

A SURVEY OF LITERATURE ON ABILITY GROUPING AS A MEANS OF IMPROVING
ABILITY GROUPING PRACTICES IN THE BOZEMAN JUNIOR HIGH SCHOOL

by

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ABSTRACT

This study was conducted to determine how to improve the procedure of ability grouping as it has been practiced in the Bozeman Junior High School.

To conduct this research, a review of related literature was made. Personal interviews with the principal, the vice-principal, and guidance personnel were also conducted to develop an insight as to the present ability grouping practices at the Bozeman Junior High School.

Some of the important conclusions of this study are: (1) Ability grouping is widespread and increasing in popularity; (2) a majority of educational leaders favor some form of homogeneous grouping; (3) critics of ability grouping base their objections on personal subjective observations and conclusions; (4) ability grouping has favored the brighter students; (5) not enough attention is being given to the average or slow learner in grouping practices; (6) ability grouping is aimed for achieving high academic standards for college preparation; (7) problems of social adjustments and development of democratic values are not significant; (8) total evaluation of ability grouping through research is very difficult to do, and the evaluations have been fragmentary; (9) no evidence has been published to show that ability grouping interferes in meeting the broadest concepts of learning; (10) ability grouping seems to be the best effort that present educators have to facilitate the instruction of large numbers of students with a wide range of abilities, interests, and motivations; (11) the greater the variety of criteria used for grouping purposes the more homogeneous the group becomes; (12) grouping should be flexible and for each subject area.

CHAPTER I

INTRODUCTION

According to Frazier (13:7), educators are now and have been giving continuous attention to the problem of grouping students for optimal learning situations. Grouping has been a subject for much research and debate and it appears that it will continue to be so for some time.

Frazier further states (13:7) that a group of students are potentially more than just a room full of people waiting for instruction. A group can be many things:

1. A resource for learning which provides an opportunity for its members to learn from one another new values, new information, and new ways of behaving.
2. A testing ground where pupils learn about all kinds of subjects, including themselves.
3. A creator of common learnings (the general knowledge and skills that all citizens need), through interaction consensus, and a continuous extension of ideas and deepening of insights and understanding.
4. A context of learning which depends upon relationship continuing in time so that pupils may learn to plan together, to lead others, and to work toward common ends.

The group may be small in number, or it may be quite large. Pupils can be grouped on the basis of chronological age, sex, intelligence quotient scores, achievement test results, interests, behavior, color of hair or skin, and by any criteria we wish to choose. (20:24)

This study has been concerned with the practice of grouping students on the basis of ability within any single grade level for the purpose of improving learning by the students.

Anderson and Van Dyke (1:42) stated that the trend has been to group students by ability into homogeneous groups where the instruction is held

at the level of the particular group. Depending on the type of grouping involved the instruction can be accelerated, and/or enriched, or be somewhat slower than normal in presentation.

The theories presented involving ability grouping seem obvious in their desirability of implementation into some school system; however, the complexities of the individual student and of the learning process have caused many educators to question ability grouping as the best method of improving the learning of our young people. (20:24)

STATEMENT OF THE PROBLEM

Educators are vitally concerned with improving the education offered in our schools. Through this concern instructional innovations are developed and tried and there has been a continual reappraisal of the curriculum in order to upgrade learning. As instructional methods are improved and curricula revised, educators are faced with the decision of how to best implement these changes in the schools.

While the grouping of students for instructional purposes is a basic administrative function, the problem concerns how to group students in order to have the best opportunity for achieving the goals set by the curriculum.

The purpose of this study was to determine how to improve the practice of ability grouping as it has been utilized in the Bozeman Junior High School.

PROCEDURE

A review of related literature available at Montana State University

Library was used as a basis for obtaining information needed for this survey. Also, there were personal interviews with the principal, the vice-principal, and guidance personnel of the Bozeman Junior High School. The information obtained was used in evaluating the existing practices in the Bozeman Junior High School, and as a basis for future planning.

LIMITATIONS

There were two limitations in this survey. First, the survey of literature was limited to reference material available in the Montana State University Library. The second limitation was that only the Bozeman Junior High School ability grouping practices were considered as the basis of the problem.

DEFINITION OF TERMS

The source used for the definition of terms for this study was the "Dictionary of Education", C. V. Good (15).

1. Ability grouping—classifying pupils into homogeneous sections with reference to intelligence for purposes of instruction.
2. Homogeneous grouping—the classification of pupils for the purpose of forming the instructional groups to have a relatively high degree of similarity to certain factors that affect learning.
3. Heterogeneous grouping—the classification of pupils for the purpose of forming certain groups having a high degree of dissimilarity.
4. Learning—growing or changing as a result of experience. The term is synonymous with education, its product being a modification of personality resulting from experience as opposed to maturation.

CHAPTER II

STATUS OF ABILITY GROUPING

According to Anderson and Van Dyke (1:142), a 1955 study was conducted in five midwestern states which found 27 per cent of the schools in the study using some form of ability grouping. Another study conducted in 1959, in four of the same states, found that 68 per cent of the schools at that time were employing some form of ability grouping.

Ability grouping has spread so widely that if it should continue to spread, by 1970 the school without ability grouping will indeed be a rare one (10:302). Placing of students in class sections according to their varied abilities (ability grouping) has been a common though controversial device for adjusting the school to the pupils individuality for nearly half a century (22:208).

SOME HISTORICAL ASPECTS OF ABILITY GROUPING

As the twentieth century started the traditional subject content of curriculum was the most common aspect of our education system. Paramount emphasis was placed upon the acquisition of knowledge and skills needed in the fundamental operations such as the language arts and mathematics (6:644).

According to Butts (6:644), some of the earlier attempts to reform the educational process took the form of various plans to individualize instruction. "Project methods" and "units of work" were used extensively, especially in the grammar schools. Two of the results of this

early experimentation were the development of the Winnetka Plan and the Dalton Plan, in the early 1920's, by which the individual students were allowed to proceed at their own individual rates by mastering pre-determined "units of work". Individualized instruction was a matter of adjusting the speed of achievement to the abilities of the students, but the subject matter was the same for all the pupils.

Another and even more popular device for individualizing instruction was the effort to classify students into different groups according to their ability. Known as "ability groups", and also "homogeneous groups" and "XYZ groups", these arrangements swept the country in the early 1920's. This was probably largely due to the large publicity given, at that time, to the psychological testing of students and the ensuing public awareness of I.Q.'s and other mental measuring tests (6:644).

According to Howell (16:113), during the 1920's and early 1930's homogeneous grouping was very popular with educators. Acceleration of students was also widely discussed. At that time, however, much effort was spent in maintaining identical curricula for all pupils of all ability levels. Borg (4:7) states that every effort was made to avoid changing the curriculum to adapt it to the superior or slow student. Perhaps this was an effort to better control the groups (4:8). This practice seemed to overlook the main purpose of ability grouping.

The growth of Progressive Education during the 1930's probably caused interest in homogeneous grouping to decline (16:113). Following World War II a great deal of pressure was exerted at all educational levels, especially at the secondary level, to improve the curriculum in the hard

core subjects to better prepare the gifted students. This precipitated a rapid re-emphasis of and subsequent growth of ability grouping (16:113).

REASONS FOR GROUPING STUDENTS

Students are ordinarily classified into grade levels for instructional purposes. The most common criteria for grade level grouping is chronological age. In addition to chronological age some schools group by sex.

The desire of educators to allow for individual differences in the pupil's learning rate led to the first attempts at ability grouping. Many types of ability grouping are possible (4, 17, 20). Pupils can be grouped on the basis of:

- a. mental test scores
- b. interest area
- c. achievement in a particular subject
- d. achievement in all subjects
- e. standard test scores
- f. prior teacher recommendations
- g. efforts of guidance counselors
- h. meetings with individual students
- i. meetings with parents

It is possible to group pupils under broad bases as well as very narrow ones. Olson (20:26) found it to be desirable to have several criteria for grouping by ability in order to get a greater homogeneity within the group. It is also well known that if we measure a group of pupils of a given age on any one factor, variability is not greatly reduced (20:26).

Ability grouping is an attempt to make adaptation for individual differences by reducing heterogeneity within the classroom. This is de-

pendant on several variables. Among these are the specificity and validity of the grouping criterion, the number of grouping levels to be established, and the variability and numbers of pupils to be grouped (4:7). The larger the group the greater the heterogeneity in it (4:7). According to Kierstead (17:422), "the only true homogeneous group is the individual child."

It has been stated by Elicker (11:148) that grouping a class of reading students is well justified because of the good standardized reading tests; however, if a teacher's evaluation or the results of an intelligence test were used singly as a basis for ability grouping the grouping would be much less justified.

Before we can answer the question of which plan of grouping is the best one, we should perhaps ask: better for who, the children, parents, administrators, taxpayers, for some pupils, or all pupils? Better for what, the pupil's all around development, his self-concepts, or his achievement in a single academic area? (20:24)

In the opinion of the writer much of the literature devoted to ability grouping seems to indicate that this plan is better for learning. Perhaps we should reappraise some of the broader concepts of what learning is.

BROADER CONCEPTS OF LEARNING

As it has been stated in the definition of terms, learning is synonymous with education. Since the avowed purpose of ability grouping is to facilitate and improve learning, and learning is education, we should give some attention to some of the definitions and objectives of education.

Basically, education is a lifelong learning process involving an all-around development of the individual accompanied by self adjustments and social adjustments. Education is not simply the acquisition of knowledge or book learning. Much wisdom comes from activities other than textbook studies (9:428). If the aims and objectives of education are considered, they will reveal more fully the scope of education. These objectives when implemented by a functioning curriculum become a program of social action.

Just as education itself is a process of growth and change, we find the objectives of education slowly evolving as our society changes. Through the years educators and professional groups have listed these objectives in various ways.

For example, Herbert Spencer, pioneer leader in American education, as early as 1861 listed five educational objectives based on the major areas of human conduct (9:430):

1. Self-preservation.
2. Securing the necessities of life.
3. Rearing and discipline of offspring.
4. Maintenance of proper social and political relations.
5. Activities which make up the leisure part of life, devoted to the gratification of the tastes and feelings.

According to Willems (24:86), one of the earliest groups to revamp educational objectives was the Commission on the Reorganization of Secondary Education, a committee of the National Education Association. The commission, disturbed by the subject-centered curriculum of the high schools of the time in 1918, prepared the Cardinal Principles of Secondary Education:

1. Health.
2. Command of fundamental processes.
3. Worthy home membership.

4. Vocation.
5. Citizenship.
6. Worthy use of leisure time.
7. Ethical character.

One of the most recent statements concerning the role of our public schools was presented in 1956, evolving from the White House Conference on Education (24:89). This committee's list of educational objectives and philosophy is as follows:

1. The fundamental skills of communication—reading, writing, spelling, as well as other elements of effective oral and written expression; the arithmetical and mathematical skills including problem solving. While schools are doing the best job in their history in teaching these skills, continuous improvement is desirable and necessary.
2. Appreciation for our democratic heritage.
3. Civic rights and responsibilities and knowledge of American institutions.
4. Respect for and appreciation of human values and for the beliefs of others.
5. Ability to think and evaluate constructively and creatively.
6. Effective work habits and self-discipline.
7. Social competency as a contributing member of his family and community.
8. Ethical behavior based on a sense of moral and spiritual values.
9. Intellectual curiosity and eagerness for lifelong learning.
10. Esthetic appreciation and self-expression in the arts.
11. Physical and mental health.
12. Wise use of time, including constructive leisure pursuits.
13. Understanding of the physical world and man's relation to it as represented through basic knowledge of the sciences.
14. An awareness of our relationships with the world community.

Even later than the above statement of objectives, the Educational Policies Commission of the NEA and the American Association of School Administrators emphatically rejected the idea that a few should be educated and the majority should be trained. All students have latent, unrealized powers of creativity. Schools should provide the kind of education that frees the mind and enables an individual to acquire a full and worthy

life (24:90).

The foregoing definitions and goals of education should develop an appreciation for the formidable responsibility the schools have in the effort to educate our youth. How to best achieve these objectives is the big problem

The building of modern school facilities, many of which are of radical design, to implement modern teaching practices is continuing throughout our nation. The team-teaching method, the expanded uses of audio and visual equipment are just two of many changes in our schools. Curricula are constantly being revised and expanded, the scheduling of students and classes is more flexible today than it was a few years ago. Class schedules can be adapted to large or small groups, for lectures or seminars. Students can have private consultations with teachers or guidance counselors, and time is allowed for independent study programs by the pupils.

FAVORABLE REACTIONS TO ABILITY GROUPING

Gifted children are those who possess some quality or innate ability which has been recognized and identified by any number of testing and observation devices, and who show interest and success in either physical, intellectual, or artistic pursuits (2:6). Mott (2:6) believes these gifted children should be grouped as nearly as possible according to in-

terest and ability, and be challenged with a type of program that will help them grow to the fullest extent of their capabilities.

In Mott's opinion, fears of developing intellectual snobs, or fears that the average or slow learners would regard themselves as inferior seem groundless. Schools have been grouping students for many years in areas of athletics, music, speech, art, journalism, without any apparent ill effect (2:6).

James Bryant Conant (7:25, 26) in his book, Recommendations for Education in Junior High Years, says: "Instruction should be organized to provide intellectual challenge for the whole range of abilities found in a school." Complete homogeneity can never be attained, but an effort should be made to reduce the range of individual differences in a given class if suitable instruction is to take place.

Conant (8:49) says much the same in his book, The American High School Today. He emphasizes three basic groupings whereby each student should be grouped for each subject; under this system a student may be in a top section in an English class, but be in a lower section for mathematics.

Melbourne High School in Melbourne, Florida, is a prototype of the non-graded high school. B. Frank Brown (5:34, 36), the Principal of this school writes that schools must recognize and appreciate not only the dissimilarity among individuals, but also the flexibility and mobility of the learning process. Educational changes based on the reorganization of the

learning process give greater attention to the individual student. In order to accomplish this the students must be realigned for learning. The re-sorting process involves a classification of students on the basis of achievement rather than chronological age.

In a published report concerning an ability grouped junior high school, Pearson (21:358) stated that students were grouped only in academic areas by standardized tests and teacher evaluations. In non-academic areas such as homeroom, music, P.E., and drama the groups are heterogeneous in ability and achievement. Under this arrangement it was felt that each child has a sufficient variety of experiences to enable him to see himself in relation to others, and realistically so. He recognizes his strengths and his weaknesses and learns to capitalize on his strengths and to live with his weaknesses.

This program is flexible and each marking term the staff meets with the principal, and the students are re-classified in the various groups as needed. These changes are made each marking period. The principal, working with the guidance department, calls in each pupil that may be involved in a group change and discusses the situation with him. A letter of explanation is sent to the parents as well (21:358).

Each individual member of a class knows that they must work to remain in their group or to advance to a higher academic group. In this manner the students should learn success or failure and can experience the reward of a job well done (21:358).

Howell (16:114) concluded after his study of ability grouping that:

1. Grouping of really gifted and talented students appears to achieve discernible results and the more intelligent the students, the more reason for grouping them.

2. Grouping with its accompanying enriched curricular off-springs became a motivating factor leading to better achievement especially in the areas emphasizing verbal concepts.
3. Grouping did not achieve significant differences in the results in the area of mathematics.
4. There is no doubt but what the grouping enhanced the competition which in turn created a motivational climate that was not inherent in the control group. This is really the good of grouping.

He further found, over a five-year period, that the ability grouped students did better on College Entrance Exams than did a random sampling of students.

UNFAVORABLE REACTIONS TO ABILITY GROUPING

One of the most common complaints against homogeneous grouping is that by its very nature it is undemocratic (23:530). According to Urevich (23:530) it sets certain students apart from each other and also above and below each other. This artificial stratification is based on rather questionable test results and subjective evaluations by teaching personnel. Urevich states further that the results of our teaching will not be measured by achievement tests, but by the impact the students make on our society. Ability grouping may be fine in theory, but does it produce well-rounded citizens with good character and a deep belief in our democratic way of life? How will these citizens feel, cooperate with, and contribute to each others' well being? Ability grouping will not develop the kind of citizens we want (23:531).

According to Frazier (13:7) some of the proponents of homogeneous grouping are interested in only certain kinds of learning, and only in

the bright pupils. They are not concerned about the slow and needy pupils, they do not understand or care to understand the great variety of individual differences found in the students. Frazier (13:8) listed as an argument against homogeneous grouping these items:

1. Pupils of all ages need knowledge of social behavior and customs which they acquire only by interaction with others the same age.
2. Many kinds of learnings are possible only in a group in which members have time enough together to get to know each other well.
3. Pupils learn to live democratically, to create a sense of community, and to acquire the many skills they need, only in the give and take of their home and group and such experience is worth our attention.

In the writer's opinion many writers feel that homogeneous grouping takes care of individual differences better than heterogeneous grouping. In opposition, Bills (3:10) wrote that, "our concern has been with learning rather than the learner, achievement instead of the achiever." Once children are grouped we assume the differences no longer exist. (3:11) One of the most important aspects of teaching is the interaction of the personability of the pupil. Anything which makes it more difficult for the teacher to recognize individuality of the student acts to reduce the effectiveness of teaching (3:23).

PRESENT STATUS OF ABILITY GROUPING

According to Lauchner and Horner (18:6), homogeneous groupings on the basis of ability is not a panacea or cure-all for school problems; however, schools having experienced grouping have found that the advantages far outweigh the disadvantages. Most students respond to instruc-

tion better than in heterogeneous groups; students seem more at ease than in the case where the range of ability is excessive. Lauchner and Horner stated that there seems to be a stimulation for brilliant students to be placed in classes with others of equal ability and teachers are for ability grouping. It saves time and effort in the teaching process (18:8).

In a review of research conducted in the area of gifted children covering a period from February 1956 to June 1963, Gallagher and Rogge (14:43) stated that "various kinds of ability grouping continue to be studied, but both the engineering and the evaluations of such groupings leave much to be desired. Too often after the bright youngsters are put together, little is added to the treatment. Teachers are usually not trained in any thorough fashion, content is not accelerated enough." Gallagher and Rogge (14:51) also found that underachievers when placed in a homogeneous ability group showed significant gains in intellectual fluency and in their attitudes. It was felt that the more stimulating atmosphere was a factor in this change.

An extensive research project was conducted which involved two school systems. One system was with homogeneous ability grouping, where content was accelerated, and the other with heterogeneous grouping. This study involved 4,000 students, over a four-year period in grades four through nine. A few of the significant findings as reported by Borg (4:85-92) are as follows:

1. Ability grouping must be based on considerations other than achievement.
2. In the homogeneous groups there was a significantly higher number of over achievers.
3. Both slow and fast groups had more favorable attitudes toward the teachers than was found in the heterogeneous groups.

4. There were some unfavorable emotional adjustments in the slow groups.

There is much to be done in modifying and improving the instructional program for the ability grouped. Douglas (10:304) writes that teachers need to be more carefully selected for teaching ability groups and also be especially trained for this type of teaching. According to Gallagher and Rogge (14:43, 52), thorough evaluations of homogeneous grouping may have been lacking and results of research may seem fragmentary, but there have been noticable trends not only to group and to accelerate the gifted, but to develop and modify educational programs specifically for them.

CHAPTER III

PRESENT PRACTICES OF ABILITY GROUPING IN THE BOZEMAN JUNIOR HIGH SCHOOL

As a result of personal interviews with the principal, the vice-principal, and guidance personnel the following statements giving the development and present practices of ability grouping in the Bozeman Junior High School have been written.

The first organized thoughts about ability grouping in the Bozeman Junior High School started in 1961. At that time an unusually bright group of seventh graders were finishing the school year and a group was selected from them to start an enriched and partly accelerated program the following school year. This class was selected to have an enriched program in social studies, general science, and language arts and an accelerated program in mathematics, which would have them complete a half year of algebra at the conclusion of the eighth grade. The basis for selecting this group was by the grades achieved as seventh grade students. This group was kept intact as an "ability group" throughout their senior high school years, except for a few transfers to other systems, and some separation due to normal elective courses in the senior high school.

Since that time the brighter students were sifted out and placed into ability groups. The number of groups formed depended on how many superior students were available. The ability grouping was practiced exclusively in the ninth grade with the exception of the last several years when students were also ability grouped in the seventh and eighth grades.

These ability groups were formed primarily on the basis of past grade achievements. There was some attention given to teacher recommendations,

erally used to pioneer these curricular changes. Any enrichment in subject areas was left to the discretion of the individual teachers involved, and the acceleration in the ability groups took the form of faster coverage of material and some in depth presentation of the subject materials.

CHAPTER IV

SUMMARY, CONCLUSIONS, RECOMMENDATIONS

SUMMARY

This study has been concerned with a survey of literature related to ability grouping. The attempt was made to learn about current practices in ability grouping, how widespread and popular it was throughout the country; the general opinions of educators associated with ability grouping and the results of research conducted in efforts to evaluate ability grouping as an aid to learning. The philosophies and goals of education were reviewed to clarify the role of ability grouping in achieving modern educational goals.

The purpose of the study was to determine how to improve the ability grouping program of the Bozeman Junior High School.

CONCLUSIONS

On the basis of the research conducted regarding ability grouping the following conclusions can be made:

1. Ability grouping is widespread and increasing in popularity.
2. A majority of educational leaders favor some form of homogeneous grouping.
3. Critics of ability grouping base their objections on personal subjective observations and conclusions.
4. Ability grouping has favored the brighter students.
5. Not enough attention is being given to the average or slow learner in grouping practices.
6. Ability grouping is aimed at achieving high academic standards for college preparation.
7. Problems of social adjustments and development of democratic values are not significant.
8. Total evaluation of ability grouping through research is very difficult to do, and the evaluations have been fragmentary.
9. No evidence has been published to show that ability grouping interferes in meeting the broadest concepts of learning.

10. Ability grouping seems to be the best effort that present educators have to facilitate the instruction of large numbers of students with a wide range of abilities, interests, and motivations.
11. The greater the variety of criteria used for grouping purposes the more homogeneous the group becomes.
12. Grouping should be flexible and for each subject area.

RECOMMENDATIONS

The following recommendations are made as a result of this study:

1. There should be at least three levels of ability grouping. One group for the above average student, another and the longest group, for the average learner, and a group composed of the slow learners (not to be used as remedial groups).
2. A broad base of criteria should be used in the initial grouping of the students. Past achievement tests, teacher recommendations, interests, aptitudes, cumulative record, interviews with students, emotional and physical health, reading test results are some of the criteria that should be used as a basis for ability grouping.
3. The ability groupings should not be unduly publicized within the school or the community as a whole.
4. The grouping should be flexible, allowing students to move up to a higher level or down to a lower level dependant on their grades earned each marking period.
5. The school schedule must make allowances for these possible changes. One way of doing this would be to have at least two or three classes in the major academic areas meeting each period. These classes would be of the different ability levels, and changes of students could thus be easily effected.

6. The high ability or low ability students should not be assigned to the same homerooms. Homerooms assignments should be random, from which each student gets to his individual subject classes in his own ability level.

7. Teachers should be selected to instruct the different levels of ability on the basis of temperament, training, and willingness to work with the assigned groups.

8. Adjustments should be made in the curriculum to better meet the needs of the students. Merely giving more work to the brighter students or easier assignments for the slow learners will not serve the purpose of ability grouping. Enrichment and acceleration programs are possible in all levels of groupings and some guidelines should be established to meet these provisions.

9. A grading system should be set up to equitably evaluate the work of each ability group. The administration and the teaching staff should achieve some sort of agreement in an effort to standardize grading. A grade of A or F should be possible in both the high ability groups as well as the low ability groups.

10. The ability grouping should be by individual subjects only. Students may have high ability in mathematics, but be poor in social studies. Each student should be placed in the most appropriate level for his ability in each academic subject on his program.

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