Part 2

Pre-Service and In-Service Teacher Training & Learning and Teaching Styles

ANA CAPELO, MARIA ARMINDA PEDROSA, PATRÍCIA ALBERGARIA ALMEIDA

WHAT LESSONS TO TAKE FROM EDUCATIONAL REFORMS IN ASIA-PACIFIC REGION? FACTORS THAT MAY INFLUENCE THE RESTRUCTURING OF SECONDARY EDUCATION IN EAST TIMOR

Abstract

To better understand current curricular reforms in some Asia-Pacific countries that came out of conflict periods, documents and information posted on various national and international agency websites were analysed. In this paper we aimed to (i) present a brief description of the conditions under which new secondary education curricula are being implemented in East Timor; (ii) describe the general characteristics of some Asia-Pacific countries that came out of conflict periods; (iii) analyse the factors that are impacting secondary educational changes in these countries; and (iv) identify some important issues to be considered in secondary school reform in East Timor.

Introduction

Since the end of the Cold War, a large number of countries affected by war and conflicts, such as Cambodia and East Timor, have experienced transitions that led to rebuild their education systems in line with social, economic, political and cultural changes.

In East Timor, school curriculum reform is regarded *"as a key component of higher living standards"* [1, p. 44] and the Government, within the project *"Restructuring of secondary school curriculum of East Timor"*, together with Portuguese institutions, is developing new secondary curricular materials, aiming at contributing to local Millennium Development Goals (MDG) and sustainable development [2], [3].

Curricular reforms in other Asia-Pacific countries aimed to promote the development of specific skills in different domains, including in vocational education, and to expand the use of information technology in the classroom [4]. Such reforms are reflected in different improvements, such as on secondary education enrolments and youth literacy [5]. Thus, it will be interesting to compare some aspects of curricular policies and design in East Timor with those of other Asia-Pacific countries in order to identify similarities among them and highlight

required specificities that are important taking into account in curricular reform in East Timor.

Based on published documents posted on various national and international agency websites, e.g. [5], [6], this chapter:

    i.   Briefly describes the conditions under which new secondary education curricula are being implemented in East Timor;

    ii.   Describes general characteristics of some Asia-Pacific countries that came out of conflict periods and analyses factors that are impacting their secondary education changes;

    iii.   Identifies some issues that are important to consider in secondary school reform in East Timor.

Secondary Curricular Reform Implementation in East Timor

As is already well documented in numerous studies (e.g. [7]) and official documents of the Government [8], East Timor emerged from periods of violence and fragility in which most of the basic infrastructures were destroyed. Schools destroyed are still a major problem when demographic patterns show population increase. Restructuring education services was considered vital and the Strategic Development Plan 2011 – 2030 (SDP 2011-2030), consistent with the MDG, highlights the necessity of a better education to build a fair and progressive nation [8]. Concerned with current education status of 15 to 19-year-olds, EFA statistics report [6] reveals that one in three Timorese are still in lower secondary, despite being officially of upper secondary age.

Much attention has been paid to improve and expand the secondary educational system, also to counterweigh the high percentage of basic school-aged children [8]. The SDP 2011–2030 points out that the earlier secondary curricula are not appropriate to serve East Timor needs [8].

The new secondary curricula are being prepared through a cooperation protocol between the East Timor Government and several institutions in Portugal [2]. A team of researchers and curriculum developers of the University of Aveiro is responsible for the design and development of curricular materials for 14 disciplines, specifically programmes, textbooks for students and the corresponding teacher's guides [7]. The need for suitable curricular materials is particularly of important, as the minister of presidency of East Timor highlighted: *"It is not good enough that many have to walk hours each day, to an overcrowded classroom, without appropriate books and curriculum"* [9]. The new curriculum for 10th grade started being implemented in 2012.

However, it must be stressed that there are risk factors and problems associated with any curricular innovation. These are common among countries that came out of a conflict situation, and usually may result in:

    i.   Power of traditional authorities [10];

    ii.   Inability to fund either capital or recurrent expenditure;

    iii.   Chronic shortages of qualified teachers;

    iv.   General corruption;

    v.   Lack of transparency in education governance [11].

Ramos and Teles [11] endorse the idea that for effective institutionalization and successful management of curriculum reform is crucial to:

i.   Invest in decentralization of working capital;
ii. Teacher training;
iii. Logistic improvement in distribution of curricular materials;
iv. Restructuration of the infrastructures of access to the schools.

Peretomode and Ikoya [12] underline that it is vital to promote strong leadership in schools. School leaderships should provide the necessary support mechanisms for adopting new curricula. These mechanisms include meticulous planning, involvement of teachers, students and other core stakeholders in decision making and, the most important, building consensus on how to promote and sustain curriculum innovation.

However, several other issues, common to countries out of conflict, may influence curricula restructuring. These will be described and analysed in the next section.

Characteristics of some Asia-Pacific Countries and Factors that have Impact on Secondary Educational Changes

General characteristics of three *low-income countries* [13]: East Timor, Lao People's Democratic Republic (Laos) and Cambodia are described, followed by an analysis of the factors that are impacting their secondary curricular implementation.

General characteristics of each country

In ascending order of independence, Laos became free by a civil war in 1975, Cambodia became free from Vietnamese occupation in 1989 and East Timor became free from the Indonesian occupation in 1992. Laos is the country with the biggest surface area, followed by Cambodia and at last, East Timor. In terms of total of population, Cambodia has the highest number of people, followed by Laos and then East Timor. Regarding population growth, East Timor reveals the highest value, followed by Laos and then Cambodia [14].

Concerning the year when each country started the last curriculum reform process, Cambodia started its reform in 1996, Laos in 2006 and East Timor in 2010. Regarding school enrolment, in 2010, Laos showed the higher increase in secondary school enrolment, followed by East Timor and then Cambodia [14]. However, Cambodia showed the largest increase in youth literacy rate in the period 2005-2010 [14].

Regarding compulsory education levels, East Timor shows the biggest change. Compulsory education in East Timor includes the first nine years of schooling (basic education) [8], while only the five years of primary education are compulsory in Laos [15] and Cambodia [16]. The rising investment of East Timor in education reflected beliefs that continued economic development requires a more knowledgeable and skilled labour force [8].

It is important to identify which factors concerning secondary educational reforms, have impact on secondary school enrolments in Laos. Moreover, which factors are impacting in youth literacy rate in Cambodia? Regarding East Timor context, which conditions are limitations (or not) to the appropriate curricular development and to the improvements in secondary school enrolments and youth literacy? These and other aspects will be examined in the next section.

Factors that have impact on secondary educational changes

Laos, like Cambodia and East Timor are low-income countries aiming to achieve general goals, such as the MDG required for sustainable development. All these countries recognize gains in improving access and equity to education, to allow people to participate in the economic, social and political development. Therefore, all had interest in reform education, though each country shows its own education policies and curriculum framework [5].

A general trend towards the decentralization of education policies and strategies was fostered to ensure that these are being effectively implemented at all levels ([17], [18], [10]). However, it was recognized that efforts to decentralize many decision-making and financial management face many constrains that are common to the three countries, for instances, the inevitability *"for training local staff to take up new responsibilities"* [17, p. 2].

Regarding the restructuring of secondary education systems, new curricula in these three countries were designed with a combination of content and competency-based approaches, where topics and contents were selected according to the learning objectives. These new and innovative curricula intended to overcome: "low enrolment ratios in secondary education"; "large number of out-of-school secondary-school-aged youth"; "low relevance, quality and efficiency in last secondary education programmes", due to "out-dated information", "discipline-based, college-bound curriculum"; "inadequate qualifications of many teachers and education managers and school principals", among others problems [19, p. 426-427].

Some of these purposes were also recognized by technical missions for monitoring the secondary curriculum restructuration in East Timor [20]. In addition, there are points of resistance, namely some reluctance of teachers to change their traditional teaching habits. Furthermore, the demand to continuously introduce new subjects into the curriculum aggravates the problem of the overcrowded curriculum [18].

In response to the above-mentioned problem, most countries have taken steps in order to decongest the curriculum. One of the trends is to adopt a cross-curricular approach, implying that new learning areas are not separate subjects, but rather appear integrated throughout the curriculum, as in Cambodia [18]. Moreover, a cross-curricular approach allowing interdisciplinary practices [18]. Theoretically, the new secondary curricula of East Timor have this advantage [3].

Concerning secondary school enrolments, the three countries in review show that low secondary enrolment coverage is highest in urban and economically developed areas, and lowest in rural ethnic group areas and poor districts. Gender disparity, too, manifests itself more prominently in rural, remote and ethnic group areas [21]. These aspects may explain differences in enrolments in secondary education [14] and adult or youth literacy rate of each of these three countries. However, it is the differences in female enrolment which best explains the differences between the countries under study [14]. Also, teacher attitudes are increasingly recognized as a major influence on school dropout patterns too [22].

Another limitation is registration fees adopted by schools [18]. Education in East Timor is free of charge and this may be a positive factor for school enrolment.

Also, the successful implementation of new curricula is highly dependent on national infrastructures. Lack of electricity, poor roads, for example, "can hinder timely delivery of printed learning materials", as well as "general communications between students and teachers" [23, p. 30].

Relevant Issues in Secondary School Reform in East Timor

There would be many aspects to consider in the process of restructuring general secondary curriculum in East Timor. In fact, many reports concerning Portuguese intervention in this process are available [24], but its analysis is not the purpose. The main purpose of this chapter is to compare some relevant issues concerning general secondary education reforms, in particular among three Asia-Pacific countries with serious economic and social problems. This comparison aimed to contribute to better understand the educational reform of secondary curriculum in East Timor which is in its initial phase.

After the comparison described in the previous section, it appears that East Timor government and all involved actors should pay particular attention to:

i.   Efforts to decentralize many decision-making, which require training local staff to take up new responsibilities;

ii.   Appropriate training of teachers (to overcome a certain resistance to change their traditional teaching habits);

iii.   A cross-curricular approach aligned with interdisciplinary development;

iv.   Reducing the discrepancy and the gap in learning opportunities between urban and rural areas and between genders;

v.   Promoting female enrolment;

vi.   Promoting parent awareness about the relevance of an upper secondary education, in order to overcome school dropout rates;

vii.   Promote teacher awareness for change and for information processing and knowledge constructing within new curricula, to avoid the fear of the unknown;

viii.   Persist in the development of national basic infrastructures, to prevent lack of electricity in many localities or the huge network instability, poor roads and inadequate school infrastructures in order to overcome difficulties in timely delivery of printed learning curricular materials.

The reports of the technical missions, e.g. [20], stress the importance of continuous training and follow-up the implementation of the new curriculum plan. This training and follow-up should be provided by the teams that produced curricular materials. It is obvious the need for a significant effort to provide the school park with the minimum conditions for a teaching quality and dignity that the Timorese deserve and need (properly equipped classrooms, laboratories, computer rooms, libraries, etc.).

In sum, the complexity of a system-wide reform requires changes that imply various stakeholders' intervention in order to build a better future. Moreover, it is important not to underestimate the timeframe for a system-wide change to give time and to prevent the capacity to resist to centrally mandated changes [25]. Finally, it will be interesting in further studies to investigate, in local context, how the new curricular materials are being used by schools, teachers and students and how these

improve secondary school enrolments and youth literacy rate. There are little publications about these topics and most is not written in English.

References

1. Nicolai, S. (2009): Opportunities for change. Education innovation and reform during and after conflict. International Institute for Educational Planning. UNESCO, Paris.

2. Instituto Português de Apoio ao Desenvolvimento (2010): Protocolo de cooperação entre o Instituto Português de Apoio ao Desenvolvimento, a Fundação Calouste Gulbenkian e o Ministério da Educação de Timor-Leste. Proposta de financiamento do projeto "Falar Português"- Restruturação curricular do ensino secundário geral em Timor-Leste. http://www.ipad.mne.gov.pt/Instituto/Protocolos/Timor-Leste/Documents/10-13_FLP_Protocolo%20IPAD-FCG-ME%20-%20Ens.%20Sec.%20I.pdf

3. Capelo, A., Santos C. & Pedrosa M. A. (in press) How can curricular reform sufficiently integrate the principles of ESD in East Timor - the search for indicators.

4. UNESCO (2005): A Situational Analysis of Education for Sustainable Development in the Asia-Pacific Region / UN Decade of Education for Sustainable Development (2005-2014) Rev. Ed. Bangkok: UNESCO Bangkok. http://www.desd.org/situational_analysis.pdf

5. Acedo, C. (2002): Improving Educational Quality Project Case Studies in Secondary Education Reform. American Institutes for Research, Academy for Educational Development Education Development Center, Inc. Juárez and Associates, Inc., University of Pittsburgh. http://www.glp.net/c/document_library/get_file?folderId=[2858&name=DLFE-940.pdf

6. UNESCO (2012): Youth and skills: Putting education to work. EFA Global Monitoring Report 2012.

7. Albergaria-Almeida, P., Martinho, M. & Lopes, B. (2012): Teacher Education in the context of international cooperation: the case of East Timor. In N. Popov, C. Wolhuter, B. Leutwyler, G. Hilton, J. Ogunleye & P. Albergaria-Almeida (Eds.) International Perspectives on Education. BCES Conference Books, Vol. 10.

8. Republic Democratic of Timor-Leste (2011): Timor-Leste Strategic Development Plan 2011-2030.

9. Prime Minister RDTL (2012): Address by his Excellency the Prime Minister Kay Rala Xanana Gusmão at the reception to launch the United Nations Secretary General's Education First Initiative. New York, 26 September 2012. Republic Democratic of Timor-Leste. http://timor-leste.gov.tl/wp-content/uploads/2012/10/Education-First-Initiative-26.9.12.pdf

10. Carapic, J. & Jütersonke, O. (2012): Understanding the tipping point of urban conflict: the case of Dili, Timor-Leste. Working Paper #4 May 2012. Working Paper Series. Understanding the tipping point of urban conflict: violence, cities and poverty reduction in the developing world. The University of Manchester.

11. Ramos, A. M. & Teles, F. (2012): Memória das políticas educativas em Timor-Leste: A consolidação de um sistema (2007-2012). Universidade de Aveiro. Aveiro. 1ª Edição.

12. Peretomode, V. F. & Ikoya, P. O. (2010): Managing Nigerian secondary school reforms to enhance equity and globalization Educational Research and Reviews. 5(6): 298-302. http://www.academicjournals.org/ERR/PDF/Pdf%202010/June/Peretomode%20and%20Ikoya.pdf

13. World Bank (2012): 2012 World Development Indicators. International Bank for Reconstruction and Development. http://data.worldbank.org/sites/default/files/wdi-2012-ebook.pdf

14. UNESCAP (United Nations-Economic and Social Commission for the Asia and the Pacific) (2012): Statistical Yearbook for Asia and the Pacific 2012. Country profiles http://www.unescap.org/stat/data/syb2012/country-profiles/SYB2012-Countryprofiles.pdf

15. UNESCO & International Bureau of Education (2011): World Data on Education VII Ed. 2010/11 http://www.ibe.unesco.org/ fileadmin/user_upload/Publications/WDE/2010/ pdf-versions/Lao_PDR.pdf

16. UNICEF (2011): Education UNICEF Cambodia http://www.unicef.org/cambodia/ 3.Education.pdf

17. UNESCO (2008): UNESCO National Education Support Strategy Lao People's Democratic Republic 2008-2013. UNESCO Asia and Pacific Regional Bureau for Education. May 2008 (draft) http://portal.unesco.org/pv_obj_cache/pv_obj_id_ 2CB8B6075F2B21D2FC7182F66BABE5CA37850900/filename/UNESS++Lao+PDR_1 5+May+2008.pdf

18. UNESCO & International Bureau of Education (2003): Regional Seminar on Building Capacities of Curriculum Specialists for Educational Reform, Vientinae, Lao PDR, 9-13 September 2002. Final report of the Regional Seminar, 9-13 September 2002/. Bangkok. http://www.ibe.unesco.org/fileadmin/user_upload/archive/curriculum/Asia%20Networkp df/vienrepor.pdf

19. Nan-zhao, Z. & Haw, G. (2002): Secondary Education Reforms in Asia-Pacific Region: Challenges, Strategies and Programme Actions in Addressing Learners' Needs.

20. Ferreira, A., Oliveira, A. L., Ramos, A. M., Santos, C., Morgado, M., Neves, M. E., Patrão, M. & Breda, Z. (2011): Projeto "Reestruturação do Ensino Secundário Geral em Timor-Leste" Relatório. 4.ª Missão Técnica a Timor-Leste. Setembro de 2011. IPAD/FCG/UA/RDTL.

21. Ministry of Education, Lao PDR (2005): Education for All (EFA) National Plan of Action 2003-2015. UNESCO Bangkok.

22. Ministry of Education, Government of Lao PDR (2009): Education Sector Development Framework 2009-2015. January 2009. http://www.globalpartnership.org/media/library/ Final_ESDF_19_January_Ready_for_FTI.pdf

23. Figueredo, V. & Anzalone, S. (2003): Alternative models for secondary education in developing countries: rationale and realities. American Institutes for Research in collaboration with The Academy for Educational Development Education Development Center, Inc. Juárez and Associates, Inc. The University of Pittsburgh, January 2003.

24. Afonso M. M., Araújo, C. & Ribeiro, M. (2011): Avaliação conjunta do programa indicativo de cooperação Portugal – Timor-Leste (2007-2010) IPAD/RDTL, Junho de 2011.

25. Hallinger, P. (2012): Synthesis of Findings from 15 Years of Educational Reform in Thailand: Lessons on Leading Educational Change in East Asia. Paper Prepared for Presentation at the INVALSI Conference Rome, Italy, October 3-5, 2012. http://www.invalsi.it/invalsi/ri/improving_education/Papers/hallinger/16.pdf

Note: sites accessed on 05/01/2013.

Ana Capelo
Chemistry Department
Faculty of Sciences and Technology
University of Coimbra
Portugal
anacapelo@ua.pt

Maria Arminda Pedrosa
Chemistry Department
Faculty of Sciences and Technology
University of Coimbra
Portugal
apedrosa@ci.uc.pt

Patrícia Albergaria Almeida
Research Centre for Didactics and Technology in Teacher Education (CIDTFF)
Department of Education
University of Aveiro
Portugal
patriciaalmeida@ua.pt