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## A rising tide of primary school standards—The role of data systems in improving equitable access for all to quality education in Vietnam<sup>☆</sup>

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### ABSTRACT

The approach taken over the past decade to introduce minimum primary school standards in Vietnam is reviewed, with annual school audits that measured both input (quality) and output indicators.

It describes a successful, context specific approach in which flexible data systems were used to support the evolution and adoption of a new set of standards. A rich multiyear data set has enabled impact analysis, equitable investment planning and test hypotheses on the variables within the 'black box' of a classroom that influence learning.

Institutional challenges presented in mainstreaming and evolving standards are contrasted with international best practice on raising standards.

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### 1. Introduction and background

As the global Education For All (EFA) and education related Millennium Development Goals (MDGs) goals were being deliberated in Dakar and New York just over a decade ago, the Socialist Republic of Vietnam was proudly announcing its achievement of EFA, notably in access terms: Universal Primary Education (UPE). Since Dakar the global education development agenda has broadened its focus from access and shifted emphasis on the need to provide an acceptable minimum level of quality that facilitates meaningful learning and development of core competencies.

Since 2002, the increasingly influential annual EFA Global Monitoring Reports have frequently articulated the dilemma of access vs. quality of education trade offs (UNESCO, 2005). Without meaningful learning, schools may become mere holding camps; parents consider opportunity costs and children dropout – undermining the very purpose of education.

Vietnam has followed a remarkable journey to develop itself and its people since the devastating wars and conflict of the 20th century. Economic reforms (*doi moi* – renovation) policies were introduced in 1986 to introduce socialist orientated market

economy policies within a communist party run state. These bore fruits in the 1990 with rapid economic growth and an accompanying expansion of the primary school network, with temporary bamboo and thatch structures being established as satellite campuses, thousand more teachers were hired, including ones with inadequate qualification to enrol children in remote and rural areas. In retrospect this was a very sensible, low-cost strategy to start, with a clear eye to building a system that could be upgraded in the future.

Primary net enrolment ratio (NER) rates rose over the decade by around 10 percentage points to 94% (World Bank, 2003), based upon Ministry of Education & Training (MoET) and census data. However Vietnam's declared achievement of UPE in 2000 must be qualified by internal definitions used<sup>2</sup> and recognition of the rapidly diverging status of urban and remote/rural areas – the latter having much lower learning outcomes and both higher dropout and repetition rates.

Standards are an essential element of an effective system of schooling, as illustrated in Fig. 1 below (World Bank, 2011a). They are integral in enabling robust systems of accountability, both to public and private providers of finance and to parents – enabling both choice and voice as part of a political process to drive up quality of both services provided and ultimately learning outcomes.

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<sup>2</sup> Only 70% of 14-year-old students are required to have completed primary education in the most disadvantaged areas, compared to the more than 80% required in advantaged areas. In addition only a proportion of communes needed to reach the UPE threshold for the district or province to declare UPE achievement (MoET, 2000).

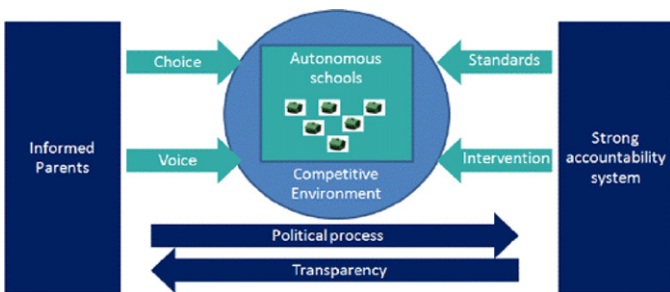


Fig. 1. Effective school systems: accountability and choice.

The use of school and educational standards, in particular minimum thresholds, is widespread in both resource rich and poor environments and has obvious application (if applied appropriately) in terms of equitable service provision and raising quality. International minimum standards have been developed for the provision of education during humanitarian crises, post conflict or natural disasters (INEE, 2010). The INEE guidelines do not attempt to provide detailed specifications that are usually context specific, but most country specific guidelines do set limits, for example on pupil teacher ratio, professional qualifications and maximum class size.

Whilst the right to education of an acceptable quality is universally recognised (World Education Forum, 2000), there is no set of internationally proposed standards and norms that may characterise the service provision a student may expect in completing his or her 'primary education of good quality' (UNESCO, 2001).

The recent influential McKinsey education report (Mourshed et al., 2010) in its critique of common factors that improving school system have deployed to raise performance from poor to fair (most students achieving basic literacy and numeracy) identifies 'getting all schools to minimum quality standard' as a key theme that has been deployed in low income environments. Parallels to these findings will be made in this paper to the case of Vietnam, which was not considered in the McKinsey report sub sample of improving systems.

Vietnam had pre-existing school standards and some, but not all elements of the effective school model with accountability mechanisms illustrated above. It had issued decrees on primary National School Standards (NSS)<sup>3</sup> (MoET, 1997, 2005a,b) with the intention to drive up quality and guide investment by local authorities, however there was concern they were set unrealistically high in the short term given fiscal resources available and in some instances created perverse incentives to upgrade infrastructure at small numbers of better off schools and direct resources away from remoter, disadvantaged areas. The Primary Education for Disadvantaged Children (PEDC) project tried to address this, capitalizing on an accepted approach of setting standards, but adjusting standards to make them obtainable for the majority of schools and proposing to raise them gradually over time. The project focused its large scale investments (~US\$243 m) around a package of quality investments for over 200 poor districts to attain a new minimum standard: **Fundamental School Quality Level (FSQL)**, which was introduced to be a 'stepping stone' to the NSS (World Bank, 2003), inspired by effective schools research: for example (Heneveld and Craig, 1996).

This paper's purpose is to review the approach that was taken to make FSQL operational, with annual school audits that

<sup>3</sup> 1997 decree set national standards for primary schools for 1996–2000, the 2005 decree revised them and required that schools should achieve the lower FSQL standard before apply for NSS.

benchmarked and measured progress in the attainment of a range of input (quality) and output indicators in all 40,000 Vietnamese primary school sites (main and satellite campuses). It describes the FSQI Input Index (FII); a measure that combines data on infrastructure, qualified teachers, community engagement, learning materials and teacher contact hours into a composite score that was used to monitor, rank and compare individual schools and aggregate results according to both administrative units and in national summaries.

We consider the longer-term impact and success of PEDC and donor programmes' model of collaboration with government on school standards and resource allocation, in particular in disadvantaged area and in the ongoing expansion to full day tuition. Eventually legislation did embed FSQI as the minimum level of a three-tier school standard system and government guidelines did require the use of the PEDC data systems for school resource allocation and planning purposes.

Section 2 of this paper describes international efforts to link school standards with data and then details the introduction of FSQI and its accompanying systems in Vietnam in more detail. In Section 3 we review the Government of Vietnam's gradual buy-in and adaptation of the school standards and resource allocation methods proposed. Section 4 looks at the long term impact, 10 years after the initial conception of the FSQI minimum school standard and Section 5 draws conclusions from this innovative approach.

Vietnam's rapid economic growth has enabled major improvements in basic education provision over the past decade. Learning outcomes remain stubbornly low in the disadvantaged, minority areas of the country, it appears probable that FSQI and related investments helped to limit growing urban–rural inequities, but were insufficient to offset the principal drivers of economic growth and parental resources in the dynamic urban regions.

## 2. Systems to drive school standards; the Vietnam FSQI case study

### 2.1. International experience in linking school standards and data

Application of minimum school standards in emergency or humanitarian situations has been referenced in Section 1; a literature search reveals that standards are a relatively common feature of international investment projects and programmes in the past decade. Since 1998, 32 World Bank supported projects defined 'operational standards for schools' as a key project feature, the concept appears to have strong focus of support in Brazil, which accounts for a quarter of these citations, notably the *Fundescola I–IIIa* (School Improvement Project) series (World Bank, 2011b).

In both Brazil and The Philippines support to define and introduce minimum school standards was combined with decentralised investments that strengthening school based management and enhanced accountability through the use of instruments such as school report cards and awareness raising on issues such as quality—for example anthropometric furniture specifications and teacher certification (World Bank, 2011b).

In predominately low income countries in West Africa approaches to enhance the use of EMIS data to improve school management and accountability have been described that utilise school report cards and composite indices (Brossard, 2011).

Noting that econometric models cannot explain why key education input cost drivers do not translate into improved learning outcomes, it seeks to construct district and school specific indices to move towards results based management. A 'Means index' (resource availability) was constructed, together with a 'Results index' (student progression and learning) and a 'Context Index' (environment factors such as remoteness, urban/rural water

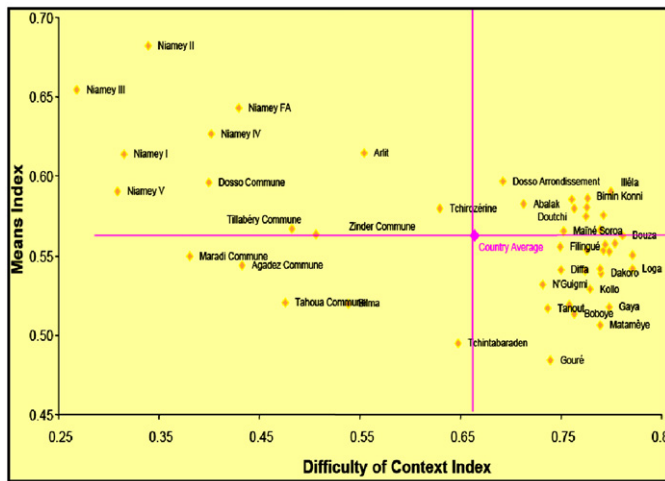


Fig. 2. Means vs. context.

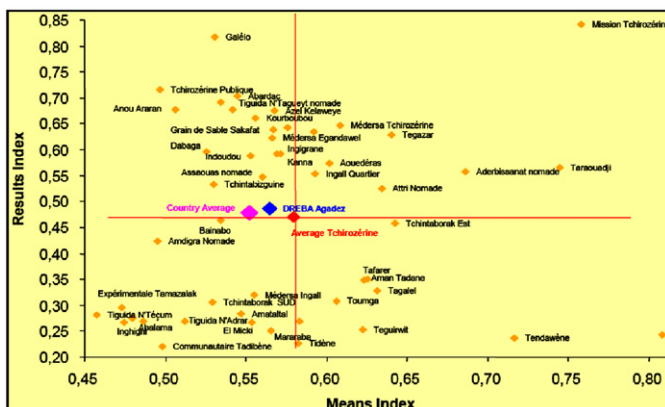


Fig. 3. Means vs. results.

access). By plotting *Means* versus *Context* or *Means* versus *Results* it was possible to graphically represent poor and good performance and identify for example districts deserving more resources or schools in need of enhanced support and supervision (see Figs. 2 and 3, Brossard, 2011).

Intersecting lines represent national and district average values respectively in Figs. 2 and 3, with the scatter plots identifying specific districts and schools.

These examples of composite indices and report cards used in W. Africa are contrasted with Vietnam's approach, in the case study below.

### 2.2. Vietnam's FSQI case study

Vietnam made excellent progress in the 1990s towards the achievement of Universal Primary Education (UPE) and was singled out for its achievements at the World Education Forum conference held in Dakar, Senegal in the year 2000. Primary net enrolment rate had increased to 94% by 2000 and completion rates had raised by 30% over the previous decade. However much of the gains made increasing access to primary school were fragile; this was acknowledged in the National EFA plan (2003–2015) that made 'moving from quantity to quality' the first major strategic goal (MoET, 2003a).

The Primary Education for Disadvantaged Children (PEDC) project that was designed in the period 2001–2003 therefore put addressing these issues of low quality, inequitable primary education provision as its major objective. It defined disadvan-

**Table 1**  
Original fundamental school quality level standards.

1. **Physical infrastructure:** solid classrooms, secure storage and furniture
2. **Teaching staff:** minimum formal qualification and annual in-service training
3. **School organization and management:** heads ensure all campuses offer the full 175-week curriculum
4. **Education socialization:** each campus with a trained, functional Parent Committee
5. **Educational activities and quality:** Core textbooks for each student, additional learning materials for each class
6. **Expected outcomes:** All children enroll with gender equity and complete

tagged children in two ways, (i) geographically being located in 227 districts<sup>4</sup> (a third of the country with over 2 million primary students) that were remote, poor that are out of school and/or had low educational outcomes (ii) child specific, linked to gender, disability, ethnic minority status, poverty, family status. The substantial investment funds were targeted at these districts, where many of the poorest households reside and the population of the disadvantaged ethnic minorities are concentrated in highland areas.<sup>5</sup>

PEDC investments were focussed on ensuring schools had the very basic inputs needed for learning, including classroom and sanitation infrastructure, classroom furniture, textbooks, learning materials, teacher training and community engagement. Innovations included ethnic minority teacher assistants, grants for quality improvement (to districts and satellite campuses, support on inclusive education) and in the concept of FSQI—minimum standards designed to drive resource allocation to the most needy schools, applied through newly developed data and planning systems.

PEDC set itself the target to 'achieve FSQI' in the districts it supported, a key concern was that education offered in remoter, smaller satellite campuses should be improved and not be inferior to that offered in the main campuses situated in larger villages and urban areas. As originally designed FSQI had standards defined in five themes, each with a limited list of requirement statements. A sixth statement encapsulated outcomes in terms of all school age children completing primary education, see Table 1 (adapted from World Bank, 2003). FSQI was intended to be a flexible instrument—minimum standards within reach of the majority of schools that could be raised over time and exceeded in many cases if resources were available.

While many of the FSQI statements were specific, many were somewhat open to interpretation and there was a clear need to collect data from all school campuses if FSQI was to be meaningful.

PEDC initiated an annual school census in 2004 that became known as the District FSQI Audit (DFA), with a 10 page data instrument going to all primary school campuses nationwide, not just the 227 districts supported by PEDC. It enabled the collection of a much more detailed information set on each campus, providing for both project specific and national monitoring of FSQI status. Data processing was decentralised to the district and province level, with soft copy datasets being transferred to allow aggregation into a powerful and detailed national database of around 40,000 primary school campuses.

The DFA managed to compile and release within a 6-month turn around the detailed national results and analysis of schools' FSQI status. Repeated annually from 2004–2010, it quickly became popular with external stakeholders as a comprehensive source of accessible information, available for data mining and extended

<sup>4</sup> In total the volume of districts increased from 189 to 227 due to the practice of splitting administrative areas, not because of increased areas of intervention.

<sup>5</sup> In addition to the *Kinh* majority, 53 minority groups account for about 17% of the population, mostly speak Vietnamese as a second language.

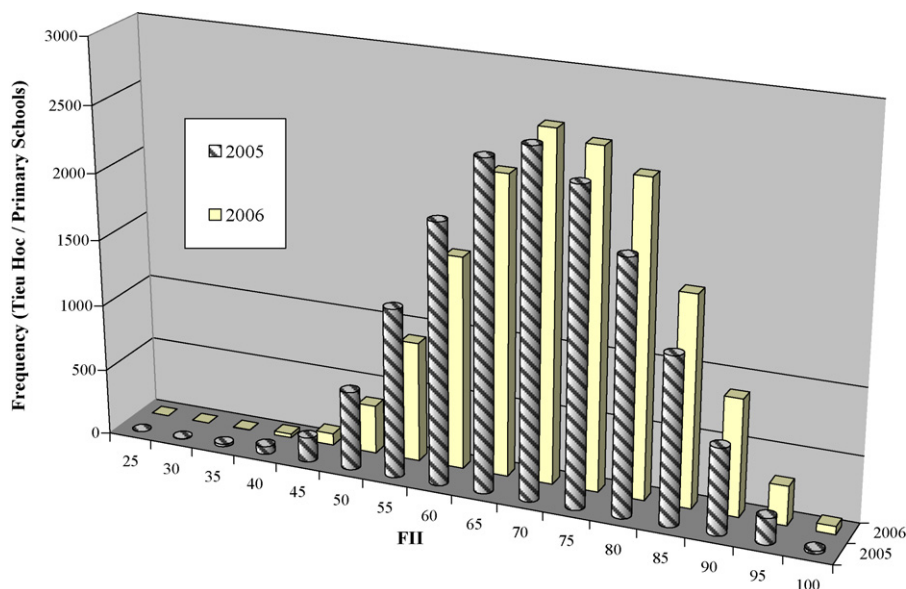


Fig. 4. National school frequency distribution of FII (2005–2006).

Table 2  
FII weightings.

|  |            |
|--|------------|
| School organization and management                                   | 22         |
| Teaching staff   | 27         |
| School and classroom infrastructure/furniture                        | 15         |
| Books and teaching aids teachers/students                            | 10         |
| Implementation of education socialization policy/general regulations | 11         |
| Complete or close by school sites (additional)                       | 15         |
| <b>Total</b>   | <b>100</b> |

analysis with other datasets (MoET, 2007; World Bank, 2010; Consia Consultants, 2010; Cambridge Education, Mokoro & Oxford Policy Management, 2009). According to the former World Bank reference ‘The introduction of the FSQL and collection of DFA data since 2004 has proved to be a successful national initiative that allows for the GOV allocation of needs-based funding at the national, provincial, district and school levels.’

Despite its ambitious scope the DFA was cost effective to implement, using already available it resources and software, costing only around \$4–5 per school campus surveyed annually. This led to pressure in recent years for the DFA to be integrated with the national EMIS system (see Sections 3 and 4).

A key purpose of the DFA was to attempt to ‘quantify’ the FSQL standards to allow for information-based planning and monitoring of PEDC activities and inputs. The FSQL standard was interpreted and adapted to allow it to be measured and monitored using the data collected. The 35 input requirements of FSQL (e.g. ‘all classrooms to be of solid construction’) were matched where possible to quantifiable indicators in the DFA, see Appendices 1 and 2 for details.

The FSQL Input Index (FII) was the quantifiable system, or index constructed, by which FSQL criteria were combined through a weighted summation of DFA data to give an overall measure of FSQL attainment for each school, district or province. The FSQL indicators were expressed in absolute and percentage terms, 0% indicated the school has not met, and 100% indicated the school fully met the FSQL requirement. Indicators considered more important have a higher weighting than others (e.g. Classrooms in good condition: 10, Teachers with Stationery/supplies only 1). A maximum score of 100 was constructed; with the following weighting to the FSQL input themes given in Table 2.

The choice of indicators and weighting factors (listed in Appendix A) used were somewhat arbitrary and had to pragmatically cope with an evolving definition of FSQL. It also ‘encouraged’ expansion of remoter satellite campuses to offer all five primary grades, by including a large 15% weighting. Statistical analysis of the 2004 DFA set<sup>6</sup> revealed that using just 9 of the 30 factors could adequately account for variations in district FSQL performance, which suggested the FII index was overly complex. These included school staff qualifications and training, permanent classrooms, drinking water, furniture, teaching aids and supplementary reading materials.

However it was decided to retain the wider range of factors to both prevent ‘gaming’: investing just in the significant factors and also to emphasise the importance of compliance right across the whole gamut of defined standards. In addition the index was directly applicable; the statistical spread of FII scores nationwide ( $n > 15,000$ ) gives a classic normal ‘bell shaped’ distribution curve as illustrated in Fig. 4, with an acceptable spread: 1 standard deviation of 11 points (Attfield, 2006). In dissemination to stakeholders such as education administrators and head teachers the FII was likened to a student’s examination paper, linking the need for year on year improvements at both micro (school/campus) and macro (province/district) level.

For the period 2005–2010 the composite FII index was widely used as the key measure of FSQL standard compliance and to quantifiably demonstrate Vietnam’s progress in raising minimum school standards. A school FII score of 60 was set as a ‘pass mark’ of FSQL achievement, by this benchmark over the PEDC lifetime the proportion of schools in the supported districts rose from 44.5 to 82.2% (Consia Consultants, 2010).

At the macro level the overall FII score<sup>7</sup> could be computed over time. Fig. 5 demonstrates the gradually rising values for the nation as a whole and the disadvantaged ‘third’ of the nation supported by PEDC (World Bank, 2010).

<sup>6</sup> This analysis was done for a donor budget support programme to assist the Vietnamese Education National Target Programme, see Appendix A for details. In 2004 the name District Physical Audit (DPA) was actually used, but it subsequently became known as the DFA, the common name used in this paper.

<sup>7</sup> The overall FII Score summates each weighted factor for the geographic area in question; taking the mean of individual school FII scores does not derive it.

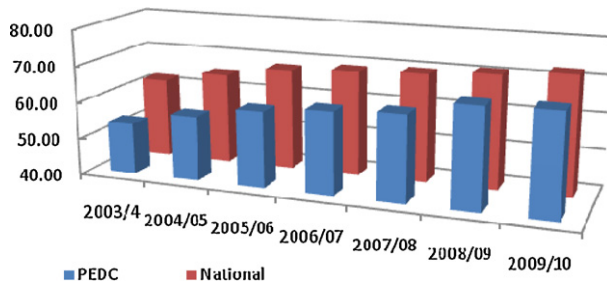


Fig. 5. National FII score 2004–2010.

FII 2006 scores aggregated for over 600 districts nationwide have been spatially extrapolated and graduated using GIS software to generate the map displayed in Fig. 6 with low values (<60: red) in the Northern, Central Highlands and Mekong Delta and high values (>80: blue-green) in the Red River Delta and Ho Chi Minh City surrounds (Attfield, 2006).

### 3. Government engagement and adaptation of school standards

When PEDC was designed, Vietnam stood out among low-income countries in having provided the majority of its primary school-aged population with access to effective, reasonable schooling. The Government had set, and largely achieved, a target of allocating 20% of the national budget to education, and had channelled significant funds to 11 nationally targeted programs,<sup>8</sup> focused upon poor areas. The National Targeted Program on Education (NTP-E), was intended to support the achievement of Vietnam’s 2010 Education Strategy and its EFA goals and targets for improved access, quality and efficiency in education services. Support for the education of ethnic minorities and in disadvantaged regions was one the fifth subcomponent of the NTP-E. Yet, a serious financing gap existed in disadvantaged areas, and there was an identified need to meet the physical, instructional material and training needs that were below basic standards and received little or no investment support.

There remained issues of disparities and inequality. An indicator of the breadth of the challenge was that one of the nation’s most effective innovations to increase access to schooling – the remote rural satellite school campus – was providing the lowest quality education. Satellite campuses in poor areas were more likely to suffer from worse infrastructure, lower teacher qualification levels and expenditure on teaching materials, an intake with greater needs and achieve poorer outcomes – particularly dropout, repetition and achievement scores (Attfield and Howse, 2001).

Before PEDC, district and province performance in term of education achievement was often judged by the number of schools that had achieved the National School Standards (NSS), yet these requirements were excessively ambitious given Vietnam’s financial capacity and situation. By 2003 and after 7 years of implementation, only about 12% of primary school achieved the NSS. As a result, all provinces and districts concentrated resources on upgrading a limited number of schools to the NSS level. This led to widening disparities between urban and rural, and rich and poor schools, the best tended to receive more resources while the worst were often ignored.

<sup>8</sup> National targeted programs are a state budget facility that provide sector-specific frameworks for planning and implementing strategic interventions, and act as focus points to attract community participation and NGO and official donor contributions.

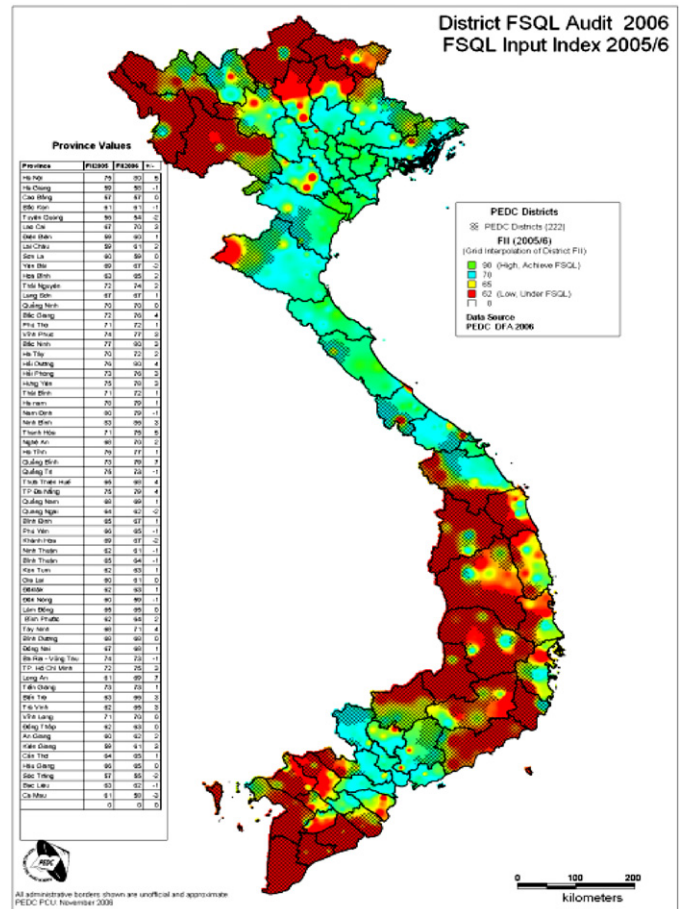


Fig. 6. District map of FII (2006).

Initially it was difficult to convince the government to accept the concept of *minimum* or *fundamental* level of education services (FSQL) as the ‘ultimate goal’ for PEDC. Some viewed these as a compromise to existing, higher national school standards. For the government, ‘standards’ embodied the ‘vision’ that all schools should aspire to achieve, but were not necessarily realistic to achieve. Over time there was recognition by government that FSQL could be a stepping stone to national standards, a “tide that raises all boats”, rather than a replacement set.

FSQL could be considered a ‘compromise’ to include a package of interventions (largely inputs) to be provided to schools with an FSQL deficit, so that the ‘expected outcomes’ (the 6th section of FSQL) could be achieved of having ‘all school age population enrolled’. This aligned within the NSS framework set by the government for primary education. FSQL<sup>9</sup> referred to those school attributes, inputs, and processes of the NSS; such as (i) school infrastructure; (ii) teacher qualification; (iii) school organization and management; (iv) school socialization; and (v) educational activities; but added (vi) expected outcomes and more quality related inputs that are critical to produce the desired educational results.

In essence the concept was to define a minimum institutional capacity, instructional materials and teacher support, physical infrastructure, and school-community linkages required to maintain a healthy and productive learning environment. FSQL was designed to be an ‘achievable’ standard that schools in disadvantaged districts could aspire to achieve. Eventually the concept was accepted by the government, it provided a stepping-stone – not a

<sup>9</sup> See details of FSQL criteria in Section 2 and in Appendix B.

substitute – to the NSS, and can be adjusted as the nation develops or exceeded if local circumstances allow. FSQL ensured that the poorer schools receive interventions first in provincial and district strategies to meet National School Standards. This strategy helps to improve the entire system by lifting the base of the lowest 20–30% of schools. At the same time, it addressed the needs of children who were excluded from minimal learning opportunities and promoted equitable improvement of student outcomes throughout Vietnam.

Procedures established for measuring and verifying progress towards FSQL using the DFA and the FII have already been described in Section 2. Yet by PEDC's mid-term in 2006 the concept of a *fundamental* school quality level was again amended since the number of indicators had increased, and FSQL was being seen as a middle order standard somewhere between the original PEDC project definition: Decision 48 (MoET, 2003b) and the NSS, rather than a *minimum* standard and *fundamental* level. The Government had increased further the number of indicators for 'achieving' FSQL under its Decision 55 (MoET, 2007), some considered the speed of adjustment to be too fast. It also made both measurement and achievement of FSQL difficult, not only for the poor and disadvantaged, but nationally.

The annual DFA survey provided year on year performance indicators of performance against FSQL standards and allows for annual monitoring of either a school's, a district's or a province's progress towards achieving FSQL. It provided a highly effective tool for planning and targeting financing and moving towards results-based delivery. With PEDC support, the DFA was conducted in all districts nationally, over and above the districts included for specific project funded investments. Prior to the DFA, data on standard achievement was paper based. Computerizing information allowed policy makers to more fully mine the power of the data at the school and district level. It provided Vietnam with data on school quality down to the remotest school campus and village and is a unique resource for tracking trends, determining gaps, planning and targeting financing. An extension to the system, the Child Development Register (CDR) even demonstrated the ability to track support needs of individual disabled children.

This multi-pronged approach supported the introduction of decentralized data systems at district levels and has built capacity and raised awareness on the use and application of information to monitor changes and make standards attainment a practical and operational concept. Although it was intended for the FSQL/DFA data systems to be integrated into the Government's EMIS this proposal proved difficult to implement, as is discussed later.

### 3.1. School standard certification and data integration

In Section 2 the relatively rapid development of the DFA annual audit of primary schools) and its composite quantitative measure of minimum school standard FSQL attainment FII has been outlined. Whilst welcomed by external partners from an early stage, it took considerably longer for government stakeholders, in the first instance MoET to consider both whether and how to incorporate FSQL compliance into its existing framework of National Standard Schools (NSS). Authority to declare a school 'NSS status' was decentralized to the local (province and district) authorities and no data system existed to monitor the situation, other than a self reported volume of NSS schools per province. The DFA surveys actually included a variable on NSS status to allow correlations with FII (see Fig. 7); whilst a reasonable linear correlation existed ( $R^2$  coefficient 0.42) it did illustrating conflicting requirements. For example the NSS requirement for a school to have a large area of land was discriminating against otherwise high quality schools in urban cities with expensive real estate prices.

In essence two methods of FSQL accreditation were considered by government: (i) local administrative certification, using a

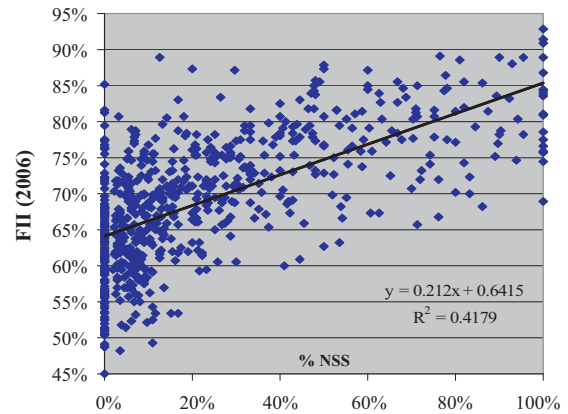


Fig. 7. District plot of FII and % National Standard Schools (2006).

compliance checklist, based upon the indicators listed in Appendix A; (ii) setting a threshold FII score above which a school was deemed to have achieved the 'minimum standards' required. The latter method, backed by a more systematic and easily verifiable dataset, was unsurprisingly the choice of external donor partners, as already discussed FII scores were used to determine overall 'partial achievement' of the target that all schools attain FSQL in the PEDC supported districts (World Bank, 2010).

Dialogue to integrate and merge the DFA system with the national EMIS started at an early stage, with encouragement from PEDC's external partner. However institutional blockages were encountered, not least due to another project – Support for Renovation of Education Management (SREM), which had considerably different strategic priorities for education data/management and administration systems. SREM developed HR, administrative and school inspection information management, seeking to introduce a more complex in situ school IT system known as V.EMIS which was rolled out to many upper secondary schools (SREM, 2010). In a sense this was following government directives to develop higher standards and follow international trends. It will take time for the underlying infrastructure and skills to make such a computerized system a reality in poorer rural primary schools.

The prevailing culture of caution in respect to the transparent dissemination of detailed, disaggregated data also was a major factor that inhibited progress in merging the competing visions of school data systems. It would have been technically possible to merge the two, not least as the DFA only covered the primary school sub-sector and SREM focused upon upper secondary schools. Factors such as inter-departmental rivalry also undoubtedly played a factor in inhibiting the uptake of DFA's approach in the V.EMIS developed for secondary school.

However it must be noted that merging overlapping data systems can be complex in any environment; to settle competing institutional interests and to develop appropriate methods and technologies. One needs to have a clear purpose for collecting data and to find ways to incentivize collation, for instance by linking it to perceived needs and finance.

## 4. Impact of ten years of FSQL minimum standards

The DFA monitoring and reporting system undoubtedly enabled the impact of the PEDC and other investments (notably government led National Target Programmes, Poverty Reduction Programmes and School Concretisation Projects) to be quantifiably demonstrated. Using the school FII score of 60 as the measure of FSQL achievement, by this benchmark over the PEDC lifetime the

**Table 3**  
School FSQL achievement reporting conflicts (2009).

| Province   | Field reported | %  | FII > 60 | %  |
|------------|----------------|----|----------|----|
| Điện Biên  | 139/168        | 83 | 123/164  | 75 |
| Kon Tum    | 129/131        | 98 | 119/131  | 91 |
| Ninh Thuận | 14/146         | 10 | 108/142  | 76 |
| An Giang   | 390/394        | 99 | 367/395  | 93 |
| Quang Nam  | 11/66          | 17 | 271/291  | 93 |
| Lạng Sơn   | 67/237         | 28 | 240/266  | 90 |
| Bình Phước | 57/166         | 34 | 128/159  | 81 |
| Lâm Đồng   | 211/249        | 84 | 208/267  | 78 |
| Kiên Giang | 263/337        | 78 | 263/337  | 78 |

proportion of schools in the supported districts rose from 44.5 to 82.2%.

Overall PEDC schools improved more quickly than the national average and more than the non-PEDC schools in the more advantaged districts of the same provinces, this is a powerful statement that the FSQL minimum standards approach assisted in ensuring that investments from central government and external partners were allocated in a pro-poor equitable manner. The fact that increases in FII were as rapid in the disadvantaged areas as in the economically advantaged areas was used as evidence of equitable growth that contributed to the release of a \$100 m poverty reduction budget support credit to Vietnam in 2006–2007. Faster economic growth in poorer areas would have been needed to close the gain FII scores, evidence on large and growing disparities in private education expenditure is presented in the next section.

The PEDC external end of project evaluation (Consia Consultants, 2010) painted a nuanced picture of impact on the institutionalization of minimum standard (FSQL) achievement. Using fieldwork in a sample of 18 districts it found evidence of an evolving but weak system of certification, based on Government instructions (MoET, 2007). School principals self-assessed FSQ compliance and then requested endorsement by the district authorities, who were not consistently monitoring or checking the veracity of applications. Some provincial authorities used the FII ‘pass mark’ of 60, while others required all 5 themes of FSQ to be determined as compliant, resulting in widely variable outcomes (see Table 3). For example Quang Nam and Lạng Sơn provinces each had variances of over 60% between methods, while An Giang, Kiên Giang and Kon Tum reported very similar rates of school FSQ achievement. Nevertheless, FSQ provided a useful framework and the much broader dissemination of information than before allowed for school standard verification and enhanced local accountability.

This apparent contradiction reflects some of the realities of decentralized – delegated administration in practice in Vietnam, by which powerful provincial authorities have considerable discretion in how central directives are implemented. It also provides a fairly powerful argument for maintaining disaggregated datasets at the central level, to enable consistent monitoring and objective information-based planning; especially where there is pressure to report higher than actual progress towards school standards.

Ample evidence of schools, district and provinces using the DFA information system to create credible implementation plans for school improvement was also found. Provincial authorities retained management authority for more complex high cost infrastructure procurement, utilising micro-planning techniques based upon the DFA data combined with geographic information system (GIS) software based school maps. Patterns of investment in some localities did vary considerably; external factors also influenced decision makers. Some provinces such as An Giang were clearly motivated to use FSQ as the sole basis for a major

infrastructure upgrade programme that has improved almost all primary schools in the province.

From 2006 the DFA system and its ability to quantify and track school standard achievement (via FSQ and the FII) was exploited by the Target Budget Support (TBS) for Education For All multi donor instrument that co-financed the Government’s National Target Programme for education (NTP-E). The composite FSQ indicator was used as a key achievement indicator for reporting TBS outcomes (see Appendix A on criteria) and the DFA was used as the main data source in developing transparent and equitable funding formula for the allocation of NTP-E finance (World Bank, 2009).

The PEDC final evaluation (Consia Consultants, 2010) also documented evidence from districts (sub provinces) on the use of the DFA, in tandem with FSQ standards and school development planning guidelines, to systemize approaches for local investment planning. They had ‘raised awareness on the use and application of information to monitor changes and ... for annual district FSQ planning to include activities and grants to support achievement’. It should be noted however that the degree of autonomy of district education offices (BOET) is somewhat limited, given the institutional landscape in which they exist.

#### 4.1. Access to school and impact on learning

Primary Net Enrolment Rate (NER) has increased over the decade to a reported rate of 98.6% in 2010<sup>10</sup> and dropout has declined, which indicates that the vast majority of children are now accessing education which the DFA data has demonstrated to be of improved quality in terms of the learning environment, resources and better qualified, trained teachers. However of even greater relevance is the question of whether FSQ and the targeted investments of PEDC in disadvantaged districts contributed to increases in learning outcomes, the *sine qua non* of any major education programme.

Two major assessments of Vietnamese Reading and Mathematics (grade 5, end of primary school) have taken place over the past decade in 2001 (World Bank, 2004) and 2007 (INTREC, Mekong Economics, VNIES 2008). Whilst not aligning with the implementation period of PEDC (2004–2010) there has been considerable effort to use them to investigate impact of both PEDC and broader changes on learning nationwide, not least a new curriculum phased in over the past decade and the policy to increase student–teacher contact hours (a key proxy of quality), through expansion from half to full day tuition. A third study in 2011 is expected to complete this process, being conducted with sufficient time lag for the impact of FSQ on learning outcomes to be more comprehensively investigated.

The 2001 and 2007 learning assessments both built national capacity and awareness of the utility of learning assessments, but institutional sensitivities already referenced contributed to the late dissemination of results, which did not portray any clear trajectory of positive improvements in learning. PEDC although managed directly by MoET had only limited control of the assessment design that contributed to the following significant difficulties in evaluating impact:

- Neither timestamp aligned as a proper baseline, the 2007 tests were originally proposed for the 2004/5 year.
- Due to curriculum revision and subsequent test alignment in 2007, only a subset of common items allowed for direct longitudinal comparisons.

<sup>10</sup> The DFA collected local school age population statistics to estimate enrolment rates, but inconsistencies in reporting and erratic data trends suggest they should be used with caution. As education become universal, the utility of enrolment rates to track progress diminishes.

- A provincially representative school sample was used in both cases,<sup>11</sup> however this conflicted with PEDC's district based targeting that supported a subset of districts in 40 of Vietnam's 64 provinces.

International expertise was commissioned to undertake additional analysis and it is interesting to note that considerable, unanticipated use was made of the DFA's detailed, multi-year school database, including 'subjective' (non standardised or controlled) learning assessment data originating from internal school managed learning achievement tests (Carr-Hill, 2010; Carr-Hill and Lang, 2009a,b).

The approach taken was to use the methodology of *synthetic estimation* – 'using other parallel data sets to extrapolate from the actual sampled data on specific schools and districts to all the districts in the country'. This was the main basis of analysis and follows an approach taken elsewhere in SE Asia, for example to estimate small area poverty statistics by taking significant variables from large area sample household expenditure surveys and matching them with demographic and housing census data. Point estimates of every school's learning achievement were made by extrapolating via Ordinary Least Squares (OLS) the 2007 learning scores for sampled schools with significant school characteristics from the DFA database. Carr-Hill and Lang (2009a) notes that the DFA 2007 subjective learning scores (Maths and Vietnamese) were sufficiently powerful to give much higher (48–66%) levels of variance accounted for in the predictive regression equations, than those used in the 2004 data which did not collect the subjective learning scores.

Whilst reinforcing the impact of the DFA's rich dataset in *enabling the estimation* of statistically reliable learning outcomes, the impact of the FSQL related investments was *not seen to increase learning*, relative to the PEDC non supported districts. Nationally a small decline of 2 (reading) and 10.5 (mathematics) points was estimated via the synthetic estimates between 2001 and 2007, with larger statistically significant declines in PEDC supported districts. However using the sub-set of directly comparable test items, scores had improved, although by less in remote rural areas. Overall PEDC districts performed less well than non-PEDC districts in both 2001 and 2007 and the relative gap between the two groups of districts widened between 2001 and 2007.

Clearly it is too early to judge PEDC's impact 3 years prior to completion,<sup>12</sup> however Carr-Hill (2010) already raises a number of hypothesis regarding widening learning gaps at a time when considerable progress has been made to equitable provide resources according to the FSQL minimum standards. Enrolment of new intake from the most deprived communities may lower average learning scores in the PEDC disadvantaged districts and migration or faster rates of full school teacher and provision of better qualified teachers in other districts may counterbalance PEDC's investments in relative terms. Considered more plausible are trends of growing socio-economic inequality; based upon household expenditure surveys (GSO 2002, 2006) it is noted that poorer households are increasingly concentrated in the PEDC districts and private expenditure on extra tuition is much higher (by a factor of 20) when comparing the richest to the poorest quintile of households.

In summary the impact of FSQL minimum standards in Vietnam is still not conclusively proven in terms of improved learning outcomes, given the lack of a comparable control group of schools/students (PEDC supported all disadvantaged districts nationwide). However initial evidence does point to improved scores linked to

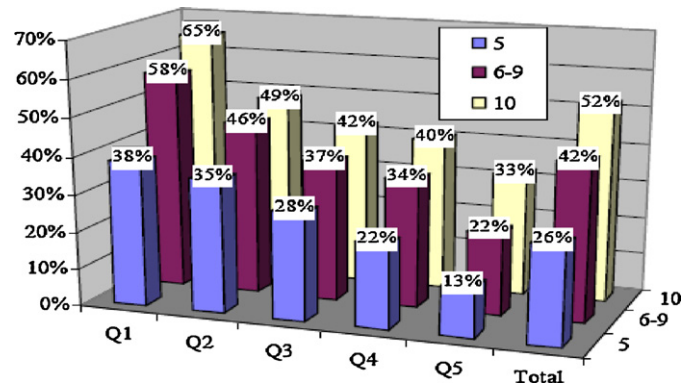


Fig. 8. Correlation excellent scores in math, and district income quintile and weekly schooling sessions (2006).

some interventions (PEDC, 2009).<sup>13</sup> The benefits of a comprehensive school level database that can track the elements of those standards are manifest, especially when relatively unbiased student test scores are collected in tandem. The latter point has actually been highlighted in an international comparative review of education data and M&E systems, compiled for the EFA – Fast Track Initiative mid term review (Cambridge Education, Mokoro & Oxford Policy Management, 2009).

#### 4.2. Future adaption of the DFA information system

Continued inaction in determining whether, or how to continue the operational use of the DFA at the end of the PEDC project in 2010 has led to an interim agreement that the successor donor instrument to PEDC: School Education Quality Assurance Project (SEQAP) will continue to operate the DFA in order to meet its internal monitoring requirements, in particular around the uptake of full day tuition in primary schools but also to continue monitor the achievement of FSQL. The SEQAP schools are codified in the DFA to allow identification and tracking. In its current format the composite monitoring index FII is unlikely to be calculated in the future as (i) it is more fragile requiring 30 constituent variables to be available and processed and (ii) its utility in tracking the uptake to the FSQL minimum standard diminishes in importance, as the bulk of school are now close to achieving this standard and the concept is now well institutionalised into local planning processes.

SEQAP's design been influenced largely by findings from the 2007 learning assessments that full day schooling<sup>14</sup> (students attending at least 30 periods, or 6 sessions, a week) correlates strongly with better math and Vietnamese scores; even controlling for other quality related variables, and this effect is stronger for both low performing students and poorer provinces (World Bank, 2009). Promotion of the FSQL concept and support to provide its required inputs will continue in order to enable full day schooling; an additional factor that will be included into the FSQL minimum standard.

The DFA already collects data on half – mixed – full day tuition (see Fig. 8) and so is well placed to support Vietnam's transition to full day schooling.

Whilst the FII may be more to collect its broad base of variables, it can assist in directly predicting learning outcomes using the subjective scores collected in the DFA. The district level scatter

<sup>13</sup> The longitudinal study carried by the project demonstrated better results in both reading and maths of grade 1 student in schools with teaching assistant and school readiness (PEDC interventions) than in schools without them, a gain of 33.3% (PEDC, 2009).

<sup>14</sup> In contrast under the half-day schooling system that predominated in 2001, only around 660 h of instructional time per annum were provided, well below regional averages.

<sup>11</sup> Around 20 Grade 5 students from each of 60 schools in the 64 provinces.

<sup>12</sup> In fact due to slow procurement and provision of teacher training, PEDC quality enhancing inputs delivered prior to the 2007 tests were limited.



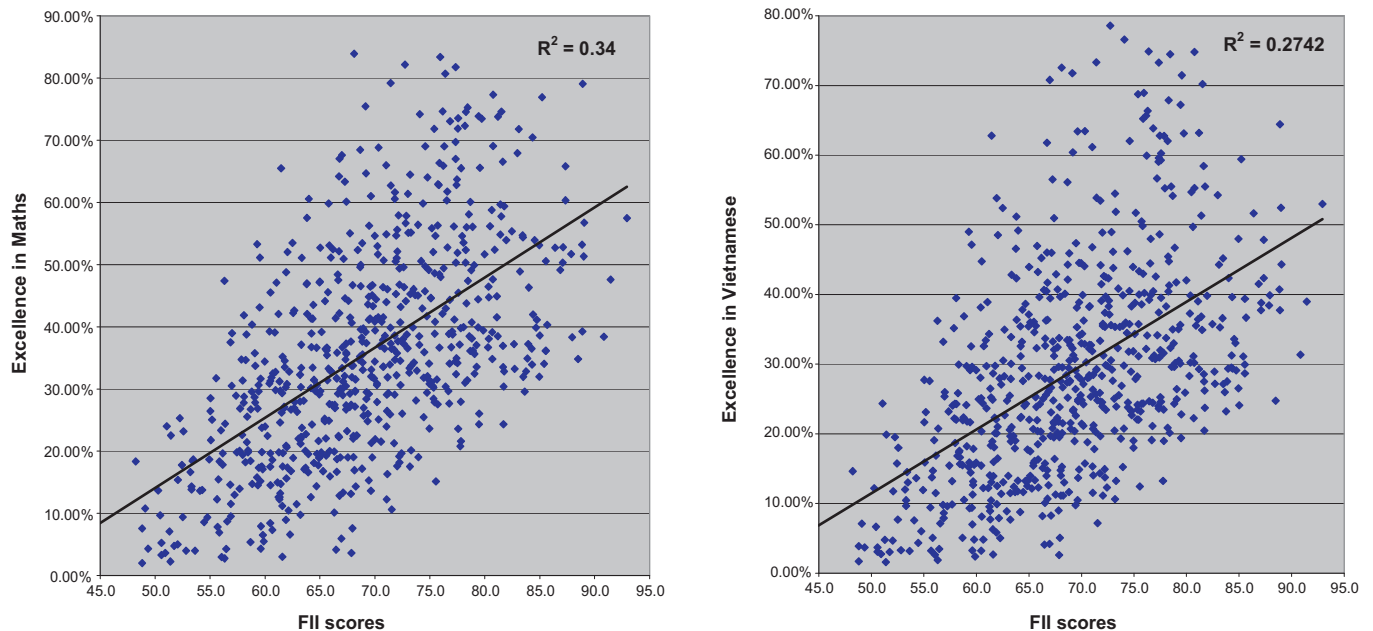


Fig. 9. Correlation between district FII and learning scores (2006).

plots in Fig. 9 shows that 34% and 27% respectively of the OLS variance ( $R^2$ ) between FII and either Maths or Vietnamese scores can be attributed. With more sophisticated factor based analysis at school level (as demonstrated above by Carr-Hill), a revised FII composite index could undoubtedly become a much better predictor of learning and thus help to identify factors that are significant in contributing to enhanced learning outcomes.

Several mechanisms exist whereby continuity can be provided for PEDC's initiatives on standards and related data and planning systems, including the SEQAP project with its focus on full day schooling provision and a proposed School Readiness Promotion Project (SRPP). In addition regular government funding channels under the National Target Program-Education (see Section 2) continues, with ear-marked provincial allocations from central budget funds, that local authorities have full discretion regarding planning, investment and resource allocation decisions.

## 5. Conclusion

Overall this paper's review of Vietnam's experiences with minimum schools standards over the past decade has been largely positive, with the long term approach taken by the PEDC project assisting to gradually introduce a more holistic, equitable approach to expansion and consolidation of the primary school system. The phased introduction of FSQL was done in a non-threatening and complimentary manner to the existing school standards and backed with sufficient investment funds to be taken seriously by Vietnam's leaders.

The large volume of funds earmarked for infrastructure (~\$140 million) aligned with the government's highest priority articulated needs. There was genuine (if at times uneven) recognition that improving education required inputs on many fronts and this enabled the introduction of innovative aspects of the project – such as the DFA data monitoring and associated decentralised FSQL planning – grant systems that have been described in this paper. In addition innovations not described here such as inclusive and child centred pedagogic training, the school readiness programme for new intakes of minority students and ethnic minority teaching assistants were also deployed.

### 5.1. Minimum standards, necessary but not sufficient?

Reference has already been made in Section 1 to the McKinsey 2010 Global Education Report (Mourshed et al., 2010) that studied 20 successful school systems that 'have achieved significant, sustained, and widespread gains, as measured by national and international standards of assessment' and interviewed leaders to try and determine contributory common factors. Vietnam would not have qualified for selection, despite its rapid growth in access and quality improvements over the past two decades. This is because it has not participated in international assessments and as noted earlier results from the 2001 and 2007 national primary assessments show no clear trend. However it is instructive to compare Vietnam's trajectory with the four countries and regions<sup>15</sup> identified as 'promising starters' that have raised performance from poor to fair (most students achieving basic literacy and numeracy).<sup>16</sup> In Table 4 below the factors common identified by the McKinsey paper are contrasted with the experiences of Vietnam's evolving primary education system.

The right hand column describes Vietnam's approach, where there is alignment with the findings of the McKinsey team the statements are **highlighted as such**. It can be seen from this general comparison that Vietnam's efforts to expand access (getting students in seats), invest according to minimum quality standards (FSQL) and increase instructional time (full day schooling) are all highly desirable, but overall insufficient to significantly increase learning outcomes without more of a focus on use of prescriptive (scripted) lessons and an enhanced system of outreach and coaching of teachers, especially in the remoter, disadvantaged areas.

A recent influential policy paper (EFA-FTI, 2011) on improving quality in developing countries reinforces this point, noting that '...the median child in poor countries has learning outcome levels comparable to that of the child at the 5th percentile of the learning

<sup>15</sup> Ghana, Minas Gerais (Brazil), Madhya Pradesh (India) Western Cape (S. Africa), areas with very roughly equivalent values of GDP per capita.

<sup>16</sup> An average improvement of approximately one school year or one standard deviation, according to the Universal Scale derived by Hanushek and Woessmann (2010) for international assessments.

**Table 4**  
Critique of Vietnam's focal activities improvement.

| Theme   | Description (proposed by McKinsey paper)   | Vietnam's approach   |
|---|--|--|
| <b>Providing scaffolding and motivation for low skill teachers and principals</b> | <ul style="list-style-type: none"> <li>• Scripted lessons: The system creates instructional objectives, lesson plans, and learning materials for daily lessons to enable teachers executing lessons rather than devising them</li> <li>• Coaching on curriculum: The system creates a field force of coaches to visit schools and work with teachers in-class on effectively delivering the curriculum</li> <li>• Incentives for high performance: The system gives rewards (monetary and prestige) to schools and teachers who achieve high improvement in student outcomes against targets</li> <li>• School visits by centre: The system's central leaders/administrators visit schools to observe, meet and motivate staff, and discuss performance</li> <li>• Instructional time on task: The systems increases student instructional time</li> </ul> | <p>Prescriptive lessons not really attempted, focus on mass teacher upgrading in-set training on child centred pedagogy</p> <p>No system of coaching or support visits that has a curriculum focus, emphasis is on principal/VP to support teachers</p> <p>Prestige for NSS status and individual student excellence, not for overall improvements</p> <p><b>Gradual transition to full day schooling since 2000</b></p> |
| <b>Getting all schools to minimum quality standard</b>                            | <ul style="list-style-type: none"> <li>• Targets, data, and assessments: The system sets minimum proficiency targets for schools/students, frequent student learning assessments (linked to lesson objectives, every 3–4 weeks), and data processes to monitor progress</li> <li>• Infrastructure: The system improves school facilities and resources to a minimum threshold adequate for attendance and learning</li> <li>• Textbooks and learning resources: The system provide textbooks and learning resources to every student</li> <li>• Supporting low performing schools: The system funds targeted support for low performing schools</li> </ul>   | <p><b>Frequent formative and end of term assessment, e.g. data collated by DFA</b></p> <p><b>Major push for improvement of infrastructure and learning resources to a minimum FSQ level since 2004</b></p> <p>Government targets poor communes, not schools</p>  |
| <b>Getting students in seats</b>  | <ul style="list-style-type: none"> <li>• Expand seats: The system increases school seats to achieve universal access</li> <li>• Fulfil students' basic needs: The school provides for student basic needs to ensure that more students attend school and that absenteeism declines</li> </ul>  | <p><b>Since 1990 major expansion of system with satellite campuses, furniture via donor and government programmes in poorer areas</b></p>  |

*distribution in OECD countries*'. It proposes a new learning paradigm 'literacy in 100 days' using amongst other techniques, scripted lessons to help teachers provide planned content efficiently, even if they don't initially understand the methodology being employed.

This analysis tends to confirm the approach of the recently initiated SEQAP programme, with its emphasis on increasing instructional time and gives specific potential areas of attention for stakeholders to consider in relation to the pedagogic approach taken and systems of support for classroom teachers.

## 5.2. Data systems on education and standards

SABER (World Bank, 2011a) is an emerging, evidence-based approach<sup>17</sup> to systematically examine and strengthen the performance of the key components of a nation's education systems. In its approach for assessing engagement with the private sector it is proposed that a Government will need to set minimum standards for student on what they need to learn and qualification levels for teachers. To assess data and information systems (such as the DFA in Vietnam), factors such as (i) the time turnaround: data collected until information released and (ii) extent of feeding back report cards to schools are considered essential.

If such tools are to be more widely adopted, the need for a more concerted approach to both set and monitor school standards using more robust information systems is likely to intensify. We feel that the DFA system provides a useful example of a successful, context specific approach in which a flexible system was rapidly developed and became operationally useful to support the evolution and adoption of a new set of minimum school standards. The system enabled accurate, quantitative benchmarking of a concept, with a sufficiently rich data set that has been exploited in a diverse range of ways to demonstrate change, track equity of investments, plan on both the macro and micro level and test hypotheses on the

variables and factors that hide within the 'black box' of a classroom and somehow determine learning.

Clearly the data systems could have been streamlined effectively, if the institutional barriers to combining the DFA system with the national EMIS (and new school level V.EMIS) were overcome. However a counterpoint is that as the DFA was *not* the official government statistical record it perhaps had more freedom to innovate with its methodology and approach.

The choice of technology deployed has not been discussed as this, together with the design of instruments and choice of variables, are very context specific and not generically applicable. Distributed, electronic format data capture and transmission techniques are evolving too rapidly to make sound recommendations.

A key lesson to be drawn from this experience is that a system which delivers data on virtually all of its population becomes very effective in that it is not subject to sampling constraints and provides a range of possible control groups to infer trends. The decision by the PEDC management to collect data from the whole country, rather than the one-third it support was vital in achieving the larger goal of supporting national development and embedding the FSQ minimum standard in Vietnam. In addition to defining primary school standards, other parts of the education system are adopting a similar approach to define and utilise 'FSQ' standards for both early childhood and lower secondary schools in Vietnam.<sup>18</sup>

The West African use of composite sub-set of indices, e.g. *Means* and *Context* variables described in Section 2, has obvious parallels to Vietnam's FII index that combines both sets of variables as a catch-all 'Inputs' index. The *Results* index used in Niger is also very similar to the approach taken during PEDC design, in which education outcome variables from a 1999 school survey were used to create a ranking of district 'educational disadvantage' to select the original beneficiary districts (Attfield and Howse, 2001). Whether composite indices such as the FII should have been simplified to its

<sup>17</sup> Initiated by the World Bank for its 2020 Education Strategy formulation process, it is also being supported in tandem by the UK's Department for International Development.

<sup>18</sup> Decision 1314/QD-BGDDT dated July 30, 2010 "technical specifications of minimum set of instructional teaching aids and toys for early childhood education".

significant factors (sufficient to give a spread of results and explain the variance in outcomes) is open to debate. The FII focused on the ‘inputs’ needed, according to the standard it was tasked to define.

Whilst Vietnamese DFA school specific data was fed back to provinces and districts through large spreadsheet files, disseminating eye catching school report cards generated in the above Niger case study was not attempted. The DFA approach also involved parallel (to EMIS) data collection that was not necessary in Niger.

Disseminating report cards to schools and communities and minimising duplicate data collection are of course desirable attributes. However it is uncertain the extent to which combining data variables such as seemingly simple ratio (e.g. pupil to teacher) into comparable indices is useful in contexts where stakeholders may have limited comprehension of the data trends being graphically represented. This is one aspect where more research could usefully be conducted. In comparison to the approaches described in W. Africa, it is clear that much more could have been done to feedback information about schools and relative performance or need; the spread of mobile technology may soon make this possible even to staff in rural schools in developing nations.

The absence of school report card dissemination in Vietnam is of note. It perhaps reflects more cautious attitudes to pro-active transparent information provision. We suggest that further research is needed to explore how to best combine and contrast groups of indicators that describe schools or areas, balancing statistical rigour with ease and ability of interpretation by local stakeholders.

As Carr-Hill remarks (2009a) the importance of the ‘subjective’ teacher collated assessment data (learning outcomes of students collected which could be biased by teachers or other factors) from the DFA in predicting achievement based on objective test data should also not be overlooked. Serious consideration should be given to formalising the collection of such data, which would of course be much cheaper than carrying out achievement surveys. It may be that this application of the DFA was novel to Vietnam and bias would enter in other circumstances or if it became known that the data was being analysed in such a way. However it also warrants further investigation, not least as the quest for robust measures of learning outcomes in developing countries intensifies, in tandem with the pursuit of ‘Quality Education for All’.

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**Appendix A. District FSQL Audit (2005) indicators, weightings and statistically key (significant) factors**

|   | Themes, sub-themes and requirement details   | DFA 2005 indicator  | Weight    | Key factors <sup>a</sup> |
|---|--|---|-----------|--------------------------|
|   | Total  | (30 weighted indicators)  | 100       |                          |
|   | <b>1. School organization and management:</b>  |   | <b>22</b> |                          |
|   | <b>1.1. Principals and deputy principals</b>   |   | <b>5</b>  |                          |
| 1 | All principals and deputy principals should be trained in school management skills; have a good understanding of the basic content of state management activities in education and training, primary education objectives and plans, and subject-related matter, syllabus and planning.  | % PVP who receive 5 or more days training in year   | 3         | Y                        |
| 2 | All principals and deputy principals should be trained in satellite campus management and support, and school management in disadvantaged areas.   | None available  |           |                          |
| 3 | All principals and deputy principals should be able to inspire the confidence of the school staff and local people with regard to professional and pedagogical aspects.<br><b>FSQL-48 only:</b> Principals and deputy principals should meet the minimum training qualification standard of 12 + 2   | None available  |           |                          |
|   | <b>1.2. Management implementation and effectiveness</b>  |   | <b>17</b> |                          |
| 4 | Each school must have a school development plan and measures to implement the plan and monitor progress.   | A: % schools BoET have approved SDP   | 6         |                          |
| 5 | Each school must provide students the standard 175-week curriculum.<br>(From 2005 there is no reason to survey the use of older 165/120-week curricula that are not used.) Above FSQ standard, long term GoVN policy is ‘full-day’ (10 half-day sessions/week) schooling, so revised indicator substituted. This awards marks according to extent of transition from half to full day schooling. | % students in 5–10 half day sessions/wk   | 3         |                          |
|   |  | % students in 6–10 half day sessions/wk   | 3         |                          |
|   |  | % students in 10 half day sessions/wk   | 3         |                          |
| 6 | All principals, deputy principals, heads of subjects and professional groups should, according to their functions and responsibilities, manage the activities carried out by teaching and other staff.   | None available  |           |                          |
| 7 | All principals and deputy principals should manage and effectively utilize facilities for teaching/learning and other educational activities.  | None available  |           |                          |
| 8 | All principals and deputy principals ensure that the quality of teaching, educational services and resources in satellite campuses is the same as in the main campus.  | Pvisit3: Satellite sites receiving 3 or more principal/deputy principals. visits per year, 100% = 1 | 2         | Y                        |

Appendix A (Continued)

|    | Themes, sub-themes and requirement details  | DFA 2005 indicator  | Weight           | Key factors <sup>a</sup> |
|----|---|---|------------------|--------------------------|
|    | <b>2. Teaching staff:</b>   |   | <b>27</b>        |                          |
|    | <b>2.1. Training qualification standard:</b>  |   | <b>15</b>        |                          |
| 9  | All teachers meet the minimum training qualification standard (9 + 3) and have basic training in working with children from diverse backgrounds, including disabled children.<br><b>FSQL-48 only:</b> Teachers should meet the minimum training qualification standard of 12 + 2  | 9_3: Teachers (all sites) and those under 9 + 3 qualified.<br>100% 9 + 3 or over = 1  | 10               |                          |
|    |   | 12_2: Teachers (all sites) with 12 + 2 or over qualification 100% 12 + 2 or over = 1  | 5                |                          |
|    | <b>2.2. Continuing and theme-based in-service training</b>  |   | <b>12</b>        |                          |
| 10 | All teachers in schools and their campuses should receive at least 5 days of professional training each year on relevant classroom management and pedagogical topics (developing teaching aids, multi-grade teaching, extra remediation, Vietnamese language strengthening, inclusive education, school-community coordination, etc.).                    | % Teachers receive 5 or more days training at Dis./Prov.<br>% Teachers receive 10 or more days training at school                                       | 6<br>6           | Y                        |
| 11 | All teachers in schools and their campuses with ethnic minority children should be provided with Vietnamese strengthening in teaching Vietnamese to non-Vietnamese speaking children.   | None  |                  | Y                        |
| 12 | Schools regularly organize professional and theme-based activities.   | None available  |                  |                          |
|    | <b>3. Physical Infrastructure, teaching/learning equipment and aids:</b>  |   | <b>25</b>        |                          |
|    | <b>3.1. Schools and classrooms:</b>   |   | <b>15</b>        |                          |
| 13 | All schools and their campuses should be located in places that are quiet, dry and accessible to all students. Schools must have no houses and shops inside the precinct area. Schools must have wells or other clean water sources and latrines.<br><b>FSQL-48 only:</b> All schools and their campuses should separate teacher toilets and a playground | % sites with 1 or more toilet cubicles on site<br>% sites with boundary fence/wall  | 1<br>0           | Y (drinking water)       |
| 14 | The classroom for all main schools and their campuses should be of solid construction (walls, floors and roofs) and with adequate natural lighting. Schools and classrooms must be accessible to children with disabilities.  | % sites with 25 m sq. or more play area<br>CR: Classrooms (all sites) and those in good condition (not temporary, borrowed or in need of major repairs) | 1<br>10          | Y                        |
| 15 | All classrooms should be equipped with the following: one blackboard, teacher's desk and chair, sufficient desk and chair for students, a (transportable) storage box or locker for instructional materials and teaching aids.<br><b>3.2 Basic teaching equipment and aids:</b>   | (%CR with good BB)<br>(%CR with good TD)<br>SD of good quality/capacity (CR*30)<br>(%CR with good Bstore)   | 1<br>0<br>2<br>0 | Y                        |
| 16 | Each school and campus has at the minimum one set of teaching aids and instructional materials per grade.   | % grades taught and Aids available at site. (grade specific)<br>Reading Aids<br>Maths Aids  | 1<br>1           | Y                        |
| 17 | Each school and campus has 1 set of supplementary reading materials appropriate to each grade taught.   | % grades taught and SRM avail. at site  | 1                | Y                        |
| 18 | Each teacher in every school and campus has 1 set of teacher supplies (ruler, scissors, chalk, paper, pen) at all schools and their campuses.   | % teachers with supplies or allowance to buy  | 1                |                          |
| 19 | Each teacher at every school campus has 1 full set of textbooks, teaching manuals and teacher guides as required per grade taught.  | % general teachers with full set text books<br>% general teachers with full set text guides   | 0<br>1           |                          |
|    | <b>3.3 Basic learning materials and aids for students</b>   |   | <b>5</b>         |                          |
| 20 | All ethnic minority students will be provided with Vietnamese language strengthening materials.   | % EM students with VLS mat  | 1                |                          |
| 21 | Each student has one set of textbooks (mathematics and Vietnamese).   | 100% – % students no V&M textbooks  | 2                |                          |
| 22 | All students in schools and campuses should be equipped with a minimum set of learning supplies including notebooks and pencils.  | 100% – % students no stationary   | 2                |                          |
|    | <b>4. Implementation of education socialization policy:</b>   |   | <b>7</b>         |                          |
|    | <b>4.1. Strengthening organization</b>  |   | <b>2</b>         |                          |
| 23 | All schools coordinate with communities to organize Education Meetings at the local level on a periodic basis with a practical focus, and participate in local level Education Councils.  | None available  |                  |                          |
| 24 | All school campuses establish individual parent associations.   | % sites with separate PA  | 2                |                          |
|    | <b>4.2. Activities:</b>   |   | <b>5</b>         |                          |
| 25 | Parent associations at all schools and campuses carry out regular and efficient activities in terms of cooperating with schools to educate students.  | % sites with 2 or more PA meetings per year   | 3                |                          |

## Appendix A (Continued)

|    | Themes, sub-themes and requirement details  | DFA 2005 indicator   | Weight    | Key factors <sup>a</sup> |
|----|---|--|-----------|--------------------------|
| 26 | Parent associations should be trained in the specific contents and measures to support students at schools and campuses in all areas in order to build an educational environment that links school, family and community together.   | None available   |           |                          |
| 27 | Parent associations should be involved in planning and monitoring of school activities.   | None available   |           |                          |
| 28 | Schools organize propaganda activities in various forms to raise the community awareness of primary education objectives, content, methods, primary student assessment, and facilitate community participation in the implementation of primary education objectives and plans. | % sites where principal reported 'active support' by parents   | 2         |                          |
| 29 | Schools coordinate with parents in student education and ensure regular contacts among schools, teachers and families.  | None available   |           |                          |
| 30 | Families and communities will participate in protecting, maintaining and keeping school facilities in good condition in order to contribute to making schools and satellite campuses always clean and beautiful.  | None available   |           |                          |
|    | <b>5. Educational outcomes:</b>   |  | <b>4</b>  |                          |
|    | General regulations   |  | <b>4</b>  |                          |
| 31 | The National primary school curriculum should be used for teaching and learning in school.  | 100% – % grades at sites offering only M&V                     | 2         |                          |
| 32 | Extra-curricular activities should be well organized for students as necessary.   | None available   |           |                          |
| 33 | Make "Day for Bringing children to schools" well organized and attractive to children. Ensure that all primary school age children will be enrolled in schools.   | None available   |           |                          |
| 34 | Specific attention will be made to enroll children with difficulties and disabilities going to school.  | None available   |           |                          |
| 35 | Ensure the implementation of the universal primary completion and illiteracy eradication tasks in localities; develop a plan for right age school enrollment; prevent the problem of repetition and drop-out.   | % sites keeping formal attendance records                      | 2         |                          |
|    | <b>X. Complete or Close By School Sites (proposal, not yet included in FSQL)</b>  |  | <b>15</b> |                          |
| 36 | All school sites offer all five grades of primary education at each site through either single or multi-grade tuition.  | Complete: Sites offering all 5 grades, % of all sites 100% = 1 | 8         |                          |
| 37 | All school sites offer all five grades of primary education at each site, except where a satellite site is close enough to allow daily travel for students in higher primary grades from satellite to main campus.  | % sites complete or 'close by' (include main or sat. close by) | 7         |                          |
| 38 | All sites offer a year of part day 'school readiness' pre-school education for 5 year olds that includes Vietnamese readiness for ethnic minority children.   | None available   |           |                          |

(a) Statistically Key Factors In the Feasibility Report (2005) of the Targeted Budget Support (TBS) to Education National Target Programme, a list of 9 indicators from the DFA set that through statistical analysis were identified as being sufficient to monitor variations in the district progress towards achieving FSQL. These are marked 'Y' in the above table.

## Appendix B. Original FSQL standards list (2001)

## 1. Physical infrastructure

- Schools and campuses have solid classroom construction (walls, floors and roofs), and with adequate natural lighting.
- Schools and campuses have one blackboard per classroom, sufficient tables and benches for students, one teacher desk/chair per classroom, and sufficient durable and transportable storage boxes or lockers for instructional materials.

## 2. Teaching staff

- Teachers are minimally qualified at 9 + 3 level.
- Teachers receive annual professional training on relevant classroom management and pedagogical topics (e.g. crafting teaching aids, multi-grade teaching, remediation support, Vietnamese language instruction, inclusive education, etc.).

## 3. School organization and management

- A school ensures that each satellite campus offers the same quality of instruction, services and resources as the main school site.
- Schools and campuses offer grades based on full 175-week curriculum.
- Head teachers are trained in satellite campus management and support.

## 4. Education socialization

- Schools and campuses have individual parent committees.
- Parent committees at all schools and satellite campuses are trained in school and student support strategies.

## 5. Educational activities and quality

- One set of teaching aids/instructional materials per grade is available to each school and satellite campuses.
- One set of teacher supplies is available to each teacher (e.g. ruler, scissors, chalk, paper, pen) in all schools and satellite campuses.
- One full set of textbooks, a teaching manual, and other guides as required per grade taught is available to each teacher.
- One set of supplementary reading materials appropriate to all grades taught is available to each school and satellite campuses.

- All students have Math and Vietnamese textbooks.
  - All students are equipped with a sufficient (minimum) number of notebooks and pencils.
  - All teachers in ethnic minority areas are trained in teaching Vietnamese to children whose native language is not Vietnamese.
  - Special Vietnamese language materials are available in all schools and campuses with ethnic minority populations.
6. Expected outcomes
- All school age children are enrolled in school.
  - 96% of 14-year olds complete primary education.
  - Gender equity is achieved in primary school enrollment.

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