Part 1

Educational Development Strategies in Different Countries and Regions of the World: National, Regional and Global Levels

Victor Martinelli

Weak English Language Literacy and Early School Leaving in a Maltese Context

Abstract

This study considers the issue of weak literacy development and early school leaving in Malta. In spite of a lack of a direct or indirect causal link between the two, in the case of Malta these issues seem to be almost exclusively specific to children attending the State school. Children from the Church and the Independent sectors are minimally affected or not at all. These two phenomena are examined against a background of parental education, socioeconomic status and social capital. While literacy may be a contributory factor to early school leaving, the two may be facets of deeper underlying deficits such as the inability of parents to support their children's learning and to act as their point of reference and educational compass outside the school. This results in alienation from schooling.

Keywords: early school leaving, English language literacy, international literacy assessments, Malta, socioeconomic status

Introduction and aims

This study examines the reading achievement in English of primary school pupils in Malta and contextualizes it in the background of early school leaving (ESL). There are established causal effects between weak literacy and ESL (Curtis & McMillan, 2008; Hammond, Linton, Smink & Drew, 2007) and between weak literacy and leaving school with insufficient qualifications (McGee, Prior, Williams, Smart & Sanson, 2002). Not only are children with weak literacy more likely to become early school leavers but they are also among the first to leave school early (McMillan & Marks, 2003). The European Commission defines early school leavers as "young people aged 18 to 24 who have completed lower secondary education at most, and are not currently involved in further education or training" (EU Commission, 2015, p. 4).

The Maltese educational scene presents an interesting case from the perspective of literacy and ESL. Malta is a bilingual country with English being arguably the most significant heritage from its colonial period. It is also a country with a high occurrence of ESL and fares poorly on both the literacy and the ESL count. Malta ranked 35th of 45 participating countries in the Progress in International Reading

Literacy Study (PIRLS) 2011 with a score that was significantly below the international average (Mullis, Martin, Foy & Drucker, 2012). Malta reported an ESL rate of 27.1% for 2009 and 20.8% for 2013, compared to EU averages of 14.2% and 12% for the two years respectively (European Commission, 2014).

Literacy and early school leaving in international contexts

Assessments such as PIRLS measure a common cognitive ability at the macro-social level and performance on these tests taps the ability to think and to apply knowledge (Rinderman, 2007). Good home literacy environments are important resources for all children, including those from poor socioeconomic backgrounds and even after controlling for home literacy environments, parental education significantly affects students' academic performance (Park, 2008). Ross and Leathwood (2013) associated weakly developed literacy, numeracy and critical thinking with an untimely exit from the educational system and exclusion from society. If, as is forecast, between 2010 and 2020 the European Union expects a net employment increase of about 37% mainly in higher-level occupations with a decrease in low-qualification jobs (CEDEFOP, 2012), then countries must strive for higher literacy rates and lower ESL rates. High literacy and numeracy contribute to employability, better social cohesion and the diminution of social inequality (Ross & Leathwood, 2013).

Background

Educational contexts – language learning

There are three mainstream education providers in Malta: the State, the Church (Roman Catholic) and the Independent sector. State schools offer completely free education to all students and the State subsidizes Church schools heavily. More than 80% of children in Malta attend State and Church schools. The Ministry of Education regulates the curricula in the Church and Independent school sectors ensuring overall uniformity. Given Malta's bilingualism, both English and Maltese are spoken with Maltese being the main language of instruction in State schools. Independent schools and some Church schools tend to favor English as a medium of communication but teachers deliver English and Maltese lessons in their respective languages in all schools (Education, n.d.). The teaching system in most State schools is not one of complete immersion but rather of both languages taught side by side, often with code switching (Ministry for Education and Employment, 2014).

Literacy has been on the Maltese national agenda at least since the OECD Program for International Student Assessment (PISA) 2009 indicated that the percentage of low achievers in reading among 15-year-olds was 36.3%; considerably higher than the EU average of 19.6%. At the time of PISA (2009), only 64% of Maltese students possessed proficiency in reading literacy at or above the baseline needed to participate effectively and productively in life, compared to 81% in OECD countries.

PIRLS 2011 – the Maltese context

Maltese children participating in PIRLS 2011 undertook both English and Maltese assessments and paradoxically they performed better in English. Maltese pupils taking the English language assessment obtained a scaled score of 477 (average set at 500) and ranked 35th of 45 participating countries, significantly lower than the international average. The proportion of Maltese pupils scoring more than 550-scaled points in reading (24%) was significantly lower than the international average (44%) and the proportion of Maltese pupils scoring less than 475-scaled points in reading (45%) was significantly higher. The above statistics highlight clear deficits in comparison to international averages.

Mullis et al. (2012) record some language instructional shortcomings in Maltese education that may explain in part why Maltese students fare so poorly overall but it does not explain the differences between the three school systems. There are certain seemingly positive practices that may contribute further to a precarious situation; Malta is in the second place after Belgium (German speaking community) for starting teaching of a first foreign language as a compulsory subject at age 5 years, effectively from the very first year of schooling. Concurrently, teachers expose children to Maltese resulting in their teaching two languages with learners possibly suffering from cross language interference (Verhoeven, 1990).

Educational contexts – early school leaving

There are multiple reasons why children leave school early. Among them are cognitive abilities, weak school performance, low aspirations and motivation (Ministry of Education and Employment, 2012). However, there are also socioeconomic factors at play.

Ali and Farrugia (2013) reported that in 2008, 20% of a cohort of about 4000 16-year-olds opted not to register for any school leaving examinations. This number matched the ESL rates quoted earlier. When they interviewed students who were not intending to sit for any school leaving examinations, among the most common reasons quoted for their decision were that examinations were too difficult and specifically that they had difficulty in reading and writing. Literacy skills were among the main issues identified by students for not sitting for any school leaving examinations. Significantly, students who did not sit for any school leaving examinations were almost exclusively State school students. The authors remarked that a high level of absenteeism among those opting not to sit for any examinations was already evident and these students were already on their ESL trajectory.

Method

The PIRLS 2011 study in Malta collected data on 9-year-olds' reading comprehension performance in English, their literacy and socioeconomic backgrounds. The International Association for the Evaluation of Educational Achievement (IEA) International Database Analyzer (IDB) was used to extract the data sets for Malta (N=3,598) along with international data pertinent to the study. The Statistical Package for the Social Sciences (SPSS) was used for some additional analyses to compute a number of descriptive analyses related to parental levels of education and home resources for learning.

Procedure and Results

Reading comprehension attainment

The three school sectors, namely State, Church and Independent sectors performed differently and obtained dissimilar overall results; State (58% of total school population) – 446 scaled scores, Church (30% of total school population) – 512 scaled scores, Independent (12% of total school population) – 541 scaled scores; the international midpoint was set at 500. Analysis of variance showed a main effect of achievement by the three school sectors $F(2,3595) = 308$, $p = .001$, $\eta p2 = .146$. Post hoc analyses using Tukey's HSD indicated that the performance of the three sectors differed significantly with the Independent School sector performing significantly better than the Church ($p = .001$) and the State school sectors ($p = .001$) and the Church School sector performing significantly better than the State school sector ($p = .001$).

Parental levels of education and home resources for learning

Only 76.6% of fathers declared their level of education as follows; ISCED 1 or 2 – 3.5%, ISCED 2 – 42.6%, ISCED 3 – 11.7%, ISCED 4 – 3.8%, ISCED 5B – 4.4%, ISCED 5A (1st Degree) – 5.0%, beyond ISCED 5A – 5.6%. This shows that 47.6% of fathers in Malta in 2011 possessed low levels of education, not exceeding secondary school level. Similar numbers were evident in the case of mothers' levels of education. There was a clear association between fathers' level of education and children's performance. Analysis of variance showed a main effect for achievement by the seven categories of educational levels $F(6,2757) = 63.3$, $p = .001$, $\eta p2 = .121$. Post hoc analyses using Tukey's HSD indicated that there were significant differences between the performance levels of many of the children of the differently educated fathers. Four homogenous subsets were identified comprising the following four levels of parental education; ISCED 1 or 2; ISCED 2; ISCED 3, 4 and 5B; and ISCED 5A and BEYOND 5A. Children whose fathers were educated to levels ISCED 1 or 2 and ISCED 2 obtained scaled score means of 439 and 470 on the PIRLS 2011. Virtually identical findings were evident when mothers' levels of education were compared to their children's levels of performance.

PIRLS 2011 data for Malta indicate that lower educated fathers tend to send their children to the State school sector whilst better educated fathers tend to send their children to the Church school sector and the most highly educated fathers tend to opt for Independent schools. An overwhelming 70% of fathers of children attending State school were educated to the first two basic levels of education; only 24% of fathers with children in Church schools and a negligible 5% of fathers with children in Independent schools were educated to this low level of education.

Analysis of levels of parental education in Malta available from the PIRLS 2011 dataset indicates that Maltese parents' levels of education are significantly below the average of the entire sample of PIRLS participants. Of significance is the fact that 44.6% of all Maltese parents report a lower secondary level of education as their highest education level in comparison to only 11.8% of parents from all other countries. Conversely, only 18.6% of parents in Malta possess a university or higher degree in comparison to 33.8% of parents from other countries. Given some 7% negative reporting bias for levels of education attained by state school parents and

7% positive reporting bias for Church school parents, the situation could be more acute.

Among other questions related to key home resources, PIRLS 2011 asked students' parents to report on the number of books in the home and the availability of two study supports–an internet connection and a room of their own; parental levels of education were also included as a home resource. As expected, those participants with many resources performed significantly better than those with some resources and those with few resources (552, 476 and 361 scaled scores respectively). Resources for learning were examined by the author in conjunction with the tripartite school system and the three sectors reported significantly different levels of home resources for learning; State – 9.94, Church – 10.66, Independent – 11.42. Analysis of variance showed a main effect of level of home resources by school sector $F(2,3073) = 244$, $p = .001$, $\eta p^2 = .137$. Post hoc analyses using Tukey's HSD indicated that the levels of home resources for learning of all three school sectors differed significantly ($p = .001$).

This finding was expected because PIRLS 2011 included parents' educational background as one of the home resources for learning. The author removed parental education from the equation and compared children in the different school sectors again. At this level of analysis the school sectors did not differ much from each other except that State school children always reported having marginally less of the commodity than Church or Independent school children. The one exception was the number of books in the children's homes where the difference was considerable. Forty two percent of State school children possessed one bookshelf (25 books) or less, compared to 29% and 23% from the Church and the Independent school sectors respectively. On this aspect of resources for learning, children attending State schools were certainly disadvantaged and this may be related to their poor literacy performance overall.

Limitations

In spite of the adequately large numbers and that fact that virtually all children attending the year level were included in PIRLS 2011, once one starts analyzing the different school sectors or the different socioeconomic groups, the numbers are reduced; for example, when a particular socioeconomic group is in a minority in a particular school sector. Parents and guardians could not be obliged to complete the home background questionnaire in its entirety and in the case of parents' level of education, data is only available for about 77% of the respondents. This is bound to affect the accuracy of the collected data. Another limitation of this study is that it adopts a cross sectional rather than longitudinal approach and this precludes the drawing of causal attributions.

Discussion

This article posits a view that poor literacy achievement and early school leaving are associated. The State school cohort that constituted 58% of the total population assessed by PIRLS 2011 was the only cohort scoring below the international average. Children from this cohort were experiencing literacy difficulties; the Church and Independent school cohorts scored above the

international midpoint. In the Ali and Farrugia (2013) study, the students who did not register for any school leaving examinations quoted subject difficulty and problems with reading and writing for doing so. These students came exclusively from the State secondary sector. Furthermore, these children were already absenting themselves from school. There is a clear association between the two although one cannot attribute causality. It is possible that poor literacy, a dearth of books in the home and ESL are co-occurring, interlinked manifestations of deeper underlying causes such as inadequate support to learn at home, parents who are unable to support children in their learning and possibly, alienation from schooling. In the Maltese context, poor literacy is an attributed cause for children not sitting for any school leaving examinations but then poor literacy underlies weak performance in most subjects because it is through reading and writing that content may be accessed and processed.

Conclusions

Conclusions based on a single indicator can be misleading and there are multiple facets to each result. Adopting a simplified logic of interpretation may do an injustice to the phenomenon under study. The two issues presented in this paper are of concern in the Maltese educational arena because of their implications for children's overall development and the economy and competitiveness of the country. The fact they are co-occurring would suggest that the issues examined in this article are not chance occurrences. The wealth of international research suggesting that there is a link between weak literacy development and ESL (Curtis & McMillan, 2008; Hammond et al., 2007; McGee et al., 2002) and Maltese research linking the two (Ali & Farrugia, 2013) supports this view. This situation merits scrutiny through continued investigation by adopting different methodologies that can establish causality.

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Dr. Victor Martinelli, University of Malta, Malta, victor.martinelli@um.edu.mt