

MSCE examination results

Are they a reliable tool for measuring educational standards?

Presented at the 4th Sub-Regional Conference on a Assessment in Education, hosted by Umalusi from the 26th to the 30th June 2006

David C Yadidi, Malawi National Examinations Board

Abstract

Over the past few years, there has been a lot of debate in Malawi on the topic of educational standards especially at Malawi School Certificate of Education (MSCE) level.

Rising and falling of MSCE pass rates have both been seen as problems in the public eye. However, the general feeling has been that educational standards have generally declined in the country over the years judging by the low pass rates in the recent MANEB examinations.

Whenever the country has registered a very low pass rate like it happened in 1999, when only 13% of the candidates passed the examination, some quarters of the public have blamed the assessment system used by the Malawi National Examinations Board (MANEB) for being responsible for such dismal examination results. However, when the pass percentage has risen like it did in 2005 with 55% pass rate, again some people have cried foul suspecting MANEB to have “doctored” the results in order to pass many candidates with the intent of pleasing the politicians.

The purpose of this paper is to share with others Malawi’s experiences with this controversial topic of standards. Firstly, there will be an attempt to explore answers to three crucial questions relating to standards: what are standards, who sets them and how are they measured? The paper will also describe reforms that the Ministry of Education policy makers have introduced to improve and maintain standards. MANEB’s procedures in benchmarking grades will also be scrutinized.

Finally, suggestions will be made on what sort of information on standard setting should be accessed by stakeholders in order to empower them with the necessary knowledge and skills

for them to accurately interpret and monitor levels of educational standards other than using examination results alone.

Introduction

The rising and falling of pass rates in the Malawi School Certificate of Education (MSCE) examination have been synonymous with the rising and falling of educational standards in the country.

The topic of education standards has generated a lot of debate in Malawi. Commentators and other interested parties have time and again expressed dissatisfaction with the quality of education in the country.

Because of the low pass rates in the recent years, there have been fears that the Malawian children who are the future workforce may not be receiving the same quality of education as their counterparts in the SADC region and the world at large. If proved correct, this could be detrimental to the socio-economic development of the country. There is also belief by some observers especially those of the older generation that the type of teaching and learning taking place in schools, judged by the dismal MSCE examination results, is inferior to that of the 1960s.

Nyasaland, as Malawi used to be called before independence, used to export secondary school leavers to other countries in East, Central and Southern Africa where they held high positions both in public and private offices. It was believed then that the 'standard' of education in the country was 'superior' to that of her neighbours. Malawi still faces a brain drain but those leaving are with university degrees.

The critics of the current education system have even gone to the extent of blaming the assessment system in the country. They have partly attributed poor education standard to the 'low quality' MSCE examinations administered by Malawi National Examinations Board (MANEB), the country's assessment agency.

The MSCE examination is written after four years of secondary education and is considered as the currency of our education system. Successful students are selected to tertiary institutions or go to other post secondary colleges. Alternatively, they are simply given a school leaver's certificate which they can use to secure a clerical or junior technical job. The MSCE certificate is therefore a passport to success in life.

The problem of the rising and falling of MSCE pass rates

Barely a month after the release of the 2005 MSCE examination results there was a big headline in one of the most widely read local weekly papers. That headline, which appeared on the front page cried, "MANEB SEXED THE 2005 MSCE RESULTS". The allegation was that MANEB, in its bid to win favours from politicians, had deliberately lowered passing marks in order to pass more students than those that actually deserved to pass. The intent according to news paper article, was to make the 2005 results more attractive than past ones,

“which had been very embarrassing to government”. This allegation triggered protracted debate with some people believing it, while others, especially those familiar with quality of MSCE examinations and with the process of standard fixing mechanism at MANEB, dismissing it as “baseless and malicious”. It had to take a “very senior” Government Official to tell the nation the truth. The official also described the allegation as malicious intended to tarnish the good images of both MANEB and Government. Another allegation followed and MANEB once again denied it in both the print and electronic media. The pass percentage that triggered all this controversy was 55.3.

But why quarrel over 55.3 pass rate?

In the eyes of most Malawians the above pass percentage was too good to be true. According to public opinion, education standard in the country was supposed to be going down, and since according to most people there was no evidence that anything had changed for the better in the schools prior to the 2005 examinations, 55.3 percent pass rate could not be justified.

To appreciate the problem, a comparison of the MSCE pass rates between 1970s and the 1990s to 2004 is being made below:

MSCE Pass Percentage from 1972 to 1976

YEAR	PERCENTAGE OF STUDENTS PASSING MSCE
1972	63.2
1973	54.7
1974	54.7
1975	62.7
1976	65.3

(Source James R, 1976 p28)

MSCE Pass rates from 1993 to 2005

YEAR	PERCENTAGE PASS RATE
1993	46.7
1994	43.1
1995	29.4
1997	30.7
1998	17.9
1999	13.67
2000	19.69
2001	34.86
2002	33.63
2003	41.52
2004	49.70
2005	55.3

(Source: MANEB Statistical Archives)

From the second table it can be noted that academic performance (judged by the pass percentages) has been going down to reach its record low in 1999, with 13.67 percent of the candidates passing. However, there has been gradual increase in pass rates since 2001.

MANEB has tried to give reasons for the gradual improvement, citing among other factors efforts of government to improve things and, change of attitude by both teachers and students towards examinations. Cheating which was rampant in the 1990s has decreased in recent years as a result of stringent measures put in place by MANEB since 2001. In 2005 tougher measures were introduced including arresting on the spot those caught cheating. Furthermore, since 2003 examinations have been written in cluster centres i.e. a number of schools writing at one central venue. Examination papers are printed overseas and are no longer kept by individual schools but are kept at police formations and other secure distribution centres. These are collected on daily basis to the examination centres. 'Leakages' of examinations are also a thing of the past because of this arrangement.

It appears therefore that people may not have appreciated the link between these recently introduced measures and pass rates or is due to a general belief that today's learners can not be better than those of the past.

Debate about pass rates elsewhere

Debates about the relationship between pass rates and standards of education are a common feature even in the developed countries. It happened in England when the 2004 A levels registered high pass rates in the top grades and more examinations were passed. Some people became cynical about such good results.

Students, Headteachers and education ministers defended the results. They denied any 'watering down' of the examinations but attributed the positive results to hard work by both students and teachers. Standards minister David Miliband attacked what he called the "national disease" of being cynical about improved examination results (BBC News 19 August 2004 19:23 GMT 20.23 UK).

The Director of the Joint Council for Qualifications Dr Ellie Johnson-Searle confirmed that the results were a true reflection of students' ability.

In Scotland the same year, the reaction to high pass rates was generally positive after the Scottish Qualification Authority (SQA) released the results (Schofield, K in the Scotsman, Tuesday 10th August 2004, Scotsman.com.websites).

However when in 2005 SQA announced equally high pass rates some sectors of the public demanded an independent enquiry to verify the results. The skeptics said a completely independent appraisal of the examination system would ensure "pupils, parents and the business community absolute confidence to the value of qualifications' (The Scotsman, Wed 10 august 2005).

The above examples show that people conclude that the standard of education is lowering when pass rates drop, while on the other hand when there is an improvement in performance they are skeptical about such results.

In order to interpret pass rates and their impact on educational standard more accurately, there is need to fully appreciate the role of assessment in the whole education set up and what impact it has on education. In the Malawi situation, MANEB is often blamed when there are both high and low pass rates. When the MSCE examination registered the lowest pass percentage, in 1999 a Presidential Commission of Enquiry was instituted to investigate factors that led to such dismal performance. The commission's report dwelt at length on the defects of MANEB as an assessment agency. It cited inadequate financial and human resources, poor processing of examinations and inadequate security. According to the report these defects made it difficult for MANEB to come up with an assessment system which was credible and reliable to assist to enhance learning in the schools. The report also purported that being examination oriented, the education system of the country is greatly influenced by the quality of examinations administered by MANEB. Poor quality assessment policies would therefore result in low education standard.

The problem of defining 'standard'

The term 'standard' has a variety of meanings. 'Standard accommodation' means moderate level of luxury. However, when we say 'holding up a standard' we imply excellence (Cizek, 1991). Others define 'standard' as required expected or accepted behaviour by others in the society. Sakala quotes Costrell (American Economic Review, vol.84 No. 4 of 1993) who defines standards as the required level of proficiency for binary credential, such as high school diploma.

The New Jersey Department of Education defines standard as description of what students should know and be able to do upon completion of a course of study.

Standards provide clear and specific benchmarks for achievement in prescribed areas of study. In America these are developed by panels of teachers, administrators, parents, students and representatives from higher education, business and the community and are revised every five years. However in assessment 'fixing standards' means determining cut scores at various levels of academic achievement.

Standards in the Malawian education context

The history of education in Malawi is associated with the coming of the Christian Missionaries in the early 19th century. However the main objective of the missionary education was to ensure that converts were able to read the Bible and to write and count.

The British colonial government's interest in education only came in 1826 with the establishment of a directorate of education (Chimzimu 1967) following a recommendation of a Phelps-Stokes Commission which urged the colonial Government to take direct control of education and establish schools in the then Nyasaland. The Phelp-Stokes Commission also criticised the missionary curriculum, which concentrated on moral education at the expense of other subjects. The Commission developed eight goals of education but these goals mainly centred on the individual and his or her environment. Only primary education was offered then.

It was only in 1940 when the first Secondary school was opened at Blantyre, offering an English Grammar School Curriculum. More secondary schools were opened later on.

When political power was shifted to the Africans in the early 1960s, the approach to and perception of education broadened. Policy makers realized the need to educate large numbers of young Malawians who would spearhead the political and socio economic development.

Malawi's educational system has therefore undergone transformation from the colonial era when education (then engineered by missionaries) was for evangelism and commercial purposes to the post independence era when it is being seen as an instrument of economic advancement and cultural heritage.

To guarantee quality, education in Malawi is guided by various regulations and instructions. The Ministry of Education which is the responsible ministry initiates all legislation strategies, programmes and projects and provides funds (Ministry of education and UNESCO, 1996).

However there are no specific policy documents that have defined 'standard' in the various curricula. What are there are various official documents outlining government's policy on education. The education system especially at secondary level attempts to equip learners with knowledge, skills, values and attitudes to enable them become responsible and productive adults. The national goals of education which are spelt out in the policy documents cover most of the aspects of life and these have been broken down into seven categories namely;

- Citizen skills,
- Ethical and socio-cultural skills,
- Economic development and environmental management skills,
- Occupational and entrepreneurship skills,
- Practical skills,
- Creative and resourcefulness skills, and
- Scientific and Technological development skills.

(Source: MSCE Syllabi)

However, standards in Malawi are interpreted using pass rates instead of considering all the above aspects. There is also tendency to pack standards against a person's ability to speak and write good English.

Quality control mechanisms

Monitoring of 'standards' in Malawi is spearheaded by the inspectorate division called Educational Methods Advisory (EMAS) Division based at the Ministry of Education head office.

EMAS visits schools to standardize the delivery of education. EMAS teams observe classes and among other details, check schemes of work, lesson plans, and all other lesson aspects including classroom assessments.

In the absence of a National Assessment Board, EMAS is therefore the only reliable monitor of standards in the country. However EMAS reports are mainly for internal consumption by decision makers within the confines of the ministry of education headquarters. The general public is generally unaware of the academic inadequacies uncovered by these inspectors.

The role of the assessment agency in Malawi (MANEB)

Because of the importance attached to certificates the Malawi education system has become examination oriented. MANEB therefore receives a lot of public attention, completely eclipsing other essential agents of the ministry of education such as the Malawi Institute of Education (where the school curricula are developed) and the teacher training colleges. As far as matters of standard are concerned the public eye is focused on examination results.

Of course public examinations are essential. They aim at auditing the curricula, teaching methods and course materials.

Assessments are suppose to provide a feedback on how well students are meeting the expectations of their parents, community and the nation at large. Assessments also provide policy makers with feedback on how well various education policies are working. This feedback is for stimulating changes in education.

MANEB examinations are developed and processed by specially selected specialists following internationally recognized principles of assessment. However the examinations cover mainly the cognitive domains. Although subjects covering affective and psychomotor skills are emphasized in the schools they are minimally tested.

To what extent then does the MSC examination measure educational standards?

It is believed that a good assessment tool will result in good teaching and thereby positively impacting on quality of education. To this effect it is important that assessment agencies like MANEB must ensure that their exams do not distort teaching and learning. They should craft their tests in such a way that such tests do not only focus on issues of technical quality i.e validity and reliability, but also mirror the national goals and objectives. The content matter of particular subjects and the specific objectives of such subjects should also be reflected (Chimwenje, 1997). For assessment to be a reliable tool for enhancing standards, and thereby being a good measure of the same, it should be treated as an integral part of the curriculum, the two being articulated together. Chimwenje (1997) argues that an examination that will successfully measure student's achievement in any subject should relate to the following:

- the nature of the subject and objectives to be achieved,
- the content to be covered,
- the skills and abilities to be fostered, and
- the feeling and learning experiences involved.

In order to ensure credibility MANEB chooses assessment techniques that take into consideration a number of factors including the purpose of the assessment, time and resources available and also the age and competence levels of the MSCE examinees.

Because different subjects syllabi have different assessment demands and description of formats of examination, the assessment by MANEB is varied in nature.

By 1980 when the MSCE examinations were being localized from the Associated Examining Board of the UK (which assisted in the localization process of MANEB), the following were the MSCE types of tests:

1. Aural (Testing Listening comprehension in English and French)
2. Oral (Testing speaking skills—in French only)
3. Theory (written papers in almost all subjects)
4. Practical (in the sciences, Home Sciences, Agriculture and Technical subjects)
5. Coursework/project (in Home and Technical sciences Geography and Agriculture).

However due to high administrative costs the Aural test for English, the course work/projects in Agriculture and Geography had to be phased out, and the number of papers in most subjects reduced.

These limitations therefore mean that MSCE cannot perform some of the skills the examinations were originally intended to test. For example, the absence of the Aural test means students cannot be tested in their listening ability; and the dropping of the projects means no creativity, research skills or original thinking tested.

Furthermore the reduction of papers in the various subjects has narrowed the scope of knowledge to be tested even further, thereby rendering the MSCE examination an insufficient tool for measuring education standards.

The following are some of the problems of using MSCE and other public examination results as monitors of changes in educational standards:

1. When results show a high pass rate it is not certain whether such results are an indication of standards rising or a reduction in the assessment demands. Could it also be that students have become clever? Anything could have happened. The results would not tell us whether if given another test, covering segments of the content or skills not tested in the initial examinations the candidates would score the same grades. Tipia (2000) quoted by Diaz (2000) argues that a student's academic failure is more than his/her failing a test, but more appropriately, it is whether the student's performance is above or below his or her potential. Examination results will therefore not give us much of the above "hidden" information.
2. Quality education should provide new knowledge, skills, values and attitudes to increase people's capacity to participate in the social and economic development of their

countries. As the learning process progresses there is need to monitor that learning process to ensure that it is being carried out in accordance with the goals/aims/objectives (standards) laid down by policy makers for positive end results. We know in Malawi EMAS does that but MANEB assessment system is not interested in the learning process itself but rather in the final product. How candidates came by their results and furthermore what will happen to them (candidates) thereafter is not within MANEB's mandate.

3. MSCE examinations are predominately a measure of cognitive achievement with little psychomotor component, which is tested only through very short practical tests. The affective domain is visibly lacking. Such examinations cannot be said to be a true measure of education standards.
4. Passing or failing in the MSCE examination could be a function of many factors and not necessarily as a consequence of the rise or fall in education standards. It could be a problem of the examination testing topics not covered by the majority of the schools. It may also be as a result of the quality of teachers or availability or non availability of teaching and learning materials.
5. Examinations data cannot explain why in a particular year for example, students in one school did better than those of another, despite the schools using the same curriculum, having equally qualified teachers and high calibre students. The disparities in academic achievement may come as a result of the way the examinations were conducted in the two schools. MSCE results simply record the candidate's scores and nothing else. The results cannot therefore be interpreted to mean that the education standard in one school was higher than that in the other.
6. Examinations only sample educational objectives that are measurable. These may not necessarily be more important in education than those that are not measurable.
7. When claims are made that standards have gone up or down compared to past years it is important to justify such claims by explaining the yardstick used. Is the curriculum better now or worse than before? The world is changing socially, economically, politically and technologically, and as such, all new ideas have to be incorporated into a new curriculum. But does that make the new curriculum better? Does it also make the examination that must be changed to be in congruent with the new curriculum more or less difficult? There is need for empirical evidence to arrive at tangible conclusions.
8. Evidence has shown that most schools are in the habit of preparing students on how to pass examinations instead of 'educating' them. Good results may therefore be as a result of drilling. It is also important to take cognizance of the fact that some of the candidates study on their own (externals) and as such their performance cannot be as good as that of school candidates. The more the externals the lower the overall pass rate.
9. As a nation did Malawi define the parameters for identifying an educated person? In the same vein did it define what pass rate would constitute high or low standards? If this is not the case, then 'education standards' as a concept is being used arbitrarily.
10. Monitoring needs to be done early enough so that the findings help the system and the learners. If the MSCE examination were to be useful as a measure of standards it would have to be administered before the completion of the secondary school course. It would then be able to uncover gaps in the knowledge and skills so far acquired by the learners at the time of the examination and corrective measures would be made.

11. Low pass rates may also be a result of tests being flawed if care was not taken at the setting stage. They may be culturally biased against certain categories of the examinees. They may also have tested what the students were not taught. Such examinations would create excessive stress among students.
12. MSCE pass rates went down during the transition period, i.e. between the end of the one party dictatorship and the beginning of the multi-party democracy as a result of increased cases of indiscipline in schools. Democracy might have been constructed as unlimited freedom to students. Many schools were vandalized and therefore kept closed for long periods of time throughout the year. Some teachers too went on strike at will. The curriculum was intact but instability in the schools affected its delivery thereby resulting in poor pass rates.
13. The introduction of television in Malawi affected the reading culture among students. Pretorius (nd) reports that research has shown that there is relationship between reading ability and academic performance.
14. Examinations are written at the end of a course of study and an exam paper lasts for a short period of time. Examination data do not provide any information on how the students had been progressing to the time of the examination. It is therefore not possible to know whether the results are a true reflection of the candidates' ability or are as a result of external assistance the test takers may have received.
15. Effectiveness of an education system is supposed to be measured by the quality and quantity of its output. Outputs in this respect refer to the school leavers. However, there is no mechanism for predicting how the school leavers are going to satisfy the needs of the society and the nation. Reliance on academic achievement tests as a measure of the value of the outputs is therefore dangerous for it overshadows other factors like their future performance. It has been observed that some people who failed MSCE have proved to be very successful citizens.
16. Studies elsewhere have also shown that students pass or fail examinations as a result of many factors. Diaz (2000) attributes a student's academic success or failure to three elements namely, parents (family causal factor), teachers (academic causal factor) and students (personal causal factor). This therefore means that no matter how well articulated the goals, aims and objectives of an education system may be, if one of the three factors has problems the whole system is doomed to collapse.

Way forward

The following are some of the strategies which policy makers may consider in order to successfully monitor and even enhance education standards:

1. Establish an independent Standards Office. This office would function like OFSTED UK. Members to this body could comprise specialists in assessment, curriculum, industry, information technology and management. The office would be mandated to carry out monitoring of standards in all types of schools in order to identify gaps in the teaching and learning process and suggest corrective measures. Senior managers and teachers of this local 'ofsted' would basically focus on specific targets to raise attainment, while managers from business would provide industrial mentoring to build the students' confidence necessary for a successful future life. Reports of this office would be shared with MANEB which would in turn take into consideration all the points raised in such reports when constructing test items and also when fixing passing scores. Results from

such examinations would truly reflect the real academic situation in the schools and would give a true picture of the level of education standards.

2. During standard fixing exercise by MANEB other outside stakeholders should be involved. These could come from industry, Health Sciences and other fields. These would be better placed to advise assessment experts on the expectations of employers from the students. It would also be more helpful if these people could also be involved in setting education standards with education policy makers. With such background these stakeholders would be in a position to confidently assist in fixing reliable assessment standards.
3. MANEB should diversify its assessment criteria to take into account global concerns about the shortcomings of summative examinations. MANEB could possibly blend its examinations with continuous assessment. If handled professionally and by qualified teachers, continuous assessment would give a better picture of the levels of educational status in the schools than relying on end of the course examinations.
4. MANEB should improve the mode of reporting results to the public to make them more useful. Instead of simply announcing grades and pass/fail information, which does little to help the students, teachers and the community, an attempt should be made to be more detailed. As of now MANEB results do not spell out the candidates' academic strengths and weakness nor do they predict what they will be able to do after passing the examination. It is therefore necessary to make the reporting more transparent.
5. Students preparing to write examinations should be given as much information as possible so that they know what to expect in the examination. Why not? They could even be told in advance which topics questions would come from in the various subjects. They should also be given opportunity to show their best ability in the areas they are strong in, hence the need to include aspects of all the three domains (cognitive, affective and psychomotor) in the examination papers. Test items should be thought provoking, and should arouse the learners' intellect. They should include practical tests that require the students to perform simple experiments, workout puzzles and even solve complex problems.

Conclusion

This presentation has discussed the problem of using public examination results as monitors of change in education using Malawi School Certificates of Education (MSCE) examination as a case study.

It has been argued that examination results alone cannot accurately measure the level of education standard as examination data by themselves cannot provide evidence of whether standards are rising or falling. It has been noted that results may rise due to factors such as the difficult levels of the test, student characteristics, poor teaching and maladministration of the examinations.

It has been recommended that some standards monitoring mechanisms such as the National Assessment Board and the Standards office should be introduced by Government of Malawi. Involvement of various stakeholders in standards setting mechanism has also been suggested.

If the above strategies were adopted, it would be easy not only to monitor but also to improve standards of education in Malawi using MSCE examination.

References

- BBC News (2004) "A levels show rise in top grades" (Thursday 19 August 2004)
- Cizek, G. J. (1999) Setting Passing Scores. University of Toledo)
- Chidalengwa, G. (2004) "A comparative Investigation of students' cognitive motivational characteristics in Conventional and Community Day secondary schools" A dissertation Submitted in partial fulfillment of the requirements of Master of Education (Psychology of Education), University of Malawi.
- Cresswell, M. (2000) "Educational Standards," In *The British academy Review*, January–July 2000 publication.
- Chimzimu, H. D. (1967) "Development of Education in Malawi 1875 – 1967," Final year seminar paper, University of Malawi.
- Chimwenje, C. (1987) "Ensuring the proper articulation of the assessment with the curriculum". A paper presented at a workshop on the assessment of the New Primary School curriculum. Domasi, Zomba, Malawi
- Hansen, ira (No date) "Are the Tests Flawed? Or is Mediocrity the New Standard?" Electric America.
- James, R (1976) Malawi Certificate of Education, Associated Examining Board
- Presidential Commission Enquiry into the MSCE Examination results (2000) Executive Summary of Findings and Recommendations of the inquiry on Malawi School Certificate of Education (MSCE) Examination results
- Pretorias E J (nd) "What they can't read will hurt them": Reading and Academic achievement., www.library.unp.ac.za/innovation/a46.htm.
- Sakala K.M. "Education Standards; A Case of Malawian Schools" a discussion paper presented to MED (Policy, Planning). University of Malawi.
- Schofield K (2005) "Call for Enquiry as exam pass rates rise" The Scotsman Wed 10 August 2005
- Tally and Wang (1999) "Possible causes of and solutions for low Achievement". The Kansas State Board of Education
- The Kansas State Board of education (2000) Possible causes of and solutions For Low Achievement (May 2000)
- Tipia (2000) Personal, family and academic factors affecting low achievement in secondary schools (2000) in Diaz (2000)
- Yadidi D.C. Strategies to Enhance Educational Attainment: A case for MANEB'. A paper intended for the 17th AEAA Conference, Lusaka 1999 (not presented).
- Yadidi D.C. (2004) "Formulating strategies for Removing Imbalances in Academic Performance between Conventional Secondary Schools and Community Day Secondary Schools: The case of the South Eastern Education Division". A dissertation submitted to the University of Derby in partial fulfillment of the Award of Master of Science in Strategic Management degree