

EFFECTIVENESS OF TEACHER-MADE TESTS IN GOROMONZI DISTRICT PRIMARY SCHOOLS

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Abstract

This study sought to establish the effectiveness of teacher-made tests on the performance of pupils in Goromonzi District in Mashonaland East Province in Zimbabwe. The study used the positivistic paradigm and adopted the descriptive survey design. The population comprised of all primary schools in Goromonzi district. The sample consisted of 240 teachers from 30 schools randomly selected. Each school provided 8 teachers for the study. Of the sample respondents 130 were female and 110 male. All the information was collected through a questionnaire which had both close-ended and open-ended questions. Descriptive statistical analysis was used to interpret data. The results of the study indicate that teacher-made tests are given to pupils in the schools and there was overwhelming acceptance by the respondents that these tests helped to improve the academic performance of pupils. It was also found that most teachers did not have knowledge about the standard procedures of constructing, marking, scoring and grading of tests. The study recommends that there was need for schools to conduct staff development programmes to equip teachers with skills to construct teacher-made tests.

Key words

Effectiveness, teacher, tests, primary school, district

Introduction

In Zimbabwe, tests play a very important role in the education system as they are used as tools in measurement and evaluation processes. As Mpofu (2011) states, for a teacher to be able to do his/her work effectively, he/she needs to assess the progress of his or her pupils from time to time. A good knowledge of where the pupil is and how he/she is progressing helps the teacher to effectively cater for the needs of pupils (Chakanyuka, 2000). Therefore, well constructed teacher-made tests give students the opportunity of assessing their knowledge and with immediate and constructive feedback; the learners can improve their performance (Sax, 2007). In Zimbabwean schools, teachers use two main groups of tests; which are standardized and teacher-made tests. According to Evans (2009), standardized tests are tests which are set and pre-tested with a group of the same level as the one that will take the tests and they come to the teacher ready-made. The tests have explicit instruction for uniform administration and they are written at the same time across the country. They are usually written at the end of a particular course or programme for example Grade Seven, Form Four ('O' Level) or Form Six (Advanced Level), whereas the teacher-made tests are constructed by the teacher himself / herself (Evans, 2009). Teacher-made tests play a very significant role in that they are part of the teaching and learning process. As Madziyire (2010) posits, teacher-made tests help the teacher to identify the content (knowledge or skills) which has been mastered by pupils and the teacher knows through the results from his/her tests the areas where the pupils have difficulties and then finds ways of overcoming the difficulties so that these pupils can do better. Results from teacher-made tests enable the teacher to assess his / her strengths and weaknesses. It was on account of the importance of teacher-made tests that this present study set out to explore the effectiveness of teacher-made tests in primary schools in Zimbabwe.

Literature Review

According to Chakanyuka (2000), teacher-made tests compare individual's performance with that of other pupils in the same class or similar class in one school. They may also compare the same student's performances from time to time. In this case as James (2005) postulates, teacher-made tests are used as a continuous assessment tool which provides more information that is more reliable than examinations or standardized tests would. Continuous assessment builds up a picture of a pupil's performance over a prolonged and representative period and can be in the form of practical work, oral tests or written tests (Hambleton and Pitomak, 2006). As Lee and William (2005) argue, the key to teacher-made tests is to make them a part of instruction and not separate from it. Tests should be instructional and ongoing. Rather than being "after-the-fact" to find out what students did not learn, they should be more "before-the-fact" to target essential standards (Migs, 2006).

Classroom tests or teacher-made tests can be used for a variety of instructional purposes and these can best be described in terms of their location in the instruction process (Merther, 2005). Dandis (2013) states that teacher-made tests can be given at the beginning of an instructional segment to determine whether pupils have already achieved the objectives of planned instruction. Ogunniyi (2006) argues that, teacher-made tests serve as good indicators in monitoring the success of teacher-student material instruction. Teacher-made tests provide feedback so that teachers can shift the emphasis of their instruction and provide remedial activities before the next lesson (Kolwale, 2010).

Marshall and Drummond (2006), state that the other type of a teacher-made test is the one given during the instructional process to provide the basis for formative assessment. According to Makoni (2008), formative assessment is used to provide feedback to students about their progress, detect learning errors and provide feed-back to pupils and teachers. At the end of a segment of instruction (for example, a unit or course), a classroom test can be constructed by the teacher aiming at measuring the extent to which the intended learning outcomes have been achieved (Trice, 2000).

Teacher-made tests or classroom tests are divided into two groups, namely essay and objective tests (Hambleton and Pitomak, 2006). According to Saudien (2007) essay tests give pupils the opportunity to freely express themselves in their responses to a question and the pupil's responses are normally extended as they have to organise their thoughts and express them in writing. On the other hand, Migs (2006) argues that objective tests questions are those that require a specific answer. An objective question usually has only one potential correct answer (there may be some room for answers that are close), and they leave no room for opinion (Migs, 2006). Objective test questions may be constructed so that they contain a list of possible answers, so that the student will be expected to recognize the correct one. As Festus (2014) postulates, objective test questions include multiple choice questions, matching, true and false questions as well as the fill-in-the-blank questions; and students must remember the correct, specific answer for each question.

As Mpofu (2011) posits, while teacher-made tests help improve the performance of children in the learning process, it is not always the case since tests are constructed by teachers themselves. At times, these tests lack validity and reliability. It is clear that teachers need to be extremely careful in designing the test that measures the skill it intends to measure (Mpofu, 2011). Robert (2009) states that the other problem faced by classroom tests is that the teachers lack the skills of appraising the effectiveness of the test. As Chakanyuka (2000) advises, teachers should build a file of items for future use called an item bank. Item analysis data, according to Downe (2008) provides a basis for remedial work as it brings to light general areas of weakness acquiring more extended attention.

Teachers themselves generally feel that construction, marking, reading and appraising of teacher-made tests still need staff development sessions since the majority of teachers have problems in these areas (Zindi, 1995). Classroom teachers need to think of how practical matters relate to testing. As Frith and MacIntosh (2008) state, a good classroom test should be “teacher-friendly.” A teacher should be able to develop, administer and mark it within the available time and with available resources (Frith and MacIntosh, 2008). As Pophan (2005) argues, classroom tests are only valuable to students when they are returned promptly and when the feedback from assessment is understood by the student. Practical issues include time, resources and administrative logistics (Popham, 2005).

Chakanyuka (2000) states that, for a teacher to be able to do his / her work effectively, he / she must have a means of knowing the progress of his / her pupils from time to time. A good knowledge of where the pupil is and how he/she is progressing is fundamental to effective teaching and learning (Chakanyuka, 2000). Therefore, as Alaba (2010) postulates, well constructed tests can give pupils the opportunity of assessing their knowledge and with immediate and constructive feedback; the learner can improve their performance. Makoni (2008) says that, it is clear that teacher-made tests are being used increasingly as an alternative to terminal examinations because they provide information that is more reliable than examinations. This, as Makoni (2008) emphasizes, is because continuous assessment builds up a picture of pupils’ performance over a prolonged and representative period, whereas examinations only show what the pupil did on one particular day.

Statement of the Problem

Well constructed teacher-made tests give students the opportunity of assessing their knowledge and with immediate and constructive feedback; the learners can improve their performance.

Purpose of the study

The study sought to establish the effectiveness of teacher-made tests in primary schools in order to expose the barriers that hinder the use of these tests so that practical suggestions could be found to improve the situation regarding classroom testing.

Research Questions

The study sought to provide answers to the following research questions:

1. To what teachers understand what teacher-made testing entails?
2. What is the frequency of assigning teacher-made tests?

3. What is the capacity of teachers in constructing valid and reliable tests?
4. To what extent do heads of schools promote the use of teacher-made tests?

Limitations of the study

The study employed a relatively small sample to make generalizations about the whole of Zimbabwe. The descriptive design used has its limitations as well. As Ary and Razaviah (2010) observe, it lacks predictive power, since the research may discover and describe “what is” and unable to predict “what would be”. The respondents may also give false responses thereby affecting the validity of the findings. This was mitigated by pilot testing of the instrument and by triangulation within the method.

Delimitation of the study

The study was confined to the effectiveness of teacher-made tests in primary schools in Goromonzi District in Eastern Zimbabwe. The respondents were the 240 teachers from the 30 schools randomly selected. Views from heads of schools, education inspectors as well as deputy heads were not solicited for this study.

Methodology

The study employed the quantitative paradigm and made use of a survey design. As Cohen and Manion (2005) posit, the descriptive method looks with intense accuracy at the phenomenon of the moment and then describes precisely what the researcher sees. The questionnaire was employed as the instrument of gathering data because as Borg and Gall (2009) postulate, it increases reliability as an instrument of gathering data because of its greater impersonality. However, as Lawrence (2008) postulates, the questionnaire has a low response rate and is inflexible in that it does not allow ideas or comments to be explored in-depth and many questions may remain unanswered. The researchers personally distributed and collected the questionnaires to mitigate the challenge of low response rate. Data produced from the questionnaire yielded descriptive statistics around the variables under study. These statistics were computed and inferential implications from them deduced and recorded.

Findings and Discussion

The study sought to establish the effectiveness of teacher-made tests in Zimbabwean primary schools. This section is presented in two parts; namely, presentation of data and discussion thereof.

Presentation of Data

Table 1: Composition of respondents by gender (N=240).

Response Category	Frequency	Percentage
Male	110	46
Female	130	54
Totals	240	100

Table 1 shows that the sample had more female respondents than male ones (54% and 46% respectively).

Table 2: Distribution of respondents by professional qualifications (N=240).

Professional Qualifications	Frequency	Percentage
Certificate in Education	46	19
Diploma in Education	148	62
Bachelor's Degree	10	4
Untrained	36	15
Totals	240	100

As Table 2 shows, 62% of the respondents were Diploma in Education holders, 19% were Certificate in Education holders, 15% were untrained and 4% had a Bachelor's Degree.

Figure 1: Composition of respondents by experience in the teaching field (N=240).

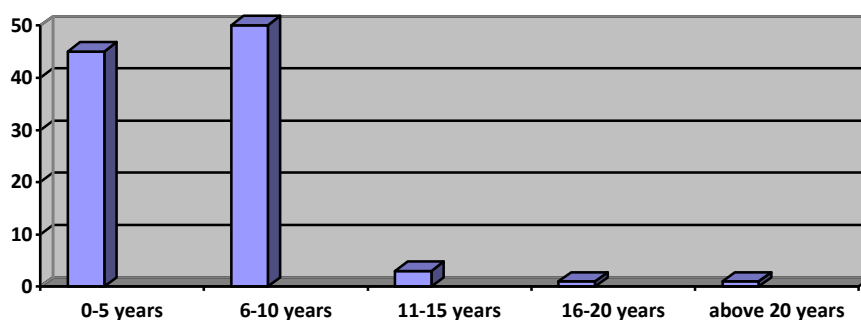


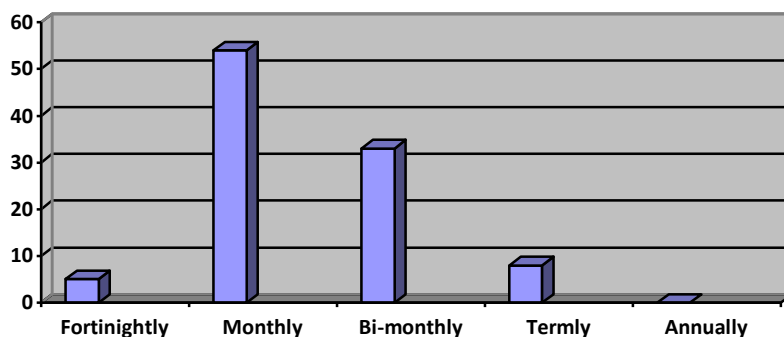
Figure 1 above shows that 50% of the respondents fell within the 6-10 years of teaching experience, 45% fell within the 0-5 years of teaching experience, 3% fell within the 11-15 years of teaching experience and 1% apiece fell within the 16-20 years and above 20 years of teaching experience respectively.

Table 3: Responses to the question: “What do you think to be the major purpose of teacher-made tests (N=240).

Response Category	Frequency	Percentage
To record pupil's marks	122	51
For instructional improvement	104	43
To drill pupils for standardized tests	14	6
Totals	240	100

Table 3 above reveals that 51% of the respondents thought that the major purpose of teacher-made tests was to enable teachers to record marks, 43% indicated that teacher-made tests were for the improvement of the instructional process and 6% said the teacher-made tests were for drilling pupils for standardized tests.

Figure 2: Responses to the question: “After how long do you give your pupils teacher-made tests? (N=240).



An analysis of the information in figure 2 above reveals that 5% of the respondents indicated that they gave pupils teacher-made tests fortnightly, 54% gave teacher-made pupils after every month, 33% stated that they gave pupils teacher-made tests after every two months, while 8% indicated that they gave their pupils teacher-made tests once per term. None of the respondents gave their pupils teacher-made tests once per year.

Figure 3: Responses to the question: “When constructing your teacher-made tests, do you consider validity and reliability of the test?” (N=240).

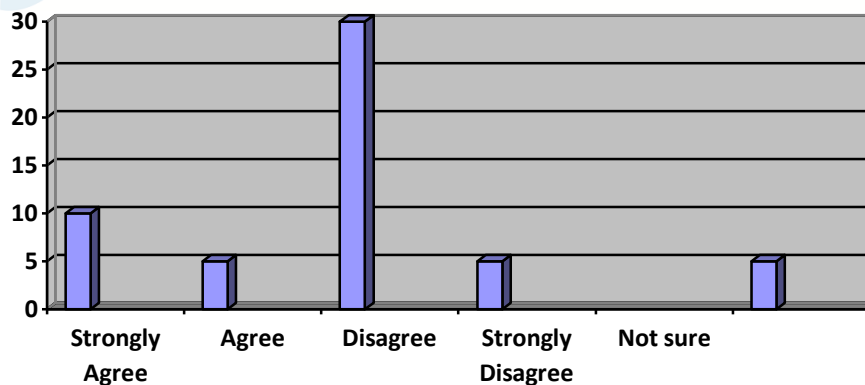


Figure 3 above reveals that 80% of the respondents indicated that when constructing teacher-made tests, they did not consider validity and reliability of the test. Only 15% stated that they considered validity and reliability when administering the teacher-made tests and 5% of the respondents were not sure about the meaning of the question.

Figure 4: Responses to the statement: “Your head promotes and supports the use of teacher-made tests over standardized tests.” (N=240).

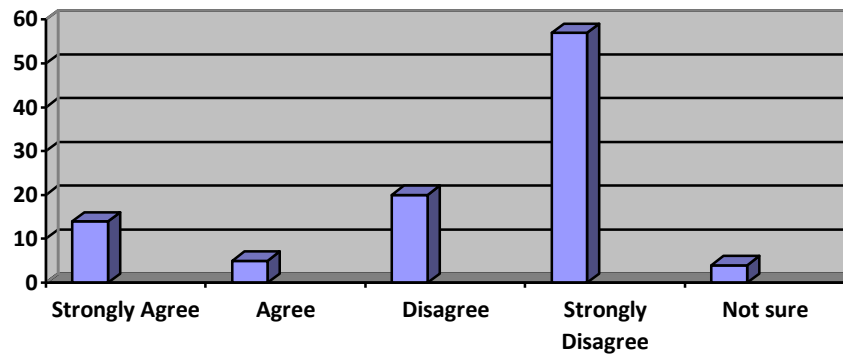


Figure 4 above shows that the majority of respondents indicated that their heads did not promote and support the use of teacher-made tests over standardized tests (77%). Only 19% of the respondents stated that their heads promoted and supported teacher-made tests and 4% were not sure.

The questionnaire had one open-ended question which bolstered data from the close-ended questions. The question wanted respondents to indicate the challenges that they faced in the use of teacher-made tests. A number of challenges were mentioned. The most common ones included the following:

- Most respondents have little technical knowhow to construct valid and reliable classroom-tests.
- Teacher-made tests are biased because some teachers were afraid of seeing their students failing a test and thus constructed very easy tests.
- School heads emphasize the use of standardized tests at the expense of teacher-made tests.
- The time-table is too congested to allow for adequate time for teacher-made tests.
- The teachers' work-overload does not allow him / her to pay adequate attention to setting and marking of teacher-made tests in all subject areas.

Discussion

Results from the study reveal that the majority of the respondents thought that the major purpose of teacher-made tests was to obtain marks for recording purposes. This might imply that teacher-made tests are more of a routine activity than an exercise to improve the learning process. This

finding negates the purposes of classroom or teacher-made tests. As Chakanyuka (2000) states for a teacher to do his/her work effectively, he/she must have a means of knowing the purposes of his/her pupils from time to time.

Data also reveal that most teachers give teacher-made tests monthly. The frequency of assigning pupils to write teacher-made tests appears to be rather far spaced. As Madziyire (2010) argues, teacher-made tests should be made to be part of the teaching and learning process as teacher-made tests should help the teacher to identify the content (knowledge or skills) which has not been mastered by pupils and the teacher knows through the results from his/her tests the areas where pupils have difficulties and then find ways of overcoming them. In short, results from teacher-made tests enable the teacher to assess his/her strengths and weaknesses, thus, they should be given to pupils on a more regular basis.

Information from the study shows that most of the respondents did not consider validity and reliability when constructing and marking teacher-made tests. As Mpofo (2011), at times the teacher-made tests lack validity and reliability. It is clear that teachers need to be extremely careful in designing the test that measures the skill it intends to measure. Chakanyuka (2000) advises that teachers should build a file of items for future use called an item bank which provides a basis for remedial work as it brings to light general areas of weakness that require more extended attention.

Data also reveal that most heads did not support teachers as they used the teacher-made tests. The implication of this revelation is that heads would rather have teachers rely more on standardized tests rather than teacher-made tests. This is tantamount to promoting drilling for examinations. Standardized tests according to Evans (2009) are tests which are set and pre-tested with a group of the same level as the one that will take the tests and they come to the teacher ready-made. Teacher-made tests on the other hand are constructed by the teacher himself/herself and they are part of the teaching and learning process.

Results also reveal that teachers experience a number of challenges as they attempt to make use of teacher-made tests. Teachers lack the necessary technical knowhow needed to construct valid and reliable tests, the timetable is also too congested to allow for adequate time for teacher-made tests. Teachers are also overloaded with a myriad of duties some academic and others non-academic to pay adequate attention to setting and marking teacher-made tests. This finding tallies with observations made by Zindi (1995) who stated that teachers themselves generally feel that construction, marking, interpreting and appraising of teacher-made tests still need staff development sessions since the majority of teachers have problems in these areas. As Poplam (2005) emphasizes, classroom tests are only valuable to students when they are returned promptly and when the feedback from assessment is understood by the student.

Conclusions

Given the background of the above findings, the researchers make the following conclusions:

- Teachers think that teacher-made tests are given to pupils in order to obtain marks for recording purposes and not to improve the teaching / learning process.
- The frequency of giving teacher-made tests is far spaced due to a congested primary school timetable as well as work overload from other non-teaching duties that most teachers are assigned to do.
- Teachers are not aware of the need for their teacher-made tests to be valid and reliable.
- Heads did not support teacher-made tests but instead preferred that teachers focused on standardised tests.
- Challenges faced by teachers in their attempts to construct and give teacher-made tests to pupils include lack of technical know-how to construct proper tests, the timetable in the primary school has too many subjects and teachers have too many duties that interfere with their academic work.

Recommendations

In light of the findings of this study, the researchers would like to make some recommendations.

- The Ministry of Primary and Secondary Education should launch staff development programmes with focus on the construction of teacher-made tests so as to help teachers understand the significant role of teacher-made tests in the teaching/learning process.
- The Ministry of Primary and Secondary Education should reduce the number of subjects taught to pupils in the primary schools as teachers fail to adequately get time to construct and mark tests.
- School heads should guide teachers with the proper ways of constructing teacher-made tests so that they utilise these tests during the teaching/learning process.
- The curriculum at teacher training colleges should include teacher-made tests so that all classroom teachers have the expertise to construct and administer teacher-made tests.

References

- Alaba, S. O. (2010). *Improving the standard and quality of primary education in Nigeria: A case study of Oyo and Osun States*: International Journal for Cross-Disciplinary Subjects in Education, 1(3): 25-38.
- Ary, D. J. and Razaviah, A. (2010). *Introduction to research in education*. London: Routledge.
- Borg, W. R. and gall, M. D. (2009). *Educational research: An introduction*. New York: Longman.
- Chakanyuka, S. (2000). *Measurement and evaluation*. Harare: Zimbabwe Open Univeristy.
- Cohen, L. amd Manion, L. (2005). *Research methods in education*. London: Routledge.
- Dandis, M. A. (2013). *The assessment methods that are used in secondary school mathematics class*. Journal of Education, Teachers and Trainers, 4(2): 133-143.
- Dowme, N. M. (2008). *Fundamentals of measurement techniques and practice*. New York: Oxford Press.
- Evans, C. (2009). *Assessment feedback in higher education*. UK: University of Exeter.
- Festus, A. B. (2014). *Assessment in primary school mathematics classrooms in Nigeria*. International Journal of Eductaion Learning and Development, 2(2): 50-55.
- Frith, D. S. amd MacIntosh, H. G. (2008). *A teacher's guide to assessment*. Lackhampton: Stanley Thornes.
- Hambleton, R. K. and Pitomak, M. (2006). *Setting performance standards*. Educational Measurements, 10(4): 433-470.
- James, B. (2005). *Assessment in the classroom*. New York: Longman.
- Kolawale, E. B. (2010). *Principles of tests construction and administration*. Lagos: Bolobay Publications.
- Lawrwence, W. M. (2008). *Conducting educational research*. London: Longman.

- Lee, C. and William, D. (2005). *Studying changes in the practice of two developing assessment learning*. Teacher Development, 20(5): 265-283.
- Madziyire, N. C. (2010). *Supervision and leadership*. Harare: Zimbabwe Open University.
- Makoni, T. (2008). *Measurement and evaluation in the classroom: The teachers' role*. Harare: College Press.
- Marshall, B. and Drummond, M. J. (2006). *How teachers engage with assessment learning: Lessons from the classroom*. Research Paper in Education, 21(2): 133-140.
- Mertler, C. (2005). *Secondary teachers' assessment literacy. Does classroom experience make a difference?* American Secondary Education, 33(2): 76-92.
- Migs, D. (2006). *Measuring teacher effectiveness: Some methodological reflections*. Educational research and Evaluation, 12(1): 53-74.
- Mpofu, B. (2011). *Formative evaluation versus summative evaluation*. Harare: Longman.
- Ogunniyi, M. B. (2006). *Educational measurement and evaluation*. Ikefa London: Nigeria Limited.
- Popham, W. J. (2005). *Educational evaluation*. Englewood Cliffs, N. J: Prentice Hall.
- Sax, G. (2007). *Principles of educational and psychological measurement and evaluation*. Belmont: Wadsworth Publishing Company.
- Soudien, C. (2007). *Making our own modernity: Standards, values and bench marks in the schools in the age of globalisation*. South African Review of Education, 13(1): 1-17.
- Trice, A. D. (2000). *A handbook of classroom assessment*. New York: Longman.
- Zindi, F. (1995). *Intelligent or not? The African's dilemma*. Harare: SAPEM.