The Effects of Ability Grouping on Achievement & Self Concept.

Masters Project

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by

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Acknowledgements

I can do all things through Christ who strengths me. Phillipians 4:13

I thank my extraordinary husband Bernard for his love and support he has cheered me on every step of the way.

Thanks also to my daughters Jamila (13) and Jasmine (10) for their help and best wishes.

I only hope that I have modeled for them by example that they have the ability to accomplish whatever they set out to do. Reach beyond the stars.

CHAPTER 1

INTRODUCTION

The dilemma of deciding the most effective means of grouping children for instruction is a problem that most teachers face on a continual basis. Currently with such a National emphasis on education and the growing awareness that a large number of students show poor academic achievement in the critical areas of math and reading an evaluation of how students are grouped is necessary. There are a variety of grouping methods used in the classroom. This study evaluates the method of ability grouping within the 2nd grade math and reading classrooms containing high,medium,and low students.

Statement of the Problem

The question that this study sought to answer was: what effect does ability grouping have on student achievement and self concept?

Hypothesis

The following Hypotheses are proposed:

(1) There is no difference in achievement in high,medium,and low skill grouped 2nd graders in Math and Reading.

(2) There is a correlation between self esteem and skill grouped students. Higher skillgroup placement results in a positive effect on self esteem.

Significance of the Study to Education

It is important to evaluate ability grouping in relationship to achievement and self concept, to determine its effectiveness as opposed to other avenues that may be pursued as alternatives to this style of grouping.

I am interested in this problem because as a teacher in the Dayton Public Schools I am currently teaching in a skillgrouped setting. While there are no concrete data concerning skillgrouping within the Dayton Board of Education policy, skillgrouping is an endorsed procedure. Building administrators urge their staff to participate in this method. From speaking with different people within the system this method is preferred because it is felt that it will help to increase test scores, and meet the needs of all students when they are taught on their level. While I feel that there may be some merit to this way of thinking, I do not see it working out as planned. I do not feel that this process allows student or teacher the opportunity to reach their fullest academic or personal potential. This feeling is based on my observations as well as personal experience. In September of 1990 I taught the low reading skillgroup 21 2nd grade students in my class. The majority of these students had either been held back previously in the 1st grade or were repeating the 2nd grade. Their reading scores were as indicated by their CAT scores 1st grade and below. The students were unable to do any work

independently. They needed constant teacher assistance, they had a very limited attention span, frustration level was high, progress slow, and in order to minimize the discipline problems a number of engaging teaching techniques were utilized constantly. This situation did not allow the students to learn from others because because they were all on the same academic level. The students were frustrated with themselves and their classmates. When a child stumbled over a word the whole class was stuck, there was no one there other than the teacher to assist. There was not a significant number of student successes to impact on the class. There is a teacher frustration because of the low success rate, constant discipline problems, the need to produce activities daily that will hold the students attention and motivation, and the repetition of basic skills. I personally find skill grouping (Having taught both skillgrouped and self contained classrooms) to be confusing to the students, causing frustation too and a defeated attitude toward school. In September when we pass the reading books to our students, they question the color of books and figure out who is in the high, med, or low group. One can see the eagerness of the two level groups. These students immediately open their books, look at the pictures and try to read the stories, while the other students sit, talk, play, everything but open their books and explore.

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Definition of Terms

The terms self contained,skillgrouped,self esteem,heterogeneous, homogeneous are used throughout the study they are defined below.

Self Contained: Classes and groups of students organized with a mixture of learners of all ability levels. This organization allows students to experience contact with learners of all abilities,ethnicity and socio-economic status.

Skillgrouped/Ability grouping/Tracking: The placing of students into homogeneous groups based on intellectual ability or academic achievement.

Self Esteem: To have high regard or respect for ones self, to value, to consider good and important. Confidence to have faith in ones self in ones self;self assurance.

Heterogeneous: Differing in kind or population. A classroom with students performing at a variety of academic levels.

Homogeneous: Of a similar kind of nature. A classroom with students performing at the same academic level.

Organization of the Study

This chapter has presented an introduction,hypothesis,significance of the study to education,methodology,and definition of terms. The second chapter contains a review of the literature concerning arguments for and against ability grouping.

The design of the study is described in the third chapter. The fourth chapter contains the results of the study. The fifth chapter contains the summary,conclusions,and recommendations.

CHAPTER 2

A REVIEW OF THE LITERATURE

In reviewing the literature many educators debate for or against
skillgrouping or tracking for a variety of reasons. The debate seems
to center around the students assessed abilities, actual level of
achievement after grouping, and the impact grouping has on self concept
of the student. This paper examines the evidence pro and con in the
areas listed above.

Arguments Against Ability Grouping

As stated earlier in the paper ability grouping has been a
traditional practice in the school system throughout the country.
Students who are tracked are divided into separate classes for high,
medium,and low achievers.

The idea of grouping is seen as a means of placing students in the
most agreeable learning situation for their ability level. Teachers
try to create groups that are alike in their learning needs, in hopes
that " instruction will be more efficient and effective "(Harp,1989).
There are various forms of ability grouping used across the educational
system. The forms commonly used in the elementary schools are (1) Ability
grouped class assignment, in which children are assigned to their class-
room on the basis of achievement or ability. Surveys conducted by Coldiron,
Braddock,& McPartland of 450 elementary schools in Pennsylvania in 1987
found that 25% of all 1st graders,19% of 3rd grades, and 13% of all 5th

graders were grouped in this way. (2) Regrouping for math and reading, where students are assigned to heterogeneous classrooms for most of the day, but are regrouped according to achievement level for one or more subjects. Students have reading and math at the same time and are resorted from their heterogeneous homerooms into classes that are homegeneous for math and reading instruction. In the Clodiron study mentioned above, this method was reported from among 24% of the 1st graders, 42% of the 3rd graders,and 60% of the 5th graders. (3) The Joplin Plan, in which children are assigned to heterogeneous classrooms for most of the day but are regrouped across grade lines for a specific subject such as reading. Under this plan a teacher may have a reading group composed of 4th,5th,and 6th graders all on the 5th grade level. Reading groups are frequently re-assessed in order to reassign students to a different reading class as soon as the evidence indicates. (4) Within class ability grouping, in a self contained classroom in which the classroom teacher places children in small groups for instruction based on ability or achievement. (5) Special classes for low achievers, these students are assigned to special or remedial classes for part or all of their day. Robert Slavin concluded in his study entitled Ability Grouping and Student that " Ability grouping does not enhance student achievement in the elementary school ".

"Regrouping for reading and math across classrooms at the same level has minimal benefit for students achievement". A principal argument against skill grouping is that students are deprived of the stimulation provided by other students in various groupings. An elitism among students is formed this system creates classes of low achievers. Students are labeled and are assigned to a low group and experience the negative implications that little is expected by fact of their placement. Students are characterized by their placement in the minds of their peers,teachers and even themselves. Their future is predetermined according to their group as being bright,slow or average. Students become defined by their group being thought of by others as high achievers,go getters,or the opposite of which are labeled low achievers,and lacking motivation.

It is because of preconceived characterization of tracked students that these children have very different school experiences ranging from excellent to disastrous. One of the purposes of ability grouping is to allow the teacher to accelerate the pace of instruction for high achievers and provide more individualized attention and instruction for the others. This method of teaching is to set high goals for the high group making them work harder for success while placing success within reach of the low achievers without them having to compete with their peers. "Students placed in higher achieving classes usually experience a greater emphasis

placed on the development and usage of higher order processes than learning and performance. The higher classes are more motivated and likely to achieve". They have an "unequal access to knowledge" (Oakes,1987). These classes are aware of their specialness and can enjoy the benefits that awareness brings to members efforts and sense of affiliation.

This situation is in direct contrast to the low achiever that only has a low achieving group to identity with,and teachers are perceived as being punitive and more emphasis is placed on discipline and behavior than learning (Oakes 1988). This seems to indicate that tracking actually retards the academic progress of students in average and low groups. Teachers expect less of these students,parents feel that somehow low students will have a negative academic effect on their bright child.

Another argument against skill grouping is that its practice effects the self esteem of the participants. " It goes against our democratic ideals "(Persell,1977) in that all students should have the opportunity to interact with a wide variety of peers and have equal opportunity to be successful. Often minority students are disproportionately in low tracts. During the early years of the desegregation of the school system in many districts minority students were automatically placed in low tracts. " The use of ability grouping may serve to increase divisions along class,race,and ethnic group lines" (Rosenbaum 1980), Although being placed in a high

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ability group may enhance the self concept of the brighter student, evidence suggest that ability grouping may adversely effect the attitudes, and achievement of students in the low group. No matter how well guarded the grouping information is concealed students are well aware of their placement and how they rank as compared to their contemporaries.

In the study"Ability Grouping and Students" Academic Self concepts: A Case Study by Donna Eder, it was found that after studying a first grade class for one year students were "inquisitive about group differences" and asked questions of the teacher concerning them. As the students became knowledgeable of the differences they communicated the information to their peers. The social stigma of being placed in the low track can be over whelming to the students not only in the elementary grades but in the middle and high school level as well. Often such placements as low,basic,and general prevent students from going on to higher academic pursuit,resulting in lowered student aspirations.

This is the concept of "Unequal access to knowledge" and "uneven classroom opportunities" (Oakes,1988) . In these situations students in the low group are in less of a position to be exposed to high quality course content such as problem solving,critical thinking, writing,and research skills ect... They are not introduced to the skills and knowledge that will afford them the opportunity to move higher classes or be successful if placed.

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The difference in teaching style and closeness to the teacher especially in the lower grades is noted.

The level of instruction is also perceived as being different in terms of the quantity of teaching time and the quality of instruction. Higher ability students tend to have clearer, better instruction, more enthusiastic teachers that use criticism less often than teachers with low or average ability students.

For ability grouping to be effective it must (1) measurably reduce student heterogeneity in the specific skill being taught (2) Must be flexible enough to allow teachers to respond to misassignments and changes in student performance after initial placement. (3) Teachers must also be able to vary their pace and level of instruction to relate to the students level of readiness and learning styles.

Arguments in Favor of Tracking

One of the prinicipal arguments of ability grouping is that It has always been done that way." It is a tradition, a historical method used to teach children. When the question is posed why do educators ability group children the responses are:

a) Because its always been this way.

b) Its easier on both the teachers and the student in terms teaching and learning.

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c) Teachers utilize a variety of techniques in their classrooms but grouping is usually the first step of any process.

d) Students are happier and learn more when taught in classes with other students with similar characteristics.

American schools began sorting students early in the 19th century, by the beginning of the 20th century "Ability grouping, homogeneous grouping,and tracking" became familiar educational terms (Chapman,1988). By 1926 a large portion of Urban schools grouped students by ability using intelligence test as a basis for their classification. Testing and grouping thus became a way of doing things in American Education.

The endorsement of intelligence testing and ability grouping began from the top down professionals such as university departments of psychology and public schools administrators became strong advocates of using testing to classify students and they rallied support from areas such as the National Education Association & the U.S. Bureau of Education. The intelligence test were adopted by administrators and teachers because they helped them to address the problems they faced with massive immigration,population shifts and and the new compulsory education laws. The school system was under-going a changing of objectives. The increase in population and diversity of ethnic groups necessitate a reevaluation of existing goals.

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Schools needed to change policies in order to meet the needs of
of the rapidly changing school population and the increasing cost.
As a result the school curriculum became differentiated.

A means of classifying students and assigning them to different
instructional tracks was seen as an effective way of handling the
situation. A noted psychologist in the field of intelligence test
by the name of Lewis M. Terman developed a plan for school systems
he advised that students be given an individual intelligence test
in first grade,and then tested in a group setting every other year.
In order to accommodate individual differences students should be
sorted into homogeneous class groups. It was not the intention that
grouping be a permanent state but that students be allowed to move
from track to track as the evidence indicates. Lewis Terman helped
to create tests which are widely utilized in the educational system.
They are known as the Stanford Binet; the National Intelligence Tests
for grades 3-8; The Terman Group Test for grades 7-12 and the Stanford
Achievement Test.

Ability grouping thus,became an intellectual way of dealing with
the problems presented by the school system. It became a way of
"equalizing educational opportunities" for the vast majority of student
(Chapman,1988). A school system that was once a college preparatory
preparatory curriculum now adds diversity and has method of affording
all students an opportunity to recieve an equal education which
addresses their abilities as perceived through standardized testing.

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It increases the schools efficiency by maximizing learning opportunities while meeting the individual needs of the student.

Ability grouping is found to increase student achievement. Studies indicated (Nevi,1987) that students learn better when placed with other students who are considered to be like them academically. These children when placed in homogeneous groups with peers who learn at the same pace, and who are expected to progress, and have similar futures thrive far better than when placed in a heterogeneous setting with students from a varying academic background. When so placed the lower average students are faced with competition and failure daily. They are passed over by the teaching instruction which is geared to a higher level than they are able to handle. The deficiencies of low achievers are more easily remediated if they are placed in classes together. These students develop a more positive attitude towards school and themselves when grouped with students more like themselves. Therefore the classroom climate for these students is very important. The feelings students have about what's happening in the classroom,their involvement with learning activities and the kind of relationships that are formed between students,teacher, and peers effect learning outcome. Creating a positive classroom climate by homogeneous grouping not only enhances student learning but it effects how students feel about themselves and their school experience.

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Another argument in favor of ability grouping is that it is easier for teachers to instruct based on individual differences in homogeneous groups. As opposed to teaching in a more diverse classroom. Teachers may allow for the differences in learning style and accommodate the student needs in times of instructional strategy or specific techniques for enhancing learning. Ideally these classes should be smaller there by allowing the teacher more time to spend with individual students.

In conclusion there is no definite right or wrong concerning ability grouping. There are many studies for and against it. Each teacher must make the decision based on what they feel is in the best interest of the child. Whether ability grouping is an administrative, teacher, or parent decision the child must be the the first consideration.

In ability grouping students must be constantly reevaluated, given opportunities to advance to the next level or continually remeideated with a variety of teaching methods until the desired results are accomplished. The important thing to keep foremost in mind is that all students can learn.

CHAPTER 3

DESIGN OF THE STUDY

Procedures/Methodology/Instrumentation

Subjects:

   The subjects of this study were approximately 61 students of
both sexes from a second grade class. There were three classes of
second graders each skill grouped for math and reading as high,
medium and low. The criteria for group placement was based on
California Acheivement Test scores (National Percentile) CBE
testing, (A Dayton Public School test to evaluate pupil performance
and mastery of skills) previous semester grades.

Data Collection

   Data collection began in January of 1990 and ended in April 91.
Records were compiled of students previous CAT scores taken in
April 90 and current CAT results from April 91, CBE student
performance evaluation test scores from September of 90 and January
of 91, the third semester grade for math and reading,attendance,
parent contacts,and office referrals. The students were assigned
a homeroom then separated for reading and math instruction.
The Piers - Harris self concept questionnaire was administered
to assess students personal feelings concerning themselves,
peers, and family.

The Piers - Harris "The Way I Feel About Myself" eighty question test was given to all of the second graders. The test was given with the teachers providing assistance with reading and some word meanings. Words such as "pep", "volunteer", "figure", etc. needed defining. The students were instructed to answer the question to the best of their ability circling yes or no and if a question was hard for them to answer to mark how they usually feel about the statement. The test was given in two parts of 40 questions over a two day period during math and reading class. Upon completion the test was reviewed for significant trends in self perception.

The study was conducted with some difficulty students were unable to understand and answer many of the questions. Numerous questions were left blank. However while the test was not traditionally scored, significant trends were seen from the question answered.

The information was evaluated in 4 categories preception in relationship to (1) self (2) peers (3) school (4) family The questions in each category are as follows:

Self

#5 I am smart
#8 My looks bother me
#9 When I grow up I will be an important person
#80 I am a good person

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Peers

#12   I am well behaved in school
#48   I am often mean to other people
#51   I have many friends
#56   People pick on me

School

#1   My classmates make fun of me
#27   I am an important member of my class
#45   I hate school
#66   I forget what I learn

Family

#14   I cause trouble to my family
#17   I am an important member of my family
#25   I behave badly at home
#59   My family is disappointed in me

CHAPTER 4

RESULTS OF THE STUDY

Presentation and Analysis of Data

CAT- When the results of the April 90 CAT scores are compared with the April scores an overall gain of 5.9% is shown in math and a 30.5% gain in reading. The high math class overall performance decreased 3.4% while the medium and the low class increased 12.0% and 75.5% respectively. In reading the high group decreased overall 9.8% while the medium and the low class increased 75.5% and 205.5% respectively. (see charts attached)

While considering the increases it must also be noted that an average performance rating for CAT national percentile would be 50% (6) students scored 50% or better in the high reading class (28.5%) (3) students in medium (15%) and (1) student in the low class (5%). In math (15) scored 50% or better (71.4%) (5) in the medium class (25%) and (1) in the low class (5%).

CBE - Comparision of the Sept.90 CBE test scores with the Jan.91 scores indicate an overall gain of 65.1% in Reading and 69.4% in Math. In reading the high group had a gain of 53.1% the medium 68.8% and the low 107.6%. The high math class had an over all gain of 43.2% the medium 96.7% and the low class 116.3%. In both cases the low group made the most improvement.

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It should also be noted that in order to meet mastery skills an average score of 75.0% is required. In high reading (8) students met the criteria (38.1%) (4) in the medium group (20.1%) and not one person in the low group met mastery. In the high math group the statistics were much better the high math group had (16) students (76.1%) who achieved mastery level followed by medium (14) (70.0%) and the low (5) (25%).

Analysis of the Piers Harris Self Concept test

As stated earlier the self concept test was broken down into four areas, the students preception of himself, relationship to peers school, and family. These areas denote significant trends in self preception.

In answering the question (#5) I think I am smart 95.2% of the students in the high reading and math classes checked yes as opposed to 50% in the medium math 60% in the medium reading, while the low math and reading only 35% and 40% respectively thought that they were smart. One can see by this sample question alone that there is a progressive decline in the way one perceives themselves from high to low class grouping.

In the area of peer relationship it is interesting to note that in answer to the question of whether students felt that they were being picked on by others (#58) .

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55% of the students in the low math class answered yes while for students in the high and medium groups the percentage was no higher than 20%. In the same area of peer relationships the low group in math (45%) and and reading (60%) scored the highest for fighting with others.

Student perception of school shows that both the low and medium groups have some problems with school adjustment. In answer to to question (#45) I hate school - 25% in the medium reading group checked yes (50%) in the low reading group and (25%) in the low math group. The test also show that (45%) of the low reading and (60%) of the low math students forget what what they learned.

Students view of themselves in relationship to their family expectation, the low groups did not feel that their families expected too much of them (10%). While the students in the high groups felt that their families expectation was too demanding (26.6%) . Of the students in the low math math class (45.1%) of them felt that their parents were disappointed in them.

Overall the information that was obtained from the test indicated that there is a significant difference in many areas from how the high group views their situation as opposed to the medium and low groups. There appears to be a progressive decline in perception from group to group with the high group feeling the most well adjusted and the low group the

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least adjusted. It is interesting to note that all groups responded yes
to question (#80) I feel I am a good person.

Attendance, Parent Conference, Discipline, Retention

Attendance

Attendance is taken during the morning homeroom time daily, of the (61)
students the average absent from class was 2.7 and the average number of
of times tardy was 4.5 days. The highest amount of absences and tardiness
occured within the low and medium groups.

Parent Conferences

Due to the rotation of students conferences were scheduled with all
teachers. These conferences were held an average of 1.3 times per child.
This number takes into consideration missed appointments by parents and
extra conferences requested for severe academic and disipline problems.
There were (5) students suspended twice during the school year (2) from
from the medium group and (3) from the low group. There were (6) students
students retained and (14) assigned (not promoted) to the 3rd grade. All
these were from the low and medium groups.

CHAPTER 5

SUMMARY, CONCLUSION and RECOMMENDATION

Summary

Instructional grouping is viewed as a means of placing students with different abilities and backgrounds into a setting that is similar to their own characteristics in an effort to provide an instructional pace that will meet their learning needs. Students are separated from one another as early as first grade in an attempt ensure students of school success. Yet a review of the literature related to grouping revealed a variety of issues both pro and con concerning the practice of grouping children for instruction. Students placed in low groups become labeled and experience diffuculty in being released from the track. Many become victims of their pre-determined destiny only fulfilling the intial prophecy of being incapable of learning. By the time low achieving students reach upper elementary grades or junior high school level they are not challenged or encouraged to compete with the best students. As result they fall through the cracks and there is not a safety net to catch them.

The intent of the study was to evaluate the effect that grouping had on achievement and student self concept. This evaluation was done by looking at various test scores over a

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given time period and examining certain questions pulled from the Pier Harris self concept test. These items in combination with other evidence when analyzed yield the following conclusions.

Conclusion and Recommendation

The results of this study shows that there appears to be a definite relationship in this instance between group placement achievement and self concept. Initially one can see that of the (61) 2nd graders only (9) reading (14.8%) (21) math (34.4%) meet the minimum test requirement for mastery of skills or the 50 percentile CAT average.

This indicates that there is a very high percentage of low achieving students. Teachers were faced with large groups of low achievers and tried to fairly and evenly distribute them as much as possible. Other factors also entered into the grouping process,late student enrollment,discipline and personality problems sometimes make a move necessary. Oftentimes students are pulled from classes for remedial instruction. Although the CAT and CBE scores show an improvement in test scores particularly among the low and medium groups, one cannot lose sight of the fact that they have an uphill climb to reach mastery skill levels.

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In the area of self concept it is as earlier stated noticeable that the high group is the most well adjusted,feeling comfortable with themselves,family,school,and peer relationships. In the low group it is area of concern that the students have a dislike of school and that most of the group forget what they have learned. Another thing is that quite a sizable amount of the group feel picked on, participate in fights and don't feel that they are important enough to the class.

It is also noted that (6) students were retained and (14) were assigned on to the 3rd grade (not promoted). While I am not advocating that retention is the answer one does have to look at what the net benefit is for the student who is retained as opposed to the one who is assigned due to administrative and parental pressure.

The grouping of children is a standard practice that I feel will not be discontinued despite research to the contrary. However, I feel there are some steps that can be taken to work within the system to help ensure that every one can achieve a high level of success.

1. Teachers must take a long hard look at themselves. Good teaching involves experience,values,insight and imagination.

2. When a student enters your classroom give him your best. Do not lower your standards, expect the best from the student.

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3. Estabished goals for the students with a variety of ways to reach them. Don't give up until each student has obtained the goal.

4. Be a cheerleader for your classroom. Build into your classroom routine some self esteem activities and role playing.

5. Allow for flexibility in grouping when a student has made progress send him on to the next level.

6. Allow the different groups to intermingle socially through games,play time,and academically by reading together and tutoring.

7. Talk to teachers,adminstrators and parents about the pros and cons of grouping which can foster some meaningful discussion that will help you make decisions based on merit not ritual.

It is recommended based on the literature and findings of this study that students should not be homogeneously grouped into high,medium and low ability classes. They should be placed with students of all ranges of abilities,backgrounds and needs. In this more global setting they will have opportunities to interact with a larger variety of children that will provide a diversity of learning experiences.

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Findings

The results of this study shows that there is a definite relationship between group placement achievement and self concept. Test scores indicate an extremely low percentage of skill mastery overall with the low group having the greatest deficiencies. In the area of self concept the high and medium groups appear to be the most well adjusted and the low group the least.

Conclusion

Classroom teachers need to be aware of the negative impact of skill-grouping on achivement and self concept and methods that are available to to them which may help to lessen its effect

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CAT HIGH READING	1990 SCORE	1991 SCORE	% CHG
ANDERSON A.	95	71	-25.3%
BARTOE S.	17	25	47.1%
CROSBY S.	12	71	491.7%
DAUGHTERY S.	41	7	-82.9%
DRAKE I.	26	28	7.7%
FLOURNOY L.	97	89	-8.2%
FORD R.	35	22	-37.1%
HARDY A.	48	29	-39.6%
HARRIS D.	35	44	25.7%
JACKSON M.	52	34	-34.6%
JACKSON R.	78	36	-53.8%
JOHNSON B.	45	41	-8.9%
KELLEY M.	49	22	-55.1%
PARHAN V.	27	25	-7.4%
PETERSON M.	27	39	44.4%
RUFFIN M.	55	49	-10.9%
SMITH JE	39	34	-12.8%
SPINKS D.	67	60	-10.4%
TAYLOR R.	35	37	5.7%
WHITE S.	71	88	23.9%
WILSON N.	55	56	1.8%
	1,006	907	-9.8%

LEASE NOTE THAT A NEGATIVE PERCENTAGE (-) DENOTES THE PERCENT DETERIORATION
OR AN INDIVIDUAL.

AT TEST SCORES
ABLE I
XHIBIT 2

CAT LOW READING	1990 SCORE	1991 SCORE	% CHG
BRACEY	1	12	1100.0%
CARLTON	1	25	2400.0%
CRAWFORD	5	18	260.0%
DAPKI	3	27	800.0%
DAVIS D.	9	24	166.7%
DAVIS R.	11	23	109.1%
GREEN K.	4	12	200.0%
HANCOCK J.	4	17	325.0%
HARRISON T.	8	23	187.5%
HARRISON W.	9	12	33.3%
JENNINGS L.	18	27	50.0%
JOHNSON J.	3	28	833.3%
JONES L.	12	56	366.7%
MEADOWDALE K.	6	17	183.3%
MILLS Q.	12	17	41.7%
SKAPIC D.	12	18	50.0%
STEPHENS A.	6	26	333.3%
WILLIAMS C.	12	18	50.0%
WINSTON J.	5	23	360.0%
YOUNG T.	5	23	360.0%
	146	446	205.5%

LEASE NOTE THAT A NEGATIVE PERCENTAGE (-) DENOTES THE PERCENT DETERIORATION
JR AN INDIVIDUAL.

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CAT MEDIUM READING	1990 SCORE	1991 SCORE	% CHG
BOWERS E.	6	13	116.7%
BROWN A.	6	22	266.7%
BRUBAKER	39	27	-30.8%
CONNORS J.	18	23	27.8%
COOPER	19	53	178.9%
DANIEL M.	11	76	590.9%
HUGHES	1	22	2100.0%
HULLABY	16	67	318.8%
JOHNSON J.	24	26	8.3%
JONES J.	31	30	-3.2%
KIRKLAND K.	7	18	157.1%
MOCK R.	16	10	-37.5%
PACKNETT J.	8	30	275.0%
PETTY A.	27	21	-22.2%
ROBINSON D.	8	25	212.5%
ROWE K.	32	28	-12.5%
SHELDON S.	28	34	21.4%
SPENCER J.	12	18	50.0%
STEWARD L.	12	30	150.0%
WASHINGTON T.	14	15	7.1%
	335	588	75.5%

LEASE NOTE THAT A NEGATIVE PERCENTAGE (-) DENOTES THE PERCENT DETERIORATION
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CAT HIGH MATH	1990 SCORE	1991 SCORE	% CHG
ANDERSON A.	60	80	33.3%
BARTOE S.	53	57	7.5%
CROSBY S.	64	54	-15.6%
DAUGHTERY S.	73	33	-54.8%
DRAKE I.	79	87	10.1%
FLOURNOY L.	53	83	56.6%
HARRIS D.	56	67	19.6%
HULLABY J.	53	83	56.6%
JOHNSON B.	60	52	-13.3%
JOHNSON J.	91	91	0.0%
JONES J.	92	91	-1.1%
KELLEY M.	41	51	24.4%
MEADOWDALE K.	30	11	-63.3%
PACKNETT J.	85	25	-70.6%
ROWE K.	49	74	51.0%
SKAPIC D.	67	44	-34.3%
SMITH J.	85	91	7.1%
SPINKS J.	60	80	33.3%
TAYLOR R.	41	26	-36.6%
WHITE S.	86	39	-54.7%
WILSON N.	74	87	17.6%
	1,352	1,306	-3.4%

LEASE NOTE THAT A NEGATIVE PERCENTAGE (-) DENOTES THE PERCENT DETERIORATION
OR AN INDIVIDUAL.

CAT TEST SCORES
ABLE I
XHIBIT 5

CAT MEDIUM MATH	1990 SCORE	1991 SCORE	% CHG
BROWN A.	31	47	51.6%
BRUBAKER M.	19	66	247.4%
COOPER T.	27	30	11.1%
CRAWFORD D.	31	7	-77.4%
DANIEL M.	8	30	275.0%
DARYL R.	13	10	-23.1%
GREEN K.	8	5	-37.5%
HARDY A.	63	59	-6.3%
HUGHES K.	1	55	5400.0%
JACKSON R.	53	18	-66.0%
JASON M.	54	13	-75.9%
JONES L.	38	63	65.8%
MOCK R.	41	44	7.3%
PARHAM V.	4	5	25.0%
PETERSON M.	19	44	131.6%
RUFFIN M.	89	66	-25.8%
SHELDON S.	40	42	5.0%
STEWARD L.	14	44	214.3%
WASHINGTON T.	1	6	500.0%
WINSTON J.	37	8	-78.4%
	591	662	12.0%

LEASE NOTE THAT A NEGATIVE PERCENTAGE (-) DENOTES THE PERCENT DETERIORATION
JR AN INDIVIDUAL.

CAT LOW MATH	1990 SCORE	1991 SCORE	% CHG
BOWERS	6	6	0.0%
BRACEY M.	7	5	-28.6%
CARLTON M.	1	7	600.0%
CONNORS J.	5	7	40.0%
DAPIK L.	1	8	700.0%
DAVIS D.	2	9	350.0%
DAVIS R.	8	17	112.5%
FORD R.	13	7	-46.2%
HANCOCK T.	5	19	280.0%
HARRISON T.	5	8	60.0%
HARRISON W.	12	5	-58.3%
JENNINGS L.	90	49	-45.6%
JOHNSON J.	1	25	2400.0%
KIRKLAND K.	10	13	30.0%
MILLS Q.	6	10	66.7%
PETTY A.	12	62	416.7%
SPENCER J.	11	10	-9.1%
STEPHENS A.	9	12	33.3%
WILLIAMS C.	10	32	220.0%
YOUNG T.	4	10	150.0%
	218	321	47.2%

:EASE NOTE THAT A NEGATIVE PERCENTAGE (-) DENOTES THE PERCENT DETERIORATION
)R AN INDIVIDUAL.

CBE HIGH READING	1990 SCORE	1991 SCORE	% CHG	GRADE
ANDERSON A.	83	94	13.3%	B
BARTOE S.	61	61	0.0%	B
CROSBY S.	22	17	-22.7%	B
DAUGHTERY S.	6	33	450.0%	A
DRAKE I.	56	83	48.2%	D
FLOURNOY L.	89	100	12.4%	A
FORD R.	17	33	94.1%	A
HARDY A.	11	61	454.5%	B
HARRIS D.	17	44	158.8%	B
JACKSON M.	44	67	52.3%	C
JACKSON R.	67	83	23.9%	C
JOHNSON B.	44	83	88.6%	B
KELLEY M.	22	44	100.0%	D
PARHAN V.	28	28	0.0%	D
PETERSON M.	33	67	103.0%	D
RUFFIN M.	22	83	277.3%	B
SMITH JE	56	50	-10.7%	B
SPINKS D.	100	83	-17.0%	D
TAYLOR R.	11	72	554.5%	C
WHITE S.	83	94	13.3%	B
WILSON N.	11	72	554.5%	B
	883	1,352	53.1%	

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)R AN INDIVIDUAL.

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CBE MEDIUM READING	1990 SCORE	1991 SCORE	% CHG	GRADE
BOWERS E.	22	29	31.8%	C
BROWN A.	22	61	177.3%	F
BRUBAKER	39	27	-30.8%	F
CONNORS J.	11	61	454.5%	C
COOPER	33	78	136.4%	B
DANIEL M.	72	78	8.3%	D
HUGHES	22	6	-72.7%	B
HULLABY	89	67	-24.7%	C
JOHNSON J.	33	94	184.8%	C
JONES J.	39	89	128.2%	C
KIRKLAND K.	11	11	0.0%	B
MOCK R.	11	22	100.0%	C
PACKNETT J.	0	67	******	D
PETTY A.	17	50	194.1%	C
ROBINSON D.	39	56	43.6%	B
ROWE K.	33	50	51.5%	B
SHELDON S.	33	67	103.0%	B
SPENCER J.	17	11	-35.3%	B
STEWARD L.	17	28	64.7%	D
WASHINGTON T.	17	22	29.4%	F
	577	974	68.8%	

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DR AN INDIVIDUAL.

CBE LOW READING	1990 SCORE	1991 SCORE	% CHG	GRADE
BRACEY	11	22	100.0%	F
CARLTON	0	11	******	F
CRAWFORD	6	17	183.3%	F
DAPKI	11	17	54.5%	C
DAVIS D.	6	50	733.3%	C
DAVIS R.	22	22	0.0%	D
GREEN K.	11	22	100.0%	B
HANCOCK J.	17	6	-64.7%	F
HARRISON T.	0	17	******	C
HARRISON W.	11	17	54.5%	B
JENNINGS L.	0	39	******	F
JOHNSON J.	17	44	158.8%	D
JONES L.	28	56	100.0%	B
MEADOWDALE K.	11	0	-100.0%	D
MILLS Q.	6	6	0.0%	A
SKAPIC D.	0	17	******	F
STEPHENS A.	6	6	0.0%	F
WILLIAMS C.	6	17	183.3%	D
WINSTON J.	11	17	54.5%	D
YOUNG T.	17	6	-64.7%	F
	197	409	107.6%	

EASE NOTE THAT A NEGATIVE PERCENTAGE (-) DENOTES THE PERCENT DETERIORATION
R AN INDIVIDUAL.

CBE TEST SCORES
TABLE II
EXHIBIT 4

CBE HIGH MATH	1990 SCORE	1991 SCORE	% CHG	GRADE
ANDERSON A.	82	100	22.0%	C
BARTOE S.	47	88	87.2%	A
CROSBY S.	29	35	20.7%	B
DAUGHTERY	6	18	200.0%	A
DRAKE I.	65	88	35.4%	C
FLOURNOY L.	88	100	13.6%	A
HARRIS D.	82	88	7.3%	B
HULLABY J.	88	100	13.6%	A
JOHNSON B.	71	94	32.4%	A
JOHNSON J.	12	88	633.3%	B
JONES J.	71	94	32.4%	A
KELLY M.	41	82	100.0%	A
MEADOWDALE K.	0	41	******	B
PACKNETT J.	71	82	15.5%	A
ROWE K.	65	76	16.9%	A
SKAPIC D.	12	41	241.7%	B
SMITH J.	76	94	23.7%	A
SPINKS D.	76	100	31.6%	D
TAYLOR R.	18	35	94.4%	F
WHITE S.	65	82	26.2%	C
WILSON N.	58	82	41.4%	C
	1,123	1,608	43.2%	

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FOR AN INDIVIDUAL.

BE TEST SCORES
ABLE II
XHIBIT 5

CBE MED MATH	1990 SCORE	1991 SCORE	% CHG	GRADE
BROWN A.	18	59	227.8%	C
BRUBAKER	12	35	191.7%	F
COOPER	24	53	120.8%	A
CRAWFORD	12	6	-50.0%	C
DANIEL	0	59	******	A
GREEN	12	35	191.7%	C
HARDY	47	88	87.2%	C
HUGHES	47	59	25.5%	C
JACKSON M.	6	59	883.3%	B
JACKSON R.	65	6	-90.8%	D
JONES L.	6	76	1166.7%	C
MOCK R.	18	59	227.8%	C
PARHAM	29	53	82.8%	D
PETERSON	41	59	43.9%	D
ROBINSON	53	76	43.4%	F
RUFFIN	25	89	256.0%	C
SHELDON	47	82	74.5%	C
STEWARD	59	82	39.0%	A
WASHINGTON	18	47	161.1%	C
WINSTON	35	47	34.3%	B
	574	1,129	96.7%	

LEASE NOTE THAT A NEGATIVE PERCENTAGE (-) DENOTES THE PERCENT DETERIORATION
JR AN INDIVIDUAL.

CBE TEST SCORES
TABLE II
EXHIBIT 6

CBE LOW MATH	1990 SCORE	1991 SCORE	% CHG	GRADE
BOWERS	29	12	-58.6%	F
BRACEY	35	35	0.0%	D
CARLTON	12	53	341.7%	D
CONNORS	12	35	191.7%	C
DAPIK	12	24	100.0%	C
DAVIS D.	6	12	100.0%	F
DAVIS R.	18	41	127.8%	F
FORD	12	29	141.7%	C
HANCOCK	29	24	-17.2%	C
HARRISON T.	18	18	0.0%	F
HARRISON W.	6	12	100.0%	D
JENNING	0	59	******	D
JOHNSON	12	59	391.7%	F
KIRKLAND	0	18	******	C
MILLS	10	10	0.0%	D
PETTY	18	59	227.8%	D
SPENCER	35	53	51.4%	D
STEPHENS	0	18	******	C
WILLIAMS	18	24	33.3%	C
YOUNG	12	41	241.7%	D
	294	636	116.3%	

PLEASE NOTE THAT A NEGATIVE PERCENTAGE (-) DENOTES THE PERCENT DETERIORATION
FOR AN INDIVIDUAL.

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THE PIERS QUESTIONNAIRE
TABLE III
EXHIBIT 1

		HIGH MATH	MED MATH	LOW MATH
	SELF	YES	YES	YES
5.	SMART	95.2%	50.0%	35.0%
8.	LOOK	0.0%	5.0%	0.0%
9.	IMPORTANT	85.7%	45.0%	25.0%
80.	GOOD	100.0%	100.0%	100.0%
	PEERS	YES	YES	YES
12.	BEHAVED	90.5%	60.0%	50.0%
48.	MEAN	0.0%	15.0%	40.0%
51.	FRIENDS	100.0%	90.0%	35.0%
56.	FIGHTS	0.0%	35.0%	45.0%
58.	BULLIED	0.0%	15.0%	45.0%
	SCHOOL	YES	YES	YES
1.	FUN OF	0.0%	10.0%	25.0%
27.	IMPORTANT	95.2%	50.0%	40.0%
45.	HATE SCHOOL	0.0%	5.0%	25.0%
66.	FORGET LEARNED	0.0%	15.0%	60.0%
	FAMILY	YES	YES	YES
14.	TROUBLEMAKER	4.8%	15.0%	20.0%
17.	IMPORTANT	90.5%	75.0%	60.0%
38.	EXPECTED	28.6%	15.0%	10.0%
59.	DISAPPOINTED	0.0%	0.0%	45.0%

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THE PIERS QUESTIONNAIRE
TABLE III
EXHIBIT 2

		HIGH READING	MED READING	LOW READING
	SELF	YES	YES	YES
5.	SMART	95.2%	60.0%	40.0%
8.	LOOK	0.0%	0.0%	0.0%
9.	IMPORTANT	85.7%	90.0%	25.0%
80.	GOOD	100.0%	100.0%	100.0%
	PEERS	YES	YES	YES
12.	BEHAVED	95.2%	80.0%	50.0%
48.	MEAN	4.8%	25.0%	35.0%
51.	FRIENDS	81.0%	75.0%	60.0%
56.	FIGHTS	0.0%	25.0%	60.0%
58.	BULLIED	4.8%	10.0%	20.0%
	SCHOOL	YES	YES	YES
1.	FUN OF	90.5%	15.0%	50.0%
27.	IMPORTANT	90.5%	90.0%	25.0%
45.	HATE SCHOOL	4.8%	25.0%	50.0%
66.	FORGET LEARNED	4.8%	30.0%	45.0%
	FAMILY	YES	YES	YES
14.	TROUBLEMAKER	4.8%	25.0%	35.0%
17.	IMPORTANT	95.2%	100.0%	16.0%
38.	EXPECTED	28.6%	25.0%	10.0%
59.	DISAPPOINTED	0.0%	10.0%	15.0%