STRATEGIES TEACHERS USE TO PREPARE JUNIOR CERTIFICATE STUDENTS FOR FINAL EXAMINATIONS IN SOCIAL STUDIES: THE CASE OF BOTSWANA PUBLIC SCHOOLS

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ABSTRACT

This study was carried out to identify some strategies or teaching methods that teachers in public schools in Botswana use to prepare students for final examinations in Social Studies. Respondents were also asked to arrange the identified strategies or teaching methods in order of effectiveness (that is, beginning with those strategies considered to produce the desired results and ending with those that produced poor results). A total of eight (8) Social Studies teachers were selected from four (4) public schools in Gaborone, the capital city of Botswana. A questionnaire was used to collect data. Though a survey by nature, the data collected were by and large, qualitative. As a result, the data were analyzed qualitatively. The major finding was that most teachers used group work as the main teaching strategy. On the effectiveness of the strategies or methods, the patterns varied indicating that the sequencing depended on the situation or context in which each teacher operated, or the teacher's choice. The teachers' qualifications and experience did not have an effect on the findings. The small size of the sample may be a limitation to the generalizability of the findings of the study.

Keywords: Strategies, teaching methods, effectiveness, examinations, qualifications, Botswana

INTRODUCTION

In Botswana, Social Studies is taught through primary to junior certificate and senior certificate levels up to tertiary level. The system of public education in Botswana, to which this study relates, is as follows: 7+3+2 (7 years primary education, 3 years junior secondary education, and 2 years senior secondary education) (Republic of Botswana, 1993) and tertiary education, which varies in years depending of the type of programs students are enrolled in (for example, B.Ed. Secondary Education) and the type of institutions offering the programs (for example, universities offering degree programs or colleges of education offering diploma level teaching programs). In secondary schools, students sit for final examinations at the end of 3 years (junior secondary education) and at the end of 2 years (senior secondary education). Social Studies is a **core** or **compulsory** subject at junior certificate level and an optional subject at senior certificate level (Republic of Botswana, 1993). A core or compulsory subject is one that all students are required to take; they cannot choose not to take it; and an **optional** subject is one that students choose to do or do another subject of their choice. For instance, at senior certificate level, history, geography, social studies and development studies are optional subjects. Students at this level choose one subject from the four given. Public schools in this study or context refer to schools aided, run or owned by the Botswana government. These schools are wholly or partly funded by the Botswana government.

THEORETICAL FRAMEWORK

This study is informed by the goal setting theory, the self-efficacy construct and the intrinsic-extrinsic interface of the motivation concept. The relationship between goal setting theory, self-efficacy construct and extrinsic and intrinsic motivation will be explained in the study within the context of the findings and the literature review.

The Goal-Setting Theory

It is based on the idea that individuals possess a drive to work towards achieving a specific result or outcome (clearly defined destination). The outcome is often rewarding to the individual affected. The efficiency to achieve a goal is determined by three factors: proximity, difficulty and specificity. An achievable goal is one in which the start of the behavior and the destination (goal) are close. This is why children are more motivated to achieve easier tasks like riding a bike than studying a demanding subject like algebra. An ideal achievable goal should be moderate in terms of difficulty. If a goal is too hard or too easy to accomplish, then this might adversely affect motivation because success in achieving it might not be that rewarding or some frustration may occur due to failure to achieve it. Specificity refers to the fact that a goal should be objectively defined and understandable (intelligible) to the individual who is working towards its achievability. If a goal is stated as to achieve the highest grade possible under given circumstances, then it is poorly stated. A better stated goal could be to achieve at least 80% pass rate (Locke & Latham, 2002).

The goal-setting theory was developed from empirical research that was conducted over a period of four decades. The theory is based on the work of Ryan (1970). In developing the goal-setting theory, Ryan (1970) proposed that conscious goals have effects on action. In Ryan's work (1970), a goal is defined as an "object or aim of an action" (Locke & Latham, 2002, p705). An important discovery in goal-setting theory is that specific difficult goals increase performance. Further studies of goal-setting theory have found that the highest or most difficult goals produced effort and performance of the highest levels. Thus, in order to achieve a high level of performance, a teacher or student must set himself or herself difficult specific goals. Goal-setting theory has been found to be relevant to performance in many organizations irrespective of function or focus. So, both educational and non-educational organizations can benefit immensely from the goal-setting theory.

The Self-Efficacy Construct

Self-efficacy is the belief that an individual has the capability to achieve certain goals. In other words, it is the belief that an individual has the power to achieve or produce a desired goal or effect. Self-efficacy can facilitate the formation of an individual's behavioral intentions, and it also enables one to develop action plans and to initiate an action. In short, self-efficacy enables an individual to act, hence achieve the desired goal. Self-efficacy is, therefore, a very powerful behavioral change construct in as far as initiation of actions is concerned. Self-efficacy has been found to "...enhance[s] goal commitment" (Locke & Latham, 2002, p708).

The Intrinsic-Extrinsic Interface of Motivation

Motivation is derived from two sources: oneself (the individual) and the people around the individual. As a result, we have intrinsic and extrinsic motivation, respectively. Intrinsic motivation means "...doing something because it is inherently interesting or enjoyable" (Ryan & Deci, 2000, p55). Extrinsic motivation "... refers to doing something because it leads to a separable outcome" (Ryan & Deci, 2000, p55).

A teacher's knowledge of the goal-setting theory, the construct of self-efficacy and the intrinsic-extrinsic interface of motivation can help him/her to motivate his/her students to learn, and, therefore, achieve better results.

LITERATURE REVIEW

The reviewed literature suggests a number of approaches that teachers use to prepare students for final examinations in various school subjects.

Tshambani (1991) conducted a study in which he wanted to find out the factors that contributed to differences in schools in terms of performance in Social Studies with reference to two selected junior secondary schools in Botswana.

The schools were selected as case studies. One school performed better than the other: a high performing school and a low performing school. The performance was in Social Studies at the Junior Certificate level. The methods used for data collection were: observation of Social Studies teachers, interviews with school heads and teachers, analysis of students' marks from examinations (1988 JC results) and continuous assessment. School effectiveness was defined as the performance of students in the Junior Certificate final examinations. Thus, a school that performed better in these examinations was regarded as more effective than one that performed poorly. All the two schools used in the study were located in the same district. They also admitted schools who had similar scores at the Primary School Leaving Examinations (PSLE). The results are summarized on Table 1.

Table 1. Comparison between characteristics of less effective schools and those of effective schools

Less effective school	More effective school	
Quality of instruction meant for better students only not whole group	Instruction geared towards whole group	
Questions asked were mainly recall type (encourage memorization)	Questions asked were probing questions and solicited a variety of answers which provoked further discussion (more student participation)	
Teachers always came late to class which reduced instructional time	Teachers were prompt in responding to the bell	
Teachers were of lower quality because of less teaching experience	More qualified teachers with more teaching experience	

Among the key points in the conclusion was that instruction in less effective schools largely encouraged memorization of facts whereas in effective schools it mainly encouraged student participation.

Goss (2004) has identified four teaching strategies teachers of Advanced Placement (AP) Social Studies courses use to improve scores of their students in the AP examination. These are: (a) Use of primary documents, in most cases, *bimonthly*. Students are required to interpret these primary documents, which gives them the opportunity to practice their skills of outlining and writing, (b) Tests that teachers give include questions from past AP examinations. Questions included interpretive essay questions which require students to interpret meanings of aspects such as a map, a graph or chart, and a political cartoon, (c) Use of outlines created by students. Students are required to submit an outline of every chapter they have studied. Teachers collect the outlines on the day when students sit for chapter tests and (d) Giving short vocabulary tests weekly. The test items are drawn from course texts and past AP examinations. (d) Teachers require each student to write and submit an assignment

weekly. The purpose of these assignments is to "...provide[d] the teachers with the opportunity to grade students in the areas of persuasion, organization, accuracy of information, spelling, grammar, and proper use of key vocabulary terms" (p117).

Fragnoli (2006) conducted a research to investigate the instructional strategies associated with the use of historical inquiry as an instructional strategy and the benefits of these strategies in terms of improving students' learning and performance. Historical inquiry is "...the passion for pulling ideas apart and putting them back together" (Grant & vanSledright, 2000, p196). Fragnoli (2006) used a sample of two undergraduate classes who were registered for a methods course on teaching Social Studies and English language arts in elementary classrooms. Class A had fourteen (14) students whereas Class B had twenty-four (24) students. All these students (sample) where enrolled at a four-year college in New York State doing a childhood education programmer course; they were seeking certification to teach grades one to six in New York State and other states. Fragnoli (2006) identified three strategies associated with using historical inquiry in the classroom: using primary documents, simulations (See also Sanchez, 2006) and object-based instruction. The advantage of using these strategies were "...motivation, critical thinking, teaching justification, testing and proving hypothesis, and providing equal opportunity for all students to succeed in activities that were not based on reading level" (Fragnoli, 2006, p250).

Korkmaz (2007) conducted a study in which 148 teachers were surveyed. Teachers were asked to give their opinions on their responsibilities to enhance students' academic achievement in schools. Ninety percent (90%) of the teachers suggested that teachers should use a variety of instructional strategies, giving examples such as: co-operative learning, inquiry training, non-directional teaching and role-playing.

Vogler (2006) conducted a study in which 141 teachers of Biology 1, one of the three high school graduation courses (others were Algebra 1 and English 11), were surveyed. The study found that teachers predominately used teacher-centered practices (strategies) such as (in declining ranking order as shown by declining means): multiple-choice questions (4.25), textbooks (4.20), supplementary materials (4.07), textbook-based assignments (4.00), lecturing (3.93), lab equipment (3.91), visual aids (3.91), audio-visual materials (3.77), worksheets (3.45), charts/webs/outlines (3.53), cooperative learning/group work (3.70), inquiry/investigation (3.65), modeling (3.57), problem-solving activities (3.55), creative/critical thinking quest (3.52), open-response questions (3.51), and group projects (3.46).

Peterson, Janicki and Swing (1980) conducted a study to find out the effectiveness of three Social Studies teaching strategies, namely: recitation, inquiry, and public issues discussion. The study had two phases.

Phase 1: The sample of the study was made up of 145 ninth-grade students who were enrolled in Social Studies classes in an urban high school in Wisconsin in 1978 during the Spring Semester. The students in the sample were distributed as follows: inquiry (44 students), lecture-recitation (40 students) and public discussion (61 students). Each of these groups of students constituted a class and each of these classes was taught by an experienced Social Studies teacher. Students in the sample elected to join the group taught by an approach they preferred. They had prior experience of being taught by all the three approaches in the previous semester. At the beginning of the semester students were assessed in aptitude (ability + anxiety + conformance) and at the end of the semester they were assessed in achievement. Achievement was assessed through teacher prepared multiple choice tests.

Phase 2: A sample of 146 ninth-grade students was drawn from the same school that was used in Phase 1 of the study. The students were enrolled in Social Studies classes in a similar context as in the case of Phase 1 of the study. This was during the Fall Semester of 1979. Altogether, there were six classes and they were taught by two male teachers, all experienced. Each teacher taught each of his/her three classes with one of the three teaching approaches: lecture-recitation, inquiry and public issues discussion. The distribution of students with respect to the approaches that were used was as follows: inquiry (41 students), lecture-recitation (51 students), and public issues discussion (54 students). Students in the sample were assessed in aptitude (ability + anxiety + conformance) at the beginning of the semester and assessed in achievement at the end of the semester. Achievement was assessed through teacher prepared multiple choice tests.

Results: In both studies, there was a steep slope of achievement as an effect of conformance related to inquiry. Secondly, there was a steep slope of achievement as an effect of ability related to lecture-recitation strategy. Third, both studies showed the presence of an ATI (aptitude-treatment interactions) for anxiety and ability. In both studies it seemed high-ability students did well when teaching was done by varying the three approaches regardless of students' differing level of anxiety. Cromback and Snow (1977) found that high-ability students did better when methods that allowed them to learn on their own were used, for example, Socrates and inquiry, which follows that low-ability students would do well when methods that restrict freedom to learn such as recitation and lecture were used.

STATEMENT OF THE PROBLEM

Tshambani (1991) found out that instructional strategies used in less effective schools encouraged memorization whereas instructional strategies used in more effective schools encouraged student participation. Goss (2004) has identified several strategies that teachers use to improve their students' grades, for example, giving students an opportunity to interpret primary documents and requiring them to submit written assignments weekly. Fragnoli (2006), Vogler (2006) and Korkmaz (2007) have also identified other teaching strategies that teachers can employ to improve student learning and performance.

In view of the related studies discussed above, this study seeks to investigate the strategies that teachers of Social Studies in junior secondary schools in Botswana use to prepare students for final examinations. (In this study the term strategies is used to mean the same as teaching methods, approaches or techniques).

RESEARCH QUESTIONS

- 1. What strategies (teaching methods) do teachers of Social Studies in junior secondary schools use to prepare students for final examinations?
- 2. Which of the strategies identified in 1 above are more effective?

RESEARCH OBJECTIVES

- 1. To identify the strategies teachers of Social Studies in junior secondary schools use to prepare students for final examinations.
- 2. To identify those strategies that teachers perceive as more effective in preparing students for final examinations in Social Studies.

METHODOLOGY

A survey was conducted in which 8 teachers were sampled from 4 junior secondary schools in Gaborone, the capital city of Botswana, using purposive sampling technique. All the

sampled teachers taught Social Studies. A questionnaire was used to collect data. There were two questions on the questionnaire each consisting of eight sub-questions.

RESULTS (FINDINGS) AND DISCUSSION

The first question required the respondents to list the various teaching strategies they used when preparing their students for Junior Certificate final examinations in Social Studies. The responses are summarized on Table 2.

Table 2. Strategies (teaching methods) identified by teachers

Strategy (Teaching method)	Number of Respondents	%
Group work	5	62.5
Drilling/lecture method	1	12.5
Co-operative learning	1	12.5
Pair work discussion	1	12.5
Total	8	100

The results of the study (See Table 2) indicate that most teachers (62.5%) in the sample use group work to prepare their students for final examinations. Other strategies that teachers use to prepare their students for final examinations include drilling/lecture method, co-operative learning, and pair work discussion, all of which are used equitably by all teachers in the sample (average percentage is 12.5 for all these methods). In the two studies carried out by Paterson, Janicki and Swing (1980) it was concluded that students did well academically when the three methods, that is, inquiry, public issues discussion and recitation-lecture were used regardless of the students' level of anxiety. The findings of this research study indicate that teachers put more emphasis on the use of group work (62.5%) followed by other techniques or methods such as pair work discussion (12.5%), co-operative learning (12.5%), and drilling/lecture method (12.5%). Group work, being closely related to inquiry and public issues discussion, dominates in the finding of this study which shows that this study by and large confirms the findings of Paterson, Janicki and Swing (1980). The findings of Cromback and Snow (1977) indicated that high-ability students did well when methods of instruction that allowed more freedom were used and that low-ability students did well when methods that restricted freedom were used. Their findings also give some insight and are therefore not far from the findings of Paterson, Janicki, and Swing (1980) and the findings of this study.

Co-operative learning has been defined by Artz & Newman (1990, p448) as "small groups of leaners working together as a team to solve a problem, complete a task, or accomplish a common goal." In order for co-operative learning to succeed, students using it to learn must co-operate and be interdependent instead of being competitive and individualistic. The basic principles of co-operative learning are the same but the models of co-operative learning vary. The leading developers of co-operative learning include authors such as Spencer Kagan, Rodger and David Johnson, and Robert Slavin (See Metzke & Berghoff, 1999). Each of these authors or groups has developed variations of the same model of co-operative learning because of different emphases and approaches (See Metzke & Berghoff, 1999). Recent studies of co-operative learning show that it has positive effects in that it increases academic achievement. For example, a study by Stevens & Slavin, 1995a) which compared academically handicapped normal students with gifted students found that co-operative

learning promoted higher academic achievement and greater retention of subject matter than individualistic learning experiences. Some authors (for example, Johnson & Johnson, 1975) have found that co-operative learning promotes acceptable behavior and desired attitudes in students.

Group work is a form of co-operative learning in which students learn in a team. Bowering, Leggett, Harvey and Hui (2007) define group work as "...a general strategy where students work together in face to face interaction without direct teacher supervision to achieve a common goal" (p105). Once students are in a group, they learn actively (Freiberg & Driscoll, 2005; Killen, 2003) because they are able to exchange ideas. Discussion is essential in any group situation. Group work has many benefits, which include the following (Department of Curriculum Development and Evaluation, 1990):

- 1. Long term retention
- 2. Higher level of reasoning
- 3. Critical thinking
- 4. Teamwork skills
- 5. Interpersonal communication
- 6. Group problem-solving and decision-making
- 7. Improved racial/ethnic relations
- 8. Improved sexual difference relations
- 9. Higher self-esteem
- 10. Individual empowerment
- 11. Conflict resolution
- 12. Higher academic achievement

Pair work discussion is another form of co-operative learning that involves only two students learning co-operatively. Pair work has been defined by Bowering, Leggett, Harvey and Hui as "Think-pair-share activities were used by the lecturers within the PowerPoint presentations as a means of ensuring engagement and further development of understandings. Normally occupying around fifteen minutes of class time, these were created when the lecturer assigned a short discussion topic ..." (p110). Bowering, Leggett and Hui refer to pair work discussion as *Think Pair Share activities*.

Drilling and Lecture are viewed here as meaning the same. Lecture is predominantly a one way method as the lecturer delivers the content to a group of learners who basically take down notes which they memorize and later regurgitate in response to questions during an examination or a test. The principles of conducting a successful lecture are spelt out in *Botswana Social Studies Teaching Methods: A Resource Book for Teachers* (Department of Curriculum Development and Evaluation, 1990).

The second question required the respondents to put the strategies they mentioned in question one (1) in a sequence according to their effectiveness or achievement of desired goals. The responses were varied which is an indication of variation in accordance with the choice of the teacher to match the mixed ability nature of the class being taught. Mixed ability students benefit most when methods are mixed (especially inquiry, public issues discussion, and recitation-lecture methods), which fits well with the findings of Peterson, Janicki and Swing (1980). The findings by Cromback and Snow (1977) would also apply depending on whether students being taught are high-ability or low-ability. In this respect high-ability students

would require teaching by methods of instruction that have more freedom to learn and low-ability students would require methods with limited freedom.

CONCLUSION

The study found that teachers used group work as the main teaching method because it produced the desired results, that is, it improved students' performance (or achievement) in the final examinations. Other methods or teaching strategies that teachers used to prepare their students for final examinations included: pair work discussion, lecture/drilling, and cooperative learning. These findings were closely related to the findings of Paterson, Janicki and Swing (1970) who found that students did well academically when the three methods (that is, public issues discussion, recitation and inquiry) were used in a varied manner. Group work, being a learner-centered strategy, is closely related to inquiry and public issues discussion.

IMPLICATIONS

Implications of the findings for teachers, education policy makers and educators (teacher trainers) are:

- 1. Those teachers who still produce poor results should try to use group work as the main teaching strategy. If such teachers are not conversant with group work, then they should seek help from those teachers who know how to use group work strategy.
- 2. Training on the use of group work and other teaching methodologies or strategies (for example, drilling/lecture method, pair work discussion, and co-operative learning) can also be provided through workshops.
- 3. Group work and other strategies that have been identified to be effective by the study should be part of the curriculum in the institutions of secondary school teacher training.

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