## Why AICET?

## Associate Professor Ben Leong Director AI Centre for Educational Technologies Singapore

#### ST-SMU Reimagining Universities

#### How the pandemic will change universities

In this last of a four-part series, Senior Education Correspondent Sand Davie talks to Singapore Management University president Lily Kong  $\varepsilon$  the changes that the coronavirus pandemic will bring to universities

Home-based learning set to be regular part of schooling post Covid-19, says Education Minister Ong Ye Kung





Sandra Davie Senior Educatio

PUBLISHED JUN 22, 2020, 5:00 AM:

When the Singapore M year in August, most of will see students altern

But what happens post of their courses online developed a familiarity

SMU president Lily Ko the online medium. **COVID-19 SPECIAL** 

#### How the Covid-19 pandemic forced us to relook education

#### Pamela Lim

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Prior to the pandemic, it seemed that the epitome of a good education was found only in elite schools, augmented by endless after-school enrichment, tuition and supplementary classes.

Many parents believed that the more their children left their homes for academic pursuits, the better their chances of doing well in school.

Then Covid-19 hit and everybody had to stay home.

ased learning (HBL) is set to become al days every month for online learning.

nis video address to school leaders at the (June 25), said that due to the pandemic, ough "an unexpected crash course" in HBL.

e a substitute for school, where there is lls and values transmission, he said that '-directed learning, which is one of the most

**Credit: Straits Times** 



## "Make Lemonades out of Lemons"



### "The teacher is at the heart of improving education."



#### Key Insight

Innovation in education is <u>not</u> a technology problem.

It is a pedagogy problem.



We will adopt a "Pedagogy First" approach to developing and deploying technology.



#### 3 Key Thrusts

- 1. Support the Singapore Ministry of Education in Deployment of AI Platforms
- 2. New and **scalable** platforms to support **(mostly online)** pedagogical innovation
- 3. Education innovations supported by technology

#### S\$10 million over 5 years



### National Al Plan for Education

#### Proof-of-Concept Adaptive Learning System

Let's hear it from Jiunn Huat!



# How can we improve teaching?



#### Approach

- 1. Identify pain points or pressing problems
- 2.Build software to solve the problem
- 3. Validate with users and iterate







## 100 Million students study programming



#### **Problem**

30%

Failure Rate



Reason

Shortage of teachers<sup>2</sup>



Cornell University programming students wait for 2 hours to seek clarifications <sup>3</sup>

1. Source: A new account of outcomes in CS1, Computer Science Education

2. Source: College of Education 2021 Impact Report

3. Source: Keynote by Sumit Gulwani, IJCAI-ECAI 2022





#### Work-in-progress:

# Adaptive Chatbot for Teaching



#### Work-in-progress:

# Plagiarism checking in the era of ChatGPT



## Turing Test for Teachers



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Teacher are at the heart of good teaching and teaching is the business of managing motivation.

We build tools that help teachers connect with more students and teach effectively online, so as to increase their reach to many more people and eventually, across geographical boundaries.





## Identify real problems/ opportunities Build Al-based software

Iterate with real users



## Xerox Parc in Education

Focused on helping teachers!



## Thank YOU!

