

PROGRAM MONITORING AND EVALUATION SYSTEM ASSESSMENT

A. Description of the Monitoring and Evaluation System

1. The current Department of Education (DepEd) education monitoring and evaluation (M&E) system for basic education (grades 1 to 10) consists of seven databases, supplemented by two types of field verification. With assistance from Australian Aid, the databases are being upgraded, and an effort is under way to create a unified database system that can be used for monitoring, evaluation, reporting, and research purposes. Although plans have been made to modify components of the current basic education databases to accommodate senior high school (SHS), additional modifications will be required for effective monitoring of the Asian Development Bank Senior High School Support Program (SHSSP) outputs and outcomes. Key gaps are related to the non-DepEd schools and students, the SHS voucher program, the technical-vocational and livelihood track, and learning outcomes, particularly for mathematics and science subjects.

2. The seven DepEd databases are (i) the basic education information system, which is being expanded to become the enhanced basic education information system (EBEIS); (ii) the learner information system (LIS); (iii) the project management information system (PMIS); (iv) the human resource management information system (HRIS); (v) the national achievement test (NAT); (vi) physical facilities management system; and (vii) monitoring and evaluation and program adjustment. Development of a unified information system (UIS) is being considered. Verification is conducted through regular monitoring by line units (particularly for physical facilities) and school visits by officials from regional and division offices. The SHSSP's M&E program will rely primarily on an extension of the current M&E system to cover grades 11 and 12, non-DepEd school databases maintained by the Fund for Assistance to Private Education (FAPE), an overhauled LIS, a revised warehouse for the results of national assessments and other end-of-level or competency examinations, and existing systems for monitoring procurement and other fiduciary and safeguard functions.

3. The current M&E system generates information on a number of key indicators required for mandatory reporting on (i) major final output for reporting to the Department of Budget Management, (ii) a resource matrix for reporting to the National Economic Development Authority, and (iii) financial information to the Commission on Audit. In addition, the M&E system is used for (i) providing information to the DepEd Secretary for Congressional question and answer briefing sessions, (ii) Education for All reporting at the international level, and (iii) project progress reports for government and development partner review. The Enhanced Basic Education Act of 2013 and associated implementing rules and regulations require DepEd to report on additional indicators related to SHS. However, no comprehensive annual statistical bulletin on education is currently published.

4. **Enhanced basic education information system.** EBEIS is an online database of basic education information, including the number of enrollees by year level, the number of schools, and the number of teachers. It is being upgraded with some assistance from Australian Aid. A database management unit in the research and statistics division of DepEd's office of planning services is responsible for EBEIS and maintains information on DepEd schools and, to a limited extent, on non-DepEd schools. FAPE maintains a separate database with information on the approximately 2,800 schools and 800,000 students who were participating in the Education Service Contracting program in 2013. For effective management and monitoring of physical facilities and the SHS voucher program, these two systems will need to be linked. EBEIS data on non-DepEd schools will need to be updated to ensure coordination of the DepEd school

building program with the network of non-DepEd schools. An SHS voucher management system will need to be developed and will need to link with a strengthened FAPE system.

5. **Learner information system.** It is the intention of DepEd to assign unique learner reference to all public school students, and an LIS has been under development since 2011 as part of an Australian Aid project. The LIS uses a unique identifier to store information particular to a learner, including name, date of birth, guardian, and sex. The intention is to expand the data to include school enrollment, achievement results, and other information. This system will need to be expanded to include non-DepEd students and will be an essential component of the SHS voucher program's implementation and monitoring.

6. **Project management information system.** The PMIS monitors performance indicators of education programs and projects. Currently, the PMIS monitors government-financed projects only, but DepEd plans to include development partner-supported projects as well. The project development and evaluation division of the DepEd is responsible for the PMIS. If the PMIS is to be used to monitor progress towards disbursement-linked indicator (DLI) achievement, some capacity development may be required, since results-based lending monitoring is significantly different from project progress monitoring.

7. **Human resource management information system.** The HRIS is a database of personnel records for teaching and non-teaching DepEd staff and includes information on salary, qualifications, and years of service. Currently, it is managed by the personnel division of the human resource development service. A separate teacher information system is being piloted that collects and analyzes more detailed information on teachers and teacher performance. As qualifications and terms of service for SHS teachers will be different from those of junior high school teachers, some capacity development may be required to adapt the HRIS and teacher information system for monitoring SHSSP DLIs on the minimum service standard for the ratio of students to teachers in mathematics, science, and technical subjects.

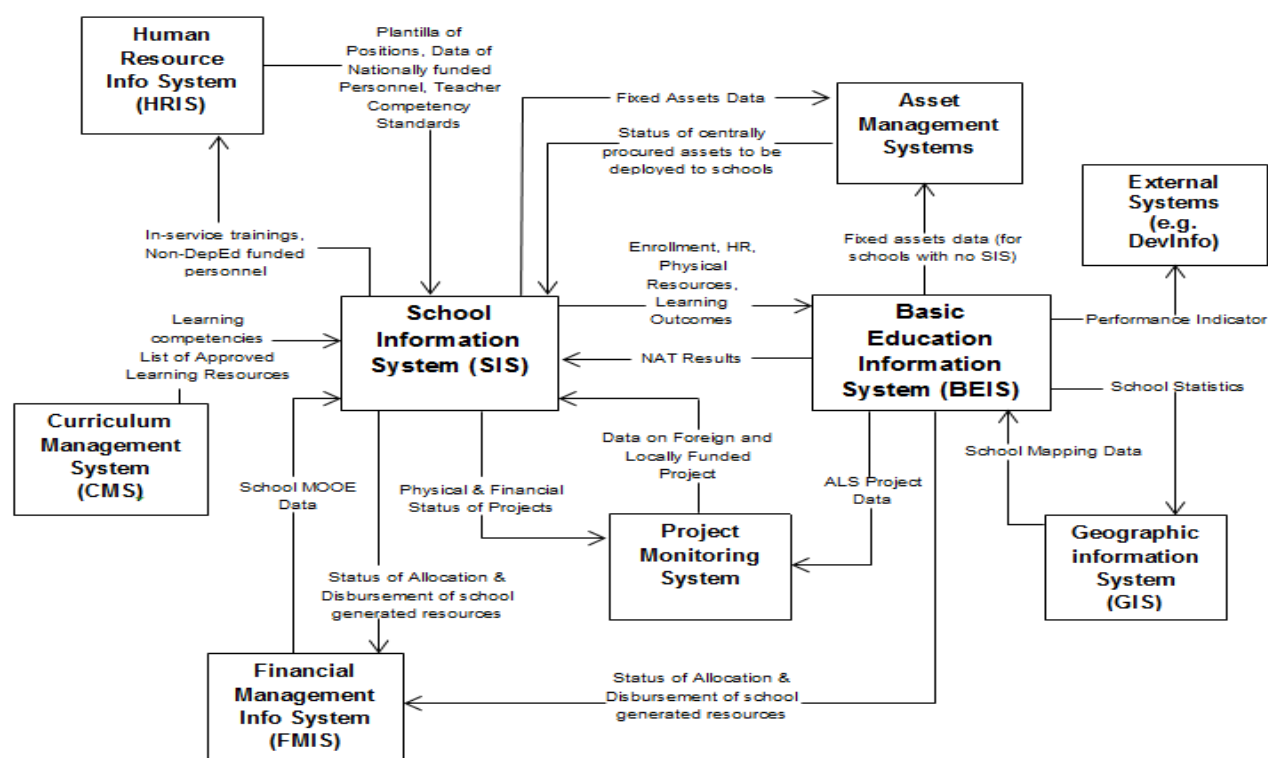
8. **National achievement test.** The National Educational Testing and Research Center (NETRC) conducts sample NATs and publishes an annual report of NAT results. Both public and non-DepEd schools participate in the NAT. While the NAT is developed by NETRC, DepEd has outsourced all data processing activity, and the contractor serves as custodian of the data. The nature and scope of SHS end-of-levels examinations or national assessments have not yet been determined, and NETRC's future responsibilities are not yet clear. However, capacity building for monitoring results of learning outcomes at the SHS level may be required and is likely to be financed in part by Australian Aid under their current Basic Education Sector Transformation Program.

9. **Physical facilities management system.** The physical facilities management system is maintained by the physical facilities and schools engineering division (PFSED) of DepEd and covers all physical facility activities undertaken by DepEd and the Department of Public Works and Highways. However, the database is not comprehensive because it does not capture school construction undertaken by other sources, such as local government units or municipalities. The current system focuses on contract monitoring and information collection, analysis, and field verification to determine the progress of new construction and the repair of classrooms, workshops, and water and sanitation facilities. This system is maintained in Excel spreadsheet format by the M&E unit under PFSED. PFSED provides school-level information (including a unique school code) for newly constructed and repaired facilities by September of the following year, and EBEIS maintains information on the inventory of facilities. Annual construction needs are determined based on inventory and school enrollment information. The

M&E unit plans to have customized software to minimize the processing time and additional manpower needs.

10. **Unified information system.** The UIS is currently being developed. It is expected to integrate the EBEIS with other DepEd M&E systems, including the LIS and HRIS. The obstacles to developing an integrated information system are many, given the complexity of existing databases, which use different software platforms. To date, little progress has been made on the development of a functional UIS, which has suffered from delays in the deployment of an adequate number of consultants. DepEd will expedite the completion of system development. Alternative solutions can be considered that extract smaller datasets from each database to construct single-purpose cubes for data mining and analysis. However, this proposal does not obviate the need to link the systems and harmonize variable codes. Australian Aid is providing technical assistance and other inputs to develop the UIS, and Figure 1 illustrates its conception of how the UIS will integrate DepEd systems.

Figure 1: Integration of Department of Education Systems in the Unified Information System



Source: Australian Aid. 2011. *Basic Education System Transformation Program Design Document*. Manila.

11. **Other.** Other monitoring programs include the (i) monitoring and evaluation and program adjustment, a periodic M&E system covering the progress of regions and divisions in the delivery of education services, as well as DepEd's performance as an organization, (ii) program monitoring by line units, and (iii) school visits from regional and division offices. Each division has school inspectors who visit schools and provide feedback on school performance.

B. Assessment of the Monitoring and Evaluation System

12. The current M&E system exhibits a number of weaknesses:

- (i) **Database design.** Functionalities for DepEd management information system databases were independently and narrowly designed and are therefore limited in their capacity to provide the type of information needed for monitoring and evaluating results-based programs. The narrow scope affects the architecture, variable codes, data collection methods, and analytics of each tool, making unification challenging. Therefore, monitoring, evaluating, and reporting on outcome-level indicators and the SHS voucher program will require more than simply modifying and unifying the current M&E systems. Close consultation with Australian Aid and technical assistance support for DepEd's project development and evaluation division can mitigate some of the challenges. Technical assistance will be required to help the DepEd to design and implement the best option for voucher distribution and redemption.
- (ii) **Enhanced basic education information system.** EBEIS will need to be extended to cover grades 11 and 12. Weaknesses include (i) the limited information collected from non-DepEd schools; (ii) the fact that the information that is collected is not integrated with other databases, including the LIS, NAT, FAPE, and PFMS; (iii) frequent delays in finalizing and publishing reports using EBEIS data; and (iv) the current procedure under which data validation is done by the regional and divisional offices, with no independent validation conducted to check data reliability.
- (iii) **Learner information system.** LIS has several weaknesses. Non-DepEd schools are not yet covered by the LIS, and no links exist to the FAPE system. The LIS database is not linked to EBEIS, and data from LIS and EBEIS do not always reconcile. Initial designs of the LIS required significant revisions. This is currently being undertaken by DepEd.
- (iv) **Department of Education capacity to analyze information and prepare supporting documentation for reporting on Disbursement-Linked Indicators.** Apart from data from the SHS voucher program, data for DLI reporting is available from DepEd. However, these data require substantial cleaning, analysis, and interpretation. While DepEd has the capacity to perform those functions, that capacity is limited and utilized primarily for reporting to oversight agencies and Congress, as well as responding to urgent requests from the DepEd executive committee. It is likely that technical assistance will be required to automate some DLI reporting requirements and to provide on-the-job capacity building for disbursement-linked results that require some analytics.

C. Managing Risks and Capacity

13. **Senior High School voucher program.** A key to the successful implementation of the SHS voucher program is a system in which all students have a unique identifier used to track their enrolment in either a DepEd or non-DepEd school, and to facilitate payment of the voucher amount to the non-DepEd school enrolling those students. It is imperative that DepEd begin defining and developing such a system as soon as possible. Lessons can be drawn from similar systems that operate well for other programs, including for conditional cash transfer programs. In the case of such programs, these systems provide students with a unique identification number, track their attendance at school, and transfer payments to their families. In the Philippines, the system used with the conditional cash transfer program was developed by Land Bank of the Philippines.

14. **Fragmentation of monitoring and evaluation activities.** Human resources and technical capacity are not aligned with reporting requirements. DepEd's institutional capacity is inadequate for the development and maintenance of various information systems. Currently, the M&E of the basic education system is fragmented, with each DepEd division or department doing its own. ADB's SHSSP program actions will support the strengthening of M&E systems needed for DLI reporting. It will also support development of an M&E system for the SHS voucher program.

15. **Extension of mandatory reporting to Department of Budget and Management to include Senior High School.** Current reporting systems—i.e., the major final output, National Economic Development Authority, and congressional response—do not include information required for the monitoring and evaluation of SHS and the SHSSP. Therefore, they will need to be extended, given that the SHSSP will require information to monitor the results framework and DLIs. The EBEIS is being extended and strengthened to (i) accommodate SHS in the existing and additional indicators; (ii) expedite the linking of LIS to EBEIS before 2016 to allow the effective monitoring of the SHS voucher program; (iii) continue collecting information on teacher credentials under EBEIS and determine whether the teacher information system will be expanded and mainstreamed; (iv) prepare an annual statistical report using key performance indicators, including student–classroom and student–teacher ratios; (v) align national assessment with the new curriculum to measure student learning outcomes, particularly in mathematics and science; (vi) conduct additional studies as required; and (vii) coordinate the PFSED database to track completion of an infrastructure development plan.

16. **Assessment of evaluation arrangements.** Evaluation and policy research activities are generally carried out by independent research agencies such as Philippines Institute of Development Studies. Outsourcing of evaluation and tracer studies is planned.

D. Summary of Risk Mitigation Mechanism

Monitoring Risks	Rating	Mitigation Measures
Development of the EBEIS and UIS could be delayed.	Substantial	Technical assistance to develop management information systems is being provided through Australian Aid's BEST program.
Timely preparation of integrated monitoring reports may be hindered due to fragmentation of information system across units under DepEd.	Medium	DepEd reorganization plan addresses the coordination issue.
LIS may not be in a position to allocate learner identification numbers that would allow DepEd to track students receiving the SHS voucher.	Substantial	The SHSSP is seeking independent TA to support voucher program. TORs will include strengthening LIS in collaboration with Australian Aid through DepEd.

DLI = disbursement-linked indicator, BEST = Basic Education System Transformation, EBEIS = enhanced basic education information system, LIS = learner information system, PAP = program action plan, PMIS = project management information system, SHS = senior high school, SHSSP = senior high school support program, TA = technical assistance, UIS = unified information system.

Source: Asian Development Bank.