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Perceptions of Education Stakeholders on the Implications of Textbook Liberalization Policy in Tanzania

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Abstract

The purpose of this study was to determine perceptions of education stakeholders on the implications of textbook liberalization policy in Tanzania. The researchers used various methods of data collection. The findings were both negative and positive. Negative views involved frequent change of the school syllabus, approval of books with low quality, piracy and corruption. Positive views involved improved quality of textbooks, enhanced intellectual diversity and increased employment opportunities. However, pedagogical issues were less considered by the respondents. Hence improving the skills of those involved in the chain of publishing should go together with appropriate management system under liberal policy.

Keywords: Curriculum, textbooks, publishing, liberal policy

1. Introduction

Sustainability of educational institutions is mainly determined by their ability to maintain their quality. When considering the education quality one may basically refer to inputs (numbers of teachers, amount of teacher training, number of textbooks), processes (amount of direct instructional time, extent of active learning), outputs (test scores, graduation rates), and outcomes (performance in subsequent employment) (Chapman, D. & Adams, D. 2002). But the efficiency of each of these stages depends substantially on the quality of the curriculum documents particularly textbooks (UNESCO, 2012). The predominance of textbooks is not surprising since they are suggestive of policy enactment and have been characterized as the "potentially implemented" curriculum; a mediator between policy intention and policy implementation (Valverde, Gilbert, Leonard, Bianchi, Richard, Houang, William, Schmidt, & Wolfe, 2002).

Considering the role played by textbooks in students' learning, UNESCO proposed 45 items to be used by publishers and other educational stakeholders to determine the quality of school textbooks based on content, educational approaches, organization, language, the continuity between themes, the style of writing and illustrations used (Seguin, 1989). Other studies specify further that, since teachers refer to textbooks questions to assess students' learning, a quality textbook should address various competences which are more demanding than routine procedural knowledge and algorithms, requiring more challenging learning opportunities (Buxkemper & Hartfiel 2003; Callingham & Watson 2004; de Castro 2008; van Oers & Poland 2007). This should go together with enough number of questions as studies show that tests with small numbers of items are inappropriate for making inferences regarding the achievement levels that students in a national educational system may obtain in varied curriculum areas (Carson 2009; Valverde, 2005, 2009). But such learning opportunities in the textbooks should ensure that they don't shift students away from the intended curriculum because students' achievement levels will increase if the intended curriculum and the implemented curriculum are more closely aligned (UNESCO, 2012). This issue is especially salient in the developing world where research describes serious gaps or misalignments between the two (Abadzi 2007). For a textbook to be able to acquire the desired features which determine its quality, it depends much on the effectiveness of the activities involved in the three crucial components of publishing a book.

Lee (1979) substantiated the three crucial components of book publishing as: book editing, book design and book production. Curriculum developers and scholars have developed rather elaborate arguments rationalizing specific aspects of textbook design, all in the name of increased learning rates (Praphamontripong, 2010). Thus, in Tanzania, Tanzania Institute of Education (TIE) which is responsible with curriculum development engineered all the crucial components of textbook publishing under the monopoly system. The government of Tanzania used to distribute textbooks to all parts of the country through a centralized system. It comprised a single publisher, printer, author and distributor. It existed between 1960s and 1990s but failed. There were several problems in this chain, including late manuscripts, cumbersome editing, time-consuming procurement and technical obstacles to printing, storing and distribution.



On the other hand, from 1991 to date, Tanzania government introduced liberalization policy of textbooks production and distribution as a way forward in solving the problems experienced during single textbook system. But under liberal policy, textbook prices are out of control (Chapman & Adams, 2002). Also, liberal policy is characterized by presence of factors which limit fair completion among publishing companies which on the other hand may reduce the number of such companies (Koch, 2006). In addition, popularity of the traditional publishing companies may be reduced by the increasing availability of electronic books which offer a viable and attractive means to meet teachers and students' needs while offering savings of approximately 80% compared to traditional textbook options (Allen, 2010). This may be a limiting factor for publishers' progress because rarely can publishers expect customers who are not students. Unfortunately most students tend to read just to pass their examinations and that many hardly read books outside their disciplines (Adejoke, 2001). Liberal policy in textbook production has also been observed to be associated with piracy and photocopy activities (Echebiri, 2005; Okilagwe, 2001).

As a means of controlling the problems associated with the liberal policy of textbook publishing, Tanzania established Educational Materials Evaluation Committee (EMAC) for evaluating and certifying the textbooks which meet minimum set criteria to be used in secondary schools (MOC, 2005). This committee was established so as to help both private and state-owned publishers involved in textbooks publishing to compete against each other on equal terms. But, the extent to which textbooks produced under the liberalisation policy meet the expectations of educational stakeholders is questionable. Thus, this study intended to investigate perceptions of education stakeholders on the implications of the liberal policy.

2. Methodology

The study was conducted in Dar es Salaam. It is the country's biggest city and a regionally important economic centre. The study area was purposely selected by the researcher because it has many publishers both local and international; many secondary schools and libraries. In addition, it is also the headquarters of the Ministry of Education and Vocational Training (MOEVT), with EMAC department, which evaluate the quality of textbooks and other supplementary books. This situation called for a deeper exploration, so as to understand the implications of the liberalisation policy as perceived by various education stakeholders. The study employed a qualitative approach; an empirical inquiry that investigates a contemporary phenomenon within its real life context (Miner-Romanoff, 2012).

2.1 Sampling and Sample Size

A sample of 155 people was drawn for the study. It comprised students, teachers, school heads, parents, editors, typesetters, marketing managers, production managers, illustrators, writers, booksellers, MOEVT Education officers- particularly the inspectorate department, EMAC department officials, NGOs, librarians, and printers. Three secondary schools from three districts in Dar es Salaam were selected for the study. Therefore, the researchers targeted 155 respondents but succeeded to meet 150 respondents as the summary of the expected and actual respondents of the study is shown in table 1 below.

Table 1: Compositions of Respondents

Category	Expected Respondents	Actual Respondents
Ctudonto	50	40
Students	50	48
Teachers	20	20
School heads	6	6
Parents	10	10
Editors	4	4
Typesetters	6	5
Marketing managers	4	4
Production managers	4	4
Illustrators	4	4
Writers	15	15
Booksellers	10	10
MOEVT officers	9	7
EMAC dept officials	3	2
NGOs	2	3
Librarians	4	4
Printers	2	2
TIE officials	2	2
TOTAL	155	150



2.2 Data Collection Methods and analysis

Major methods used for data collection were: interviews, questionnaires, focus group discussions and documentary evidences. Different types of data collection methods were used for the same categories of respondents as a strategy for triangulation so that responses which appear to be consistent could be established easily (Cresswell, 2009). Therefore, all details that are provided in the data presentation were obtained from two or more sources. In cases where information contradicted, the researcher enquired further especially through interviews. Data gathering focused on the stakeholders' views regarding the liberalisation policy of textbooks production in Tanzania including their views on the quality of textbooks published in Tanzania after the liberalisation policy. Questionnaires were administered to publishing officials such as editors, typesetters, designers, production managers, marketing managers, teachers, students and parents.

The researchers conducted face to face interviews using both open and close ended questions so as to get the information directly from the respondents. Interviews were conducted with the publishing managers, school heads, Students, librarians, TIE officials, and EMAC officials, National Examination Council of Tanzania (NECTA) officials, Non-Governmental Organizations (NGOs) specifically Hakielimu, and Publishers Association of Tanzania (PATA) officials. Focus group discussions were conducted with officials in five publishing companies including also teachers and students in six schools. Data that were collected by self-administered questionnaires were analyzed by quantitative and qualitative methods. The quantitative data obtained was sorted and categorized into small sorts of underlying themes, then tallied. Frequencies were counted and computed into percentages. Qualitative data were analyzed by merging respondents' information which presented similar themes.

3. Findings

This section presents both negative and positive perceptions on the textbook liberalization policy in Tanzania.

3.1 Negative Perceptions

The respondents indicated that liberalisation of textbooks has resulted into frequent change of the syllabus, piracy, corruption and confusion of both learners and instructors. Frequent change of syllabus (75%) was the leading obstacle in the implementation of the policy, followed by the incoherence and confusion (56%), poor language (53%), corruption (50%), questionable certified textbooks (50%) and piracy (33%). These are discussed in detail in the following sections.

3.1.1 Frequent Change of the Syllabus

Analysis of the interview and questionnaire data indicates that frequent change of syllabus makes it difficult for the parents to buy appropriate textbooks for their children. Publishers (100%), NGOs (100%), booksellers (90%), students (83%) and teachers (80%) ranked the frequent change of syllabus as the biggest obstacle in the implementation of the liberalisation policy in Tanzania's education system. This is mainly because, the government is now free to change the syllabus any time as it does not sense the burden of producing new textbooks since such role is now played by private publishers under liberal policy. For instance, from the year 1991, when Tanzania adopted the liberalisation policy in the education sector, that introduced the multi-textbook production and distribution to the year 2010, Tanzania Institute of Education (TIE) has changed the syllabus four times; that was 1997, 2005, 2007 and 2009.

3.1.2 *Ouestionable Certified Textbooks*

Most of the teachers (80%) and publishers (83%) confirmed that some textbooks which have been awarded the EMAC certificate are below the quality stipulated in the EMAC circular No.2 of 1998 and No.7, MOC of 2005. The teachers observed that even some of those books with EMAC certificate have grammatical and conceptual errors. This makes them avoid buying and using some textbooks even those with EMAC certificate. When the researcher asked why the textbooks with errors are certified and sent to schools while EMAC has experts in each subject, the respondents' responses were that; some publishers collude with EMAC officials who then give them the approval certificate without intensively editing to prove for the textbook's standards as stipulated in the EMAC manual.

3.1.3 Poor Language Used in Textbooks

Focus group discussion and interview from students indicated that they did not clearly understand some of the concepts of some textbooks. Editors were mentioned as the limiting factor in the production of quality textbooks. Students were of the opinion that the poor language that is used in many textbooks contributes to their poor performance.



The survey data from five local publishing companies in Dar es Salaam confirmed that many publishing companies have in-experienced editors. Analysis of the survey data revealed that in some of the publishing companies, the chief editors were recruited from Kenya and Uganda. They did not have enough experience with the academic curriculum for the Tanzanian Schools. Additionally, they were unfamiliar with the subjects taught in Tanzania and hardly had any idea about the teaching ethics. The criterion which was used in employing such editors was their ability to speak and write good English, and having certificates in editorship.

Other editors were Tanzanian teachers with little knowledge of grammar and the editorial process. These book editors did not have any professional qualifications that would enable them work in the field of publication. One director of a publishing company pointed out that, they did not employ Tanzanian editors because they were not well vested with editorial skills. He stressed that: "It seems the Tanzanian Universities do not offer editorial courses. Only newspaper editors are available and these know very little about book publishing processes".

3.1.4 Piracy

Responses from publishers (94%) and booksellers (80%)), indicated that piracy of approved textbooks increased significantly with the introduction of liberalisation policy in the publishing industry. Most of the respondents pointed out that, piracy of the approved textbooks has also remained unchecked to the extent that textbooks belonging to bona fide publishers are clandestinely printed and sold to schools.

Interview data, with one official from the Publishers Association of Tanzania (PATA) confirmed that piracy has affected the textbook business because the publisher may produce quality textbooks but the pirates print and sell them cheaply. Such textbooks are easily identifiable because they have poor physical and design standards.

3.1.5 Incoherence and Confusion

Booksellers reported that, they get confused while stocking textbooks for their customers, who in most cases are students and parents. This kind of confusion was also revealed by parents (80%) and students (83%). Majority of the students (83%) and parents (80%) in this study pointed out that sometimes they come across various books whose texts are presented differently although they are meant for the same subject and the same level. They further argued that the presence of many books in the market has made the parents; teachers and students fail to get the recommended textbooks. Most of the parents (80%) who were interviewed were of the opinion that, depending on booksellers' persuasion, the customers find themselves buying textbooks of low quality with a lot of errors.

3.1.6 Corruption

Majority of the publishers (94%) claimed that, under the current multi- textbooks system, each school selects and procures the books that meet their requirements through the respective school's committees. They also reported that there were cases in which a few unscrupulous heads of schools collude with unscrupulous suppliers for payment to be effected for undelivered books.

Furthermore, the publishers cited that the process of procuring books by school heads and their committee, to a great extent was influenced by corruption. This was also pointed by the heads of schools. Some heads of schools who were interviewed in this study confessed that they had negotiated deals to buy books from dishonest suppliers who gave them 'kickbacks' or sometimes even convinced them to pay for unsupplied books. Also, one publisher pointed out that some publishers have colluded with the Ministry's officials to approve some books that do not meet all EMAC's approval requirements. The accusations were mostly targeted at a few representatives of multinational publishers who were allegedly involved in intense lobbying for approval of their books.

Corruption has been pointed out even in tendering for supply of textbooks to schools. The tendering is a 10% based process. The supplier is required, by the school procurement committee, to produce a certain percent of money before being given the tender or else he/she loses the tender to someone else. One Publisher pointed out that the recommended tendering procedure by the Public Procurement Regulatory Authority (PPRA) is not observed in most schools. For example, in certain instances, only one supplier may be assigned to fill various proforma invoices from different publishers.

3.2 Positive Perceptions

Despite the negative perceptions of the respondents on the liberalisation of textbooks in Tanzania, other respondents identified a number of positive contributions from the liberalisation policy. Among the contributions given, employment (86%) was the leading positive factor for liberalisation policy, followed by decreased price



(84%), competition (79%), creativity (72%) and intellectual diversity (56%). These are discussed in detail in the following sections.

3.2.1 Employment

Analysis of documentary data showed that a network of over 600 booksellers was engaged in textbooks publishing and distribution by the time this study was carried out. Interview data with PATA's officials revealed that, the book production chain involved authors, publishers, printers and booksellers support, and that the chain has an estimated 250,000 individuals who directly depend on employment and income generated in this sector. As a result of the multi- textbooks policy, there are considerable foreign and domestic direct investments in the publishing industry which in turn have brought about technological advancement, tax revenue and improvement of skills.

Different categories of respondents (students (83%), educational officers (95%), publishers (100 %,) Booksellers (100%), NGO (100%) and printer (100%) revealed that with liberalisation policy, which brought about multitextbooks production and distribution in schools, has led to high rate of employment to various people. Tanzania had about 40 registered publishers operating in the country by the time this study was conducted. Interview data with publishers and booksellers also indicated that if the government decides to shift to a single textbook system; would lead to loss of employment, tax revenue, as well as collapse of bookshops, stifling of local authorship and a monopolistic situation of high prices and textbooks of poor quality. Analysis of documentary and interview data from PATA demonstrated that there have been considerable foreign and domestic direct investments in the publishing industry, as a result of the multi- textbooks policy.

3.2.2 Competition and Prices of Books in the Market

Data from the field showed that, where there is competition, the customers in most cases are at a better position of quality products, as opposed to what could often occur under a monopolistic environment. With the liberalisation policy, stakeholders expected the price of textbooks to go down. In contrast to single textbook model, books were not available and those available were sold very dearly. Analysis of the interview and documentary data revealed that the multi-textbooks system has on the other hand resulted into high quality product and competitive prices.

Thus, with multi-textbooks production policy, it is possible to have quality textbooks at a very low price. Publishers (94%), Booksellers (80%), teachers (90%) and Printers (100%) reveal that liberalization policy in the publishing industry has brought about competition and lowered the price of textbooks, while at the same time improving their quality.

3.2.3 Intellectual Diversity and Creativity

Data from the field showed that, if we change from liberalisation of textbooks to single textbook system, according to many respondents who were interviewed, i.e. Educational officers (90%), NGOs (100%) and teachers (70%), is likely to kill the intellectual diversity and creativity. For instance, one of the managing directors of the publishing firm warned that:

"The bigger impact on single textbooks move will be on the quality of education, as students will lack an increase in intellectual diversity..... If one book has errors, factual or otherwise, there will be no recourse"

Other responses added that; multi-textbooks are worthwhile and build creativity, while single textbooks encourages cramming. The respondent pointed out that having one textbook is an out dated system. Also the single textbook system approach to single examination is out dated as it encourages learning and cramming for examination purposes without enabling the student to gain requisite knowledge and the required skills as specified by the curriculum.

3.3 Views on the Quality of Textbooks

Respondents' views on the quality of textbooks focused on the content, physical and design standards. Basing on the content of the textbooks published after liberalisation policy, the following respondents supported the policy: publishers (83%), educational officers, (81%), teachers (75%) and NGO's (67%). But they admitted that, textbooks under liberalization policy are associated with the problems discussed above though they insisted that despite such problems the status of the liberal policy reflects improvements compared to how the situation would be under monopoly system.

The Publishers argued that with the introduction of multi textbooks with EMAC standards, a good number of textbooks in the market have improved contents. They compared the system with the old single textbook scenario, where only one publisher produced the required textbooks, which were fool of errors as they were



prepared through seminars and workshops which took only few days. Thus, the textbook which was produced under single textbook system had less detailed information on the topic under discussion. The contents were shallow and less organized. Educational officers also commented that multi textbooks which are used in secondary schools have improved quality. Also, one officer said that, this situation has made the publishers engage in competition to produce quality books so as to win the market.

Teachers were of the view that the content of various textbooks are now better than before, since, it is easier now to prepare lessons using various textbooks. The end result is the best notes for the students. Therefore, the liberalisation policy has made students gain more appropriate materials. In view of this analysis, publishers and printers were supporting the printing facilities which are available. They insisted that today with the introduction of computers, the content is legible and the available software has enabled the production of well designed illustrations.

The editorial input and the language used are of improved standard. Publishers (86%), teachers (75%) and students (73%) have at least agreed that there are improvements on the language used. One respondent said that the problems with poor language, especially the grammar is common with the local publishers, who do not have sufficient funds for commissioning prominent editors and therefore, produce unedited textbooks. The multinational publishing companies do not have editorial problems as they have competent editors. Book design has also improved with the introduction of the liberalization policy. A big number of students (90%), publishers (97%), booksellers (80%) and printers (100%) agree that nowadays the design of textbooks has tremendously improved than before the liberalization policy was introduced in Tanzania.

4. Discussion and Recommendations

This study has revealed that both systems of book publishing in Tanzania; i.e. monopoly and liberal policies have negative and positive impact on the quality of the produced textbooks. But it should be noted that even if the government decides to shift to the original monopoly system it can not be effectively controlled in this era of increasing demand for regional integrations leading to East Africa community, African Union etc. Since such integrations are expected to be featured with free market economy; there must be several textbooks from different countries in Tanzania which will get accessed by both teachers and students provided that such textbooks can help students perform better in their examinations regardless of their quality. This is by considering the observation that most students read for the sole reason of passing examinations (Adejoke, 2001). Inability to prevent accessibility of multiple textbooks is fueled by globalization which seems to be characterized by increasing demand for formal schooling (Kira & Komba, 2012); a phenomenon which is propagated by the advancement of information technology.

This observation does not mean that liberal policy should be left uncontrolled rather it is high time for educational policy makers and all other educational stakeholders to work together so as to identify the factors which destabilize the quality of the school textbooks under liberal policy and deal with them effectively. One may suggest that having a centralized system of controlling the quality of text books like the EMAC system of Tanzania may be effective; but this study has identified that, the efficiency of the EMAC system is questionable as there were approved textbooks with incoherent content, conceptual and grammatical errors and poor illustrations. The reason for this can be of two sides; one based on the management of the policy issues and the other regards the pedagogical issues. If one considers management of the policy issues, the study has identified that the negative implications of the liberal policy are associated with frequent change of the syllabus which create sudden increase in demand of textbooks to meet the requirements of the new syllabus, piracy and corruption rooted along the entire chain between textbook production and textbook utilization. This implies that policy makers, publishers and some education stakeholders stand at a position where they can easily temper with the quality of the school textbooks for personal economic gains.

In order to account for the pedagogical issues it should be noted that, although in this study education stakeholders mentioned the aspect of quality as a dynamic issue under market liberalization by citing some issues related with quality of textbooks such as relevant content, illustrations, language, printing, designing and editing they could not reveal pertinent issues which tend to shift the content of a textbook away from the intended curriculum like content coverage, depth, and readability. This is by considering the observation that in developing world there are serious gaps or misalignments between the textbook content and the intended curriculum (Abadzi 2007). Likewise, textbook features of pedagogical significance such as types and levels of the learning domains which should characterize the textbook activities, questions and the style of presenting the contents were not points of concern during the interview with educational stakeholders though studies found such issues to be significant in learning(de Castro 2008; van Oers & Poland 2007). This means that even if the



activities involved between textbook production and accessibility were appropriately done without being interfered with issues of piracy and corruption; still quality school textbooks can not be assured.

Thus, in order for positive impact to be realized out of the liberal policy of text book publishing as observed in this study such as improved quality of the textbooks and increased intellectual diversity, the following need to be observed:

Changing the school syllabus should be research based activity that follow the necessary stages of school curricular review so that publishers are given ample time to prepare the other curricular materials such as textbooks and teachers guides and make the necessary reviews after such materials are tried out.

In order to limit the possibility of corruption among the EMAC officials, the major function of the EMAC officials need to be that of selecting and training educationists for the review process; that is, the review of school text books should be done by regularly appointed educationists who are not permanent members of EMAC. This means EMAC needs only to take the role of supervising the review exercise and the reviewers should also see to it that the textbooks they recommend are the ones approved by EMAC. This should go together with establishing a system of monitoring, identifying and convicting corrupt individuals who deal with school textbooks.

Also, educational stakeholders who should be assigned any responsibilities of dealing with school textbooks at various stages of textbook publishing and approval process, need to have sound knowledge on the technical and pedagogical features of a quality textbook.

5. Conclusion

There are several activities which are involved in the entire process of publishing a textbook. These activities may be grouped into three categories as: managerial, technical and educational. This study has revealed that both technical and educational operations depend not only on the good policies formulated by the managerial component but also its ability to ensure that they are appropriately implemented. Likewise, appropriate policies for textbook production and utilization including the activities of the technical component need to be synchronized with the educational requirements so that a quality textbook can be produced. Since the issues of quality just like knowledge evolve with changes in the society; textbook quality stability depends substantially on the rate at which educational stakeholders involved in textbook production can access the relevant knowledge and skills of aligning the relevant content and pedagogical knowledge with the intended curriculum. Thus, in a Tanzanian context if another study is conducted in order to determine the extent to which the approved textbooks diverge from the intended curriculum, it would serve as a milestone for designing a training program for the educational stakeholder involved in the chain of textbook production.

References

Abadzi, H. (2007), "Absenteeism and beyond: Instructional time loss and consequences. Washington, DC, World Bank, Independent Evaluation Group Sector, Thematic and Global Evaluation Division", Policy Research Working Paper, 4376.

Adejoke, L. A. (2001), "Indigenous publishing in Nigeria: Problems and prospects", In Folarin, B., (Ed), Topical issues in Communication arts and sciences, 1, Bakinfol Publications, Ibadan, pp. 159-181.

Allen, N. (2010). A Cover to Cover Solution. [online]. Available at http://www.studentpirgs.org/uploads/66/4d/664d09ba9bc97cc9138eda5faac5e061/A-Cover-To-Cover-Solution.pdf.

Buxkemper, A. C., Hartfiel D. J. (2003), "Understanding", *International Journal of Mathematical Education in Science and Technology*, 34 (6), 801-812.

Carson, Terrance R. (2009), "Internationalizing curriculum: Globalization and the worldliness of curriculum studies", Curriculum *Inquiry*, 39 (1), 145-158.

Chapman, D., Adams, D, (2002). *The quality of education: Dimensions and strategies*. Hong Kong: Asian Development Bank and Comparative Education Research Centre.

Creswell, J. W. (2009), Research design: Qualitative, quantitative, and mixed methods approaches, third ed. Thousand Oaks: SAGE Publications, Inc.

de Castro, B. V. (2008), "Cognitive models: The missing link to learning fraction multiplication and division", *Asia Pacific Education Review*, 9 (2), 101-112.

Echebiri (2005), Copyright and the future of publishing. [online]. Available at http://EzineArticles.com/?expert=Dr. Gary S. Goodman..



Kira, E., Komba, S. (2012). Perspectives on the status of traditional medicine in Tanzania. *Eurasian Journal of Anthropology*, 3(1), 21-31.

Koch, J. P. (2006), An Economic Analysis of Textbook Prices and the Textbook Market. [online]. Available at www.immagic.com/elibrary/CBICBT99/FIN AID/US ED/A060923k.pdf.

Lee, M. (1979). Book making: The illustrated guide to design/production/editing, 2nd Ed. New Bowker, 23- 24: New York.

Miner-Romanoff, K. (2012). "Interpretive and critical phenomenological crime studies: A model design", *The Qualitative Report*, 17(54), 1-32.

Ministry of Education and Culture (MOEC) (2005), "Education Materials Approval Committee", Circular No.7. MOEC: Dar es Salaam.

Okilagwe, O. (2001), Book publishing in Nigeria. Stirling-Horden Publishers, 16: Ibadan.

Rose, M. M. (2007), City at the head of the class: Consolidation, talent pool has made Columbus a hotbed for educational publishers, [online]. Available at

http://web.archive.org/web/20110523050151/http://www.dispatch.com/live/contentbe/dispatch/2007/08/05/20070805-D1-01.html.

Rosemary, C., Watson, J. (2004), "A developmental scale of mental computation with part-whole numbers", *Mathematics Education Research Journal*, 16 (2), 69-86.

Seguin, R. (1989), The elaboration of school textbooks methodological guide. Paris: Unesco.

UNESCO (2007), Education for all by 2015: Will We Make It? Oxford University Press and Paris: Oxford.

UNESCO (2012), *Primary school curricula on reading and mathematics in developing countries*. Montreal: UNESCO Institute for Statistics.

Valverde, G. A. (2009), *Estándares y evaluación*. In: Schwartzman, S., Cox, C. Santiago Políticas Educativas y Cohesión Social en América Latina, Ed. Chile: Colección Cieplan.

Valverde, G. A., Bianchi, L. J., Houang, R. T., Schmidt, W. H., Wolfe, R. G., 2002, *Using TIMSS to investigate the translation from policy to pedagogy in the world of textbooks*. The Netherlands: Kluwer Academic Publishers, Dordrecht...

Valverde, G. A. (2005), "Curriculum policy seen through high-stakes examinations: Mathematics and Biology in a selection of school-leaving examinations from the Middle East and North Africa", *Peabody Journal of Education*, 80 (1), 29-55.

van Oers, B., Poland, M. (2007), "Schematizing activities as a means for encouraging young children to think abstractly", *Mathematics Education Research Journal*, 19 (2), 10-22.

Notes

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