds that of controls; the opposite is true for a negative effect size.

Kulik and Kulik (1992) looked at the effects of grouping in five different administrative arrangements. Separate analyses were conducted within each of
These groupings. It is important to separate out type of grouping, because the experimental effects for some arrangements are lost through averaging with all forms of grouping, leading to the erroneous conclusion that grouping has no demonstrable effect on academic achievement.

1. Multilevel classes.

Sometimes referred to as XYZ classes, multilevel placement is intended to facilitate instruction by grouping students of similar ability. Students in the same grade may be divided into groups such as high, middle, and low, and placed together in separate classrooms (usually elementary) or for single subjects (usually secondary). A standard curriculum is followed, irrespective of group, with no adjustment of curriculum and methods to ability level. The Kuliks located 56 studies which examined the effects of multilevel placement. The results indicated a negligible overall effect size of 0.03. However, when effect size was computed separately by level, the effects were variable: 0.10 for high ability; -0.02 for middle ability and -0.01 for low ability. Thus the high ability students, even in the absence of a differentiated curriculum, performed better than control students, medium-ability students and low ability students. It should be noted in passing that separation by ability had negligible effects on the achievement of medium and low ability students compared to students in mixed-ability classes.

2. Cross-grade grouping.

Cross-grade grouping is usually subject specific, and is most often used for teaching reading in the elementary grades. Students from different grades are assigned to groups based on instructional level. In the best known plan for cross-grade grouping, the Joplin Plan, for example, students from grades four, five, and six are assigned to a reading group based on reading skill, not grade level.
Each reading teacher works with a class that varies in age but is relatively homogeneous with respect to reading ability.

Cross-grade grouping is similar to multilevel grouping since students of similar ability are grouped together. However, the number of levels of instruction is usually greater and there is more curricular adaptation in cross-grade plans. In contrast to multilevel programs, different materials and methods are used with students of different ability levels in cross-grade grouping.

Meta-analysis of the 14 studies of cross-grade grouping revealed a small and significant overall effect size (0.30). Comparisons of achievement by ability level produced a small effect for high-ability students (0.12), a negligible effect for middle-ability students (-0.01) and a larger effect for low-ability students (0.29). Thus the most beneficial effect of cross-grade grouping is with low-ability students.

3. Within-class grouping.

Teachers often group or "cluster" children within their class according to ability for instruction in subjects such as reading and arithmetic. The purpose of the clusters is to provide differential instruction to different groups of learners. Thus within-class programs provide for differentiated curricula like the cross-grade plans, but the children do not leave their regular classroom.

A small but significant effect size (0.25) was found on average in the eleven studies of within-grade grouping. There was a positive effect for all levels: 0.18 (medium-ability groups), 0.16 (low-ability groups), and greatest of all, (0.30) for high-ability groups.

4. Enriched classes for the gifted and talented.

In enriched classes, students of high ability are provided a more challenging program with differentiated curricula, materials and methods that are different from those used in the regular classroom. This type of grouping is designed
specifically for gifted children and is usually taught by a specially trained teacher. Kulik and Kulik identified 25 studies dealing with special programs for gifted and talented students with a moderate overall effect size of 0.41.

5. Accelerated classes for the gifted and talented.

Acceleration involves movement through the curriculum at a faster rate than same-age or same-grade peers. The 23 studies on which Kulik and Kulik based their meta-analysis included the following types of rapid advancement: compressing curriculum (e.g. four years in three), and extending instruction beyond the school year (e.g. four years in three with five summer sessions).

The 23 studies used two different research designs. Half the studies used same-age controls, that is, those students who were equivalent initially to the experimental group in age and aptitude, but were behind in grade level at the end of the study because they weren't accelerated. The effect size for same-age controls was 0.87, or almost an entire year in grade equivalent terms.

On the other hand, in the studies which compared accelerated students with same-grade controls, that is, older, non-accelerated students with the same aptitude, the effect size was -0.02.

Summary

A summary of the achievement of gifted and talented children in different types of ability groupings appear in Table 1. Effect size indicates achievement which is beyond normal expectation for one school year, as measured on grade-equivalent scores on standardized achievement tests.

It is obvious from Table 1 that degree of academic gain is a function of program type. The greatest gains are found in those programs that not only group high ability children together but also provide a differentiated curriculum matched to their abilities and skills. When the students are placed together but taught the regular curriculum (multilevel grouping), the gains are small. When
the curriculum is adapted to their interests and capabilities (enrichment) and/or to their rate of learning (acceleration), the gains are most pronounced.

The beneficial effect of homogeneous grouping with differentiated instruction is also evident for students of medium ability (see Table 2) and low ability (see Table 3). The achievement of medium and low ability students does not drop when grouped together with similar peers. In fact, in those types of groupings where skill level of students is taken into account, performance rises, particularly for low ability students.

Thus the research evidence shows that all students benefit from being grouped for instruction by ability. Gifted learners, especially, flourish academically in classes with their like-minded peers. It is premature to disband instruction within ability groups for gifted and talented children. We must maintain the life boats and resist the tide of inclusion which would sweep them away.

References
Table 1
Achievement of Gifted Students

<table>
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<tr>
<th>Grouping type</th>
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<tr>
<td>Cross-grade</td>
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<tr>
<td>Within-class</td>
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<td>Enrichment</td>
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<td>Acceleration</td>
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Source: Kulik & Kulik (1992)

Table 2
Achievement of Medium Ability Students

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</table>

Source: Kulik & Kulik (1992)
Table 3

Achievement of Low Ability Students

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<td>Cross-grade</td>
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<tr>
<td>Within-class</td>
<td>0.16</td>
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</tbody>
</table>

Source: Kulik & Kulik (1992)
Implications of Alberta Education Policies and Practices for Gifted Students

Lorraine Wilgosh
University of Alberta

Alberta Education has attempted to develop policies and practices which will meet the educational needs of all Alberta students. The Minister of Education in 1991 said:

Our focus will be on doing what's best for disabled students -- developing their full potential. Integration into the regular classroom will be the norm for disabled students and will give them the chance they need to learn, to grow, and to become full participants in our schools and in our society. (Alberta Education, 1991a, p. 2)

Alberta Education (1991a) proposed that the best interests of the child would be the basic consideration. Integration would be the option of first choice "for the vast majority of Alberta school children" (p. 2). Only when the child's needs could not be met in the regular classroom would removal be considered, with return to the regular classroom the primary focus of programming.

Another Alberta Education (1991b) document was released following the above Alberta Education position paper on integration. Vision for the nineties...a plan
of action affirmed that "integration into the regular classroom must be the norm for special needs students so that they get the programs and services to succeed to the best of their abilities" (p. 32).

Those other children with special needs, who are gifted and talented, were not recognized in the report as having "special needs." Rather, reference was made to their "diverse learning needs" (p. 19). Alberta Education's (1991b) separate policy for "gifted" students stated, "Our brightest and most capable students must be challenged to excel" (p. 19). For those young people, Alberta Education proposed establishing "specialized public and private schools in areas of study such as science and technology, fine arts, and business... challenge programs... Specialized schools enlarge the opportunities for students to develop their strengths and talents" (p. 19).

Subsequent documents produced by Alberta Education (1992, 1993) have reported a degree of success within the province's schools, in integrating children with disabilities when it is in the best interests of the
children to do so. However, over 75% of surveyed teachers and about 60% of surveyed administrators and trustees were of the view that teachers do not have the training and support to successfully integrate students with disabilities (Alberta Education, 1993).

Also, success has been reported in providing more opportunities for capable students, in the form of academic challenge and alternative arts programs, as well as leadership courses. There is an expressed commitment to establish public specialized schools to provide more opportunities for the most capable students. Survey results (Alberta Education, 1993) have indicated that about two thirds of educators believe Alberta's most capable students are "challenged", apparently supported by success of those students in provincial diploma examinations.

The policies of Alberta Education seem, at face value, to offer the promise of educating children with disabilities in regular classrooms and schools with non-disabled peers, while also promising to provide separate, specialized schools and programs so that the "brightest
and most capable students" can be challenged to excel. There is an potential conflict between these policies. Inclusive education would appear to be best for children with disabilities while some degree of segregation would appear to be best for those who are brightest and most capable. Can we teach tolerance and understanding for all people in exclusive, specialized schools and programs, a question asked by those advocating integration of children with disabilities? Where does the gifted child with disabilities, or the gifted underachieving child, belong? Where do we place the child with special talents, who would not necessarily fall into the category of "brightest and most capable" as measured by provincial diploma examinations or other standardized achievement measures? These policy conflicts, which lead to dilemmas in attempting to offer best practices, will need to be resolved.

References

Alberta Education. (1991a). Meeting the individual needs of Alberta students - A framework for positive change. Paper prepared for participants
attending the Minister's Forum on Special Education, Calgary, AB.


This paper is a summary of a presentation by the author on Alberta policies and practices regarding inclusion at the Society for the Advancement of Gifted Education (SAGE) conference in Edmonton, in September 1993.
Implications of Inclusive Education for Gifted and Talented Children: 
A Parent's Perspective

Donna Rankin
Alberta Associations for Bright Children

In today’s economic realities, many school budgets do not allow for special classes for gifted students. In small, rural school systems such as mine, inclusive education is the only option.

The special needs of an intellectually gifted child are as valid any other "special needs student". Gifted children can not always make it on their own. Encouragement and focus on the student’s strengths are the best approaches.

Home and school need to work as a team to make the child’s school experience the best possible. Communication is the key.

I chose not to identify my school system because I believe our experiences are typical of many cases. I like many aspects of my school system and have enjoyed good communication with teachers.

The official District policy on Enrichment Programs is as follows: "Enrichment activities are available for students who require additional challenge. Enrichment includes supplementing and extending the Alberta curriculum."
In reality, programming for gifted students is the responsibility of individual classroom teachers, who plan open ended assignments. Each student may elaborate and embellish their work.

My experience with school systems has been as the parent of a gifted child who is also behaviorally challenged.

Focus so far has been on eliminating unacceptable behaviors rather than building on strengths. Once the child conforms to classroom behavior standards, then the school might talk about enrichment for the student. As a parent, I felt that the source of much poor behavior was boredom and frustration. At times, when I asked for academic goals, I felt I was treated as an adversary rather than part as of a team.

I appreciate the difficulty teachers have in coping with multi level classrooms. It is hard to be everything to everybody. Parents acknowledge the toughness of the job. Limited funding for special education is spent first on physical apparatus and personnel to help physically and intellectually challenged students. In our integrated schools, this is necessary. It is reality.

How can we help our underachieving gifted?
Recommendations:

(1) The Education Response Centre provides direction and leadership to school boards in providing special education programs. It is my understanding that the Provincial Co-ordinator of Guidance and Counseling can be requested by school boards to provide guidance and assistance in developing programs for bright children.

(2) School personnel, as well as parents should stress positive reinforcement and encouragement.


(3) Parent volunteers can be used as mentors, classroom helpers, or research supervisors. My school system already makes excellent use of helpers for primary grades, special outings, and some special needs students. Gifted and talented children would also benefit.

(4) More parent-school dialogue is needed about the nature of underachievement and joint strategies developed to attack the problem from both directions.
Bibliography

From a parent’s or educator’s perspective, the following resources may prove interesting.


Park, Beverly N., (1989), Gifted Students in Regular Classrooms, Allyn & Bacon


Smyth, Elizabeth; Walker, Margaret; McPhee, Sylvia; and Shaw, Kate, (1993), "So You’ve Been Invited to Speak About Gifted Students: A Practical Guide to Effective Advocacy", in AGATE, Volume 7, Number 1, Spring 1993.


The following helpful books are aimed at parents.

Coloroso, Barbara, (1989). Winning at Parenting... without beating your kids. Audio tape set with booklet


Inclusive Education: Teachers' Perspectives

Tracey Schaufele
Vernon Barford Junior High School
Susan MacDonald
Mayfield Elementary School
Edmonton, Alberta

As teachers, we were asked to present our viewpoints re: inclusive education and the gifted child. Our teaching backgrounds are quite different, yet it is interesting that we share a common viewpoint about how inclusive education will impact our gifted students. One of us currently teaches elementary school—an inclusive classroom which contains cross grading, Down's Syndrome and Behavior Disordered children. The other of us teaches a self-contained Gifted Class of twenty-six Grade 7 students.

Our first concern is that the needs of the Gifted child both academic and affective, are met. We cannot only look at the marks and IQs of our gifted children. Their needs are much more complex than that. We, as teachers, need to know how to identify the gifted child, and need to be allowed to provide the extra time they require for academic guidance and even counselling.

The term 'inclusion' can be interpreted many ways. At its purest level, it means that all students, regardless of their ability or disability will be schooled in their neighborhood school, and, further, that they will be mixed in with all other children. It disallows 'special' classes, and is of the view that the regular classroom teacher is the best person to educate all. We realize that there are many variations of inclusion in practice, and they achieve varying degrees of success. However, for the purposes of speaking to the area of gifted and inclusion, it is best not to "muddy the waters" with grey areas.

One of our major concerns, as teachers, is that the needs of the gifted will not be met in an inclusive setting. Teachers do their best, but it will be the 'squeaky wheel gets the grease'. By that, we mean that the Behavior Disordered student, who hangs from the light fixtures will demand the teacher's attention, while the gifted student may quietly tune out, and become negative about school in general. We are concerned that these children may become gifted underachievers, who are at risk of dropping out of school, altogether.

Teachers sometimes become caught in the "Robin Hood Effect", in which the 'good' gifted student can be left to work on his/her own, while instruction time and individualiza-
tion is given to the lower end of the academic spectrum. This is, in effect, robbing from the rich to give to the poor.

This is not to say that the teachers are not doing their best. It is just human nature to attend to those who clamor for attention. Teachers cannot be expected to do it all. So, whose needs will not be met? We fear it will be those of the gifted.

We allow other professions to train specialists. Doctors are permitted, by society, to choose areas of strength for their focus. We, as members of society respect our heart specialists, our brain surgeons, our ophthalmologists. We would not dream of making them all become general practitioners. Yet, we have no qualms about dictating that all of our teachers give up their specialties, and teach all students. Is this best for our children? Is it best for our teachers? Is it best for society?

Decisions about inclusion must not be unilateral. They should be determined in the context of what is best for each particular child, each particular teacher, and the dynamics of each particular school. Parents, teachers and administrators must not put the needs of the gifted children second to those with more obvious and demanding exceptionalities.
Inclusive Education—Good For All??
Debra Chinchilla
Alberta Associations for Bright Children

The opinion I am expressing today on the implications of inclusive education practices for our gifted/bright students has come from my child’s school experience and that of related experiences of other such children enrolled in the Edmonton Public School System and elsewhere in the province of Alberta.

What is the school experience for children in an inclusive education classroom? And how would inclusive education impact my child? In inclusive education a central concept is child-directed learning, as well as cooperation amongst students in learning, sharing and helping each other. All this is done in mixed ability groups. There would not be segregated settings nor grouping of intellectual peers (no district academic challenge program). To answer the previous questions one must ask other questions. Can a bright/gifted child’s educational needs be easily accommodated in mixed ability groups? Can a bright child stay motivated (child-directed learning) when all the other students in the classroom are doing work he already knows or if he is doing work that no other students are doing— in other words he always works alone? Can a bright child cooperate and share in a meaningful, satisfactory way in a group where he knows the most and is academically more able than the others to put the project/report together? Can a bright child be helped by other...
students in a group where the other students are not as academically advanced? Do most teachers know what an individual education plan is and do they know how to prepare one? Can the bright child’s rapid rate of learning be easily accommodated without either disruption to the class or by placing unreasonable expectations on the teacher?

My observations of my son’s past seven years of education lead me to believe the answer to all the above questions, for most bright/gifted students is no. It is especially hard for a young child to stay motivated when all his friends/classmates have absolutely no interest in what he’s doing or if they are interested they remain observers because they are unable to contribute anything new and perhaps cannot even participate because of a lack of ability. It’s academic loneliness and isolation that bright children face in mixed ability classrooms. Working in groups to complete projects often results in resentment being felt by all. The bright child often does most of the work and the other children do little. The bright child gets tired of doing all the work and the other students get tired of the bright one always being the leader/director, the know-it-all. Sometimes the bright child will hide his academic abilities in order to temper these resentments or in order not to be called the geek/nerd. No one benefits from this situation. Sometimes the child will look with disdain upon the other students – they can’t see what he sees or they can’t grasp the ideas as quickly. He may come to view himself as superior in every respect. Sometimes the
bright child may be asked to help teach others in his class. This puts yet another barrier between students and adds to the loneliness and isolation of the bright student in the mixed ability classroom. Also, teachers have yet to become expert in the preparation of individual education plans and have yet to be given enough classroom support to be able to have meaningful academic interaction on an individual basis with their students.

If gifted/bright students are grouped with others of similar abilities and receive differentiated curriculum they could remain motivated and really cooperate in a meaningful way. This grouping would enable them to move ahead at a faster pace without disrupting the classroom or placing an onerous burden on the teacher. So, it seems to me that the movement away from ability grouping for gifted/bright children would seriously decrease the quality of education for many gifted/bright students. This is especially so when funding cutbacks will force teachers to face the impossible task of providing all things to all students. Obvious in this is that the teacher will put more energy into helping students who are struggling, leaving little energy for the bright/gifted child. So, having said that inclusive education practises are not the best for many bright/gifted children, what educational practises are needed in schools in order that the gifted/bright child's needs are met?

Alberta Education has said "The best interests of the child should be the basic consideration for all placement and programming decisions." As well, in 1990 The Canadian Parliament adopted article 29 of the U.S. Convention on the Rights of the
child — that the education of the child be directed to "the development of the child's personality, talents and mental and physical abilities to their fullest potential." In order to accomplish these ends Alberta Education has said we must have a range of education options and parental input into determining what those options should be. Many parents, myself included, have seen or heard of the video Failing Grades and have read in the magazine Western Living of the confusion of British Columbia's Vision 2000 education policy. Many other articles and videos point out that models of education that emphasize adopting one major method of instruction such as inclusive education have some students that pass through the system without acquiring basic skills. Might not those students have been better served by a different model of education. And should it not be acceptable that a school district offer a variety of instruction models in order that parents might be able to better place their children in an educational setting that best suits that child? The responsibility of identifying the right style of learning for a gifted/bright child and the right milieu for that child must be shared by the parents, teacher, principal, and education psychologist. Most parents know their children far better than the ever changing scenario of teachers, and principals. Parents must take a greater chunk of responsibility for their child's education.

In conclusion I quote Thomas Jefferson who once said "There is nothing more unequal than equal treatment of unequal people."

To ensure that all gifted students have an education that
develops their abilities to the best of their potential it is important to have a broad range of options in the school system. Options such as: mixed ability classrooms, pull-out enrichment programs, acceleration, full-time segregated academic programs (academic challenge), homeschooling, multi-age groupings, International Baccalaureate program and distance education services will serve to ensure that most gifted/bright students will not pass through the system without achieving close to their potential. I understand the transportation limitations for offering more options in rural settings but I understand also that the urban settings can more readily offer options. Choice has worked well in the Edmonton Public School System. Currently in the system there exists a broad range of choice of education experiences for the gifted/bright child. Most parents applaud this decision to offer options. Parents from other districts look with envy at the range of options offered here. Gifted/bright children are well served in this system and I believe that this system should be the model for other districts interested in serving the needs of gifted/bright children.
References


4. Alberta Education. *Education Programs - Educational Placement of Students with Exceptional Needs*. Document # 02-02-05, 1993
