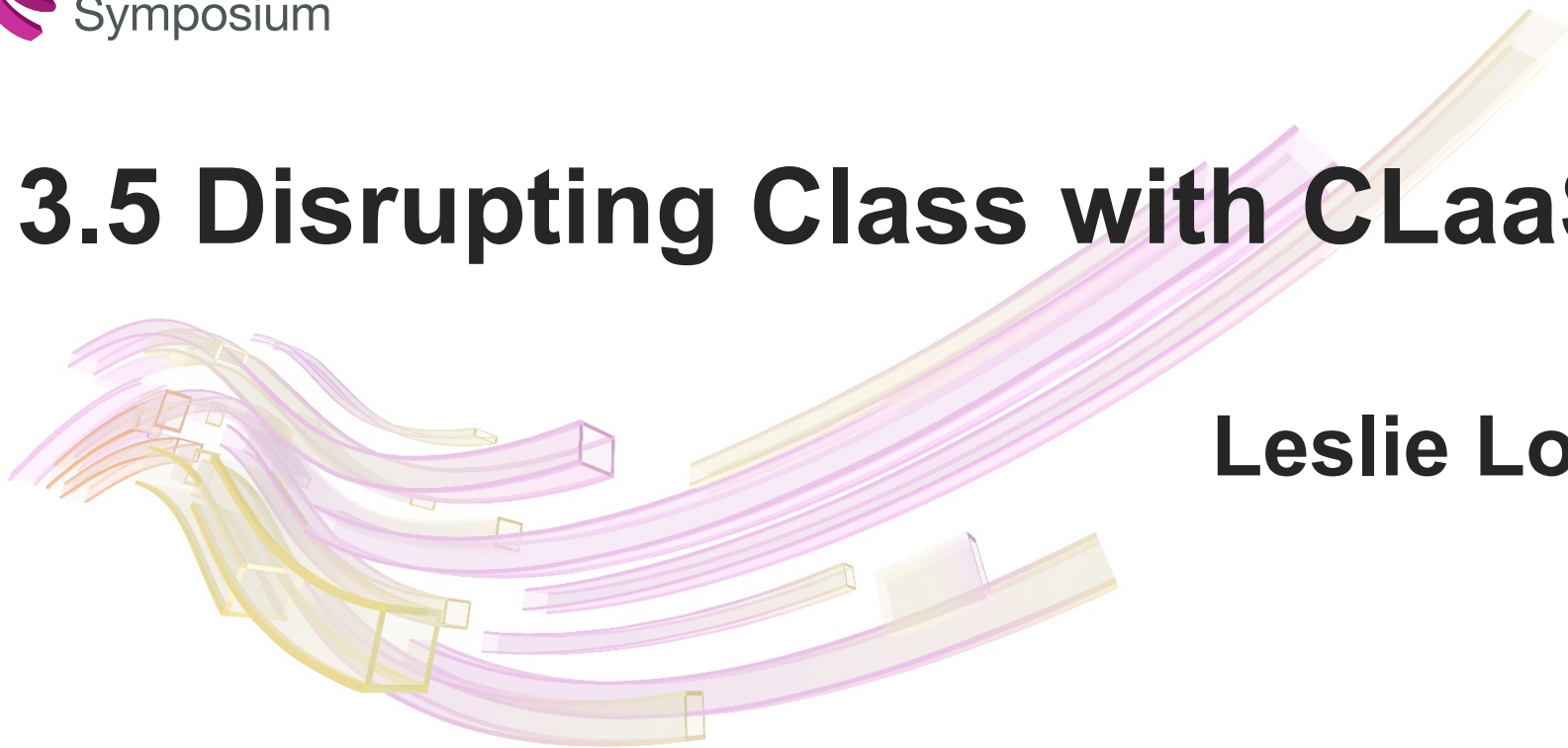


3.5 Disrupting Class with CLaaS

Leslie Loh



Future of Work • Future of Learning

3 - 4 November 2016



Let's go!

TRAINING AND ADULT EDUCATION SECTOR TRANSFORMATION PLAN (TAESTP)

An initiative of

SKILLS*future*



ORGANISED BY:

SKILLS*future* SG

IAL institute for
adult
learning
singapore

Disrupting Class with CL.a.a.S

Leslie Loh
Nov 3rd 2016



Let's go!

**TRAINING AND
ADULT EDUCATION**
SECTOR TRANSFORMATION PLAN
(TAESTP)

- Technology transforming Economy & Redefining Jobs
- Problems with Higher Education & Adult Learning
- Disrupting Class with Learning Innovations
- Future of Higher Education
- Future of Adult Learning
- Workplace of the Future
- Lithan Transformation Narrative



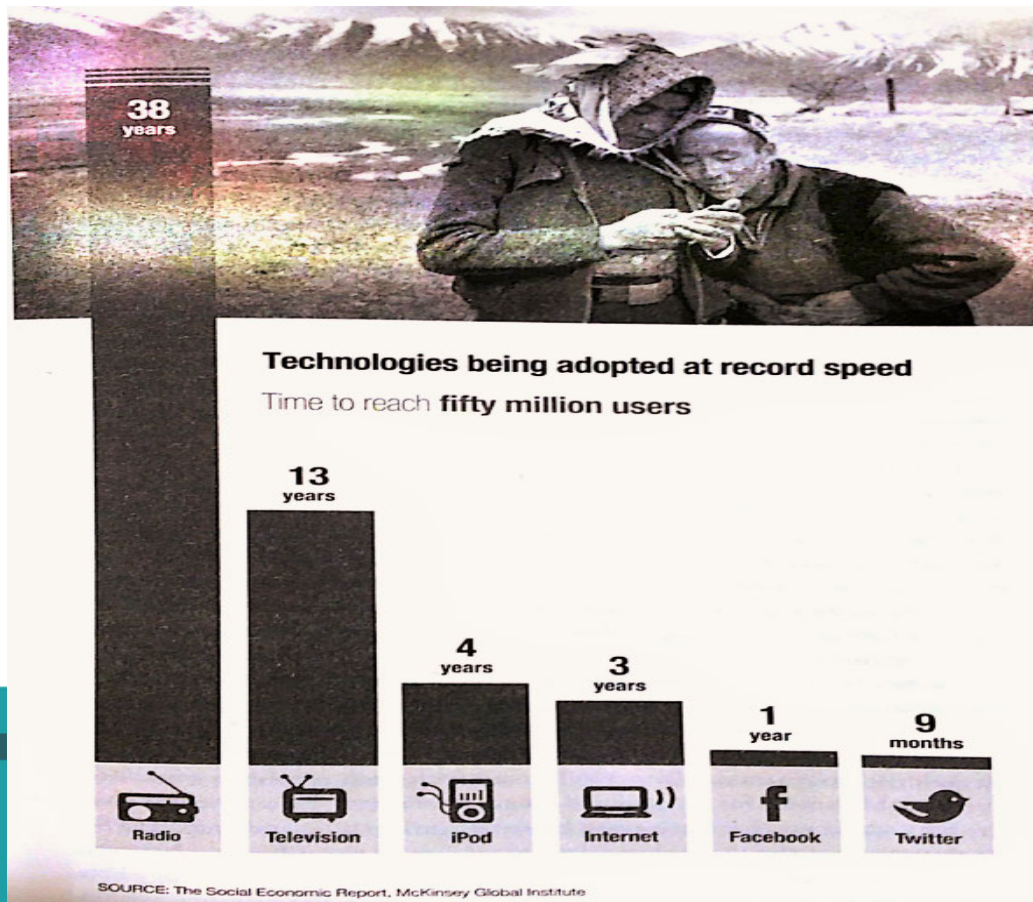
Let's go!

Technology Transforming Economy & Redefining Jobs

A stylized landscape illustration at the bottom of the slide. It features a teal background with a dark teal wavy path. In the background, there are light teal silhouettes of buildings and trees. The text "Let's go!" is written in a white, handwritten-style font with a circular arrow around it.

Let's go!

**TRAINING AND
ADULT EDUCATION**
SECTOR TRANSFORMATION PLAN
(TAESTP)



Let's go!

Digitization transformed the economy in three ways :-

- It converted physical goods into virtual ones
e.g., eBooks
- It enhanced the information contents of many of our routine transactions
e.g., RFID tags to track the movement of goods
- It created online platforms and business models that enabled small startups to become micro-multinationals

- Online platform e.g., eCommerce, Digital Market Place
- Sharing economy e.g., AirBnB, Uber, Icarsclub
- Cloud services e.g., SaaS, CLaaS
- Crowdsource everything e.g., Investors, Customers, etc

LITHAN Technology Redefines Jobs

- If Moore's law applies to employment, workers will need to master new sets of technology tools (web, social media etc.) every two years or so
- Mckinsey – 60 % of future jobs would have more than 30 % of activities automated by technology
- Growth of “freelancer” or “Gig” Economy

Value Creation vs Value Addition

Thinker & Maker

“T” - shaped Multidisciplinary skills

Tech & Innovation skills are Core future skills

Major Occupational Group		Percent of Total Employment	Percent Displaced Within Group
11-0000	Management	6%	41%
13-0000	Business and financial operations	3%	32%
15-0000	Computer and mathematical science	2%	21%
17-0000	Architecture and engineering	2%	11%
19-0000	Life, physical, and social science	1%	10%
21-0000	Community and social services	2%	36%
23-0000	Legal	1%	6%
25-0000	Education, training, and library	6%	74%
27-0000	Arts, design, entertainment, sports, and media	2%	50%
29-0000	Healthcare practitioners and technical	5%	10%
31-0000	Healthcare support	2%	29%
33-0000	Protective service	2%	16%
35-0000	Food preparation and serving related	8%	88%
37-0000	Building and grounds cleaning and maintenance	4%	78%
39-0000	Personal care and service	3%	81%
41-0000	Sales and related	11%	93%
43-0000	Office and administrative support	17%	90%
45-0000	Farming, fishing, and forestry	1%	43%
47-0000	Construction and extraction	5%	39%
49-0000	Installation, maintenance, and repair	4%	12%
51-0000	Production	7%	53%
53-0000	Transportation and material moving	7%	64%
Total		100%	60%

Source: Stuart Elliot, National Research Council, *Projecting the Impact of Computers on Work in 2030*, May 2007

Problems with Higher Education & Adult Learning

- Academic education do not deliver work-ready graduates
 - 96% of college provosts in the US believed that they have successfully prepared students for the workplace but only 11% of employers felt so (Gallup Survey)
- Vocational credential not internationally recognized

ARE FORMAL TRAINING PROGRAMS A POOR ROI?

The cost to have
1 HOUR of formal
learning available is
\$1,798



In just 1 week people
FORGET 70%
of what they learned in a
formal training program.
In 1 month, they will have
FORGOTTEN 87%



In other words, money spent
on quickly-forgotten
information
IS WASTED,
and could even result
in employees leaving.



8 IN 10

employees will leave an
organization if they don't
receive the right training to
perform their job effectively



Let's go!

**TRAINING AND
ADULT EDUCATION**

SECTOR TRANSFORMATION PLAN

(TAESTP)

- Silo and proprietary pathway for university, polytechnic and vocational education respectively
- Limited credentials interoperability inhibit flexible learning pathway for developing multi-disciplinary talents who are “Thinker”, “Designer” and “Maker” all roll into one

Disrupting Class with Learning & Business Model Innovation

Global Access
By Millions

With almost
no cost



coursera



edX



UDACITY



KHANACADEMY



udemy



- One size does not fit all
- Need personal intervention eg., coaching

LITHAN Learning Mass Customization

- Digitalization + Pedagogy = Massification + Personalization
- Mass Customization via Collaborative Learning



Multi-Disciplinary Applied Skills

Just Enough Just In time Learning

Career Enhancement

Competency Curriculum
Work Integrated Learning

Non-invasive
Personalized

Work Place Skills Mastery
Credential interoperability

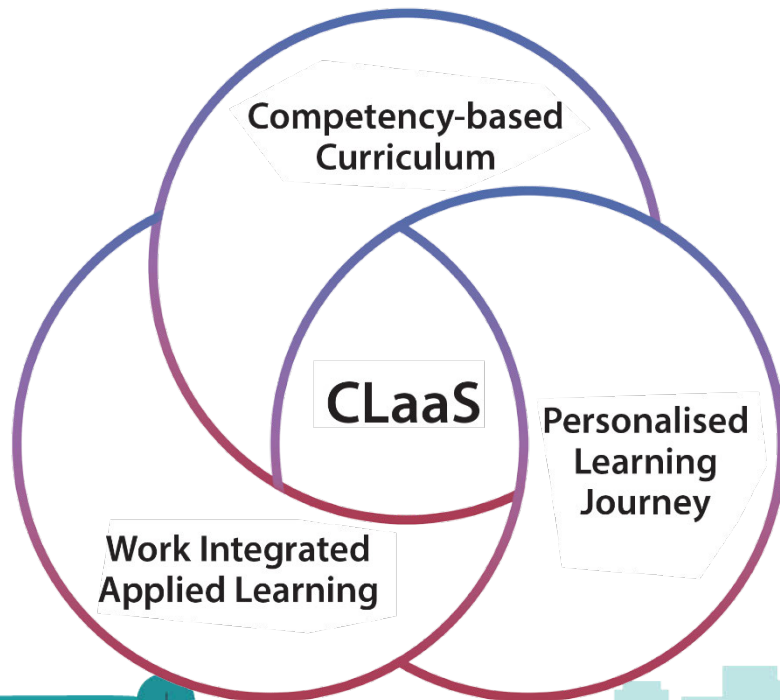
Knowledge Supply

Classroom Delivery

Academic Credential



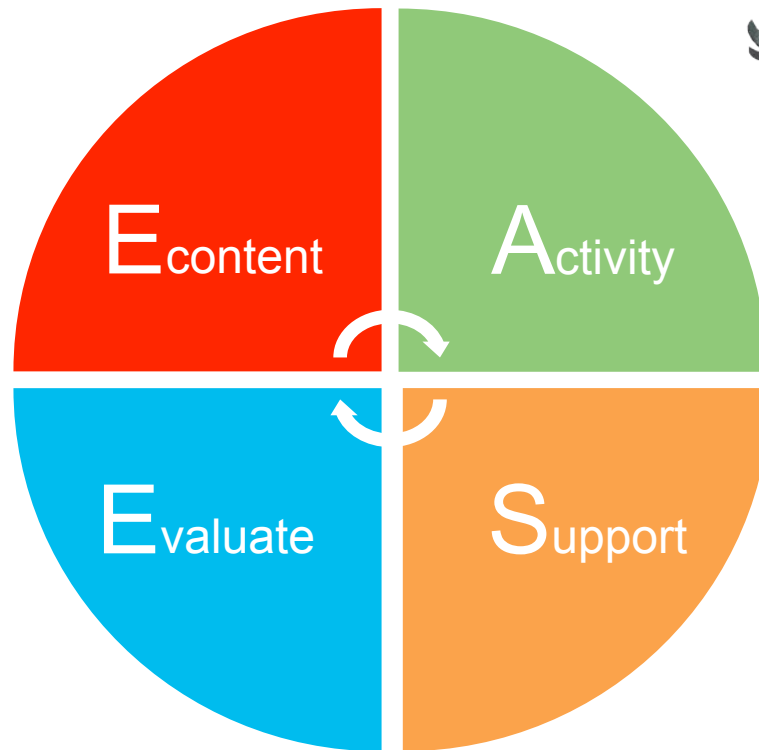
On Demand Learning & Mentoring



- Competency-based curriculum with accreditation to skills framework to deliver multidisciplinary skills & competencies outcome for specific job
- Interoperable Credential
 - Accredited Singapore WSQ Competencies framework
 - Cross accreditation for academic pathway to 50 universities in UK and Australia

From Classroom to Work Place Skills Utilization





Non-invasive Personalized Blended Learning Anytime, Anywhere



More than just a training provider

Applied learning pathway for Undergraduate

Lifelong Learning & Career progression for Professionals

Outsource Talents & Training provider for Enterprises

Learning-to-job-enhancement Outcome as our mission

Systems Management

- System Management
- IOT

Software Engineering

- Software Development
- Big Data & BI

Business IT

- ERP
- CRM
- eCommerce

Entrepreneurship & Innovation

- Entrepreneurship
- Sales & Marketing
- Innovation Management



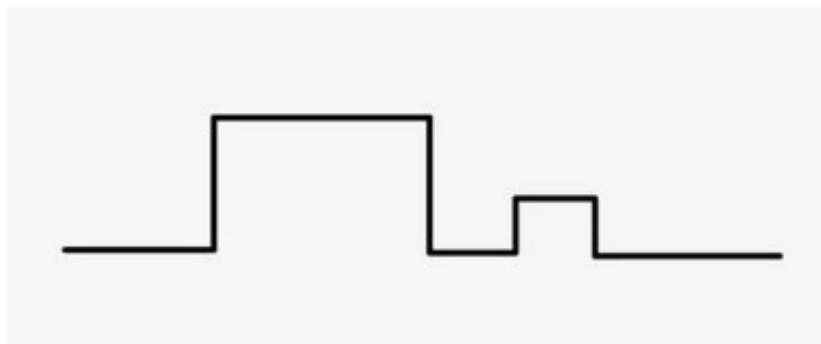
Future Of Higher Education



Let's go!

**TRAINING AND
ADULT EDUCATION**
SECTOR TRANSFORMATION PLAN
(TAESTP)

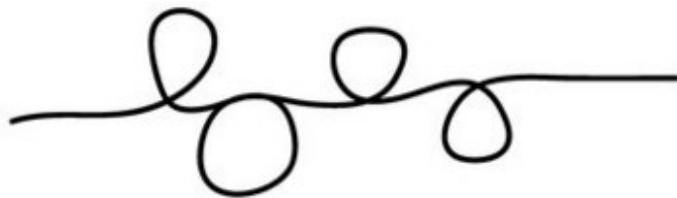
Students received four years of college education, front-loaded at the beginning of adulthood



- 4 years during ages 18-22
- Formal learning occurred in the classroom only
- Limited access to academic setting later in life
- Students needed to prove ability by age 18 to be accepted
- Alumni returned to campus occasionally for selected events

Source: www.stanford2025.com/open-loop-university/

Students receive a lifetime of learning opportunities



- 6 years over a lifetime
- Knowledge was obtained across classrooms and practical settings
- Seasoned adults returned to pivot careers and reconnect with community
- Students began studies at a range of ages
- Populi returned as expert practitioners and enriched campus life

Source: www.stanford2025.com/open-loop-university/

- Asian's aspiration for degrees produces excessive number of university graduates not ready for the workplace
- In 2014, Singapore announced SkillsFuture initiative with annual investment of S\$1B to deliver an applied education system
- In 2014, China announced that 55% (640) of their academic universities (1145) will become Universities of Applied Sciences
- In 2015, Malaysia Education Blueprint was launched recognizing the growing important of skills based learning and technology

- No “either” “or”
- Applied + Academic = Skills + Transferable knowledge
- Toward cross fertilization between academic education and applied curricula

WEB DEVELOPMENT APPLIED LEARNING PATHWAY

6 months full-time on campus, immersive skill-based learning

6 months full-time apprenticeship for skills application

12 months integrated study and work pathway
50% learn & work
50% work & learn

12 months academic learning

Lithan BTEC HNC
in Web Development
(9 months)

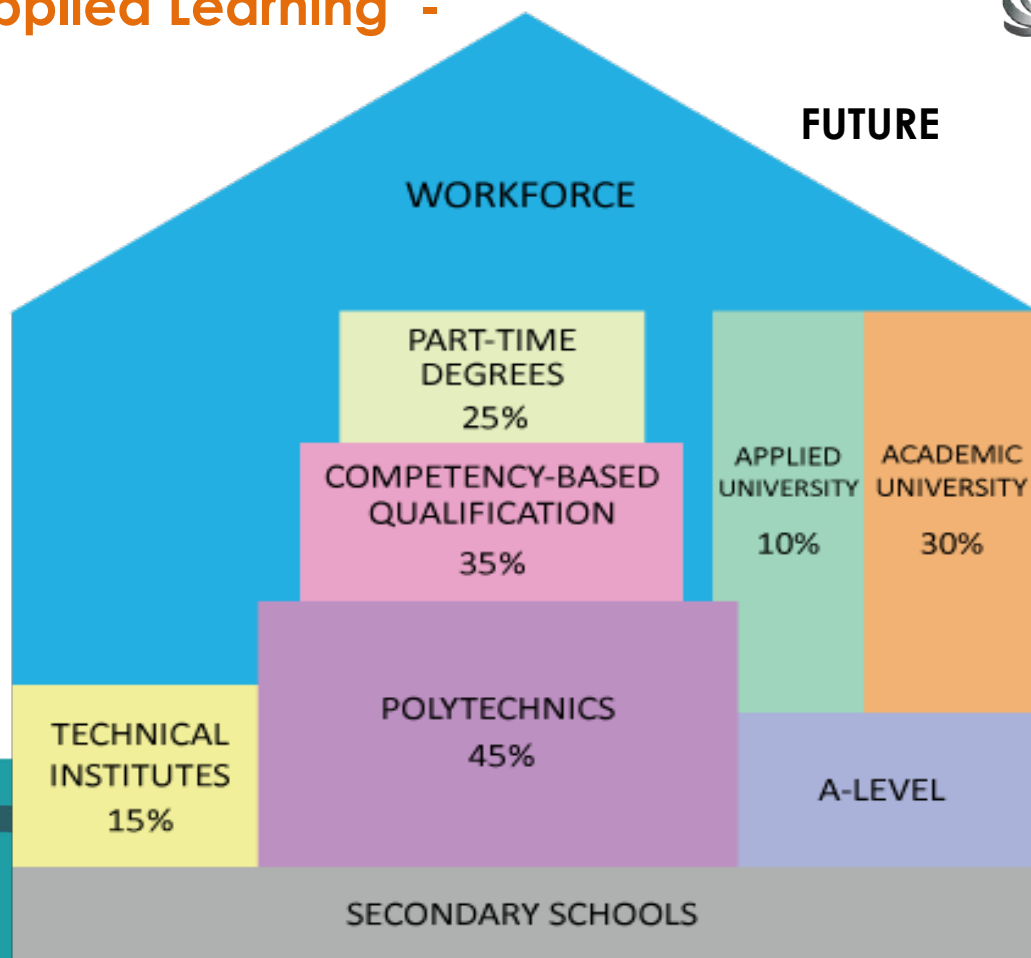
Lithan BTEC HND
in Web Development
(12 months)

Bridge to VU
(3 months)

VU or Top-up degree with 50 UK/
Australian Universities
(12 months)

7 LEARNING CAMPUSES IN SINGAPORE, MALAYSIA, MYANMAR, INDIA, CHINA

FUTURE



Let's go!

- “A” level, Polytechnic & ITE Graduates unable to enter our top-ranked public universities
- Study & Work Internationally to a Global Digital Career
- To achieve better Return on Investment & Learning Outcome than graduates from our top-ranked public universities
 - Get hired before they even graduates
 - More than 83% secure fulltime jobs within 6 months
 - Higher than S\$3,200 monthly salary

Future of Adult Learning



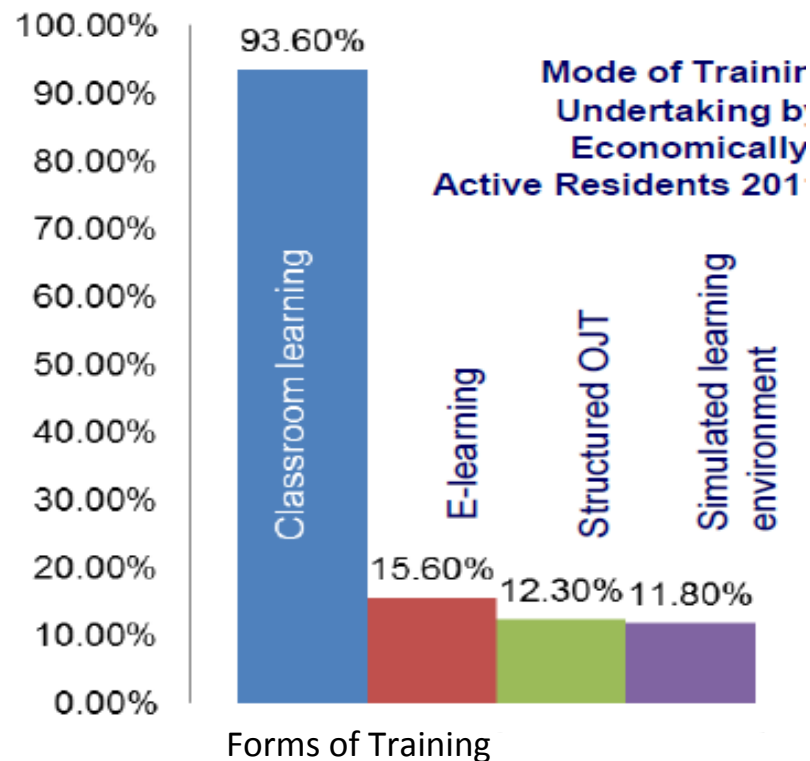
Let's go!

**TRAINING AND
ADULT EDUCATION**

SECTOR TRANSFORMATION PLAN

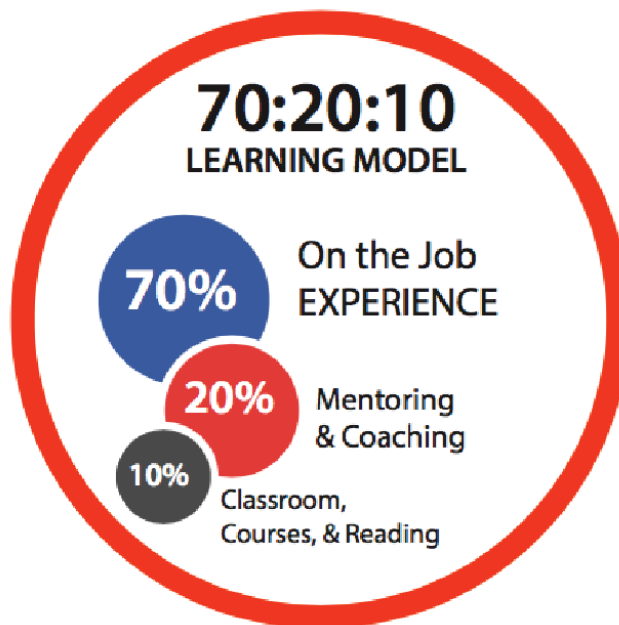
(TAESTP)

- Weak outcomes for both employers and individuals
- Time invasive to both employers & individuals
- Weak link in bridging learning to performance



Source: MOM Occasional Paper (2011)
Source: TAE Sector Survey (2014)

Let's go!



Open learning architecture where bite-sized learning components can be arranged and assembled just like LEGO bricks to form personalized learning journey

- What – Competency delivery with EASE
- When – Own Pace Own time
- Where – On Campus, Workplace or Anywhere
- How – Personalized Mentoring & Peer2Peer Learning

The Workplace of the Future

Traditional Learning

Workplace Learning

Store Knowledge

Find Knowledge

Learning Events

Continuous Learning

Learning by Knowing

Learning by Doing

Just in Case

Just in Time

For Everyone

For the individual

Learning Enabling Work

Learning as Part of Work

Formal (10%)

Formal and Informal (70:20:10)

© 2015 70:20:10 Forum Pty Ltd

- Latent talents (Train & Place) Sourcing
- Variable Workforce
 - Skilled Apprentice
 - Mentors on demand

Competency
Learning
as a Service
(CLaaS)

On demand Curriculum
On demand Mentors
On demand Technology

Workplace
Learning
Consulting

Workplace Learning Plan
OJT Blue Print
Learning facilitation

Let's go!

Lithan Transformation Narrative



Let's go!

**TRAINING AND
ADULT EDUCATION**
SECTOR TRANSFORMATION PLAN
(TAESTP)

Focal Area 1:

Reposition TAE provision for growth opportunities

Strategy 1:
Identify new opportunities**Strategy 2:**
Support business competitiveness**Strategy 3:**
Establish outcome measurement for learning-to-performance effectiveness

Supported by

Infrastructure and Systems**Focal Area 2:**

Strengthen infrastructure and systems for operational efficiency and business excellence

Strategy 4:
Strengthen training management to support business model**Strategy 5:**
Strengthen learning infrastructure and systems to support innovative solutionsManpower and Skills**Focal Area 3:**

Address emerging manpower and skills

Strategy 6:
Manpower resourcing for evolving and new TAE job roles**Strategy 7:**
Deepen critical skills sets through capability development and professionalisation

- New Customers
 - Higher Education
 - Enterprise Learning

- New Geography
 - Myanmar
 - Malaysia
 - India
 - China

Learning Innovation

- Competency Learning as a Service (CLaaS) deliver scalable personalized blended learning without boundary
- Skills based learning pedagogy using real world or simulated projects to deliver skills utilization at workplace

Business Innovation

- New services eg talents sourcing & workplace learning
- Uberized faculty to deliver mentoring on demand

- Learning-to-performance Outcome as our differentiator
- Learning journey & Relevant to Jobs Enhancement Measurement
 - Independent certification of WDA level 4 survey outcome for qualification for Public sharing & Branding
 - Public sharing of learners comprehensive satisfaction rating on their learning journey and outcome

Real time Assessment Management + Advance Learning Analytics
= Effectiveness Training Management

- Total Learning Effectiveness
 - Online/Offline Contents
 - Delivery Quality
 - Learning environment
- Real time 360% Assessment
 - Peer2Peer collaborative assessment eg Learners, Faculty, Producer
 - End-to-end journey assessment eg Online, Offline, Support, Evaluation

- Learners & Community Engagement
 - Online Community learning Portal
 - Online applications & enrollment system
 - Customers Experience Management
- Training Operations Management
 - Training Management System
 - Learning Management System
 - Assessments Management System
 - Learning Analytics
- Financial & Talents Management
 - Financial Accounting System
 - Talents Management System
- Open Learning Technology Infrastructure
 - Video/Audio Recording Studio
 - Online learning infrastructure

- Multidisciplinary TAE Job Role
 - Product/Programme Producer
 - Curriculum Designer/Developer
 - Learning Facilitators/Mentors
 - Workplace Learning Consultant
- Uberized workforce
 - Learning Facilitators
 - Mentors

Thank You

Let's go!

**TRAINING AND
ADULT EDUCATION
SECTOR TRANSFORMATION PLAN**

(TAESTP)



leslie@lithan.com

