

Analytics Features:

The key strength of **AIM@iSTAR**® lies in its analytics capabilities. The system distinguishes itself by offering users advanced visualisation technology to analyse assessment results and presenting them, so that users can easily draw conclusions and design intervention strategies. The business intelligence module presents the following analyses to the teacher:

Class Performance Analysis

- Class Performance Analysis
- Subject Performance Analysis
- Topic Performance Analysis
- Main Skill Performance Analysis
- Sub-Skill Performance Analysis

Trend Analysis

- Student Downward Trend Analysis

The artificial intelligence module presents the following analyses to the teacher:

- Weak Topics Correlation Insight
- Student Potential Performance Analysis
- Student Predicted Performance Analysis

The business intelligence module presents the following analyses for HOD's and School Leaders:

Level Performance Analysis

- Level Performance Analysis
- Subject Performance Analysis
- Topics Performance Analysis
- Main Skill Performance Analysis
- Sub-Skill Performance Analysis

Trend Analysis

- Intake Trend Analysis
- Level Trend Analysis
- Class Trend Analysis
- Topic Trend Analysis
- Main Skill Trend Analysis
- Sub-skill Trend Analysis

The artificial intelligence module presents the following analyses for HOD and School leader:

- Weak Topics Correlation Insight
- Student Potential Performance Analysis
- Student Predicted Performance Analysis

The system also comes with a comprehensive range of reports:

- MCQ Answer Sheet
- MCQ Item Analysis
- Pupil Itemized
- Student Subject Performance
- Class Summary Report
- Subject Based Banding (SBB) Report
- Subject Analysis
- Subject Performance Analysis
- Subject Detailed Analysis
- Level Subject Trend
- Level Performance
- School Cockpit Export

Benefits:

- No more tedious copying and pasting student marks from unmanageable Excel spreadsheets
- Safe and organised repository of student and school performance results
- Intuitive and powerful analytics save hours of work for teachers and HOD's
- Comprehensive range of BI reports provide teachers and HOD's with rich insights into teaching and policy effectiveness
- User-friendly, little or no training needed
- AI analytics predict student performance and enable pre-emptive intervention
- Suitable for different syllabi, eg MOE, International, Primary & Secondary School, etc
- Analyse student performance at different levels of details, eg subject, topic, skill, etc
- Powerful analytics to help HOD's monitor students' learning journeys in school
- Valuable tools for teacher to analyse results of individual students and help weaker ones
- Easily export results to share with and encourage students, and engage parents
- Integrate with School Cockpit and minimise administration overhead

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AIM@iSTAR®

An Artificial Intelligence-driven Analytics Solution Let Every Student Shine

Improve teaching and
facilitate learning

BI with comprehensive
data analysis facilities

B

AI capabilities to provide
predictive insights

A

Student Learning Insight:
Analyze results and identify
factors influencing results

S

AIM@iSTAR[®], the intelligent Student-Teacher Analytics Resource system, is equipped with business intelligence and artificial intelligence technology to improve teaching and facilitate learning through the analysis of students' results and identification of influencing factors affecting the results.

The system provides general school data management functionalities and an artificial intelligence-based analytics engine that discovers useful insights to help educators know the weaknesses of each student, so that they can adjust their teaching pedagogy and contents to the targeted group of students in order to address their weaknesses. This would eventually lead to improved student learning outcomes.

The system can help teachers isolate the specific issues affecting each student's performance, thereby allowing effective and expedient intervention. It can even provide the school with insights on its teaching effectiveness. The system will also be able to improve teaching productivity while enhancing student learning.

AIM@iSTAR[®] allows teachers to understand each of their students' weaknesses and influencing factors.

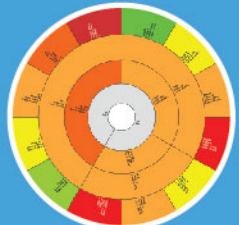
Teacher

- Individualisation of pupils
- Personalisation for Teachers
- 1-click identification of pupils' strengths and weaknesses
- Encourage parent involvement
- Identify pupils for Supplementary Classes

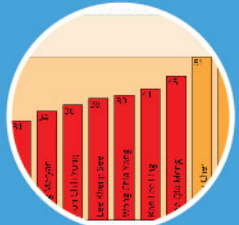
School Leaders and HOD's

- Helicopter view of all activities
- Automate Tracking and Monitoring of pupils' journey at school

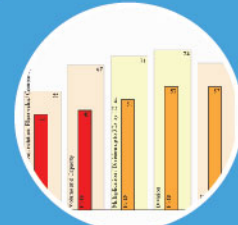
Visualisation tools help the teacher understand students' performance and weaknesses easily. Within minutes, she can organise a remedial class only for those who have common weaknesses. At the same time, she will know the influencing topics and skills that she will need to teach during the remedial class for this target group of students.



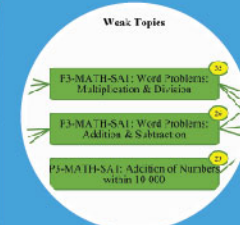
Teacher
Dashboard:
traffic light color to
know overall
performance of
students



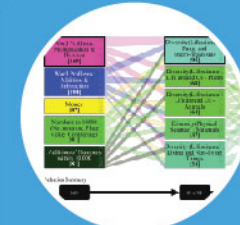
One-click to rank
students' results
by class, subject,
topic and skill



Ranking of
weak topics &
skills by class

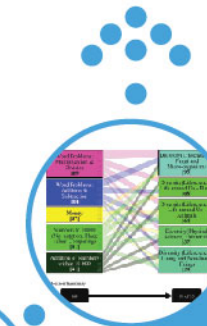


Artificial Intelligence
automate discovery of
influencing factors for
weak topics



Generate list of
students who have
common weakness
across multiple
subjects for remedial
class

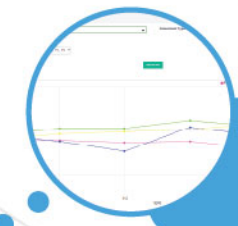
Speed up Exam Result Processing & Analysis



Artificial Intelligence-driven
automated discovery of influencing
factors allows HOD's to strategise
teaching contents and pedagogy .



Intake yearly trends presents
cohort performance from 1st year
to latest year



Subject yearly trends allows HOD's
comprehend level performance
across years so that they may
intervene if necessary



HOD Dashboard: Traffic light colors
easily exhibit performance of level,
subject, topic and skill

AIM@iSTAR[®] is an analytics system that captures and analyses test and examination results and discovers insights of students' weaknesses. The system will have the following Modules:

1. Administration Module
2. Data Entry Module
3. Business Intelligence Module, and
4. Artificial Intelligence Module.

Security Features:

The system is designed to comply with personal data protection regulations. Personal data, student assessment results and analysis data are separated and secured in different databases with encryption so as to prevent unauthorised access.

The system is also equipped with role-based security features, so that the Administrator can assign the appropriate access privileges to users with regards to the analytics and reports within the level, class and subject structure.

Moreover, the system has a built-in locking feature that disallows any change to students' marks outside of "lockout dates", so as to ensure finalised results cannot be altered without the proper authorisation.

Data Entry Features:

The system allows multiple data entry methods for the teacher to enter data. These include:

- Optical Mark Reader (OMR) entry: scan in MCQ answer sheets commonly used in schools to auto mark student answers. The system can use any photocopier scanning function or any scanner available in the school, and does not require additional hardware.
- Web mark entry: enable teachers to enter student marks into the system via Internet browsers.
- Mobile App mark entry: enable teachers to enter student marks into the system via the **AIM@iSTAR**[®] Mobile App.
- Handwritten mark entry: Intelligent Character Reader (ICR) allows teachers to auto record the marks of students' answers to Open Ended Questions (OEQ) by writing them freehand, and scanning the handwritten marks into the system.
- Excel mark entry: allow teachers to enter student marks into predefined Excel templates and import them into the system.
- CSV file import allows teachers to import data from MOE's School Cockpit.
- CSV file export allows teachers to export data from **AIM@iSTAR**[®] to School Cockpit.