Homogenous Grouping and Mixed Ability: A Comparative Approach on Two Rural Secondary Schools in Muzarabani District, Zimbabwe.

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Abstract

The principal aim of this paper was to investigate the impact of streaming according to ability vis avis mixed ability. The choice of this topic was premised on the recognition and realization that streaming according to ability has continued to be practiced despite the system's unfavorable dehumanizing effect on both teachers and pupils, especially on the aspect that streaming of pupils usually results in the streaming of teachers and resources and that lowly placed pupils will be destined to failure. The research has also been prompted by the realization that schools which practice streaming , give shortage of learning material as an excuse for streaming pupils according to ability, yet, surprisingly, there are other schools which also have acute shortages in teaching and leaning materials but successfully practice mixed ability. The physical area of this study was Muzarabani District in Mashonaland central from which two schools out of seven schools in the district were selected for study, of these one school practices mixed ability while the other practice streaming according to ability. Data was gathered through partipant observation, documentary study, interviews and questionnaires. These methods were used to complement each other. The data derived from the instruments revealed that instructional benefits that are associated with streaming according to ability are outweighed by the negative effects of streaming. In light of these findings, the study therefore recommends that mixed ability be practiced in place of screaming according to ability.

Introduction

Streaming is the grouping of pupils according to their academic performance or achievement Boaler (1997) Recent definition of mixed ability refers to a group in which children of varied abilities are taught together rather than set apart in sets or streams Morrison (2004). The debate on streaming according to ability has raged on since the beginning of the modern educational system. Several reasons for and against streaming have been brought into focus by a number of scholars inside and outside Zimbabwe. Harlem (2000) identifies four types of ability grouping that schools use to allocate pupils classes. These are Between-Class ability grouping, Within-Class ability grouping, mixed ability and Setting. Harlem (2000) described these four types of ability grouping as 'tracks'. In his educational report, Boaler (1997) stressed that education offered to low ability streams is of inferior quality as compared to that offered to high ability streams. He further highlighted that students who perform below the expectations in achievement tests are considered to be slow learners and these are put into low ability streams. Derogatory adjectives are sometimes used to describe these pupils such as mentally defective, mentally sub-normal, dull and disabled. This has been denounced by Chisaka (1996) who blamed the system of labeling and stigmatization. He further argued that streaming according to ability puts pupils into social hierarchies and determines the pupils' future. In Zimbabwe, streaming dates back to the colonial era where it was selectively applied to black children so that only a few blacks could escape the bottleneck system of education inherent at the time.

In 1980, the government introduced free and compulsory education as a way of eradicating the bottleneck system. The response to free and compulsory education was an influx of pupils from primary to secondary school regardless of their grade 7 results. Hordes of pupils enrolled at secondary schools, some of whom had not even written grade 7. Some pupils who could hardly read or write enrolled at secondary school because it was 'free'. The problem was that the influx was not fully complemented by an increase in educational resources. Schools that wanted to maintain their standards introduced a system of either tracks or streams where slow learners found themselves in low ability classes doing subjects like music, physical education and some practical subjects. Former group 'A' schools like Vainona, Churchill, Prince Edward and Earglesvale, to mention but a few, are still practicing the system of tracks to this day Muronda, (1997).

Some schools (many of them) began to stream pupils according to ability as a way of channeling the meager resources to the few pupils with ability. Those pupils who were placed in low ability classes received inferior education from non-qualified teachers, as compared to their counterparts in high ability classes. Shortage of resources was given by many school heads as justification for streaming. In mixed ability classes, which the researcher has also experience in teaching, pupils compete. Even those who have problems in grasping concepts compete with those of high ability. The problems of labeling and low esteem do not exist in mixed ability classes. Despite the negative effects of streaming according to ability, this practice has become so institutionalized in schools that there are few schools in Zimbabwe that do not stream according to ability. This investigation is concerned with both the positive and the negative effects associated to homogenous grouping at secondary schools.

Geographical Location of the study

Muzarabani is in the north western side of Zimbabwe with a population of approximately half a million. It is one of the economically impoverished provinces of Zimbabwe where a greater number of its population depend on farming. Few schools have electricity and tap water. The whole district has two boarding schools and one government school. The rest are council schools that are equally ill equipped.

Research Hypotheses

In view of the issues raised above, the following null hypotheses (\mathbf{H}_0) were generated to guide the study:

- a) instructional benefits derived from streaming according to ability are outweighed by emotional and behavioral effects that streaming may cause in pupils.
- b) streaming of pupils also results in the streaming of teachers and in the unfair distribution of resources.
- c) there are more negative effects than positive in streaming pupils according to ability.

Significance of the study

Teachers are central to the success of any curriculum innovation. To perform their role effectively well, teachers must be sensitized about the pros and cons of such a curriculum exercise. This research presupposes that streaming according to ability has more negative effects than positive on the lowly perceived pupils.

The findings of this study will popularize the magnitude of the effects of streaming as compared to mixed ability. The instructional benefits of streaming according to ability together with its negative effects on pupils shall be made clear in this study. These findings are very important for schools that are still practicing streaming, despite its overwhelming criticism.

Description of the study Area and Research Design

The study was carried out in Muzarabani District which is 200 km north of Harare. There are seven registered secondary schools in this district and the study focused on two schools, of which one practice streaming and the other one practice mixed ability grouping, of the seven secondary schools four schools practice streaming according to ability while three secondary schools practice mixed ability grouping.

Methodology

A descriptive research survey was used as its features allowed the collection of a lot of data at a time. It deals with description of existing phenomena Robson (2002) which is streaming in this study. Thus the designs was appropriate for identification of streaming problems, comparison of current streaming practices and their justifications and describe the current curriculum practices of homogenous grouping. Two thousand three hundred and forty six (2346) pupils in seven widely spaced secondary schools in Muzarabani District of Mashonaland Central, Zimbabwe constituted the target population.

Three hundred and ninety four (394) ordinary level pupils in two secondary schools constituted the study sample. This gave a sample size of 20% which the researchers considered to be fairly representative of the target population. Data was collected through a self developed, pilot studied and administered questionnaire. The questionnaire consisted of twenty structured items. Structured items were slotted to allow the respondents to provide specific Keeves (2002). Furthermore, the questionnaire was considered to be an appropriate data collection tool where despondences were free to air their sentiments.

The questionnaire was self administered. The questionnaires were distributed to all the O-level students who were present on the day in their respective classrooms. Instructions on how the questionnaire was to be filled were provided. The students took an average of thirty minutes to complete the questionnaire. The researchers collected back the completed questionnaire. This ensured high completion and return rate of 96% and 100 % respectively. The data collection took six working days. The names of people used in this research are pseudo-names for ethical issues. The two schools that have been studied have also been coded X for that which practice streaming and Y for the school which practice mixed ability. This was done for ethical issues, to protect the images of the real respondences.

Results

Findings from this study suggest that the schools that practice streaming according to ability argue that less able pupils may be encouraged to work harder in their own class with the hope of being promoted to high ability class. At X High School, pupils were selected to high ability class at form one using their grade seven results. Pupils kept these ability classes until form three where another rigorous selection was done. Students were either moved to a higher ability class or demoted to a low ability class depending on their form two performance. This however encouraged some pupils to work very hard with the hope of getting promoted to a high ability class. The school Head for X Secondary School gave good intentions for streaming namely, to give pupils opportunity to learn effectively without discouragement or de-motivation. Another reason advanced for streaming was that the low ability grouped classes have to master English Language before they joined the high ability classes where 'difficult' subjects were done. The last reason given was that some pupils are too slow that streaming them allows the teacher to give the individualized attention and remediation. These pupils needed special remedial work which was only possible if they were put in their own class. These responses suggested good intentions for ability grouping, but they tend to forget that pupils work and benefit more from each other.

Analyses of the subjects that are done in different ability groups at X reveal some kind of segregation and hierarchisation of subjects in order of importance and market value. Low ability pupils from this school that practice streaming according to ability are exempted from doing subjects like English Literature, Accounts, Physical sciences, Biology, Technical Graphics and Computer sciences. At this school form 3 white and 3 Black are low ability classes which do subjects like Mathematics, English, Shona, Geography, Integrated Science, History and Commerce. These classes were denied the chance to do practical subjects because they were said to be too dull to carry nine subjects. Due to unfair practices of streaming it was discovered that there was antagonism among teachers of different ability groups and subjects at X High School. Teachers teaching high ability classes looked down upon those taking Low ability classes. Pupils' attitudes towards teachers of the low ability classes were negative. They disrespected those teachers teaching low ability classes because they associated them with their pupils' performance.

These findings confirm the hypotheses of this study that streaming of pupils often results in the streaming of teachers and resources. One teacher revealed that there were incidences when a high ability pupil refused to be assisted in his homework by a teacher who taught low ability classes. The pupil innocently asked if the teacher was good enough to assist in algebraic processes because he was afraid of being 'poisoned.' These problems only manifest where ability grouping is practiced. At Y Government Secondary School where mixed ability has been practiced, no incidences of indiscipline have been reported as stemming from frustration on how pupils are treated. Teachers from this school indicated that they work harmoniously together because they all share the burden of teaching low ability pupils. 40% of pupils who responded to the questionnaire revealed their resentment on ability classes. They argued that since they would sit for the same examinations at the end of the year, there was no need to place them in different ability classes because the low ability classes would be jeopardized by this segregation in so far as resource distribution was concerned. The Zimbabwe, Public School Examinations do not cater for low ability classes since the final examination will be the same for high and low academic performers. A question was asked on the general aspirations of high and low ability pupils.

This was aimed at determining the occupational aspirations of all pupils regardless of their ability. The responses show that the majority of high class pupils aspired for high class occupations. The interpretation that the high ability pupils are motivated, they aspire for big money and despise anything that is manual. Adversely, the low ability's response to this question was mixed; seventy percent of the pupils liked to have high class jobs. The impression these results may create is that ability grouping may not necessarily dampen the spirits of the low ability pupils. A large proportion of them remained motivated to the extent of aspiring for high class jobs. This somehow dispels the belief that streaming according to ability may result in pupils developing low self concept. However, the researcher came to the conclusion that the desire by low ability pupils for high class jobs did not always convert to better academic performance. The aspirations for white and blue color jobs by low ability pupils became simply an emotional feeling driven by poverty and a dream rather than a reality. It is also possible to interpret the desire for high class jobs by low ability pupils as an indication of the influence of the social values set by the dominant groups in the society Chisaka (1996).

Another interpretation derived from the low ability class pupils' aspirations for high class jobs was that it might imply a rejection of the despised manual jobs of the working class. This may be regarded as the development of a negative social value that discriminates between occupations and social status. This confirmed finding by Griffiths (1977), Gamoran and Berends (1987), that ability grouping develops social values of segregation and class conflict rather than a culture of cooperation and harmony. The rejection by low ability pupils to be associated with low status jobs may be taken as a rejection of low status that their class is labeled with and consequently, a rejection of the curriculum practice of segregation through ability grouping.

This study was premised on the hypotheses that instructional benefits derived from streaming are outweighed by their negative effects.

This has been confirmed by 60% of teachers who indicated that once pupils are relegated to the low ability class, they tend to behave according to the low ability tag that hovers around them. They will perceive themselves as relatively incompetent as compared to their high ability counterparts. The end result is that a lot of them resign to fate and devalue the importance of trying hard and doing well. Teachers also confirmed that there was higher participation in high ability classes than in low ability classes. This reveals that for low ability pupils, there are no instructional benefits in ability grouping.

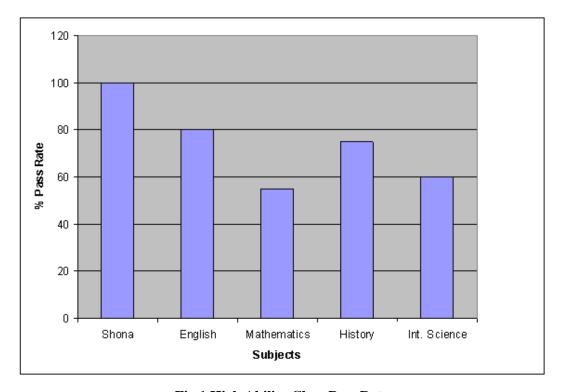


Fig.1 High Ability Class Pass Rate

Statistical figures in Fig. 1 indicate that the high ability grouped classes performed within the pass rate of 55% to 100% while that of mixed ability as in Fig 3 range from 19% to 67%. The low ability classes disappointingly scored between 0% and 60%. Low ability passes are highly recorded in Shona. Analysis from these graphs reveals that low ability pupils performed poorly compared to mixed and high ability pupils. These results confirm fears by Chisaka (1996) that instructional benefits to low ability pupils are more imaginary than real. The fact that low ability pass rate is always below that of mixed and high ability class is an indication of non-instructional benefits of homogenous grouping to low ability pupils. This analysis indicates that low ability pupils rarely benefit as evidenced by their perpetual failure. Homogenous grouping tends to benefit pupils in high ability classes because they are motivated to work.

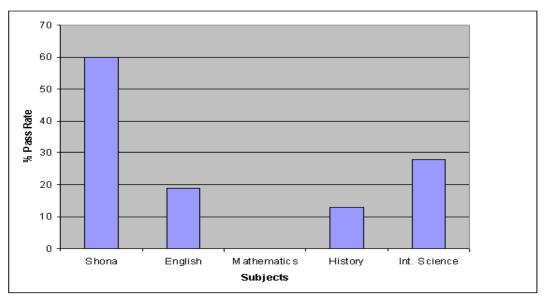


Fig. 2 Low Ability Class Pass Rate

The school Head at X High a Mr. Goredema explained the few passes found in low ability classes in History and English saying these were a result of teachers good performance because pupils were lucky to be taught by teachers who had experience in marking public examinations .He further explained that pupils who transfer from other schools may be wrongly placed to low ability classes since their performance may be underrated. These can only be promoted upon display of their academic make up while the high ability pupils always work hard in order to maintain the high ability tag.

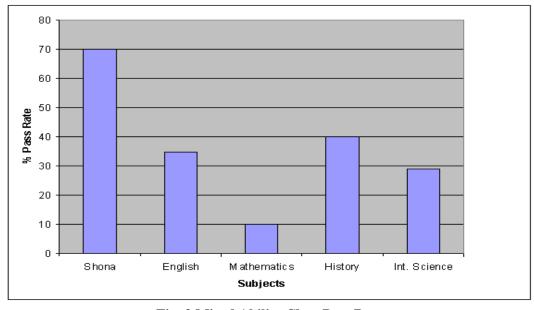


Fig. 3 Mixed Ability Class Pass Rate

The assumption of this study, that streaming of pupils results in the streaming of resources has been confirmed by teachers from the school that practice streaming. One teacher explained the high pass rate in high ability classes as attributable to the segregatory aspect that is practiced when educational recourses are distributed. The textbook distribution ratio is biased towards high ability classes. Where low ability pupils share major text books in the ratio of six pupils per copy, the high ability pupils would share the same text book in the ratio of three pupils per copy. This reveals the evils of segregation and favoritism that are manifested by homogenous grouping. A Head of department at X High School supported the unequal distribution of recourses saying that giving text books to low ability pupils was a waste of resources because they are "useless". This inequitable distribution of resources is unethical, segregatory and ignores the feelings of the pupils themselves, whose future has already been jeopardized by this inhuman treatment created by school authorities. The responses from the school which practice streaming indicated that even teachers themselves are not happy with the practice of streaming. 64% of teachers reiterated that although ability grouping had some positive effects on the school's rating and high ability pupils, it also had its fair share of disadvantages on the low ability pupils and on teachers.

Teachers are motivated to teach high ability classes. It therefore suggests that streaming according to ability disadvantages low ability classes in that they are abandoned. Low ability classes (white and Black) were allocated non-qualified teachers while high ability classes had the privilege of having qualified and competitive teachers. It was revealed that teachers who teach high ability classes looked down upon those who teach low ability classes even if they were all qualified teachers. This confirms fears by Farrant (1991) that where there is streaming, there is always antagonism between teachers of different streams. This study has discovered that low ability pupils are the ones who get punished for noise making, not doing work, coming to school late and even beer drinking. These are a result of negative attitudinal complexes that are associated with a feeling of rejection. Mr. Goredema indicated that indiscipline and child delinquency was associated with low ability pupils at his school. He revealed that the school lost one pupil who could not accept the low ability tag on him. Out of frustration he absconded from school and now operates as a captain of street kids in Harare. These revelations are an indication that streaming can have permanent damage to the behavior and emotions of the lowly placed pupils.

The researchers also discovered that pupils in low ability classes expressed more negative attitudes about themselves and their future than the high ability pupils. It was also discovered that almost half of pupils in lower ability classes drop school before the write O'level. This confirms findings by Smith in her Educational report of 2007 that streaming results in loss of interest in school for the lowly perceived pupils. Streaming according to ability has the effect of trivializing the ambition among pupils of low ability groups. Researchers also found out that streaming according to ability makes the slow learner to lose hope of trying. At Y secondary school, it was discovered that many low ability pupils drop mathematics in their early years of secondary school. This substantiates findings by Boaler (1997) that low ability pupils lose hope, self esteem, and confidence and give up to fate. They live up to the derogatory tags associated with them.

There is a different picture at schools where mixed ability is practiced. Low and High ability pupils mingle in their classes. The practice of social integration and interaction is promoted where there is mixed ability. The findings also confirm Abadzi's (1984) assertion that ability grouping always results in confining low ability groups to low socio-economic status. The Headmaster of School X testified that the relationships between low and high ability classes have been characterized by antagonism. There are incidences when high ability pupils have been harassed and beaten by low ability pupils blaming them of being teachers' favorites. He was also quick to say there was a danger at his school of gangsterism especially in low ability classes against high achievers in the high ability classes. In schools where mixed ability is practiced class conflicts do not exist since all pupils are treated equally and equitably. This promotes harmonious interaction between pupils and teachers. Pupil to pupil relationships and teacher to teacher relationships are not characterized by antagonism. There is eradication of negative feelings between high and low ability classes.

The researchers gathered that if low and high ability pupils are in the same class with the same teachers, the low ability pupils become encouraged to work harder. The researcher also gathered that in mixed ability schools no one class dominated the pass rate. Although the pass rate was poor at Y where mixed ability was practiced, there has been equitable distribution of resources to all pupils regardless of ability. The overall 'O'level results at a glance from 2002 up to 2004 are 45%, 49% 47% respectively. The school Head revealed that his school's high failure rate was due to their unsegregatory nature in enrolling pupils for form 1.

He also reiterated the school's high failure in public examinations to shortage of major recommended text books. However, these results from a mixed ability school are quite encouraging as compared to the low ability results of the same period at school X which are a disappointment. The results from the Zimbabwe School Examination Council in the table above confirm the fears of Chisaka (1996) and Watyoka (1999) that streaming only benefits the high ability classes and that it cuts off the pupils' future by instructionally defining it negatively.

Conclusion

In this study, the researchers found that streaming according to ability at secondary school is selective and segregatory. It confirmed the assumptions of this study that there are more negative effects in streaming pupils according to ability than there are positive effects. The findings have to a large extent confirmed those researchers inside and outside Zimbabwe, particularly the findings of Griffiths (1977).

Hallinan (1989), Chisaka (1996) and Watyoka (1999) who concurs that ability grouping tends to create in pupils so streamed low self concept and stratifies children largely on the pattern of their real life. The research has also established that instructional benefits of streaming are imaginary for low ability pupils persistently do worse than high ability groups. The research has also confirmed the declaration by Watyoka (1999) that ability grouping creates in schools the system of 'haves' and the 'have nots.'

Standards Site (2010) summarized the effects of streaming thus it plays a major role in polarizing pro-and antischool attitudes among pupils (with higher level pupils being pro and lower ones anti). Smith (2005) confesses that pupils of below average ability who were streamed to lower classes became friendless or neglected by others. This is the evidence of low self esteem and social alienation of lower stream pupils. This has been confirmed in this research especially when one considers the high rate of school dropouts in the low ability streams.

Recommendations

Having analyzed data gathered in this research regarding the effects of streaming according to ability, and comparing streaming with mixed ability, the researchers recommends that mixed ability grouping of pupils should be adopted:

That mixed ability is adopted where teachers use cooperative learning in which the slow learner will not be shunned but will feel as part of the learning process. High ability pupils will learn to accommodate those who are less privileged and feel obliged to assist in every way they can. This suggestion is made because the study has established that streaming according to ability segregates against low ability classes.

It advantages the high ability classes by giving them more text books, favorable learning conditions and more qualified teachers.

Mixed ability is recommended because streaming has proved to be socially, culturally and philosophically impoverishing in the sense that it focuses the curriculum on monolithic knowledge and skills. Pupils in the high ability classes are taught for the sake of passing the examinations not for the sake of knowledge. This stifles pupils and teachers' creativity Hallam in Ireson (2002)

Mixed ability is recommended for the purposes of destroying social conflicts in schools, stereotypes and complexes. If individuals are being frustrated through being labeled and being discriminated against, their aspirations and interests are not being promoted by the society, be it academic society or the larger society.

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