Chairlady

eLearning Consortium

Councilor

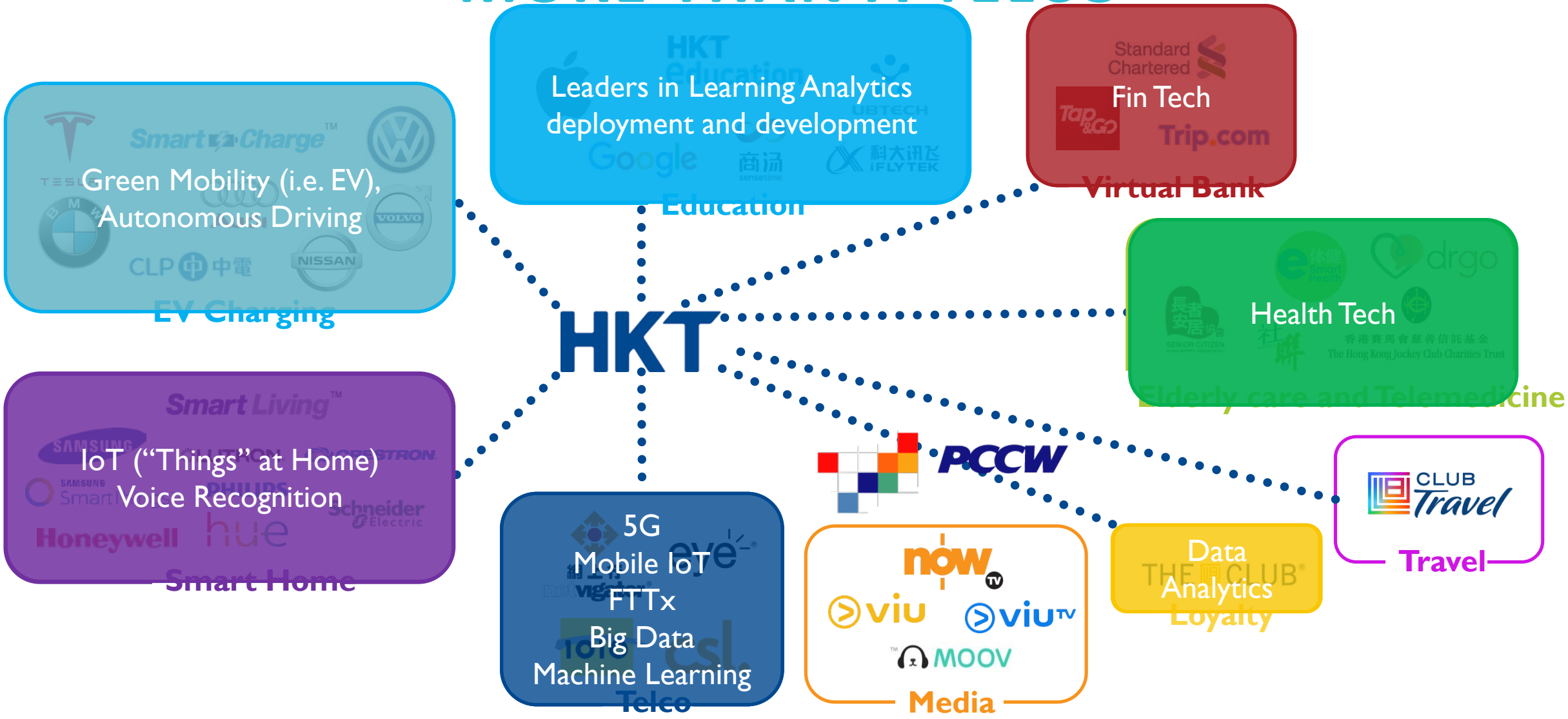
Hong Kong IT Federation

Head of Marketing

Consumer Group, HKT and HKT Education Limited

HKT
Building for tomorrow, today.
Over 19,000 staffs in 1 team to serve for Hong Kong more than 150 years
Pioneer for bringing innovation and technology to create a better Hong Kong
eye
HKT Care
drgo
HKT education
1010
Smart Living
HKT Premier
csl.
THE CLUB
now
viu
MOOV
viuTV
摯誠為你

MORE THAN A TELCO



HKT education

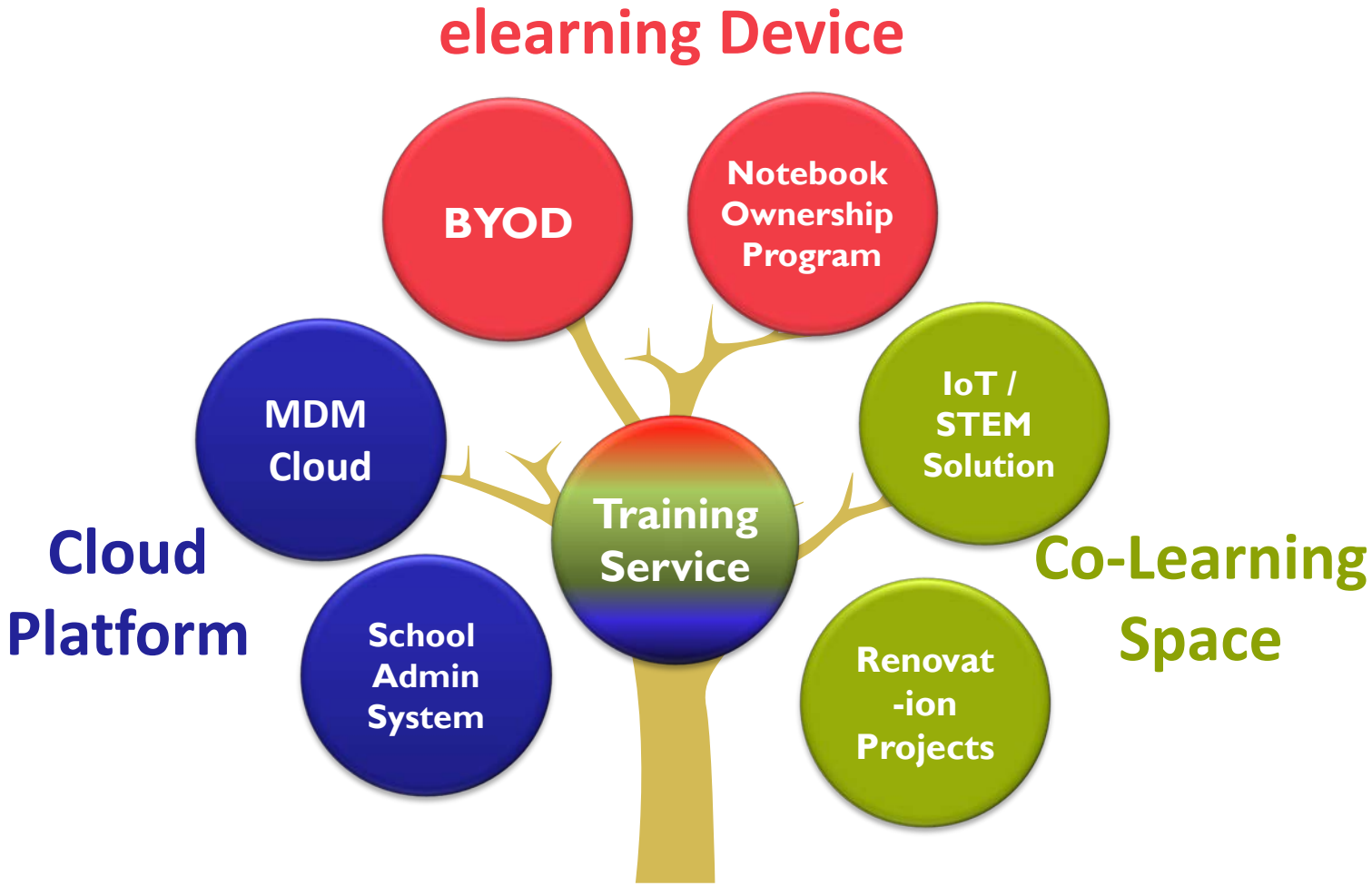
Build tomorrow's education with you

HKT education looks forward to working closely with Hong Kong's education community in the context of our commitment to developing Leaders in Learning Analytics deployment and development. We believe this can be done via co-operation, communication and innovation – all to facilitate sustainable development of a superior learning and teaching environment in Hong Kong.

Product Portfolios

HKT education

BUILDING TOMORROW'S EDUCATION WITH YOU



Google for Education Partner

Authorized Education Reseller

How Learning Analytics Create Revolutionary Impact on Teaching & Learning Experience

Predict Learner Performance

Cater Learner Diversity

Personalized
Learning
Experience

Improve Learning Motivation

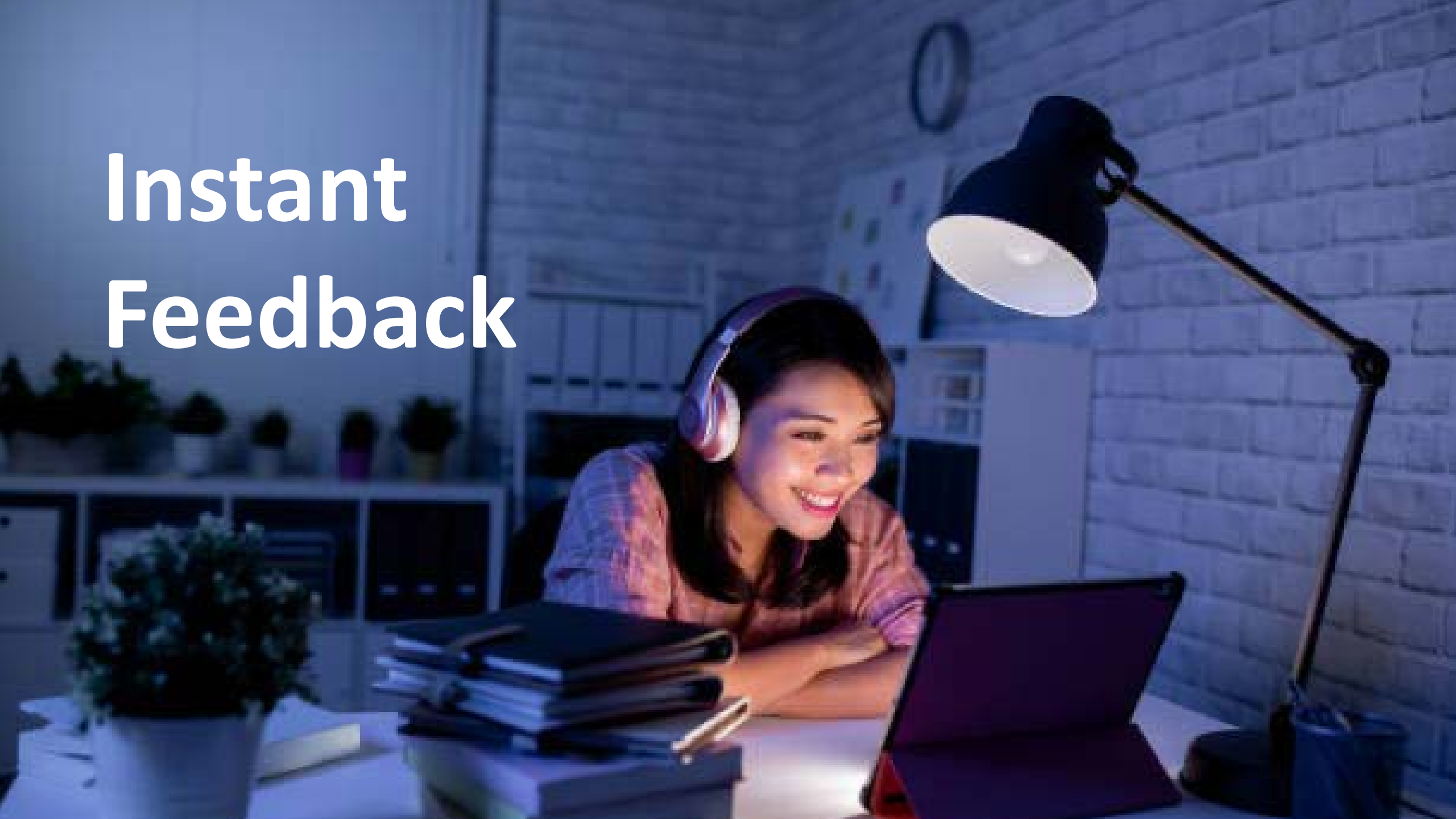
Increased Learners Retention Rates

Pedagogy & Learning Plan Review

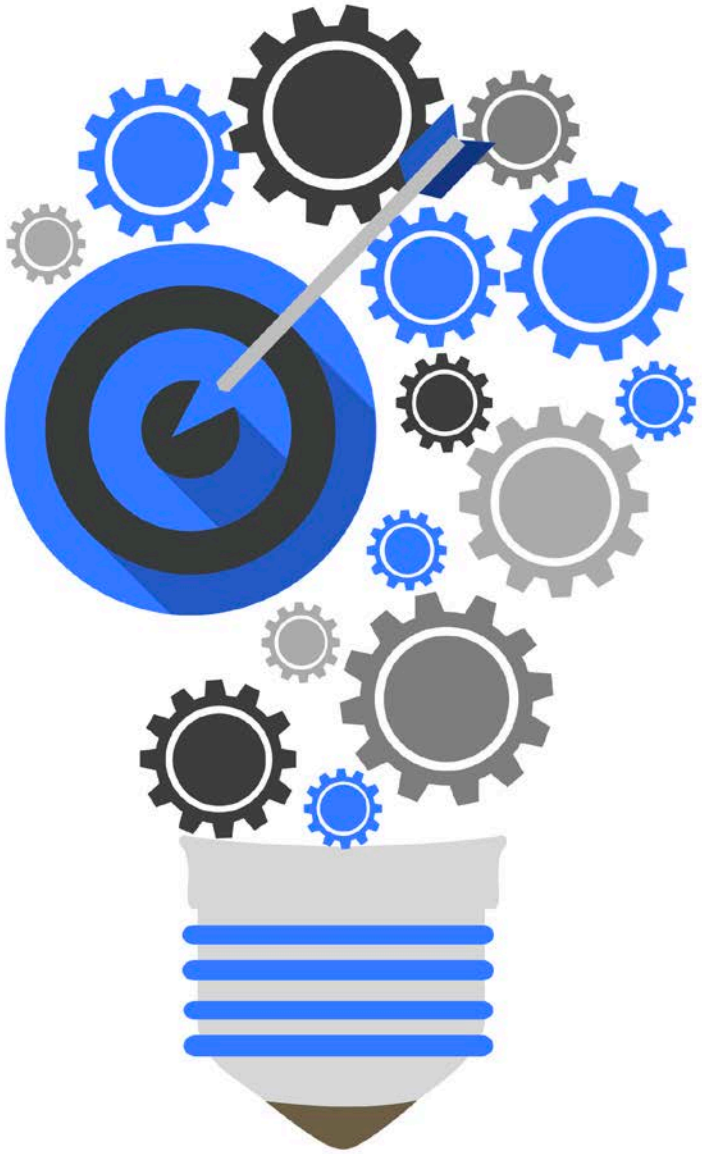
Quality Assurance and Quality Improvement

Collaborative Learning

Instant Feedback



Monitor
progress
by
groups



Application of Learning Analytics

Hou Kong Middle School

Biggest School In Macau

> 3,500 students > 450 staff

4 schools with affiliated
President Jiang Zemin 主席江澤民 visited in 2000,
sculpture unveiled by Macau Chief Executive in 2001

2019-21 Mission

建設智慧校園，善用大數據，全面提高學生核心素養。

Build a SMART CAMPUS, leverage Learning Analytics, and improve students' core literacy in an all-round way

Kindergarten 濠江幼稚園

Primary 濠江小學

Middle School 正校

Premier School Affiliated to Hou Kong Middle School
英才學校 (中小幼）

Utilize Learning Analytics to provide Personalized Learning Experience

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Integration of Learning Analytics to campus management by collecting student data to develop core literacy

- Lesson behavour analysis
- Test and assignment
- Smart bracelet and campus activity tracking
- Smart Library

Utilize Learning Analytics to provide Personalized Learning Experience

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Data Management, Analysis and prediction
Smart School Management

In-Class & Assessment
- in-Class learning data
- Assessment & Exams

In-Class Behaviour Analysis
- Interactivity
- Concentration level
- Student participation in Q&A

Smart Library
- Book reading record

Smart Bracelet
- Attendance taking
- Health trend (e.g. Steps & Campus Activities)

Learning Analytics as the focus for being “All Round Development People”

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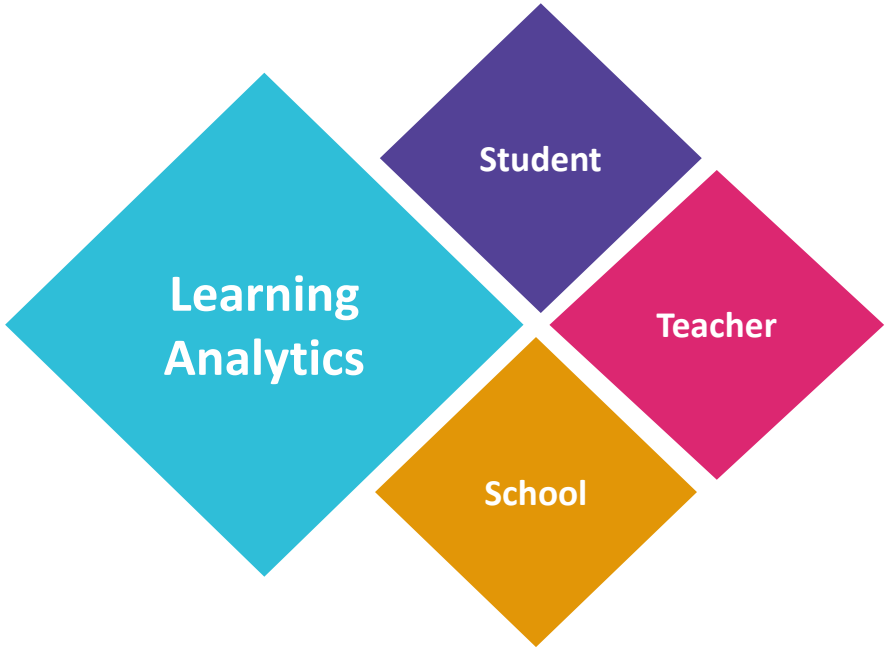
Build a SMART CAMPUS, leverage Learning Analytics, and improve students' core literacy in an all-round way

建設智慧校園，善用大數據，全面提高學生核心素養。

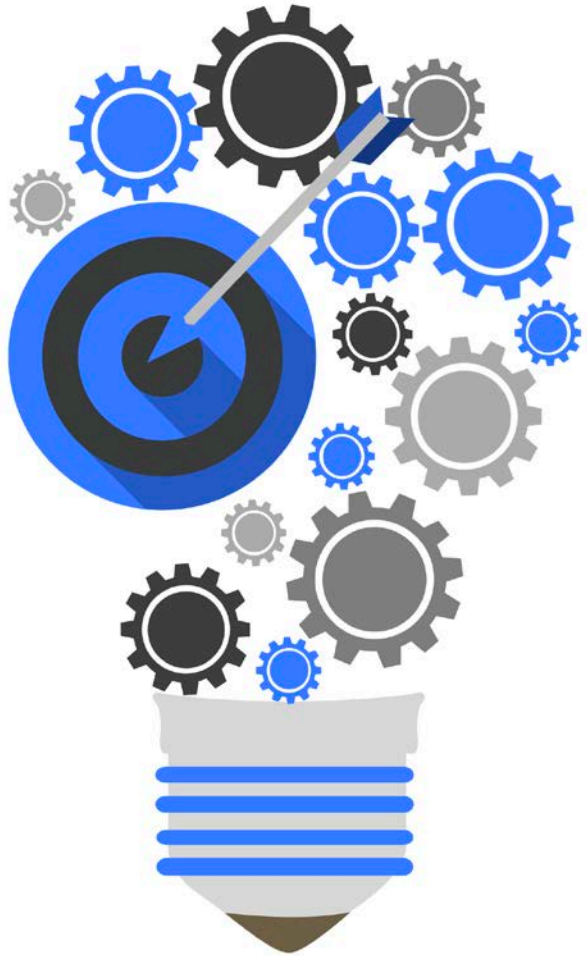


- Personalized learning to improve academic performance
- Collect student activities to set career path advice

- Master students’ learning progress and enable to design precise teaching plans
- strengthen teaching process

- Smart campus to enhance teaching effectiveness

Use of Learning Analytics



Before Class Assessment

Descriptive analytics

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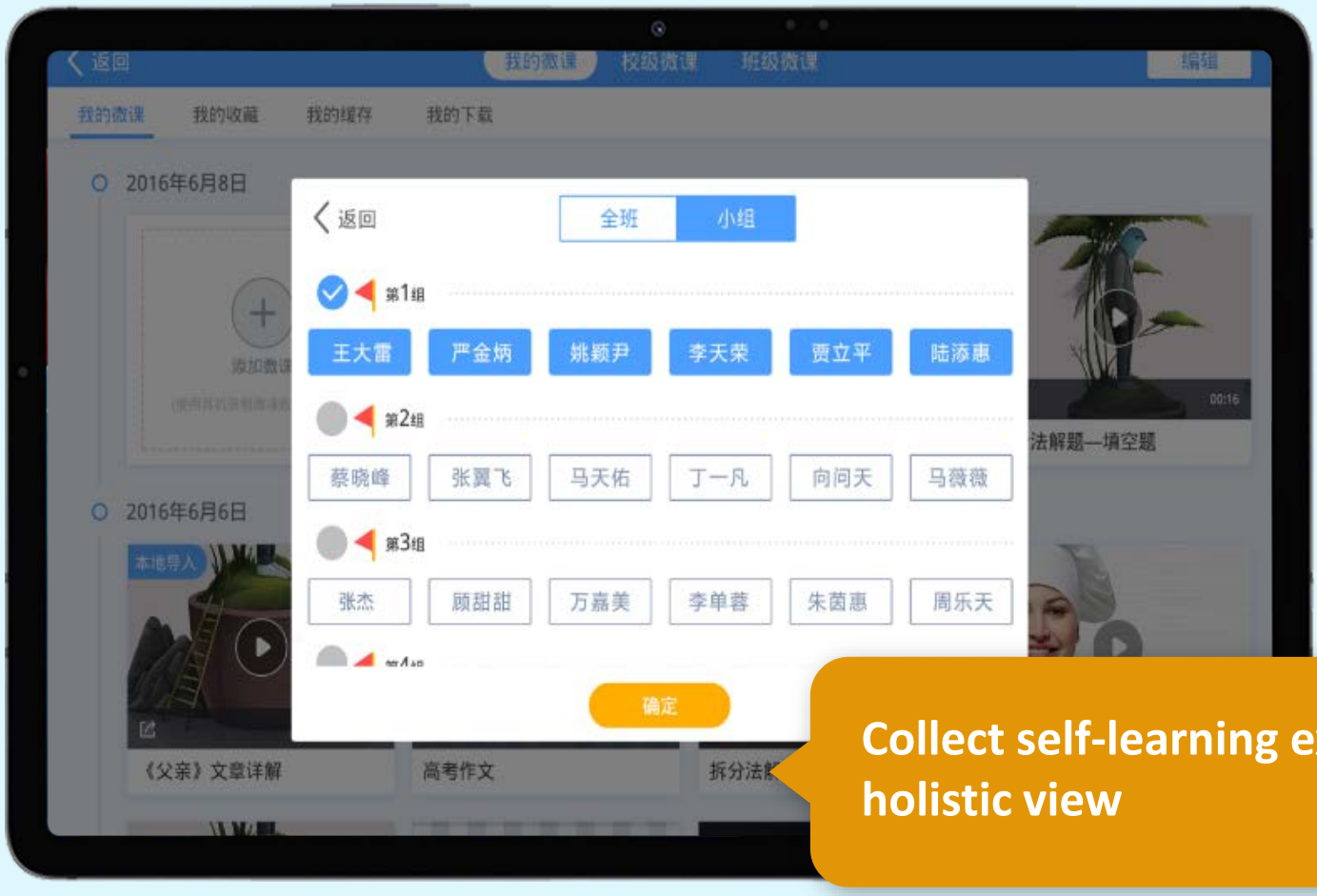
Review



Collect self-learning exercise data in holistic view

Descriptive analytics

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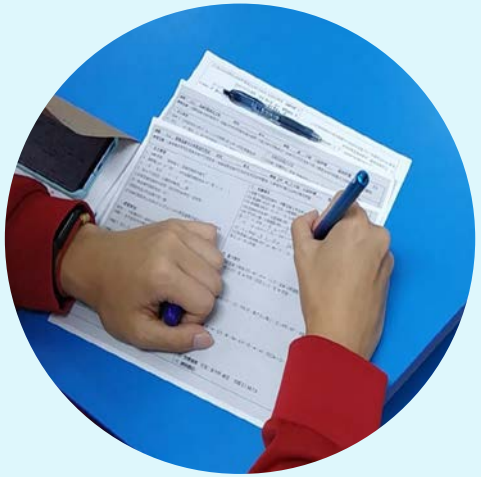
Real Time data collection

Digital Learning Pen（紙筆互動）

- **Use of Digital Pen to capture the image for the in-class exercise**

Digital Pen



In-Class work - record image of students' writing

Real-time receive classwork

In-class

Diagnostic analytics

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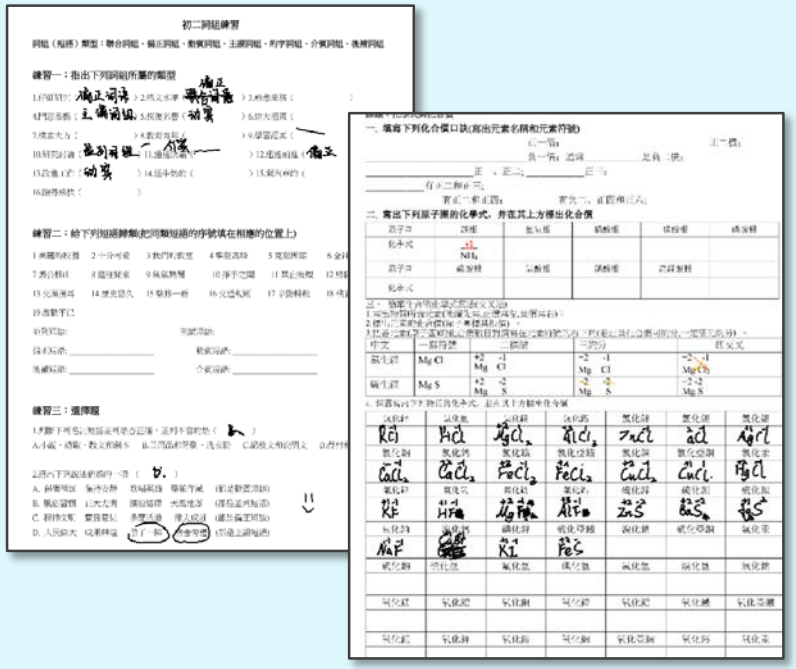
Real Time analysis

Digital Learning Pen（紙筆互動）



Identify learning patterns for real time classwork analysis

Encourage sharing among students

In-class

Diagnostic analytics

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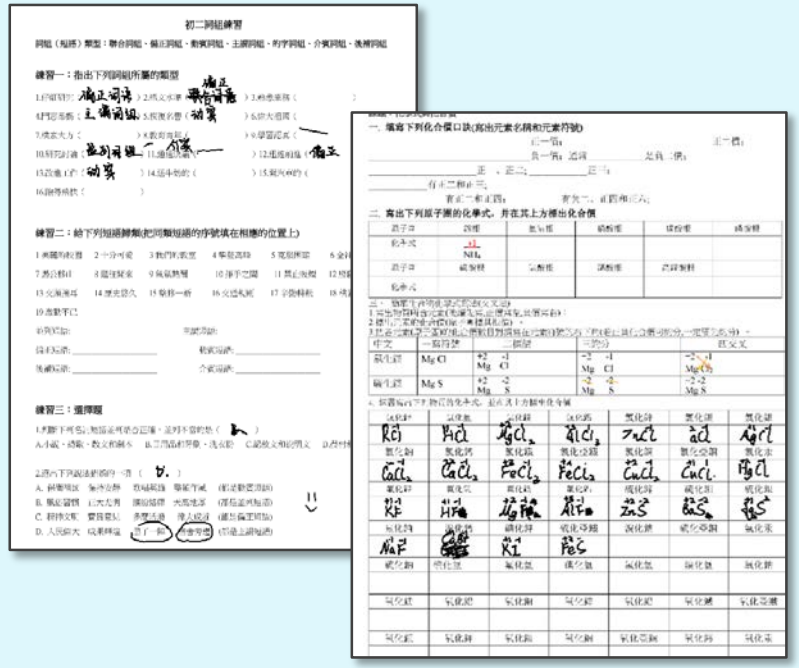
Benefits

Digital Learning Pen （紙筆互動）

- Monitor progress by groups
- Real time result analysis
- Provide instant feedback
- Encourage sharing among students
- Peer evaluation



Before-class Assessment

Diagnostic analytics

Predictive analytics

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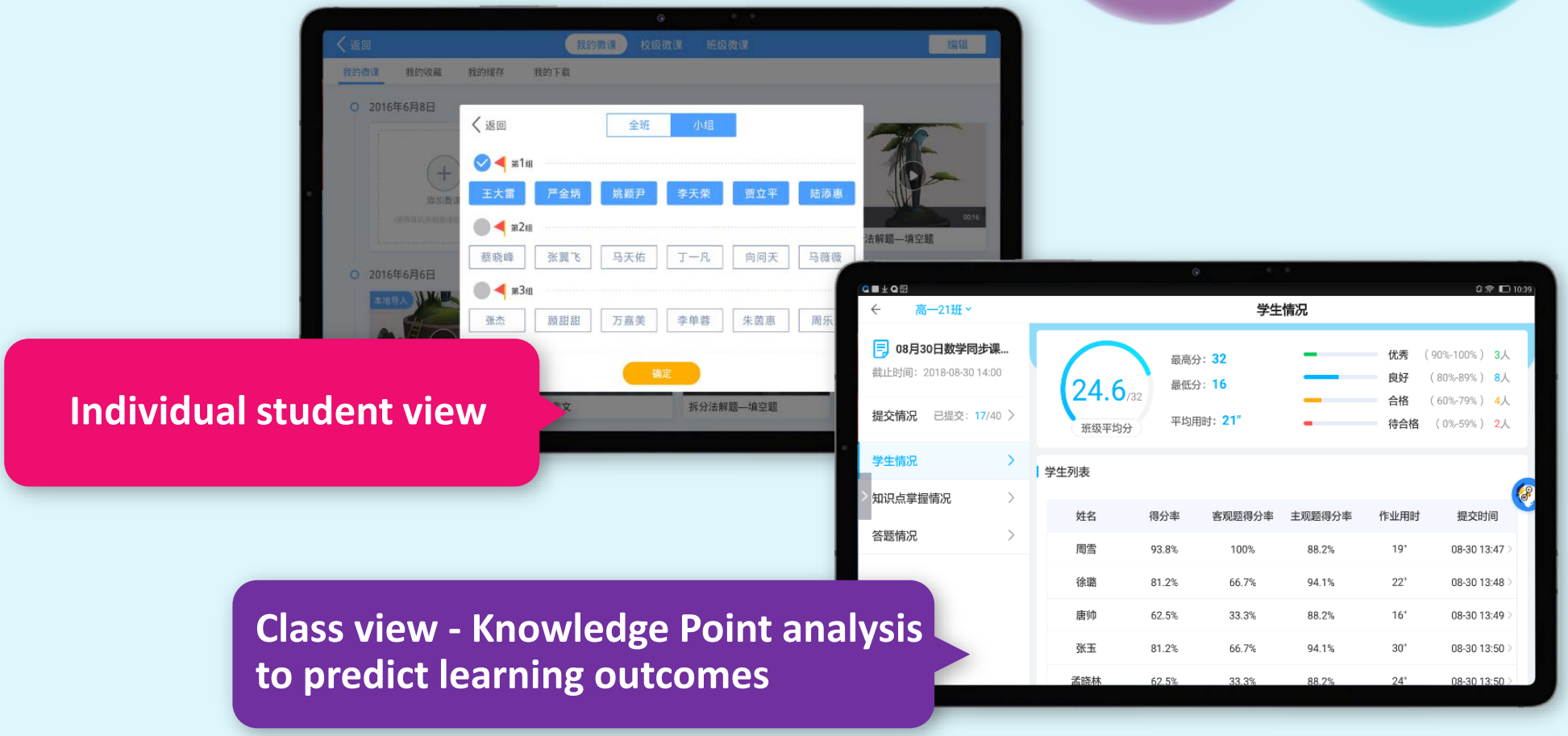

Individual student view

Class view - Knowledge Point analysis to predict learning outcomes

Before-class Assessment

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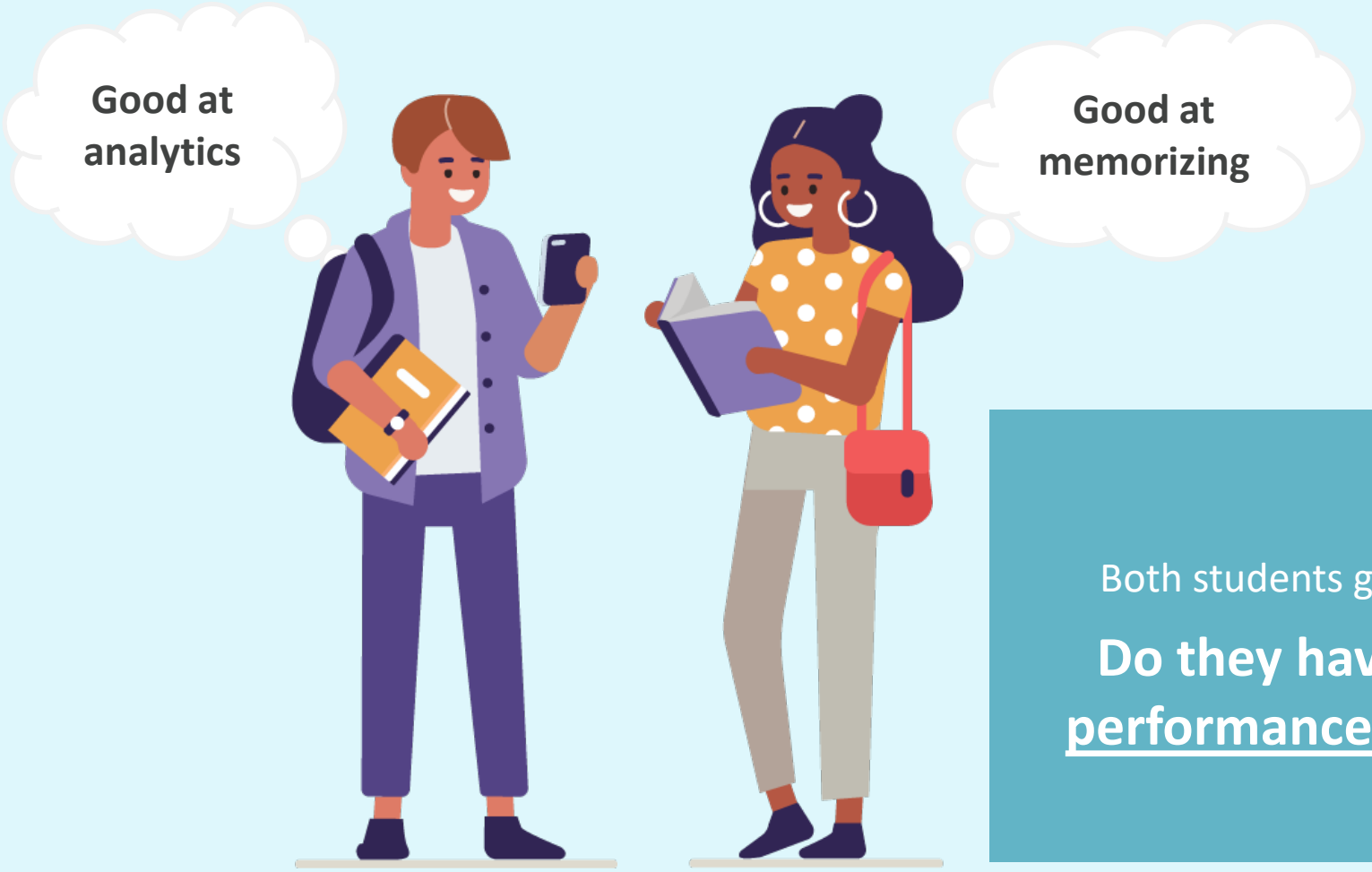

Both students got **80** marks

Do they have same KAS performance in that area?

In-class

Prescriptive analytics

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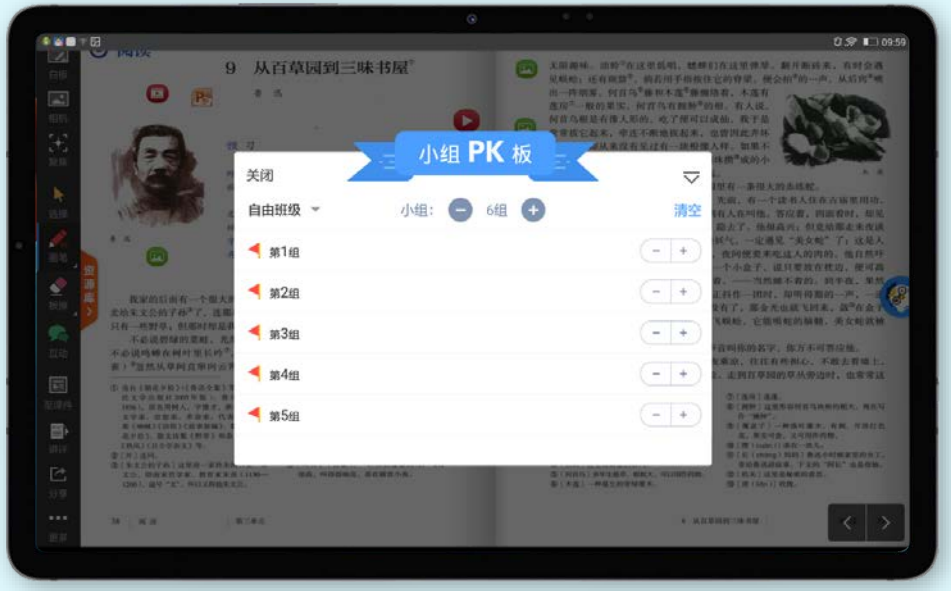
↑ Learning Motivation with Collaboration

Interactive Group activities according to learner diversity

- Reference from pre-class exercise result to prepare for in-class activities
- Encourage idea sharing

Strategically lesson planning from pre-class insights



Assignments and Exercise

Prescriptive analytics

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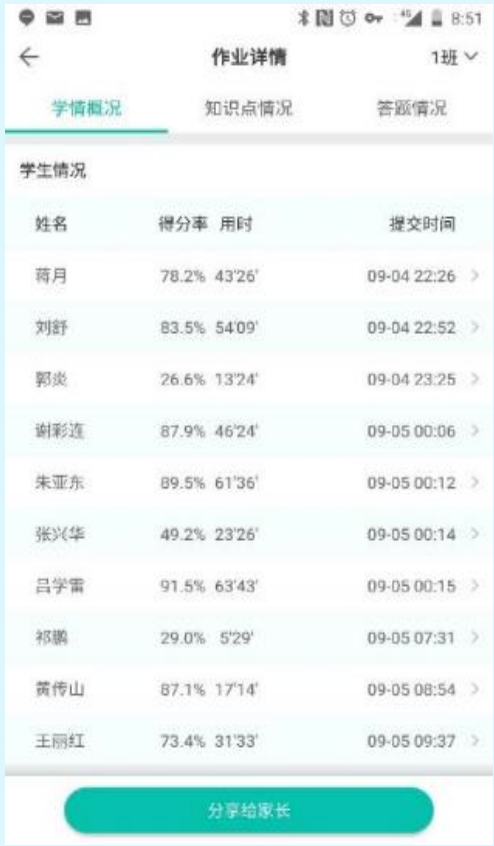
Adaptive Assignments



Assignment and Assessment

Prescriptive analytics

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Catering Learner Diversity

本次月考考情

知识点	对应题号	知识点权重	年级得分率	高三年级208班 均分	高三年级208班 得分率	高三年级209班 均分	高三年级209班 得分率	高三年级210班 均分	高三年级210班 得分率
复数的四则运算	2	0.02	96.87%	4.88	97.5%	5	100%	4.9	97.92%
定积分在解决实...	15	0.02	45.97%	4.13	82.5%	2.98	59.52%	2.63	52.5%
数列求和方法	17	0.05	53.36%	9	75%	7.36	61.31%	7.77	64.76%
回归直线方程	18	0.05	57.15%	10.9	90.83%	8.29	69.05%	9.48	78.99%
离散型随机变量...	18	0.05	57.15%	10.9	90.83%	8.29	69.05%	9.48	78.99%

展开

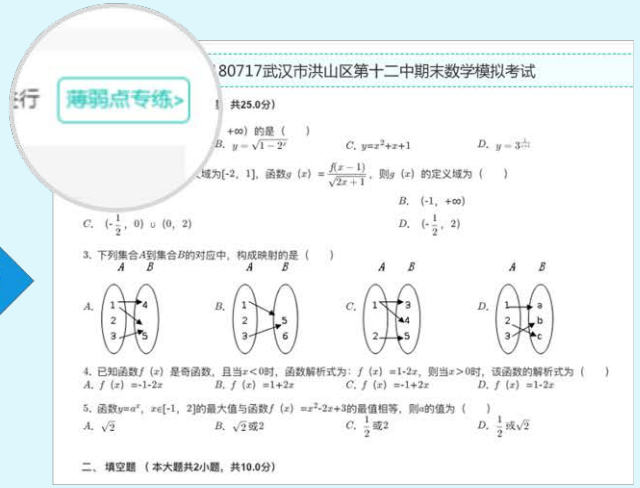
近一个月考情

近一个月 (2018年08月05日至2018年09月03)

知识点	高考考频	掌握率 本校	掌握率 区域	掌握率 1班	考频 本校	考频 区域	考频 1班	详情
误差的大小	10次	68%	68%	68%	10次	10次	10次	查看详情
二元一次不等式的解法	12次	39%	39%	39%	12次	12次	12次	查看详情
认识相反意义的量	12次	70%	70%	70%	12次	12次	12次	查看详情
正负解析	10次	88%	88%	88%	10次	10次	10次	查看详情
三角函数不等式	10次	45%	45%	45%	10次	10次	10次	查看详情

Adaptive Learning – deliver customized resources to address the needs of each learner

自动推荐



Assignment and Assessment analysis

Diagnostic analytics

Predictive analytics

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澳門 濠江中學 HOU KONG MIDDLE SCHOOL

Clustering Patterns & Predict Potential Outcomes

Under-performer

Unstable & Fluctuating in performance

Marginal performer

Learning Analytics - initial result

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Enable defining best Teaching Strategy

Teachers

100% Subject teachers

AGREE

- Can immediately cater **learner diversity**
- Autocorrect & data synchronization

Quality improvement & assurance

Students

Shortening Study Periods:

48% time save

32% less exercise

To comprehend one subject

Predict results for Career planning

Are We Grooming Skills for Future Workforce?

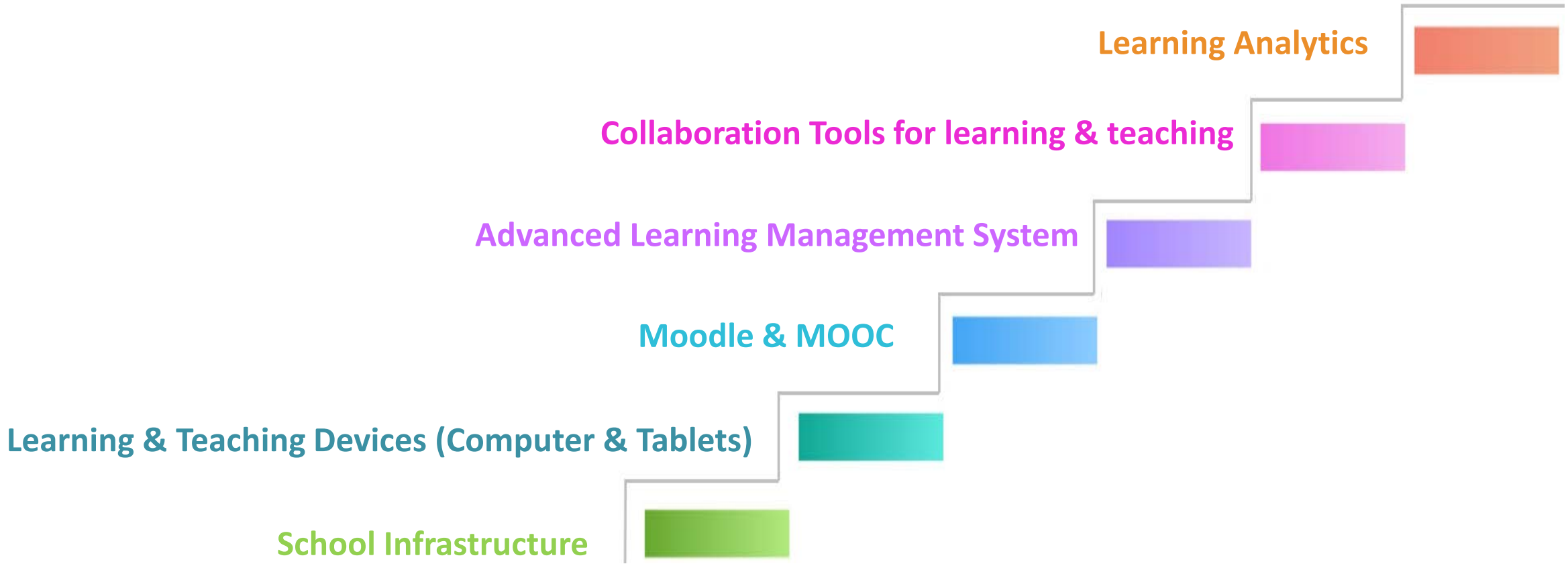
Skills For Future WorkForce

- **Critical Thinking and Analytical Reasoning 批判性思維**
- **Emotional Intelligence 情緒商數**
- **Adaptive Thinking 適應思維**
- **Cross-cultural Competency 跨文化能力**
- **Computational Thinking 運算思維**
- **New Media Literacy 新媒體素養**
- **Transdisciplinary 跨學科能力**
- **Design Mindset 設計思考**
- **Cognitive Load Management 應知負載管理**
- **Virtual Collaboration 虛擬團隊協作**

Sources : Future of Jobs Report 2018, World Economic Forum. TEDxPeddie, Robin Landsman.

Is Current eLearning Model in Hi-Ed Good Enough to Groom Future Workforce?

eLearning Ladder



Be Real, Educate from the Heart, true to yourself and find the courage to "cannonball" into the adventures life offers. Make REAL connections with your students and staff and dare to make a difference.

Tara Martin

You Must be the
CHANGE
you wish to see in the world
Mahatma Gandhi