CITIZENS LEAGUE REPORT

No. 115

Educating High Ability Students in Sr. High School

March 1960
TO: Board of Directors

FROM: Education Committee, Lucas Van Hilst, Chairman

REPORT OF A SURVEY OF PROBLEMS
OF EDUCATING HIGH ABILITY STUDENTS
IN OUR SENIOR HIGH SCHOOLS

The Citizens League of Minneapolis and Hennepin County reports to the citizens, the Boards of Education, and the administrators of the public schools the results of a survey undertaken by its Education Committee. The survey was primarily concerned with the problems of educating students of high academic ability. For the purpose of our study we considered these to include roughly the upper fifteen per cent of the senior high school population. The method of investigation consisted of visits by committee teams to nine of the comprehensive senior high schools in Minneapolis as well as six suburban senior high schools. Previous to the visits the schools completed detailed questionnaires requiring factual information. A second set of questions, mainly concerned with judgments, formed the basis of the interviews. Copies of the two questionnaires and a digest of the answers are included at the end of the report.

Without exception, our interviewers were received with great hospitality and the discussions were quite spirited and open. We are appreciative of the cooperation of all concerned.

We feel that special educational programs for students of high ability are in full accord with democratic principles which recognize the inherent differences between individuals and which dictate equal opportunity for everyone within the limitations of his ability. These principles have been widely accepted with regard to disabled children, mentally retarded, and the athletically gifted. The fact that programs are being developed for the academically gifted demonstrates that these children are now recognized as deserving special attention. We believe these programs are worthy of support.

Findings

1. The distribution of high ability students is not uniform among high schools. These students may make up considerably more than 15% of the student body in one high school and considerably less in another. This variation in distribution is particularly evident in Minneapolis, where it generally follows the socio-economic structure of the school district.

2. There are differences of opinion among educators about the procedures to be followed in educating the high-ability student. The methods now in use in the special field of education for the gifted are acceleration and enrichment, with or without homogeneous grouping. For the purposes of this report, acceleration is defined as covering the regulation or "normal" amount of subject matter faster than usual. Enrichment means spending the
regulation amount of time on each subject but going into more detail or depth. Homogeneous grouping is grouping together of students according to ability, resulting in classes composed of students of like talent. In Minneapolis and its suburbs each method is currently in use to varying degrees and in various combinations. The concept of enrichment is the more accepted, while acceleration can be considered somewhat controversial. What to do with the student who has completed one or more of the traditional high school subjects early presents some problems. Some schools have embarked on a program of acceleration and have not as yet resolved this question.

3. Ideally, each student should receive individual attention and thereby follow a school program that best fits his individual needs. This applies to the high ability student in at least the same degree as it does to others. One means of giving this needed attention is by providing adequate counseling. The generally recommended ratio is one full-time counselor for approximately every 350 students. Currently the ratio in Minneapolis is closer to one counselor for every 500 students. Every suburban school reporting was closer to the recommended standard.

4. The need for a solid in-service training program for teachers, including both courses in specific subject matter and courses in methodology of teaching, was rather widely expressed by school staffs.

5. One of the questions school administrators have difficulty with is "How much work have we the right to ask of the high ability student?" Particularly in Minneapolis we were told more often of instances of parents complaining that their gifted child had too great a workload than of parents attempting to make their child overachieve. These complaints are not of sufficient volume to cause general reductions in student workloads, but educators are wary of this parental reaction.

6. In Minneapolis and suburbs, there is a great deal of interest among educators in the educational problems of the high ability student. It is felt by a few that this interest is primarily "Sputnik-inspired" or that perhaps it is a "phase" or "fad." However, administrators are concerned with the problem and there is some interesting experimentation taking place. Within the Minneapolis system this experimentation and interest fluctuates from school to school. This is partly because of the previously mentioned variance in student academic ability from school to school, and partly because of a variance of enthusiasm by the individual administrators. The importance of the role played by the individual schools in the development of any program for the high ability student cannot be overemphasized.
Recommendations

It is evident that solutions to the problems of educating our high ability students in a large city school system are likely to differ from those which a smaller suburban system may employ. The first of our recommendations has applicability to all of the school systems which we visited; the remaining recommendations, while tailored to the Minneapolis situation, contain ideas which may deserve consideration by the suburban systems.

1. In order that the public be kept better informed, we recommend that a concise and factual "Report on Educational Progress" be published annually by the boards of education. With respect to high ability students, this report should include a so-called "academic inventory," such as recommended by Dr. Conant, which tabulates the amount of time spent by these students in a number of key subjects, results of college entrance examinations and of standard achievement tests. We hope that improved means of measuring achievement will be developed.

2. We recommend that more emphasis be given to coordinating and promoting experiments in curriculum for high ability students within the Minneapolis school system. Presently there is no one person whose primary responsibility is in this area, and we suggest the desirability of centralizing this responsibility.

3. We call upon the Board of Education of Minneapolis to appoint an Advisory Committee on Education of the High Ability Student. The task of this committee would be to make a thorough study of the practical problems in this area. The committee should include proper representation from the Minneapolis school system, other professional educators, and informed lay people, with the chairman preferably drawn from the last group. It would be expected that this committee would make recommendations which would specifically meet Minneapolis' needs. Properly conducted, this study could serve to the benefit of the Board of Education, the school administration and the public.

4. We ask that the Minneapolis Board of Education give high priority to means of increasing the number of counselors.

Conclusion

Experimentation and study are now going on in all areas of education. One concrete example of the work being done is "The Study of the High School Day" which was released early in 1959 by the Minneapolis school system. This report established "guidelines through which continued curriculum evaluation and modification in the senior high schools in Minneapolis shall take place." We endorse this study. In particular, we favor giving the highest priority to implementing a program of acceleration and/or enrichment in each school where the size and composition of the student body permits.

The question of whether senior high schools are being burdened with college courses, an opinion held by some, or whether colleges are being charged with high school responsibilities, another widely held view, is, in our opinion, a moot one. The true problem is what a student of given ability and maturity should
fruitfully learn within the framework of a well-rounded high school education with a minimum of time wasted. While intelligent counseling and programming in our schools can go far towards promoting a high level of achievement among academically gifted students, the responsibility of motivating our children still rests with the home at least as much as with the educators.
APPENDIX I.

TABULATION OF REPLIES TO QUESTIONS ON INTERVIEW QUESTION SHEET
MINNEAPOLIS SENIOR HIGH SCHOOLS

1. (a) All schools felt that acceleration was desirable to some extent and with many qualifications.
   (b) All the schools have some type of grouping for students below the top 15%.
   (c) Seven of the schools have other types of homogeneous grouping.

2. (a) Seven schools have accelerated classes in operation to some extent.
   (b) Three schools gave percentages from 1 to 15 in terms of the students who should be given the opportunity to accelerate.
   (c) Four schools felt that acceleration should start at the 7th grade level; two of these indicated that the area should be in mathematics.

3. Seven schools felt that enrichment was desirable.

4. With respect to the dangers in ability grouping and acceleration, one school did not know, two schools saw none, and the rest mentioned one or another of removal of leaders, not good for certain subjects such as social studies, can start too early, student can be pushed too far, creation of an elite, nothing to provide for student after he finishes the accelerated program.

5. One school saw no problem in a program of grouping and acceleration. The others suggested one or more of cost, problems of programming, narrowing of education (because of drop-out from extracurricular activities), extra work for teachers, and limits in teachers available and time.

6. As to the feelings of parents, teachers and students with respect to grouping and acceleration and the factors that prevent students from taking difficult courses, various schools indicated one or more of the following: objection by parents and students of the work load, resistance to stiffer competition, anti-"egghead" influence, fear of lowered grades, math-science teachers favor but social study teachers oppose.

7. As to whether or not high ability students are working up to ability and are being challenged, and to how this is known, the replies indicate that two schools do not know, two schools use special tests of aptitude, one school looks at the percent of its students who graduate from college, and the others feel somehow that the student is not challenged or is not working up to his par.

8. If the ratio of counselors to students was increased, four schools see an improvement, two see no change, and the others are noncommittal.

9. With respect to closer coordination between junior and senior high school, three schools felt that closer communication of some sort was desirable, and one felt that its arrangement was OK at present. No information from the others.

10. When asked how the school encourages the top 15% to take heavy courses, one indicated that encouragement stems from the student, one indicated that the home-room teacher does the encouraging, one indicated that parents object to such encouragement, one indicated that parents may over-encourage, one indicated that the student is encouraged only when he refuses, and one says that college entrance requirements serve as encouragement.
APPENDIX I (Continued)

11. All but one school said their grading is based on achievement, and five add ability; most schools indicate that students can fail.

12. One school is not in favor of an honors program, the rest range from a hearty favor to favor with reservation.

13. To install a program of accelerated courses, three schools require special training for their staff and seven would require in-service training.

14. Two schools reported a system of rewards for scholastic excellence and the rest indicated traditional arrangements as one or both of National Honor Society and Honor Roll.

15. All schools felt that a student should be allowed to graduate from high school without at least three years of a modern or classical foreign language.

16. Among six schools, staffs varied from 27 to 50 teachers and with 29% to 50% holding the M.A. degree.

17. All schools felt that the proposed revision program for Minneapolis Senior High Schools would require revisions in the Junior High School program.
APPENDIX II.

TABULATION OF REPLIES TO QUESTIONS ON INTERVIEW QUESTION SHEET
SUBURBAN SENIOR HIGH SCHOOLS

1. (a) All but one favor acceleration to some extent and with qualifications.
(b) All but two group students below the top 15%.
(c) Two of the schools have other types of planned homogeneous grouping.

2. (a) All but one favor acceleration, and the one favors enrichment instead,
(b) One school indicates only the top 6% should accelerate.
(c) One school feels that acceleration should start at the 7th grade.

3. All feel that enrichment is desirable.

4. With respect to the dangers in ability grouping and acceleration, one school indicated the difficulty of attaining high marks, one mentioned difficulties in identification of students, one mentioned the formation of cliques, one felt it might be merely a fad, one mentioned personality harm and unequal treatment for teachers.

5. With respect to problems in a program of grouping and acceleration, one school pointed out the need for more counselors, one observed that it takes more work by the staff, and two pointed out problems in course scheduling and planning.

6. As to the feeling of parents, teachers and students with respect to grouping and acceleration, and the factors that prevent students from taking difficult courses all schools felt that it was well accepted; but three suggested that it may lead to overwork for the student.

7. As to whether or not high ability students are working up to ability and are challenged, and as to how this is known, one school uses special tests, one uses "observation" and one states its students tend to slightly over-achieve.

8. If the ratio of counselors to students was increased, three indicated an improvement would result.

9. With respect to a closer coordination between junior and senior high school, four schools have a coordinator and in one there are joint meetings between the two school staffs.

10. When asked how the school encourages the top 15% to take heavy courses, three schools encourage students through the counselor, two obtain the aid of parents in such encouragement.

11. Two schools grade on achievement, two grade on ability and achievement. One school indicates that only 1% fail.

12. Two schools do not approve of an honors program, one now has one, one will have one in 1960, and one school approves but parents object.

13. To install a broad program of accelerated courses, two schools indicate the need for more teachers, and two ask for in-service training of teachers.

14. Four schools have no system of rewards for scholastic excellence and one has a "scholastic index."
APPENDIX II. (Continued)

15. All schools felt that a student should be allowed to graduate without a foreign language.

16. Two schools indicated all their teachers have a B.A. in their major, one school says all but one teacher have a B.A., one school says 90% and another 59%. The schools report 36-50% of their teachers having the M.A. degree. One school has a system of teacher appraisal. One indicated a need for less of a student load, more money, and better working conditions in order to attract more and better teachers.
APPENDIX III.

TABULATION OF REPLIES TO QUESTIONS ON BASIC QUESTION SHEET
8 MINNEAPOLIS SENIOR HIGH SCHOOLS

1. Number of students enrolled in school (grades 10-12): 732 - 2360.
   Number per grade: 130 - 833.

2. Number of students per class:
   Academic subjects: 23.0 - 33.1
   Non-academic subjects: 19.9 - 32.0 (one had 8.0 for auto shop and agric.)

3. Largest and smallest classes:
   Auto Shop: 8.
   Office subjects and foods: 13 - 14.
   Printing: 18.

4. Number of teachers:
   Total: 38.5 - 92.5
   Academic: 22 - 53
   Non-academic: 10 - 29

5. Percent of graduates attending college:
   One school had 29%
   One had 75%

6. I.Q. range:
   Median: 97.7 - 112.4
   Second Quartile: 90.3 - 103.5
   Third Quartile: 104.5 - 121.8

7. The schools all have 2 years of foreign language (3 - 4 languages), mathematics through advanced algebra, chemistry, physics, biology.

8. There is ability grouping reported in 7 schools; classes range from 19 - 35 students; the percentage of students involved ranges from 5% up.
   By subject: Four have ability grouping in English
   Seven have it in mathematics
   One has it in social studies
   Two have it in physics
   One has it in biology

9. The schools seem to feel that it is a matter of opinion as to when ability grouping should be started (as to the age of the student, that is).

10. It was felt that the high ability student may start to study algebra and a foreign language at any age, depending upon the individual, from kindergarten up.

11. In the schools students in accelerated classes advance as far as analytical geometry in mathematics and go through college-level history.

(The above question numbers do not follow the numbers on the basic question sheet)
APPENDIX IV.

TABULATION OF REPLIES TO QUESTIONS ON BASIC QUESTION SHEETS
5 SUBURBAN SENIOR HIGH SCHOOLS

1. Number of students enrolled in school (grades 10-12): 1212 - 2006.
   Number per grade: 380 - 703.

2. Number of students per class:
   Academic subjects: 10 - 31.5
   Non-academic subjects: 14 - 33.5 (79 in a band class)

3. Largest and smallest classes:
   History, English, Languages, Mathematics: 10 - 38.
   Business, art, music, shop, physical education, home economics: 14 - 84.

4. Number of teachers:
   Total: 40 - 85
   Academic: 36 - 59
   Non-academic: 11 - 26

5. Percent of graduates attending college: 40 - 84%.

6. I.Q. ranges:
   Top 15% run 123 - 137
   Lower 85% run 80 and up

7. The schools have 2 - 3 years of languages (3 - 4 of them), mathematics through trigonometry (one school visited has some calculus), chemistry, physics, biology.

8. All have ability grouping:
   5 in English
   5 in physics
   4 in mathematics
   3 in biology
   4 in social studies
   2 in languages

9. Most schools felt that the 7th grade was the place to start ability grouping; one said 10th grade for mathematics.

10. It was felt that the high ability student could start algebra at the 7th or 8th grade and languages at the 7th grade or earlier (one said grade 2).

11. Students in accelerated classes advance as far as:
   English given college credit in one school
   History given college credit in two
   Mathematics of college level (one with calculus) in two
   Chemistry, physics and biology of college level in two.

12. All schools have teachers for mathematics through calculus, for chemistry, physics, French and German. Two have teachers for Russian.

(The above question numbers do not follow the numbers on the basic question sheet.)