Teacher Training for the Gifted and Major Issues in Gifted Child Education*

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Etant donné la remise en vigueur des dispositions particulières régissant l'enseignement qui s'adresse aux enfants surdoués, la sélection et la formation des enseignants de ce secteur attirent de nouveau l'attention. Nous décrivons les liens historiques entre l'enseignement donné aux surdoués et l'orthopédagogie, les hypothèses qui sont à la base des programmes accélérés ou enrichis, les grands débats qui se déroulent actuellement et ceux qu'il faudra entreprendre. Nous relions tous ces aspects à la formation des enseignants et nous les remettons parfois en question. Les problèmes que soulève la formation des enseignants qui oeuvrent dans le secteur des enfants surdoués revêtent une importance capitale dans la poursuite de l'excellence en éducation.

Programs and services for gifted children are receiving renewed attention in many Canadian schools, at a time when interest in the area already has acquired considerable momentum in the United States and in other countries. For example, in October 1978 the U.S. Congress passed the Gifted and Talented Children's Education Act (U.S. Congress, 1978), which has appropriated up to $50 million in federal grants. With this increased attention, questions about giftedness and the education of the gifted are certain to be asked frequently in the forthcoming months and years. It is therefore appropriate to have a retrospective look at where gifted child education has been, and where it may be going.

When Sputnik went up in 1957, there was a dramatic rise in interest in the education of gifted children in North America. But this positive interest was not sustained. Opponents of education for the gifted claimed that if the youngsters were so bright they could "make it on their own." Other opponents made accusations of elitism. This is about where we were in the mid-1960s.

This paper will summarize some of the developments which have taken place since the 1960s, the major types of programs which have evolved and their underlying assumptions, debates which exist and should exist in the field, and some estimate of what the near future might bring. Since it is impossible to completely separate teacher training for the gifted from gifted child education in general, the two issues will often be discussed together.

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An important source for this paper has been the opportunity during 1977 for the author to visit some two dozen North American universities and school systems catering to the gifted, and to participate in the Second World Conference on Gifted and Talented Children at San Francisco as well as the First Conference at London two years earlier.

THE RESURGENCE OF GIFTED CHILD EDUCATION

Renewed activity in the training and retraining of teachers to work with gifted children was dependent on the re-emergence of school programs for such children in the past decade or so. Of course there are exceptions: Saskatoon, Saskatchewan, and London, Ontario, public schools have had special classes for about four decades, and the Cleveland, Ohio, Major Work Classes have operated since 1922. The existence of a scattering of special programs was insufficient, however, to spur even local universities or teachers' colleges to specially prepare teachers to work in special education. School administrators simply searched the ranks for experienced, able teachers, or were forced by circumstances to rely on seniority or other criteria.

Strangely, the surge of activity for gifted children in the late 1950s did not also produce widespread interest in their teachers. It may have been an expression of lack of confidence, since the bulk of effort went into curriculum reform. New courses in biology, physics, and chemistry were introduced and there was an intentional move to make these new programs as "teacher-proof" as possible. The only general result seems to have been that the educational community became as disenchanted with the overly simplistic educational "technology" being pushed upon it as with the purported benefactors, gifted children.

Whatever the causes, three developments took place in the mid-1960s: the belief that bright children could succeed on their own was slowly turned into a myth, the accusation that teaching these children specially was elitism started to be seen as logically false, and money began to appear to support programs.

Succeeding on their own

It was very difficult to convince anyone, including many teachers, that gifted children need any special attention in school. Some teachers might have been forestalling the removal of the smart children from their classes (their competence to cope with them may have been seen to be challenged, or the class average would drop), but they did have the literature up to that time on their side. In research dating back to 1920, gifted children were depicted as stronger, bigger, healthier, and more attractive, upwardly mobile, and successful than most other children (Terman & Oden, 1951, and 1959). With that advance billing, even the best jokes about bespec-

tacled, weak, and shy eggheads were incapable of warming the hearts of educators and legislators. It was gradually recognized that those conclusions were made mostly with male, middle-class, white subjects who were sampled from school populations on the basis of tests designed to predict school performance in the first place. The results of these studies were not entirely negated, but evidence emerged about high drop-out and low participation rates by gifted girls and minority students, as well as rates of suicide and juvenile delinquency. In many important ways gifted children were having the same problems as other children.

Through this same period, the general retention rate in schools was also dramatically increasing. By the end of high school in earlier decades, gifted youngsters may not have been noticeably different from the relatively small numbers that had not already gone out to work. But the work option disappeared. Gifted children stood out more and more from the often lamented declining average, yet shared many of the same problems as average children. To the exclusion of work, church, and even home, schools became the agency increasingly burdened with the problems of society, and here was but another one.

Elitism

The argument was simple. This is a democracy and no one, especially an already supposedly advantaged group, should receive further advantage. Essentially, this view can be seen as an unwarranted extension of misinterpreted Jeffersonian democracy, whose traditions and certainly rhetoric, if not institutions, also crept or were imported across the boundary into Canada. It is a point of view defended in a manner akin to quoting from the Bible (and not inappropriately, considering the existence of Jefferson's Bible), selecting the passages that suit the case being made. "They" quote "all men created equal" from the United States Constitution. "We" quote from a Jefferson letter to John Adams dated 1813: "I agree with you that there is a natural aristocracy among men. The grounds of this are virtue and talents" (Cited in *National/State Leadership Training Institute on the Gifted and Talented Bulletin*, Bicentennial Supplement, July 1976, p. 5). The compromise is the now popular point of view that equal educational opportunity does not mean the same education for everyone. The arguments of those claiming elitism also reflect the stereotype of the "superhuman" gifted child.

The growing strength of the nonelitist position did not arise from the success of a movement for individualized instruction, partly because there has been little such success. Politics prevailed over pedagogy. Support for this position arrived on the coat-tails of special education for handicapped children, a related but politically separate question. Handicapped educational gains were won on civil rights grounds, opposition to the denial of opportunity to people who did not have what most people had or could

do. Even the most devoted advocates of special education for the gifted must concede that they seek for gifted children the opportunity to achieve what others might not, a question of ends as well as means.

The majority of gifted child education programs in the United States are operated by special education offices (Sisk, 1978). Many teacher trainers in programs for the gifted have found academic homes in departments or divisions of special education, and this focus on teachers has been carried on. Had they been in media or educational technology departments, for example, the question of teacher training for gifted education might still have no audience. One further benefit of this identification with special education is being associated with a commitment to fair treatment for each child.

There are two other important institutional evidences of the special education connection. The Association for the Gifted (TAG) is a division of the Council for Exceptional Children (CEC), a professional association devoted to children with problems, and the Office for the Gifted and Talented is located in the Bureau of the Handicapped of the U.S. Office of Education in Washington. One should not read too much into this limited similarity as voices in TAG are frequently raised in favor of separation. On the other hand, recent proposals to Congress would change the Bureau of the Handicapped to one for Exceptional Persons, both gifted and handicapped, and abolish the Office for the Gifted and Talented (Zettel & Ballard, 1978). Which position represents progress is very difficult to determine. The new act of Congress leaves to the discretion of the Commissioner of Education where within his office the new act is to be administered; no change is presumed.

Financing

The availability of money for gifted education is another derivation from special education. Once large sums were allocated to programs for children with difficulties and for the training of their teachers, it became possible to invoke anti-discrimination provisions in United States legislation to force equal benefits for gifted children. Several individual states have voted equal funding or close to it at both extremes. School program provisions are again finding their way into Canada, at least in those provinces that can ostensibly afford them.

That brings us again to the present. Gifted programs are increasingly common but not yet universal in the U.S.A. In Canada, efforts are scattered but increasingly visible, especially in southern Ontario. There seems to be growing interest at the school and school board level, but not in universities concerned with teacher education. Only five universities and the Ontario Ministry of Education offered courses specifically on giftedness last year, but this number is growing slowly. One university, McGill, has also established a study committee which will conduct research, supervise

graduate studies, and assist inservice development in the area. Where any direct effort exists, it is usually conducted by the school boards.

These have been the main issues which surrounded discussions about whether or not to have programs for the gifted. If it is decided to proceed, then other issues arise concerning what kind of program to provide.

MAJOR PROGRAM TYPES

Two broad types of programs, acceleration and enrichment, are usually described. In the former, students complete school in fewer than the usual number of years, a process frequently limited by laws restricting early school entry and leaving ages, and by concerns about maturity and social adjustment. In enrichment, the curriculum is altered or expanded to give gifted children more advanced and broader learning, without speeding up their progress through the years of schooling, or, if so, only by the rather common skipping of one middle grade. Combined acceleration and enrichment programs also exist.

The challenge for teacher training is immense since, if a school system were to implement any number of these, teachers would have to be able to cope with multi-age classes, children pursuing highly individualized curricula, community contacts, and students who very likely know more than they do about many things. These experiences are rarely anticipated in the coursework of most teacher training, and even less often in practice teaching placements, where student teachers are supposed to demonstrate mastery of "the basics." Little but "the basics" may be going on with which to practise, and pressures of evaluation do not encourage adventures in new directions. To make matters worse, teacher trainers rarely get to choose the exact placements of students, though good will frequently helps in special cases.

There are many reasons why various jurisdictions make different choices from among possible programs. The knowledge base and range of ongoing research in the field is sufficiently weak to put the greatest weight on local traditions and personal preferences. The assumptions which underlie program alternatives therefore are likely to be rationalizations rather than directions for what is done. These assumptions are presented on page 80 in Table 1.

These assumptions vary in the extent to which they are openly espoused or even admitted. It is my impression that the first two and last two are more frequently cited than the others. An understanding of these assumptions should certainly have a place in planning staffing, selection, budget, and courses of study.

In some cases these assumptions appear somewhat negative. Program planners and critics might consider the following examples of how they do not always hold true and how their consequences may be combined to advantage. Not only is it true that basic acceleration costs nothing more in

TABLE 1

Assumptions Underlying Program Alternatives

Assumptions Underlying Acceleration Programs	*Assumptions Underlying Enrichment Programs*
1. Gifted children need to be with their intellectual peers.	Gifted children need to be with their social and chronological age peers.
2. Acceleration has at least no effect on the children, and can be beneficial.	Acceleration has at best no effect on children and can be harmful.
3. Schools have fairly limited objectives and students who accomplish them quickly should move on.	Schools are free to expand on official objectives which are to be regarded as minimal.
4. Education (schooling?) is a linear, cumulative process much the same for all students.	Education (schooling?) is nonlinear, and its parts vary in depth for different students.
5. Acceleration costs less.	Enrichment costs more.
6. Teachers and school administrators are limited by time, training, or inclination to diversify programs.	Teachers and principals are capable of diversifying programs.

itself, but it also saves money and ultimately creates extra revenue. Keeping a student in school for less time costs less money, and that student becomes a taxpayer all the sooner. The injustice in the system is that these savings and earnings never find their way back to the schools to pay for other programs that cost more. The money remains in the coffers of higher levels of government, including the federal. Depending on what is attempted, additional costs need not necessarily be incurred.

The first assumption in each category also presents a problem in that both are probably correct. It is not necessarily mutually exclusive to recognize gifted children's needs for both intellectual and social peers at least some of the time.

There are serious effects of the operation of these assumptions on teachers and teacher training. First, under acceleration there is no special preparation for teaching the gifted, nor for coping with the accelerated gifted child who quickly and typically moves again to the academic front of the new class. On the other hand, the expectation of providing enrichment for children with additional needs puts pressure on teacher-training programs to consider both means of individualization and higher levels of learning (for example, in terms of Bloom, 1956) in some detail.

Once again, the acceleration-enrichment dichotomy needs to be treated with care. To regard it as a true dichotomy implies that the two types of

programs and their concomitants are independent. They are not necessarily so. A gifted child who is accelerated is likely only partly accommodated by being able to move more quickly through the system. If the quality of that child's intellectual processes is indeed also different, then the quality of the learning experience also requires enrichment. Acceleration and enrichment may be useful descriptors, but perhaps they should be demoted from the status of "types of programs" that they are accorded in most of the literature. There may be benefit, with whatever risks, to talking about programs or services for a gifted child, and not about children for particular types of programs.

CURRENT ISSUES IN EDUCATION FOR THE GIFTED

Interviews with personnel in North American programs for gifted students and related teacher training resulted in a list of ten major issues in three categories: theoretical problems, program concerns, and debates regarding the qualifications of teachers for the gifted.

Theoretical problems

The three main theoretical concerns are very closely related. First, despite volumes of texts and papers, there is a continuing debate on the definition of giftedness. The U.S. Office of Education has offered a long definition which is given much support:

> Gifted and talented children are those identified by professionally qualified persons who by virtue of outstanding abilities, are capable of high performance. These are children who require differentiated educational programs or services beyond those normally provided by the regular school program in order to realize their contribution to self and society.
>
> Children capable of high performance include those with demonstrated achievement and/or potential ability in any of the following areas, singly or in combination:
>
> 1. general intellectual ability
> 2. specific academic aptitude
> 3. creative or productive thinking
> 4. leadership ability
> 5. visual and performing arts
> 6. psychomotor ability
>
> It can be assumed that utilization of these criteria for identification of the gifted and talented will encompass a minimum of 3 to 5 percent of the school population.
>
> Evidence of gifted and talented abilities may be determined by a multiplicity of ways. These procedures should include objective measures and professional evaluation measures which are essential components of identification.
>
> Professionally qualified persons include such individuals as teachers, administrators, school psychologists, counsellors, curriculum specialists, artists,

musicians, and others with special training who are also qualified to appraise pupils' special competencies. (U.S. Commissioner of Education, 1972, pp. 10-11)

One problem with this definition is that if one does not believe that the gifted require particular educational provision, then to define gifted children as those needing particular educational provision closes a lot of doors. Strangely, this definition puts the emphasis in later paragraphs on procedures to identify gifted children, when its greatest dependence is on the kinds of programs gifted children are claimed to require. A statement of the general qualities of such programs could have been a valuable part of the definition.

The 1978 act offers an abridged definition:

gifted and talented children means children and, whenever applicable, youth, who are identified at the preschool, elementary, or secondary level as possessing demonstrated or potential abilities that give evidence of high performance capabilities in areas *such as* intellectual, creative, specific academic, or leadership ability, or in the performing or visual arts, and who by reason thereof, require services or activities not ordinarily provided by the school. (U.S. Congress, 1978, p. 1)

This is a better definition than the 1972 version in that the identification issue is set aside. It still makes the assumption that giftedness is a quality that includes different ways of learning.

Vernon, Adamson, and Vernon (1977) suggest a simpler definition. Gifted children "are outstanding in general intelligence, and/or in one or more areas of special talent" (p. 57). They suggest an IQ of 130 as a cutoff for the former, and 120 for the latter. This definition is "safer," but perhaps less encouraging to school personnel, both by making no reference at all to school programs and by so bluntly — not necessarily inappropriately — stating the place of the measure of IQ.

The problem in practice is that every new program committee seems to want to invent its own definition, perhaps due to fear of the implication of mental testing, a fear complicated by the prohibitions to its use in educational selection in such places as California. There is another related issue, the poorly defined position of the supposedly required special program for the gifted.

The second problem is identification. Naturally, the less precise one's operating definition, the more difficult it will be to assess the eligibility of a given child for a program. Test results must also be given a reasonable weight with teacher, peer, and parent nominations, as well as other considerations. One also faces the problem of almost certainly identifying more gifted children than the system is set up to accommodate. U.S. sources have estimated that some 12% of the gifted (Sisk, 1978), up from 4% in 1972, are being served in any real way and there are still underrepresented groups. Furthermore, even as precisely stated definitions as

the two examples above will produce an extremely heterogeneous group of children.

The third theoretical issue is the weak knowledge base for what is done in gifted child education. So much need is unserved that the call to provide service swamps most professionals' interests and time. Research is scarce and therefore contributes much less than experience, good will, faith, and dedication to the education of the gifted. Most doctoral programs are practitioner-oriented, evident in the activities of staff (e.g., operating community projects for gifted children), the career aspirations of students, and the nature of students' field experiences (Current degree programs in gifted education, 1977). This is not to say that the people involved have their priorities wrong, but a mere handful of institutions and researchers in the field are primarily devoted to scholarly enquiry on giftedness, despite widespread expression of the need for a better knowledge base. The key issues receiving study are the qualitative differences in how the gifted learn, early reading, gifted females, delinquency, and special concerns such as cultural minorities, the poor, and physical, medical and emotional handicaps. In addition, The Association for the Gifted has established a Knowledge Production and Utilization Committee.

Practical problems

There seem to be three areas of current debate on matters related to the operation of programs for gifted children. First, should such programs be in school on school time, or elsewhere at other times? Second, assuming the program is in school, to what extent should the gifted be integrated with other children? Arguments range between the absolutes at both ends of that spectrum. Once consensus is reached on "some of both," the problem of exactly how much remains. If we are lucky, the existence at last of an increasing number of school programs of some variety will permit measurement of optimal conditions. Regrettably, not many students were observed being trained to conduct good program evaluations, so that particular field of research might not receive adequate attention despite the opportunity.

The third program problem is the relative lack of participation by assorted minorities and women. This issue is receiving the most research attention of any, again likely in the wake of legislative, official, and popular interest in the status of women and minorities. Probably because so many United States projects are dependent on "soft" money from government and other agencies, they must reflect current funding priorities in their activities.

Teachers

Four debates exist with regard to teachers of the gifted. First, should they be specialists or generalists? There is still a strong opinion that students

should "complete a liberal arts course of study" (Gowan, 1977, p. 286) before specializing. Even existing programs for teachers of the gifted vary considerably, from a focus on interpersonal relations and a humanistic context to highly structured instructional design and educational media. The only recurring element observed was a survey course on the psychology of such children.

The second debate is whether or not teachers of the gifted should be gifted themselves (Gold, 1976). When consideration is given to the effects such a limitation would have on the availability of personnel, the discussion quickly shifts to other personality qualities, a matter not unique to the education of the gifted.

Third, disagreement exists about whether teacher training for the gifted should be inservice or preservice. It is readily observed that the greatest part of it is retraining, not training. There are, however, a couple of serious efforts to develop bachelor's-level training programs. The claimed advantages are greater control of selection when dealing with students than with licensed teachers, and the opportunity to offer preservice contact with gifted children usually through community programs run by the college. The most obvious rebuttal is that good teachers in the field may be overlooked.

The fourth debate is about whether such training should be at the undergraduate level. The winning position will depend on the outcome of the preservice-inservice argument. Preservice training is almost universally undergraduate, in bachelor or diploma programs. Inservice training, if it leads to a formal certificate, is increasingly at the graduate level, at least nominally. Not all teachers, of course, qualify academically for admission to graduate programs, but such a criterion might be appropriate regarding the gifted.

Sources of answers

There are some extremely promising lines of research underway which might point to future resolution of some of these debates. The most developed is on the outcomes of "radical" acceleration of mathematically and scientifically able teenagers to university, with excellent academic results, and apparent social and emotional benefits rather than harm (when there is any difference to report). Studies of gifted women, partly in that same acceleration program, have begun to inform us about the importance in students' perceptions of the role played by female instructors in motivating them to achieve in stereotypically male subjects. Studies of gifted delinquency may shed some light on the reasons for more such youngsters to be extremely able than anyone might first guess. Research is also in progress on the structure of intellect and creativity, knowledge utilization, and learning styles, as well as identification among the very young and "headstart"-type intervention in poor households. There are

also studies of early reading and biological correlates of giftedness. Finally, several developmental projects are underway in materials for teacher training and programs for the gifted handicapped.

This is a very encouraging list of research topics. The discouragement lies in the small number of scholars who are largely devoted to any one of these studies. Several people visited noted that their backgrounds prepared them better for a practitioner's role. A consortium of some 12 doctoral programs co-ordinated by Columbia University has some potential for helping, but it seems not yet to have made explicit a high-level research apprenticeship part of the exchange system proposed for students accepted, and existing programs have nowhere been identified openly as committed to research as contrasted with program operation. Neither has the consortium made a highly visible commitment to the evaluation of these programs on a formal basis.

DEBATES TO BE HELD

It is interesting that in the visits several questions were seldom if ever asked that require greater attention. The paper will conclude with six such issues, and a few comments on each of them. These debates are in two categories: programs and teacher training.

The first program-related debate that needs to be staged is reflected in the most frequently repeated comment: "if we could only get some more money. . . . " There really has not been a convincing argument that to do anything at all for gifted students must cost school systems or the teacher in a classroom more dollars than are usually available. As pointed out earlier, there is potential, perhaps remotely, for some reallocation of revenue among parts of a varied gifted program without taking from others. It does not cost more to release children from the scheduled class activity to do something else, and to make use of volunteers, retired people, sunny corridors, and peers. Someone does have to decide to do it, and more. This does not deny the benefits of money, it only denies many of the problems surrounding its absence. Such continued pursuit of extra funds also adds to the dependence on politicians and the bureaucracy, and the desirability of this is questionable (Ward, 1977). Such dependence may also be a bond in the relationship to special education.

The second issue occurs when implementing a new program. What comes first — selecting the students who will participate, or defining the details of the program? Of course, there can be some accommodation once underway, but not always easily or completely. For example, if a school district set out to identify all its gifted children, by whatever definition, it might not be able to provide the services needed within the limits of its fiscal and especially human resources. Community expectations can also be prematurely raised to unfair levels.

Perhaps the resolution of this issue would be assisted by expanding the definition of giftedness to include some characteristics of the exceptional education provisions required. Possibilities include courses of study, teaching and learning methods, and classroom practices which maximize initiative and self-direction and which give priority to cognitive and affective processes at the higher levels of functioning. Administrative provision for a multiplicity of programs, flexible admissions, and liaison with other institutions seem no less reasonably a part of a definition of differential education for the gifted than an IQ of 120 or 130 is a part of the definition of a gifted child. Then perhaps it would be easier to attend to building good programs first, and afterwards making certain we find all the students who can benefit from them.

The third program issue is the responsibility of public schools for the specific education of the artistically gifted. Responsibility for education in dance, art, and music has remained with or reverted to parents willing and able to pay for them privately. In some places, dance, art, and music have disappeared completely from the course of study and the list of teachers' specializations.

There are two implications for teacher training and selection. First, one must ensure the availability of training programs. Second, the manner of deployment of staff to schools, the inclusion of specialists in student-teacher norms (hence raising class size when a school elects to have a specialist), and the willingness to seek the benefits in program excellence, fall at least partly on the shoulders of teachers and their educators.

The first of the three absent debates directly concerning teachers is whether teachers of the gifted should have a specific background in the study of giftedness and gifted child education. This goes beyond the preservice-inservice question. The fascinating observation is that most of the senior people in the area do not have such a background themselves. The main contributions made in the past five decades have come from psychologists, educators, biologists, special educators, and others who largely out of interest came into the area of giftedness. Will their prodigies, specifically educated about giftedness, be able to make the same kinds of contributions? The unstated assumption is "yes," but the number of pathways to a career in the area may be limited.

Ensuing directly is the question of whether or not teachers of the gifted should be licensed or certified, as most special education and some other specialist teachers are. The historical association with special education accounts for some of this pressure, but so does the feeling that specific training regarding the gifted is a good thing. Opponents say no, certification will ossify training practices, reduce flexibility in selecting the best teachers, and increase pressure in favor of segregated classes on a full-time basis or itinerant teachers. There are proponents of both sides, but the issue has not been raised with a view to some resolution.

Finally, is it time to break the ties with special education? This question has definitely been raised at the organizational level, specifically by TAG splitting away from CEC. However, the issue extends much further. Should programs for the gifted continue to look for a place in association with programs for the handicapped? Should teachers be enrolled in special education departments with their frequent (and necessary) focus on microscopic educational questions and attractions for public sympathy? Special educators currently challenge insufficient integration, while the gifted may suffer from insufficient segregation. Are, in fact, teachers of gifted children special educators as the term has come to be used? Is it all to the children's advantage that they even be the special province of any cadre of teachers? From where, in the research which is developing, will come inspiration for answers to some of the problems of teaching the gifted? Have the advantages of the link to special education been outweighed? What will be the consequences of the current integrationist swing in special education? Serious debate at these levels could be very useful.

CONCLUSION

It was my hope to look profoundly into the future as a conclusion to this paper. To some extent, that future is visible. There will be more programs and services for gifted children, and probably more inservice training for their teachers. These programs will also be quite diverse, but I fear that they may not receive a sufficient level of co-ordination and evaluation.

I suspect that an important impetus to future progress might be more explicit specification of characteristics and standards for the curriculum of programs for the gifted. The critical concern is what goes on when we work with such children. We basically know how to find the children when we set out to do so. The first criterion for success is not the average IQ of the group, or how large it is, but whether or not the program's goals are set appropriately and the children and teachers can cope with them. This is not to say all the answers are anywhere nearly known. However, such an approach would give needed focus to the problems of definition and selection of children, and to the selection and training of their teachers and other responsible personnel.

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