DOCUMENT RESUME

ED 385 960 EC 304 138

AUTHOR Belcastro, Frank P.
TITLE Richardson Study: U.S. vs. Iowa.
PUB DATE [17 Jul 95]
NOTE 47p.
PUB TYPE Reports - Research/Technical (143) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Academically Gifted; Acceleration (Education); *Delivery Systems; *Educational Practices; Educational Quality; Elementary Secondary Education; Enrichment Activities; Inservice Teacher Education; Program Descriptions; Questionnaires; *Rural Education; Special Classes; *State Surveys
IDENTIFIERS *Iowa; *Richardson Study

ABSTRACT

Using a questionnaire developed for a 1985 national survey of educational practices for gifted students in both public and parochial schools (the Sid W. Richardson Study), this study surveyed 273 Iowa school districts in 1993 to determine types of programs in existence in Iowa schools and how Iowa schools differed from the nation's schools in its responses. The study gathered information on 16 program types which constitute practices or approaches judged appropriate for gifted students. Program types are: (1) enrichment in the regular classroom, (2) part-time special class, (3) full-time special class, (4) independent study, (5) itinerant teacher, (6) mentorships, (7) resource rooms, (8) special schools, (9) early entrance, (10) continuous progress, (11) nongraded school, (12) moderate acceleration, (13) radical acceleration, (14) College Board and Advanced Placement participation; (15) fast-paced courses, and (16) concurrent or dual enrollment. Comparison with the Richardson findings suggested that, overall, Iowa schools had more negative significant results than positive significant results. These negative results included significantly fewer supervisory staff responsible for gifted programs, significantly lower per pupil expenditures, and significantly fewer schools with special funding for gifted students. Positive results included significantly more schools in which all teachers participated in inservice training and significantly more use of libraries. The questionnaire is appended. (Contains 15 references.) (DB)

Richardson Study: U.S. vs. Iowa

Frank P. Belcastro

University of Dubuque

RICHARDSON STUDY: U.S. VS. IOWA

RICHARDSON STUDY: U.S. vs IOWA

In 1981 30 leaders in the field of gifted education were issued invitations to attend a conference in order to examine the then current practices in the field of gifted education. This conference was the official launching of the Sid W. Richardson Study, a national study to help make informed decisions that could have an impact on improving education for high ability elementary and secondary students (Cox & Gluck, 1989).

Part of the study included a national survey of public and parochial school districts which provided a profile of the current status of educational practices for gifted students throughout the nation. It is the fullest report on the then current educational practices for gifted students. The complete report was published in 1985 (Cox, Daniel, & Boston, 1985).

The study gathered information on 16 program types which constitute practices or approaches which are appropriate for gifted students.

The program types are:

1. Enrichment in the Regular Classroom
2. Part-Time Special Class
3. Full-Time Special Class
4. Independent Study
5. Itinerant Teacher
6. Mentorships
7. Resource Rooms
8. Special Schools
9. Early Entrance
10. Continuous Progress
11. Nongraded School
12. Moderate Acceleration
13. Radical Acceleration
14. College Board and Advanced Placement
15. Fast-Paced Courses
16. Concurrent or Dual Enrollment

The national study determined which programs were most effective and offered the best chance for adaptation to many environments. However, it would be necessary to determine which program types were in existence in the state of Iowa in order to make use of this information for Iowa schools. Therefore, the purpose of this study was to determine which program types were in existence in Iowa and how Iowa differed from the nation in its responses to the survey.

During the spring of 1993 the national questionnaire (see Appendix A) was sent to the 431 public school districts in Iowa. Two hundred seventy three or 63% of the school districts responded.

Iowa Results

Sample characteristics. Following are some of the

general characteristics of the responding Iowa school districts.

1. Fifty percent of the responses were from communities with a population of less than 650; 75% were from communities with a population of less than 1200; 12% were from communities of more than 2000.
2. One hundred percent of the respondents were from public, coeducational schools.
3. Twenty-four percent of the students in the school responding were receiving free or reduced-price lunches.
4. An average of 23% of the teachers working with gifted students had master's degrees.

There are numerous ways in which Iowa school districts do not differ significantly from the nation's school districts in their responses to items on the national questionnaire. However, their significant differences are important in order to determine exactly where Iowa is better than or worse than the national average in programming for gifted students. These significant differences will help school districts to decide in which areas definite improvement or additions are necessary and in which areas less attention needs to be paid. Those differences that were statistically significant but not of practical significance were not considered in this report.

Statistical procedure. The chi square statistic was used to analyze the comparison of the categories of Iowa schools and the nation's schools in this study.

Significant positive results. The results in which Iowa scored significantly higher than the nation are labelled positive; however, that does not absolve Iowa school districts from the responsibility of making improvements in these areas.

1. Percentwise, Iowa schools (74.6%) had significantly more schools in which all of the teachers participated in inservice training on a regular basis than did the nation's schools (64%).

2. Percentwise, Iowa schools (98.8%) used the library significantly more as a resource for its gifted programs than did the nation's schools (91%).

3. Percentwise, Iowa schools (56.8%) used mentors significantly more as a resource for its gifted programs than did the nation's schools (50%).

4. Percentwise, Iowa schools (91.1%) had significantly more schools that had a written philosophy for educating gifted students than had the nation's schools (73.8%).

5. Percentwise, Iowa schools' (63.7%) lack of goals for gifted students written at the building level was significantly less than the nation's (77%) lack at that level. It is better to have goals written at the

district level with modifications made for unique situations at the building level.

6. Percentwise, Iowa schools (76.7%) used teachers in its advisory group for gifted programs significantly more than did the nation's schools (63%).

7. Percentwise, Iowa schools (70%) used administrators in its advisory group for gifted programs significantly more than did the nation's schools (61%). Care must be taken, however, not to permit the administrators to dictate or unduly influence the advisory group's decisions.

8. Both the nation's schools and Iowa schools established less special procedures at the building level for evaluating gifted programs, but Iowa schools (65.1%) had significantly less schools that lacked these special procedures than did the nation's schools (77%).

9. Percentwise, Iowa schools (86.5%) made significantly more special additional budgetary provisions for gifted students than did the nation's schools (76.5%). While laudable, this was made necessary because Iowa schools spend significantly less per pupil than do the nation's schools.

10. Percentwise, of the special additional budgetary provisions for gifted students, Iowa schools (76.5%) had significantly more special funding available for

gifted students at the local level than had the nation's schools (49%). Also laudable, but this funding should have been available at the federal and state levels making local funding unnecessary.

11. Where enrichment activities were provided for gifted students in the regular classroom, significantly more Iowa schools enriched the social studies (46.2% vs. 38%) and multidisciplinary areas (54.9% vs. 43%) than did the nation's schools.

12. Where enrichment activities were provided for gifted students in the regular classroom, significantly more Iowa schools (88.8%) used curricular materials different from those used in the regular program than did the nation's schools (66%).

13. Where itinerant teachers of the gifted were provided, significantly more of these teachers in Iowa schools served less than five schools (91.1% vs. 69.4%) and significantly less of them served 5 - 10 schools (8.1% vs. 22%) than did similar teachers in the nation's schools.

14. Where itinerant teachers of the gifted were provided, significantly more of these teachers in Iowa schools traveled less than 50 miles per week (85.9% vs. 74.3%) and significantly less traveled 50 - 100 miles per week (8.1% vs. 18.5%) than did similar teachers in the nation's schools.

15. Where resource rooms were provided for gifted students, significantly more Iowa schools (93.8%) had a special teacher of the gifted in charge of the resource room instead of a librarian or an aide than had the nation's schools (56%).

16. Where resource rooms were provided for gifted students, significantly more Iowa schools (76.8%) had that room located in a separate room rather than in the library compared to the nation's schools (59%). However, that separate room should be located near the library for ease of use.

17. Where school districts had an early entrance policy of allowing students to enter a school earlier than the normal age for that district, significantly less Iowa schools (20% vs. 78%) made the kindergarten available and significantly more made both the junior high school (40% vs. 15%) and senior high school (53.3% vs. 16%) available as a provision for early entrance than did the nation's schools. Very young gifted students are neglected and often unidentified. More provision for early entrance into kindergarten should be made available so that these students are encouraged and are challenged early rather than being taught by default that everything comes easily and that being better is unimportant. And while Iowa schools are significantly better than the nation's school in junior

and senior high school early entrance, 40% and 53.3% are still low compared to the 100% that they should be.

18. Where school districts had an early entrance policy of allowing students to enter a school earlier than the normal age for that district, significantly more of Iowa schools used achievement tests (86.7% vs. 28%) and teacher recommendation (80% vs. 36%) as a basis on which early assignments were made than did the nation's schools. The nation's schools relied almost exclusively on ability tests; Iowa schools used more varied criteria.

Significant negative results. These are the questionnaire items in which Iowa schools were significantly worse in meeting the needs of gifted children compared to the nation's schools.

1. Percentwise, Iowa schools (68.2%) had significantly less staff members at the supervisory or administrative level responsible for the gifted programs than did the nation's schools (85.6%). Without administrative responsibility and oversight, gifted programs do not receive the needed attention at the level where funding and resource decisions are made. Ownership of the gifted programs is absent and neglect is the inevitable consequence.

2. Percentwise, Iowa schools (47.9%) used the museum significantly less as a resource for its gifted

programs than did the nation's schools (56%). Even though many Iowa schools are located in rural areas or small towns and thus farther from museums than city schools, concerted efforts should be made for gifted (and other) students to visit museums. Field trips in combination with other schools in the area would help defray expenses and have social advantages as well.

3. Percentwise, Iowa schools (42.9%) used industry significantly less as a resource for its gifted programs than did the nation's schools (51%). Of course, there is less industry located in Iowa than in other states and it is generally concentrated in large city areas. Nevertheless, efforts in the form of field trips should be made to for gifted students to visit industry because it is an important part of our nation and touches on many academic areas.

4. Overall, per pupil expenditure in Iowa schools (20.2%) was significantly less than per pupil expenditure in the nation's schools (79.8%); however, per pupil expenditure in Iowa schools in the $2501 - $3000 range (58.3%) was significantly more than per pupil expenditure in the nation's schools in that range (12.1%) while per pupil expenditure in Iowa schools in the $1500 - $2000 range (0.8%) was significantly less than the nation's schools in that range (32.8%). That

the nation's school spend four times as much per pupil than does Iowa schools has implications for gifted education. If gifted education were treated equally with other school programs (and it is not), this discrepancy would extend to the gifted programs as well. This means that Iowa schools only expend at the most only one-fourth on its gifted students compared to the nation's schools expenditure for gifted students. That this should be addressed by the Iowa legislature immediately is an understatement and a deprivation of the opportunities to develop these students to their fullest potential.

5. Eighty-five percent of the nation's schools and 95% of Iowa schools had no special funding available for gifted students at the federal level. Of the remaining schools, Iowa schools (4.9%) had significantly less funding available at the federal level than did the nation's schools (15%). One of the major shortcomings in the area of gifted education has been the lack of funding and support at the federal level. With P.L. 94-142, Education for All Handicapped Children Act, children at the lower end of the intelligence scale along with other handicapped children are recognized as needing federal assistance. Gifted children are also handicapped in that their growth is stunted without federal support to fund a

specialized education for them. They must crawl when they could be flying; the intellectually gifted must endure reading material at their grade level when they are reading three, four or more grades above grade reading level and often hit the ceiling of their teacher's knowledge; creatively gifted students are limited by the lack of expertise on the part of their regular teachers. Truly, the gifted should be included in the definition of the handicapped in PL 94-142.

6. Where enrichment activities were provided for gifted students in the regular classroom, significantly more Iowa schools (39.9%) involved all of the class in those activities than did the nation's schools (26.7%). If enrichment activities are to challenge gifted students through the higher order thinking skills of analysis, synthesis, and evaluation, then the whole class cannot be involved since the regular students cannot operate at those three levels. If the whole class is involved, either the material is too hard for the regular students or too easy for the gifted students. In addition, research indicates that regular classroom teachers make very few modifications in their instruction for gifted students (Tomlinson, 1995; Westberg, Archambault, Dobyns, & Salvin, 1993). Eventually, movement should be toward the continuous progress program and then to the full-time special

class program.

7. Where enrichment activities were provided for gifted students in the regular classroom, significantly more Iowa schools (75.1%) allotted less than three hours per week for those activities than did the nation's schools (55.8%). Because gifted students learn in a fraction of the time that regular students do, there is time in the class day to engage in enrichment activities; but regular students have little if any time left for enrichment activities. This conflict results in the above finding which deprives gifted students of enrichment time because they are included in the classroom with regular students. When gifted students are placed in classes with only gifted students for their areas of giftedness and with the regular students for all other activities, this deprivation will end.

8. Where enrichment activities were provided for gifted students in the regular classroom, significantly less Iowa schools (67.2%) used individualized instruction as an enrichment strategy than did the nation's schools (82%). If gifted students must be in the regular classroom, then individualized instruction is a logical strategy to accommodate gifted students. This does not seem to occur enough in Iowa schools and it should.

9. Where pull-out programs were provided, significantly less Iowa programs met one day a week (30% vs. 50%) or five days a week (9.6% vs. 25%) but significantly more met 2 - 4 days week (60.4% vs. 36%) than did similar programs in the nation's schools. It is not inherent that gifted students are gifted at certain times and not at other times; it is not inherent that they are gifted only one or two days a week or certain times during the day. They are always gifted. What is necessary is to be challenged and to be given the time in which to used their gifts. Gifted students should be in classes with other gifted students that meet five days a week. Gifted students are affected when they spend extended periods of time with regular students where the ceiling of expectations are those of the regular students and thus too low for the gifted students. In these situations, the gifted students' capacity is bent, misshapen and malformed, exactly as their bodies would be if placed in physical spaces where the ceilings are too short for their heights. A conclusion of the Richardson Foundation study is that pull-out programs are a part-time solution to a full-time problem (Cox & Daniel, 1985). There are many disadvantages to the pull-out program; foremost being that it is not a total program because it is isolated, fragmented, time-limited, lacks

continuity, and lacks integration and coordination with other school programs (Cox & Daniel, 1984).

10. Where pull-out programs were provided, significantly less Iowa programs had 1 - 2 hour classes (33.8% vs. 42%), significantly less had more than 2-hour classes (7.5% vs. 33%) but significantly more lasted less than one hour (58.8% vs. 31%) than did similar programs in the nation's schools. Where gifted programs are tied expediently to the length of periods in the schools (usually less than one hour), then the program suffers unless demands are made for greater lengths of time in a day for gifted programs. These hours are nominal and the curriculum is most often unrelated to the scholastic demands of students who have mastered at least half of the curriculum before the start of a school year, which is the case at the elementary level.

11. Where part-time special classes were provided (with students of similar ability part of the time) for gifted students, significantly less Iowa special classes studied mathematics (27.6% vs. 42%), science (25.4% vs. 37%), English/language arts (29.4% vs. 51%) or social studies (21.9% vs. 31%) in the classes and significantly more classes studied multidiciplinary content areas (83.3% vs. 62%) and other content areas (21.5% vs. 9.2%) than did similar classes in the

nation's schools. Too often, part-time special classes and pull-out programs are seen as non-academic programs where students engage in challenging activities in their areas of giftedness or in areas other than the traditional school program. For the intellectually gifted, this means studying incontent areas which are three or four or more grades below the grade levels of their knowledge. In the part-time special classes and pull-out programs, students should be advancing beyond the grade levels of their knowledge in the traditional areas listed above. Too often, "multidisciplinary" means snippets of this and that without regard to scope and sequence of any areas--a poor substitute for advancement in the traditional academic subjects.

12. Where full-time special classes for gifted students were provided (with students of similar ability all of the time), significantly less Iowa classes studied science (33.3% vs. 53.1%), English/language arts (50% vs. 70%), or social studies (25.9% vs. 43%) in the classes than did similar classes in the nation's schools. One wonders what students did in these full-time special classes in Iowa since the traditional academic subjects were barely covered. Challenging activities such as puzzles and mystery solving have its place but are no substitute for the

primary purpose of the school.

13. Where full-time special classes for gifted students were provided, significantly more Iowa classes (29.1%) provided the same curricular materials as those studied in regular classes than did similar classes in the nation's schools (14.7%). Since gifted students learn faster than regular students, what will the teacher do near the end of the year when those curricular materials are learned early? If the teacher goes on to the curricular materials of the next grade, then much has been accomplished. However, schools seldom do this. This means that gifted students are taught at the same pace as the regular students with a consequent loss of the additional subject matter that they could have learned. What is necessary is subject matter that is taught in a different way so that it challenges gifted students to think at a higher level--to analyze, synthesize, and evaluate.

14. Where full-time special classes for gifted students were provided, significantly more Iowa schools (24.1%) used self-selection as opposed to having specific selection criteria in assigning students to these classes than did the nation's schools (5.0%). Although 75.9% of Iowa schools did not use self-selection in assigning students to full-time special classes, that per cent is still significantly less than

the 95% of the nation's schools that did not use self-selection. That nearly one-fourth of Iowa schools carelessly permitted anyone who wanted to attend these full-time special classes for the gifted defeats the purpose of these classes: to have a homogeneous group that can move rapidly through academic material and at a different intellectual level without being held back by the average and above average students.

15. Where independent study was provided for gifted students, significantly more Iowa schools allotted less than three hours per week to it (66.7% vs. 57%) and significantly less Iowa schools allotted more than five hours per week to independent study than did similar programs in the nation's schools (0.8% vs. 9%). While independent study hours needed vary by student maturity and student project, the aliotted hours should be generous with restrictions set individually by the parent or teacher of the gifted child.

16. Where independent study was provided for gifted students, significantly less Iowa schools provided mathematics (30.2% vs. 41%) and English/language arts (32.5% vs. 42%) as a content area and significantly more provided multidiciplinary studies (66.7% vs. 55%) as a content area for independent study than did the nation's schools. While gifted students are encouraged to seek and make connections among the various

disciplines, the traditional subjects will be the one studied in colleges and universities and more schools should provide for them as independent study than the barely one-third of the schools that the survey shows.

17. Where itinerant teachers of the gifted were provided, significantly less of these Iowa teachers (35.4%) taught in a permanent classroom assigned for that purpose than did similar teachers in the nation's schools (53.1%). While space in schools is always a problem that has competing interests, having or not having a permanently assigned classroom is an indication of the worth of a program by the administration. Evidently, in Iowa itinerant teachers of the gifted are not considered as worthy as some other programs. This attitude is not lost on the gifted students and their families and on the other personnel in the school as well. This cannot help but impinge negatively on the learning as well as the treatment of these gifted students.

18. Where mentorships were provided for gifted students, significantly more Iowa schools allotted less than three hours per week (63.3% vs. 38%) and significantly less of them allotted 3 - 5 hours per week (8.3% vs. 22%) of school time to a student to work with a mentor than did the nation's schools. While mentorship hours vary by student maturity and the

project involved, the allotted hours should be generous with individual hours set by the teacher or the mentor in consultation with the teacher.

19. Where mentorships were provided for gifted students, significantly more Iowa schools (82%) used school staff as mentors than did the nation's schools (55%). When school staff are used as mentors, opportunities are lost to have experts in a wide variety of fields interact with gifted students both academically and socially. Using school staff, expert as they might be, is an expedient way to provide minimal service.

20. Where resource rooms were provided for gifted students, significantly more Iowa students spent less than three hours (77.2% vs. 52%), significantly less spent 3 - 5 hours (21.9% vs. 42%), and significantly less spent more than five hours (0.9% vs. 11%) in such a room compared to gifted students in the nation's schools. Both enrichment programs and individualized learning require the use of resources. Generally, the less time spent in the resource room, the more restricted the scope of the work of the gifted students. Teachers of gifted students should encourage students to make more use of the resource room and make more assignments that require the use of resources.

21. Where resource rooms were provided for gifted

students, significantly less Iowa schools (55%) had films available in those rooms than did the nation's schools (67.1%). Films uniquely provide information and concepts that are difficult to obtain: slow, fast and regular motion; sequences of events; poignant moments; close-ups of events; and magnification of microscopic material. To deny students these aspects is to limit the education of these students.

22. Where districts had a continuous progress policy of allowing students to progress through the curriculum of one or more subject areas as the required skills were mastered, significantly less Iowa schools (62.2%) used the elementary school as the level at which this occurred than the nation's schools allowed (80.1%). One major characteristic of gifted students, perhaps the key characteristic, is that their rate of dealing with new information is much faster than average. Evidence for this comes from both evaluation of gifted students' learning in classroom situations as well as from experimental psychology (George & Denham, 1976; Keating & Bobbitt, 1978). It follows that schools should use full-time special classes as a policy and as early as possible.

23. Where districts had a continuous progress policy of allowing students to progress through the curriculum of one or more subject areas as the required skills

were mastered, significantly less Iowa schools (52.4%) used language arts as a content area in which students could advance at their own pace than the nation's schools allowed (73.1%). Even more than mathematics, language arts is a content area that is vitally important for communication and interaction. More Iowa schools should use this area as a content area for continuous progress for gifted students.

24. Where districts had a continuous progress policy of allowing students to progress through the curriculum of one or more subject areas as the required skills were mastered, significantly more Iowa schools had less than 5% (47.4% vs. 26.6%) and significantly less had more than 20% (5.3% vs. 27.6%) of its students functioning above grade level in one or more content areas that particular year than did the nation's schools. Compared to secondary schools, elementary schools have the larger enrollment. When significantly less Iowa schools use the elementary school for continuous progress programs (see # 22), it can be expected that less gifted students will be functioning above grade level. The remedy is to offer more continuous progress programs at the elementary level. A major advantage of continuous progress programs is that gifted students are not held back at the pace of the regular students and thus do not waste learning

time until the school year is over. A motivational factor in the continuous progress programs is that gifted students are with their intellectual peers.

25. Where schools offered the College Board Advanced Placement (AP) program, significantly less Iowa schools (25.8%) offered American History as an advanced placement course than did the nation's schools (58.1%). This may be a function of the very small enrollments in over half of Iowa schools districts (see #1 under sample characteristics) where there might not be enough gifted students to form a class. Nevertheless, the opportunity should not be denied to gifted students to enroll in Advanced Placement American History because of the size of the school district. Combining gifted students from several neighboring school districts to form such a class might be a solution.

Recommendations

1. Even though Iowa schools and the nation's schools did not differ significantly in many areas and items on the national questionnaire, there were many of those areas in which both scores were low. It is recommended that the Iowa Department of Education and the departments of education of the other 49 states make all attempts to increase the number of schools in their states in those areas where the per cents were low.

2. Even though Iowa schools scored significantly

higher than the nation's schools on some items of the national questionnaire, the Iowa per cent in many cases was low. It is recommended that those deficient Iowa schools:

a. include all the teachers as participants in inservice training on a regular basis;

b. use mentors more as a resource for its gifted programs;

c. cease the practice of writing goals for gifted/talented on the building level and encourage the school district to set district-wide goals;

d. include more teachers in its advisory group for the gifted program;

e. increase the number of administrators in its advisory group for gifted programs;

f. cease establishing special procedures at the building level for evaluating gifted programs and encourage the school district to establish these procedures at the district level;

g. increase local special funding available for gifted students while encouraging the state legislature to give the gifted the same fiscal consideration that it gives to handicapped students;

h. include social studies as an enrichment activity for gifted students in the regular classroom;

i. locate resource rooms for gifted students in

separate rooms rather than in the libraries.

j. make all levels from kindergarten through senior high school available for early entrance for gifted students.

3. Where Iowa schools scored significantly lower than the nation's schools on the questionnaire, it is recommended that the deficient Iowa schools:

a. increase the number of staff members at the supervisory or administrative level responsible for gifted programs;

b. use both the museum and industry as resources for its gifted programs;

c. increase per pupil expenditure to at least match average per pupil expenditure on the national level;

d. contact their federal legislators in order to increase the very low special funding available for gifted students at the federal level;

e. do not involve all of the class in regular classrooms in enrichment activities provided for gifted students but separate these activities; provide full-time special classes, instead;

f. allot more than three hours per week for enrichment activities that were provided for gifted students in the regular classroom; provide full-time special classes, instead;

g. use individualized instruction as an enrichment

strategy where enrichment activities were provided for gifted students in the regular classroom; instead, provide full-time special classes.

h. meet five days a week for pull-out programs that are provided for gifted students; substitute full-time special classes, instead;

i. provide for two or more hours per class for pull-out programs for gifted students; replace pull-out programs with full-time special classes;

j. study mathematics, science, English/language arts, and social studies in the part-time special classes provided for gifted students;

k. study science, English/language arts, and social science in the full-time special classes provide for gifted students;

l. do not provide the same curricular materials for gifted students in full-time special classes; provide differentiated materials that challenge the gifted at their levels of achievement and on higher thinking levels;

m. do not use self-selection as the only criterion in assigning students to full-time special classes; instead, have specific selection criteria to accomplish this;

n. allot five or more hours per week to independent study for gifted students;

o. study mathematics and English/language arts as content areas in the independent study program for gifted students;

p. provide a permanent classroom for itinerant teachers of the gifted;

q. allot five or more hours for gifted student to work with mentors in a mentorship program;

r. use less school staff and more outside experts for gifted students in mentorship programs;

s. allot five or more hours for use of in a resource room for gifted students;

t. have films available in resource rooms that were provided for gifted students;

u. especially use the elementary schools to implement a continuous progress policy;

v. use language arts as an area in which students could advance at their own pace in continuous progress programs;

w. offer American History as an advanced placement course in the College Board Advanced Placement program.

4. All schools both in Iowa and on a national level should apply the seven basic principles that all gifted programs should meet before being implemented by asking the following seven questions (Belcastro, 1987):

a. Is the gifted program curriculum tied to the regular curriculum?

b. Is there a rigorous identification procedure?

c. Is the program in effect every day, all day?

d. Does the program provide placement and interaction with intellectual peers?

e. Is faster pacing of the class facilitated?

f. Are students challenged at their own level using different strategies?

g. Are teachers selected who are trained in gifted education?

5. Aim to have the full-time special class as the primary program for gifted students but apply the seven basic principles (Belcastro, 1987) to that program. This program is the best option to promote the academic, social, and emotional growth of gifted students (Willis, 1995). This applies to other gifted programs as well; results indicate that accelerated students and students in gifted classes have better perceptions of their social relationships and emotional development and tend to have fewer serious school behavior problems than regular students (Saylor & Brookshire, 1993).

6. For the most advanced students, mentorships and acceleration opportunities such as taking college classes while in the middle school or high school would help meet their needs. Research has shown that these students are able to do college-level work in

mathematics and physics while still in middle school and high school (Ravaglia, Suppes, Stillinger, & Alper, 1995).

7. Those Iowa teacher interested in developing an Advanced Placement course should take advantage of a unique opportunity for training at little cost by applying for an Iowa AP Enhancement Grant available through the Iowa Department of Education.

Conclusions

1. Iowa schools had more negative significant results when comparing them to the nation's schools than positive significant results. The gifted programs in Iowa fall short of principles of excellence and need improvement.

2. Educators need to demolish the claim that mixed-ability classrooms can meet the needs of gifted students. When it is noted that the ability range among the gifted is as vast as that among the retarded, the unsuitability of the mixed-ability classroom for nurturing students at either extreme should be appreciated.

3. Educators need to acknowledge the ability of gifted students, affirm it, make plans to stretch it, and see it as part of the essence of school and of society.

4. The mixture of gifted and almost-gifted does a disservice to both groups since it either inhibits the

maximum development of the intellectually gifted or overtaxes the abilities of the almost-gifted intellectually.

5. Unless teachers trained in gifted education and possessing specific traits are used as teacher in programs for the intellectually gifted, the program will lack proper planning, structure, direction, and resources and will not achieve its potential but will be a program in name only. Research showed that teachers trained in gifted education demonstrated greater teaching skills and developed more positive class climates than did teachers who had no training in gifted education (Hansen & Feldhusen, 1994).

6. More attention needs to be given to gifted students in special populations, including cultural minorities, students with disabilities, and underachievers (Gallagher & Gallagher, 1994).

7. Parents need to be involved in the school programs of their gifted children so that they feel that they have ownership in the programs and so that they learn important ways to reinforce classroom activities (Baldwin, 1994).

8. In-school curricular options should be supplemented with a home visitor who serves as a liaison between students' families and the school. In addition, the home visitor assists families in obtaining social

services and information about career and college opportunities. These home visitor should be counselors or social workers (Hiatt, 1994).

Abstract

A national survey of public and parochial school districts was conducted (Richardson Study) which provided a profile of the current status of educational practices for gifted students. Using the national questionnaire, a similar survey of Iowa school districts was conducted in 1993 to determine which programs were in existence in Iowa schools and how Iowa schools differed from the nation's schools in its responses. The chi-square statistic was the tool of comparison. Results indicated that overall Iowa schools had more negative significant results than positive significant results. Recommendations were made.

References

Baldwin, A. Y. (1994). The seven plus story: Developing hidden talent among students in socioeconomically disadvantaged environments. Gifted Child Quarterly, 38(2), 80-84.

Belcastro, F. (1987). Elementary pull-out programs for the intellectually gifted--boon or bane? Roeper Review, 9, 208-212.

Cox, J., & Daniel, N. (1984). The pull-out model. G/C/T, 34, 55-61.

Cox, J., Daniel, N., & Boston, B. O. (1985). Educating able learners: Programs and promising practices. Austin, TX: University of Texas Press.

Cox, J., & Gluck, D. (1989). The Richardson study and the pyramid project. Gifted Child Today, 12(2), 44-46.

Gallagher, J. J., & Gallagher, S. A. (1994). Teaching the gifted child (4th ed.). Boston: Allyn & Bacon.

George, W. C., & Denham, S. A. (1976). Curriculum experimentation for the mathematically talented. In D. P. Keating (Ed.), Intellectual talent: Research and development (pp. 103-131). Baltimore, MD: John Hopkins University Press.

Hansen, J. B., & Feldhusen, J. F. (1994). Comparison of trained and untrained teachers of gifted students. Gifted Child Quarterly, 38(3), 115-121.

Hiatt, E. L. (1994). Promises to keep--the story of Project Promise. Gifted Child Quarterly, 38(2), 85-88.

Keating, D. P., & Bobbitt, B. L. (1978). Individual and developmental differences in cognitive processing components of mental ability. Child Development, 49, 155-167.

Ravaglia, R., Suppes, P., Stillinger, C., & Alper, T. (1995). Computer-based mathematics and physics for gifted students. Gifted Child Quarterly, 39(1), 7-13.

Saylor, M., & Brookshire, W. (1993). Social, emotional, and behavioral adjustment of accelerated students in gifted classes, and regular students in eighth grade. Gifted Child Quarterly, 37(4), 150-154.

Tomlinson, C. A. (1995). Deciding to differentiate instruction in middle school: One school's journey. Gifted Child Quarterly, 39(2), 77-87.

Westberg, K., Archambault, F., Dobyns, S., & Salvin, T. (1993). The classroom practices observational study. Journal for the Education of the Gifted, 16, 120-146.

Willis, S. (1995). Mainstreaming the gifted. Education Update, 37(2), 10-11.

Appendix A

THE RICHARDSON STUDY

IOWA QUESTIONNAIRE

The Sid Richardson Foundation in Fort Worth, Texas, is continuing its national study of elementary and secondary programs for gifted students. We are collecting data on programs that are identified as special programs for the gifted and also on other provisions for the most able and talented students which may not be identified as "Gifted Programs."

This questionnaire, though rather lengthy, should require only a few minutes of your time since not all of it will be applicable to any one district. You will notice that the programs are identified by a Roman numeral in the margin and that they are separated by double lines. We request that you complete the General Information section at the beginning and any other sections which apply to your district. The results of the study will be available state-wide to all who are concerned with this important issue.

An addressed envelope, requiring no postage, is enclosed for your convenience.

GENERAL INFORMATION

School District_____
Name of District

Name of person completing questionnaire_____

Person's title_____ Telephone No._____

Address_____
Street

_____
City State Zip

A. What is the total population of the area served by your school district?

____(1) Less than 50,000 ____(2) 50,000-100,000 ____(3) 100,001-200,000
____(4) 200,001-300,000 ____(5) 300,001-400,000 ____(6) 400,001-500,000
____(7) More than 500,000

B. Please list the number of certified staff members in your district.

____(1)

C. What percentage of teachers have as their highest degree:

____(1) B.S., B.A. ____(2) M.S., M.A., M.Ed. ____(3) Ph.D., D.Ed.

D. Is the school:

____(1) Public ____(2) Private
____(3) Parochial ____(4) Other. Please specify._____

_____

E. Is the student population:

____(1) All male ____(2) All female ____(3) Co-educational

F. Please list the number of students enrolled in:

____(1) Pre-School ____(2) Elementary (Inc. K.)

____(3) Middle/Junior High ____(4) Senior High

G. The student ethnic ration is:

____(1) % Anglo ____(2) % Black ____(3) % Hispanic

____(4) % Asian ____(5) % Native American

____(6) Other. Please specify._____

H. What percentage of students receive free or reduced-priced lunch?

____(1) None ____(2) List the percentage who do.

I. Check the procedures included in identifying students for special programs or provisions for gifted students.

____(1) None ____(2) I.Q. tests ____(3) Achievement tests

____(4) Grad ; ____(5) Teacher nomination ____(4) Peer nomination

____(7) Other. Please specify._____

J. Are there special requirements for teachers in these programs?

____(1) No ____(2) Yes. Please specify._____

_____

K. The following staff members participate in inservice training on a regular basis:

____(1) None ____(2) Teachers in gifted/talented programs

____(3) All teachers ____(4) Counselors ____(5) Administrators

____(6) Other. Please specify._____

L. Is a staff member at the supervisory ot administrative level responsible for the gifted program?

____(1) Yes. Specify title._____ ____(2) No

M. Check the following resources your program uses.

____(1) Library ____(2) Museum ____(3) Industry ____(4) Government agency

____(5) Mentors ____(6) Others. Please specify._____

_____

N. Does the district have a written philosophy for educating gifted students?

____(1) Yes ____(2) No

O. Goals for gifted/talented students are written:

____(1) For the district level ____(2) For the building level ____(3) Not at all

P. An advisory group for the gifted/talented program includes:

____(1) Students ____(2) Parents ____(3) Teachers ____(4) Administrators

____(5) Others. Please specify._____ ____(6) Does not exist

Q. Special procedures for evaluating the gifted/talented program are established:

____(1) At the district level ____(2)At the building level ____(3) Neither

R. What is the per pupil expenditure in your district?

____(1) Less than $1,500 ____(2) $1,500-$2,000 ____(3) $2,001-$2,500
____(4) $2,501-$3,000 ____(5) $3,001-$3,500 ____(6) $3,501-$4,000
____(7) $4,001-$4,500 ____(8) $4,501-$5,000 ____(9) More than $5,000

S. Are special additional budgetary provisions made for gifted/talented students?

____(1) Yes ____(2) No

T. If special funding is available for gifted/talented, check any of the following sources which apply:

____(1) State ____(2) Local ____(3) Federal ____(4) Private
____(5) Other. Please specify._____

U. Please list the program or school in your district which you recommend for a visit from an outside observer.

Name of school_____

Address_____
Street

_____
City State Zip

Person to contact_____Position_____

Telephone No._____ / _____
AC

I. ENRICHMENT IN THE REGULAR CLASSROOM. The teacher with or without special assistance, provides enrichment activities for gifted students in a heterogeneous classroom. We include individualized instruction in this category.

V. How many students participate in the enrichment activities?

____(1) All of the class ____(2) Those identified as gifted/talented
____(3) Those identified as gifted/talented plus others, but not including the entire class.

W. How much time is allotted to enrichment activities per week?

____(1) Less than 3 hours ____(2) 3-5 hours ____(3) More than 5 hours

X. Which content areas are enriched?

____(1) Math ____(2) Science ____(3) English/ Language Arts
____(4) Social Studies ____(5) Multidisciplinary
____(6) Other. Please specify._____

Y. The curricular materials used in the enrichment activities are:

____(1) The same as those used in the basic program.
____(2) Different from those used in the basic program.

Z. What strategies are used in the enrichment activities?

____(1) Group instruction ____(2) Individual instruction
____(3) Special projects ____(4) Puzzles and games
____(5) Other. Please specify._____

II. PART-TIME SPECIAL CLASS. The gifted student is with a heterogeneous class part of the time but is with students of similar ability part of the time. At the elementary level, this provision might be described as a "pull-out" program; on the secondary level it would include honors classes. Resource rooms are considered later as a separate category.

AA. How many days per week does the special class meet?

____(1) 1 day per week ____(2) 2-4 days per week ____(3) 5 days per week

BB. What is the length of each class session?

____(1) Less than 1 hour ____(2) 1-2 hours ____(3) More than 2 hours

CC. Which content areas are studied in the special class?

____(1) Math ____(2) Science ____(3) English/ Language Arts
____(4) Social Studies ____(5) Multidisciplinary
____(6) Other. Please specify._____

DD. What strategies are used in the special class?

____(1) Group instruction ____(2) Individual instruction
____(3) Special projects ____(4) Puzzles and games
____(5) Other. Please specify._____

EE. Do the regular classroom teacher and the special class teacher co-ordinate their curricular plans:

____(1) Regularly ____(2) Occasionally ____(3) Not at all

FF. Is a student required to make up work covered in the regular classroom during his/her absence?

____(1) Yes ____(2) No

III. FULL-TIME SPECIAL CLASS. At the elementary level, this might be a self contained or departmentalized classroom of high-ability students. At the secondary level, this might be a single course in whichthe student's curriculum in enriched and accelerated. See XV for situations where two or more classes are integrated and fast-paced.

GG. Which content areas are studied in the special class?

____(1) Math ____(2) Science ____(3) English/ Language Arts
____(4) Social Studies ____(5) Multidisciplinary
____(6) Other. Please specify._____

HH. Are the curricular materials the same as those studied in regular classes?

____(1) Yes ____(2) No

II. How are students assigned to special classes?
____(1) Specific selection criteria ____(2) Self-selection

JJ. Is the amount of curricular material covered:
____(1) About the same as in the regular classes ____(2) Greater than in the regular classes

---

IV. INDEPENDENT STUDY. A student chooses certain areas for investigation and assumes a high degree of responsibility for meeting objectives.

KK. How much time is allotted to independent studies per week?
____(1) Less than 3 hours ____(2) 3-5 hours ____(3) More than 5 hours

LL. In which content areas do students engage in independent study?
____(1) Math ____(2) Science ____(3) English/
____(4) Social Studies ____(5) Multidisciplinary Language Arts
____(6) Other. Please specify._____

MM. What resources do the students use in indpendent study?
____(1) Staff ____(2) Library ____(3) Community ____(4) Laboratory
____(5) Other. Please specify._____

NN. How is a student's independent study progress evaluated?
____(1) Self ____(2) Teacher
____(3) Other. Please specify._____

V. ITINERANT TEACHER. A teacher with special skills in gifted education teaches gifted students in more than one school on a regular basis.

OO. How many schools do itinerant teachers serve?
____(1) Less than 5 ____(2) 5-10 ____(3) More than 10

PP. Do itinerant teachers teach in:
____(1) The regular classroom teacher's room
____(2) A permanent classroom assigned for the purpose
____(3) In a variety of settings

QQ. Do the regular classroom teacher and the itinerant teacher co-ordinate their curricular plans?
____(1) Regularly ____(2) Occasionally ____(3) Not at all

RR. What is the average number of miles driven by an itinerant teacher per week, exclusive of the distance to and from the home?
____(1) Less than 50 miles ____(2) 50-100 miles ____(3) More than 100 miles

VI. MENTORSHIPS. We define mentorships as a program which assigns gifted students to work or study with adults who have special knowledge or skills in the students' areas of interest. We include the High School Executive Internship Program in this category.

SS. How much school time is allotted to a student to work with a mentor?
____(1) None; it is an out of school program ____(2) Less than 3 hours per week
____(3) 3-5 hours per week ____(4) More than five hours per week

TT. Is Carnegie credit awarded for work with mentors?
____(1) Yes ____(2) No ____(3) Sometimes

UU. How are mentors selected?
____(1) On a voluntary basis ____(2) Specific criteria ____(3) Recommendations

VV. Who are the mentors?
____(1) School staff ____(2) University faculty
____(3) Business and professional people ____(4) Other. Please specify._____

WW. Do mentors receive special training?
____(1) Yes ____(2) No

XX. Are mentors paid?
____(1) Yes ____(2) No

VII. RESOURCE ROOMS. This might be a corner of the library or an entire room where gifted students go individually or in groups to explore special areas of study.

YY. How much time per week does a student spend in a resource room?
____(2) Less than 3 hours ____(3) 3-5 hours ____(4) More than 5 hours

ZZ. Time scheduled in the resource room is:
____(1) The same each week ____(2) Varied from week to week

AAA. Who is in charge of the resource room?
____(1) Special teacher of the gifted ____(2) Librarian
____(3) Aide ____(4) Parent ____(5) Community Volunteers

BBB. What materials are available in the resource room?
____(1) Books ____(2) Films ____(3) Packets
____(4) Other. Please specify._____

CCC. What equipment is available in the resource room?
____(1) Labarotory equipment ____(2) Shop tools
____(3) Other. Please specify._____

DDD. Where is the resource room located?
____(1) In a separate room ____(2) In the library
____(3) Other. Please specify._____

VIII. SPECIAL SCHOOLS. These include magnet schools which focus on a single discipline as well as those which include the entire spectrum. Also included are residential schools for the gifted.

EEE. The special school is:
____(1) Residential ____(2) Non-residential

FFF. The special school has a:
____(1) General curriculum
____(2) Special area of concentration. Please specify_____

GGG. Is the school considered a magnet school?
____(1) Yes ____(2) No

HHH. How are the students selected?
____(1) Self-selected ____(2) Specific criteria

III. Is the school considered a school for gifted students?
____(1) Yes ____(2) No

JJJ. Do the students pay tuition?
____(1) Yes ____(2) No

KKK. How long has the school been in existence?
____(1) Less than 5 years ____(2) 5-10 years ___(3) More than 10 years

IX. EARLY ENTRANCE. We define early entrance as a policy allowing students to enter a school earlier than the normal age for that district.

LLL. At what level(s) is the provision for early entrance made?
____(1) Kindergarten ____(2) First grade
____(3) Middle/Junior High School ____(4) Senior High School

MMM. How many students entered these leve.s last year due to early entrance policy? List the numbers please.
____(1) Kindergarten ____(2) First grade
____(3) Middle/Junior High School ____(4) Senior High School

NNN. On what basis were early assignments made? Check all that apply.

____(1) Ability test ____(2) Achievement test
____(2) Teacher recommendation ____(4) Parental request
____(5) Other. Please specify._____

OOO. Of the number accepted last year as early entrants, how many continued for at least one full year? List numbers at the appropriate levels please.

____(1) Kindergarten ____(2) First grade
____(3) Middle/Junior High School ____(4) Senior High School

PPP. Last year how many students left high school prior to graduation to enter college or university?

____(1) None ____(2) List the number, please

QQQ. How long has the early-entrance policy existed in your district?

____(1) Less than 5 years ____(2) 5-10 years ____(3) More than 10 years

---

X. CONTINUOUS PROGRESS. We define continuous progress as a provision for students to progress through the curriculum of one or more subject areas as the required skills are mastered.

RRR. At which level(s) is continuous progress in operation?

____(1) Pre-School ____(2) Elementary (Inc. K)
____(3) Middle/Junior High School ____(4) Senior High School

SSS. In what content areas does continuous progress allow students to advance at their own pace?

____(1) Math ____(2) Science ____(3) Social Studies
____(4) Language Arts (Inc. Reading) ____(5) English
____(6) Foreign Language ____(7) Other. Please specify._____

TTT. On what basis does a student move from one level to another?

____(1) Standardized tests ____(2) Teacher made tests
____(3) Demonstrated competency ____(4) Other. Please specify._____

UUU. What percentage of students are functioning above grade level in one or more content areas this year?

____(1) Less than 5% ____(2) 5-10% ____(3) 11-20% ____(4) More than 20%

VVV. How would you describe the continuous progress program?

____(1) Group instruction ____(2) Individual instruction
____(3) Other. Please specify._____

WWW. How long has the continuous progress program been in operation?

____(1) Less than 5 years ____(2) 5-10 years ____(3) More than 10 years

---

XIV. COLLEGE BOARD ADVANCED PLACEMENT. As the name specifies, we refer to the Advanced Placement of the College Board.

HHHH. How long has your school offered College Board Advanced Placement Courses?
____(1) Less than 5 years ____(2) 5-10 years ____(3) More than 10 years

IIII. In what content areas does your school offer Advanced Placement courses?
____(1) American History ____(2) Art-History ____(3) Biology ____(4) Chemistry
____(5) English Composition/Literature ____(6) English Language/Composition
____(7) European History ____(8) French ____(9) German ____(10) Latin
____(11) Mathematics ____(12) Music ____(13) Physics ____(14) Spanish

JJJJ. How many students completed at least one Advanced Placement course last year? List the number please.
____(1) Sophomores ____(2) Juniors ____(3) Seniors
____(4) Other. Please specify._____

KKKK. How many students took at least one Advanced Placement examination last year? List the number please.
____(1) Sophomores ____(2) Juniors ____(3) Seniors
____(4) Other. Please specify._____

LLLL. What percentage of the examinations received a score of:
____(1) "3" ____(2) "4" ____(3) "5"

MMMM. How were the Advanced Placement opportunities offered?
____(1) Conventional classes ____(2) Independent study
____(3) Seminars ____(4) Correspondence courses
____(4) Other. Please specify._____

XV. FAST PACED COURSES. We define fast paced courses as an arrangement which allows a student to complete two or more courses in a discipline in an abbreviated time span.

NNNN. Last year, how many students were enrolled is such courses in:
____(1) Mathematics ____(2) Foreign language ____(3) Science
____(4) Other. Please specify._____

XI. NONGRADED SCHOOL. We define a nongraded school as one in which the usual labels, such as first grade, have been removed, and students progress at their own pace. Thus, one child might complete what is normally covered in one grade in less than the usual amount of time, and another child might require more than the usual amount of time to gain the skills generally acquired in one year in a graded school system.

XXX. At what level(s) is your district nongraded?
____(1) Pre-School ____(2) Elementary (Inc. K)
____(3) Middle/Junior High School ____(4) Senior High School

YYY. Do some students complete the level(s) checked in fewer years than is normally required?
____(1) Yes ____(2) No

ZZZ. If you answered "Yes" how many students:
____(1) Received additional enrichment only
____(2) Were offered curricula from the next higher level but did not leave the first school
____(3) Moved on to the next higher school

AAAA. How long has your district been nongraded?
____(1) Less than 5 years ____(2) 5-10 years ____(3) More than 10 years

---

XII. MODERATE ACCELERATION. We define moderate acceleration as any kind of provision which allows a student to complete the grades K-12 in less than thirteen years but more than ten.

BBBB. How many students were in last year's graduating class?
____(1) Less than 100 ____(2) 100-500 ____(3) More than 500

CCCC. Of this nun ber, how many spent fewer than 13 years but more than 10 in grade K-12?
____(1) Less than 2% ____(2) 2-5% ____(3) More than 5%

DDDD. How long has your school had a policy which allowed or encouraged moderate acceleration?
____(1) Less than 2 years ____(2) 2-5 years ____(3) More than 5 years

---

XIII. RADICAL ACCELERATION. We define radical acceleration as any kind of provision which allows a student to complete grades K-12 in fewer than 11 years.

EEEE. How many students were in last year's graduating class?
____(1) Less than 100 ____(2) 100-500 ____(3) More than 500

FFFF. Of this number, how many spent fewer than 11 years in grade K-12?
____(1) Less than 1% ____(2) 1-2% ____(3) More than 2%

DDDD. How long has your school had a policy which allowed or encouraged radical acceleration?
____(1) Less than 2 years ____(2) 2-5 years ____(3) More than 5 years

---

XVI. CONCURRENT OR DUAL ENROLLMENT. We define concurrent or dual enrollment as an arrangment which allows a student to enroll in classes on two campuses. For example, a middle/junior high student who takes one or moreclasses at the high school or a high school student who takes one or more classes on a college campus.

OOOO. How many students enrolled in classes on two campuses last year? Please specify the numbers.
____(1) Middle/Junior High and Senior High combination
____(2) Middle/Junior High and College combination
____(2) Senior High and College combination

PPPP. Of the number who enrolled in classes at both the middle/junior high and senior high, what percentage satisfactorily completed the class?
____(1) Less than 50% ____(2) 50-75% ____(3) 76-99% ____(4) 100%

QQQQ. Of the number who enrolled in classes at both the middle/junior high and college, what percentage satisfactorily completed the class?
____(1) Less than 50% ____(2) 50-75% ____(3) 76-99% ____(4) 100%

RRRR. Of the number who enrolled in classes at both a senior high school and college, what percentage satisfactorily completed the class?
____(1) Less than 50% ____(2) 50-75% ____(3) 76-99% ____(4) 100%

OTHER. If your school has a provision or program for gifted students not listed in any of the above sections, please describe it briefly.

Thank You!

Dr. Frank P. Belcastro
Dept. of Ed./Psychology
University of Dubuque
Dubuque, Iowa 52001