2. ADMINISTRATION AND DATA/INFORMATION MANAGEMENT

FRAMEWORK FOR A SCHOOL MANAGEMENT INFORMATION SYSTEM

1.1 LEGISLATIVE FRAMEWORK

- National Educational Policy Act, 1996 (Act No. 27 of 1996), Sections 3(4)(a) and 8(3), which give the Minister of Education a mandate to "undertake the monitoring and evaluation by analysis of data gathered by means of education management information systems, or by other suitable means, in co-operation with provincial departments of education".

1.2 INSTRUMENT FOR THE EVALUATION OF A SUITABLE MANAGEMENT INFORMATION SYSTEM (MIS) FOR SCHOOLS

1.2.1 Background

School Management Teams (SMT), School Governing Bodies (SGB) and the Departments of Education are constantly faced with an increasing demand for information. The demand for information should not cause an additional workload for educators, administrative staff and financial personnel at schools and it is therefore crucial that SMT's and SGB's have a tool in hand that can be applied when they are faced with the daunting task of selecting a management information system (MIS) that will address the needs of the school.

It is important to mention that at this stage it is not compulsory for schools to implement the MIS of the National Department of Education namely SA-SAMS. It is, however very important that data of the system the school chooses, can be integrated into SA-SAMS if or when necessary. For the sake of the staff of the school, it is crucial that the system the school chooses can also be integrated with the Learner Unit Record Information Tracking System (LURITS) of the Department of Education otherwise the staff will have to enter this data twice.

Below follows a number of questions that can be considered when evaluating a possible school management information system. The questions will be categorized as follows:

- Statutory/ legal aspects
- Creditability/reliability of service provider
- Level of integration
- User friendliness
- Accessibility
- Backup
- Integration with other systems

1.2.2 Statutory/ legal aspects

Nr	Question	Notes
1.	Is the system compatible with LURITS?	If the answer is "no", the principal must consider the additional administrative workload on the staff!
2.	Does the system comply with all requirements relating to the South African Schools Act?	Are learner admission numbers handled according prescribed legislation?
3.	Does the system comply with Generally Accepted Accounting Principles (GAAP)?	Discuss this with the school's Financial Committee chairperson or Auditor if there is uncertainty.
4.	Does the system take the Credit Act into consideration and is the system adaptable in the event of any changes in the Act?	
5.	Does the system accommodate Governing Body Elections attendance-roll?	
6.	Is there an audit trace available on all aspects of the	

Nr	Question	Notes
	system?	
7.	Is the contract at any moment binding for a period of more than 3 months?	

1.2.3 Reliability of the service provider

Nr	Question	Notes
1.	Is the system specifically developed for the needs of a school?	
2.	How long is the company that is presenting the product in existence and for what period are they involved in the school market?	Here you can measure the experience of the company
3.	How many schools have implemented the system?	Obtain references by phoning a few schools who have already implemented the system. Also try and speak to the administrative and financial personnel who work with the system to gain their experience and opinions of the system.
4.	What is the number of employees in the firm?	
5.	Is there a support line or emergency line available for at least all the school days?	
6.	Are there cell phone numbers of support staff available after hours?	
7.	What is the current client base's general impression of the company's service delivery capabilities?	
8.	How many schools have already used this company's system but changed over to another system at a later stage?	
9.	Does the contract with the service provider make provision for the confidentiality of the school's data?	

1.2.4 Level of integration

Nr	Question	Notes
1.	Is the system fully integrated?	When it becomes necessary to key in any data or contact detail of parents or learners more than once (e.g. on the Admin system, the Financial system, the Report card system or SMS system), the system is not integrated!
2.	Can the learner appear on a class list or receive a report card without the financial administration of the learner being handled?	If so, then it is a sign that the system is not fully integrated.
3.	Do the parents still receive SMS's and/or emails after the learner has already left the school (except for the purpose of debt recovery)?	

1.2.5 User friendliness

Nr	Question
1.	Is the system user friendly?
2.	Is the screen layout clear and simple and is it easy understandable?
3.	Does the system force the user to execute certain tasks?
4.	Are reports/documents being printed in the format as needed/required?
5.	Can reports in the system being saved in other formats for example Adobe Acrobat, Excel?
6.	Is the year end process logical and the transfer of learners from one year to the following year part of a work flow process?
7.	Does the system generate Departmental forms in the prescribed format? ▫ Leave forms ▫ Promotion schedules ▫ Attendance statistics
8.	Is the system available in both Afrikaans and English?
9.	Can the system print certificates for achievement according to pre-determined parameters?
10.	Does the system provide for direct reporting to the Governing Body: ▫ Budget, Spending and Money available per category? ▫ Other management information and statistics?

1.2.6 Accessibility

Nr	Question
1.	Is the system internet based (web-based) and thus 24 hours a day and 7 days a week (24/7) available?
2.	Is there adequate security, usernames and passwords?
3.	Can the users work from home or any other place without the need for flash discs or compact discs?
4.	Is training material (training manuals and video training) online available?

1.2.7 Backup

Nr	Question	Notes
1.	Does the responsibility to make backups rest with a person at the school?	It is advisable that no staff members are involved in these tasks and a service agreement negotiated with the service provider who will take over the responsibilities for these tasks.
2.	How long will the system be offline in the case of the theft of the computer or the crashing of the hard drive?	
3.	Does the responsibility to restore the backups rest with a person at the school?	

1.2.8 Integration with other systems

Nr	Question	Notes
1.	Does the system facilitate integration with Bank systems by, for example, integrating bank statements electronically?	Integration with systems like these can only benefit the school and relieve the administrative burden of educators and administrative staff.
2.	Does the system facilitate integration with Debit Order systems of banks?	
3.	Does the system facilitate integration with simple, cost-effective communication systems like School Communicator?	

1.3 POSSIBLE FRAMEWORK FOR A SCHOOL INFORMATION MANAGEMENT SYSTEM

- **ADMINISTRATION MODULE**
  Learner and Family information
  Future enrolments & archive
  Sport & extracurricular activities
  Class lists, transfer cards
  Learner portfolio and statistics
  Learner images (photos)

  - ATTENDANCE REGISTER
    Learner and Staff absenteeism
    Custom defined reasons
    Weekly reporting
    Quarterly surveys
    Exception reporting & trends

  - DISCIPLINE
    (Merit & De-merit system)
    Custom defined setup
    Penalty system
    Memo facility
    Weekly & Quarterly reporting

- **STAFF MODULE**
  Biographical information
  Previous experience
  Qualifications and specialization
  Post and leave planning

Temporary appointments
Staff images (photos)

  - ACADEMIC PROGRESS
    Define exam cycles and weighting
    Define subjects, tests, projects and examination papers
    Create custom report card layout
    Statistics, graphs, Dept. schedules
    Auto calculations, averages

  - OBE ASSESSMENT & EVALUATION
    Create custom layout
    User defined learning areas and outcomes
    Custom evaluation per grade
    Comment database
    Schedules and report cards

- **FINANCIAL**

  - GENERAL LEDGER
    Double entry accounting (GAAP)
    Account cost codes and sub accounts
    Cash control
    Transactional history
    Trial balance & detailed ledger

Bank reconciliation

□ BUDGET
Annual and monthly budget
Budget versus Actual reporting
Capital expenditure budget

□ DEBTOR'S LEDGER
Automatic accounts on enrolment
On-line receipting
Fee structures, allocations and invoicing models
Subsidies and discounts
Transactional history
Detailed ledger; Age analysis
Print / e-mail accounts

□ CREDITOR'S LEDGER
Transactional history
Detailed Ledger; Age analysis
Integrates with stock module
Calculates VAT if required

□ STOCK & ASSETS
Consumable / non-consumable stock
Multiple groups and warehousing
Stock levels; issues & returns
Stock take and adjustments
Pricing & supplier history

▪ **ADDITIONAL SOFTWARE ADD-ON'S**

□ EMIS STATISTICS
Schools provide data electronically
School Management Information flows from school to the district office

From district to regional office to head office

□ TIMETABLE
The timetable module integrates to the administration module
Define free/fixed periods and priorities for subjects and educators.
Define double and free periods.
Multiple timetables can be scheduled and saved.

□ MEDIA /LIBRARY
The library module is integrated with the Staff database to issue, return and reserve material.
Key words.
Barcodes for inventory items automatically generated

□ YEAR PLANNER
Plan and date all school activities

□ REMOTE MARKS INPUT
Off site capturing of marks, assessments and report card content by grade and subjects.

□ SMS MODULE
Select parents or guardians and send bulk SMS messages as well as outstanding account balances.
Select Staff members to SMS

POSSIBLE REPORTS/PRINT-OUTS

Absenteeism Reasons
Account Detail
Account History
Account Name & Address By Class Oldest
Account Name & Address School Alphabetical
Addresses & Telephone No - Future Learners - Alphabetical
Addresses & Telephone No - History Alphabetical
Addresses by Class - Alphabetical
Addresses by School - Alphabetical
Admissions - School Alphabetical List
Age Groups by Sports House
Analysis - Ages in Years by Class Groups
Analysis - Average Ages by Class
Analysis - Boarders / Day Scholars
Analysis - Classes
Analysis - Ethnic Group by Gender, Class & Grade
Analysis - Families
Analysis - Home Language by Class Groups
Analysis - New Learners by Class, Gender, Language
Analysis - Religion By Gender, Class & Grade
Analysis - Suburb Distribution by Class

Analysis - Suburb Distribution for School
Analysis of Sport Houses in Age Groups
Application for Leave (Blank Form)
Asset Register - Asset Code Order
Asset Register - Description Alphabetical
Asset Register by Group
Asset Register by Location
Average Age Groups by Sport House
Birthday List by Class
Birthday List by Date Alphabetical
Boarder Information by Class
Boarder Information for School Alphabetical
Budget Amount per Account
Budget Management Export
Budget Vs Actual - Detail
Budget Vs Actual – Summary
Candidate Entry Form
Care Centre Learner List
Care Centre Learner List Grid
Care Centre Learner List Grid with Account No.
Cash Balancing Report

Cash Balancing Report by User
Citizenship & Countries
Class Analysis for Next Year
Class Groups/Grades
Class List Alphabetical Grid (First Name & Initials)
Class List Alphabetical Order - Grid
Class List Alphabetical Order - Grid (Large Block)
Class List Alphabetical Order - Grid (Subject Block)
Class List Alphabetical Order - Lines
Class List Alphabetical Order – Plain
Class List Alphabetical with Age
Class List Ethnic Groups
Class List for Next Year
Class List Gender - Grid
Class List Gender - Plain
Class List in Age Order
Class List in Age Order - Oldest to Youngest
Class List with Basic Information
Class List with Birth Dates & Sport Houses
Class Lists - Oldest
Class Lists - Oldest (Grid)
Class Lists - Youngest
Class Lists - Youngest (Grid)
Class Mark Sheet - Alphabetical Order
Classes
Codes for Effort or Evaluation
Codes for Staff Grading
Confidential Nominal Roll
Confidential Nominal Roll by Class
Creditor & Creditor Control Postings
Creditor Ledger Summary by Transaction Types
Creditor Memo Report by Account Number
Creditor Transactions without a Creditor Master
Creditors Address List
Creditors Opening Balances
Cycle Set-up Report
Daily Absenteeism by Class
Daily Absenteeism by Class By Date
Days Absent by Learner - Summary
Debit Order Details
Debit Order Monthly List
Debit Order Receipt Postings
Debtor & Debtor Control Postings
Debtor Address List
Debtor Ledger Summary by Transaction Types
Debtor Receipt Account Analysis by GL Account
Debtor Transactions by Account Number Order
Debtor Transaction by Account Number Order (Date)
Debtor Transactions by Doc. Number Order
Debtor Transactions by Doc. Number / Date Order
Debtor Transactions without a Debtor Master
Debtors Opening Balances
Debtors Opening Balances Summary by Period
Debtors Outstanding Invoice Analysis
Debtors With Alert Indicator set to true
Debtors Without Credit Transactions for a Period
Debtors Without Invoice Transactions for a Period
Departmental Attendance Report
Departmental Transfer Form by Grade
Departmental Transfer Form by Learner
Deposit Slip by Date Selection

Deposit Slip by Receipt Number Selection
Different Surnames E-Mail Addresses by Learner by Class
Entry Form for Grade 9
Entry Form for Senior Certificate Examination
Examination Labels by Class
Export Family Data for Excel Mail Merge
Export Learner Data for Excel
Export Learner Data for Excel With Res. Address
Export Youngest & Only with Contact Details
Family - Memo Report by Account Number
Family & Learners Full Detail
Family & Learners Full Detail (With Memo Field)
Family Enrolment Form (Blank) Afrikaans
Family Enrolment Form (Blank) English
Family Identity Information - Alphabetical
Family Postal Label (Correspondence Address)
Family Postal Label By Class (Correspondence Address)
Family Postal Label By Class (Future Learners)
General Ledger Openings Balance
General Ledger Summary
General Ledger Summary with Account Groups
GL Transaction Posting by Date
GL Transaction Posting by Period
GL Transaction Summary per Period
GL Transaction Summary per Period per Type
GL Transactions without a GL Master
Grade Averages per Class
Grade Averages per Subject
Grade List Alphabetical Order - Grid (Large Block)
Grade List Gender - Plain
Graph Symbol Distribution per Subject per Grade
Home Language List
Home Languages
Hostel List
Hostels & Residence
Information Check List for Parents
Insurance Item List
Learner Attendance by Dates per Class
Learner Enrolment Form (Blank) Afrikaans
Learner Enrolment Form (Blank) English
Learner Failure List
Learner Failure Schedule
Learner Grid by Test / Exam Paper
Learner List - ID Numbers by Class
Learner List - Subject with Marks
Learner List - Totals & Results
Learner List by Previous School - Alphabetical Order
Learner List by Previous School by Class - Alphabetical
Learner List by Suburb
Learner List for Future Learners by Class
Learner List of Siblings
Learner List per Subject Package
Learner Marks By Cycle - OBE
Learner Marks Grid (Grade 1 thru 9)
Learner Marks Grid (Grade 10, 11 & 12)
Learner Subjects with Levels
Learner Subjects without Levels
Learners - Absenteeism Detail
Learners - Psychology Test Information
Learners - Psychology Test Information By Class
Learners - Sport & Culture Activities

Learners - Subject List
Learners Balances Report by Class
Learners Balances Report by Class (Debits/Credit)
Learners By Test / Exam
Learners Exclude from Invoice Run By Period/Grade
Learners (Active, Deleted, Future Enrolment)
Learners Balances Report Alphabetical
Learners in Rank Order - Exam
Learners in Rank Order - Final
Learners in Rank Order - Test
Learners in Rank Order - Totals
Learners in Rank Order by Class – Final
Learners Invoice Allocation by Class
Learners Invoice Allocation by GL Account
Learners List - Alphabetical Order Basic Info.
Learners List - Alphabetical Order Basic Info. By Class
Learners List - Alphabetical with Educator
Learners Marks by Cycle
Learners Marks by Cycle - Failures
Learners Marks by Cycle with CASS
Learners Memos
Learners Per Subject Per Grade
Learners Subjects Mark Schedule
Learners Test / Exam Mark Schedule
Learners To Be Excluded from the Invoice Run
Learners with Condoned Subjects
List of Authors
List of Bus Learners
List of Comments
List of Comments in Code Order
List of Comments in Description Order
List of Debtors/Families
List of Families per Variable Code
List of Families to Receive SMS - Alphabetical Order
List of GL Accounts by Account Description
List of GL Accounts by Account Number
List of Heading in AFRIKAANS Alphabetical Order
List of Heading in ENGLISH Alphabetical Order
List of Immigrants
List of Key Words
List of Languages
List of Learners not Allocated for Next Year
List of Learners per Variable Code
List of Loan Categories
List of Loan Groups
List of Media Groups
List of Media Origins
List of Media Statuses
List of Media Types
List of Merits - Positive & Negative - Totals
List of Merits per Learner - Detail
List of Merits per Learner - Detail (by Page)
List of Merits per Learner - Positive & Negative
List of Merits per Learner - Totals
List of Outstanding Media by Class
List of Outstanding Media by Staff Member
List of Publication Edition Codes
List of Publishers
List of School Leavers by Date - Alphabetical
List of Series
List of Subject Groups

List of Subjects
List of Subjects Per Package
List of Subsidy Recipients
List of Suppliers
List of Test & Exam Papers
List of Variable Groups per Learner
Main Detail of Media by ISBN Number
Main Detail of Media by Titles
Marital Status
Mark Sheet - Class/Educator/Subject/Key
Mark Sheet - Class/Subject/Key
Mark Sheet - Grade/Educator/Subject/Key
Mark Sheet - Grade/Subject/Key
Media Detail by ISBN Number
Media Detail by Media Titles
Media History by Admission Number
Media in Accession Number Order
Media in Author Name Order
Media in Bar Code Order
Media in Location Order
Media in Title Order
Media Returns List in Date Order
Medical Aid List
Merit Codes
Merits per Learner by Class by Date
Missing Master Files - Learners without Family
OBE Line for Learners (Missing Lines)
OBE Report Card Set-up
OBE Report per Learner
Occupation Father
Occupation Mother
Occupations
Print Bar Code Labels for Existing Media Items
Print Bar Code Labels for Learners by Class Alphabetical
Print Bar Code Labels for Media Items
Print Bar Code Labels for Staff Members
Project Classes for Next Year
Psychology Tests
Quarterly Survey (Absenteeism)
Range of Admission Numbers
Range of Entry Dates
Receipt Analysis by Date
Receipt Analysis by Period
Receipt Analysis by Receipt Number
Receipt Deposit Report (Still to be deposited)
Receipts Totals per GL Acct. per Family per Period
Register (Landscape)
Register Index (Dates)
SMS Usage & Totals
Specialised Report Cards (Grade 10-12) by Class
Specialised Report Cards (Grade 10-12) by Grade
Specialised Report Cards (Grade 10-12) by Learner
Sport Age Groups
Sport & Culture Activities
Sport & Culture Activity Levels
Sport Houses
Sport Houses List by Classes
Sport Houses List by Grade
Sport List by Class
Sport List by Class - Alphabetical
Sports Activity Labels by Variable Codes