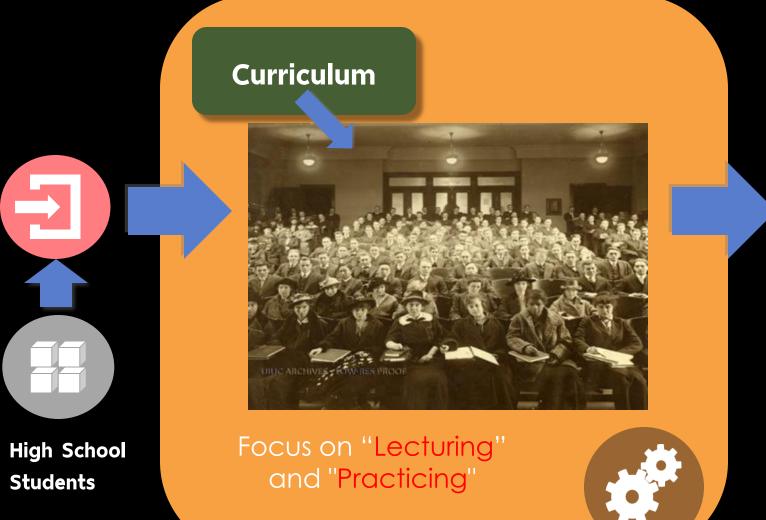






we currently operate our university using ... 19th Century education system

Higher Education System (now)



Professional
Degree
(EMPLOYMENT)

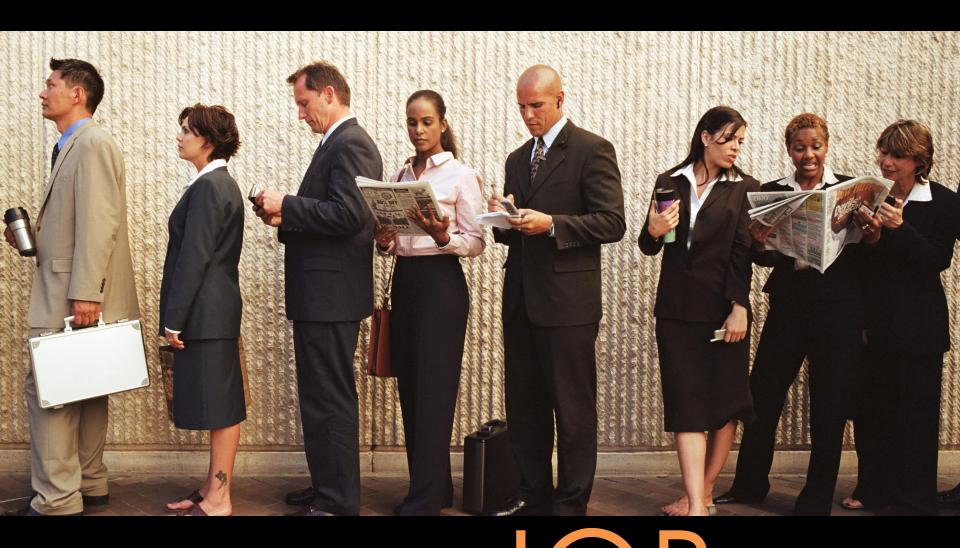




job markets





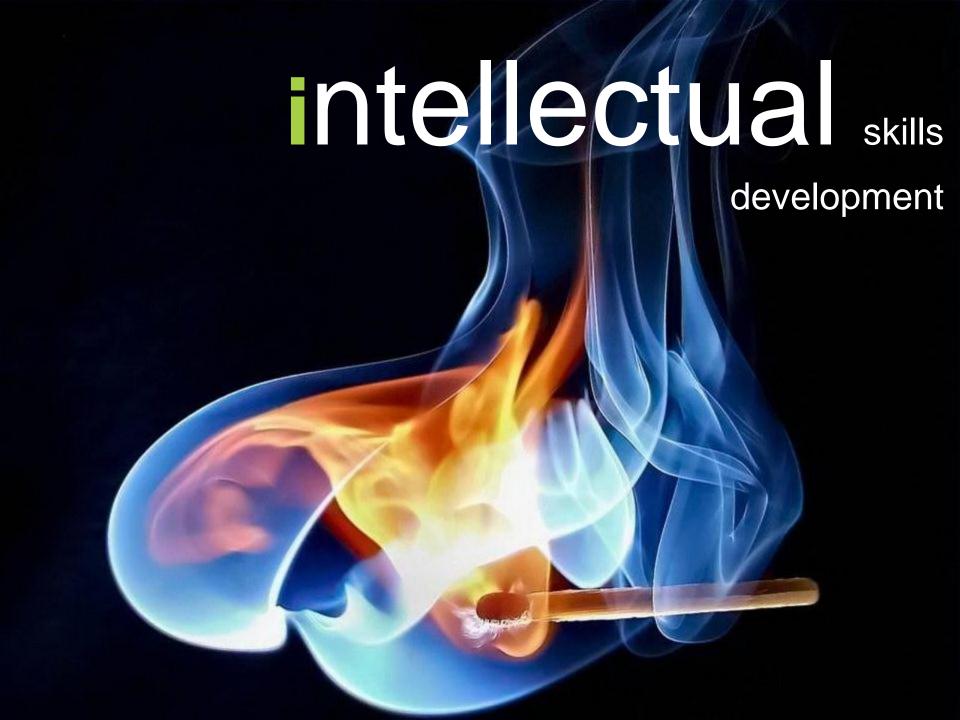


education for JOB

student



this is what we have been doing...



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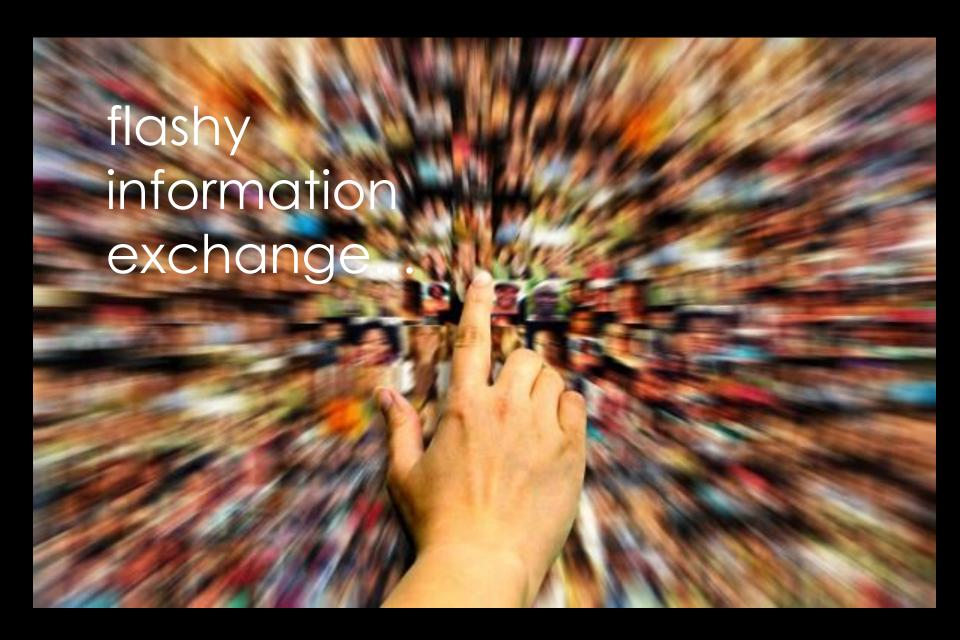
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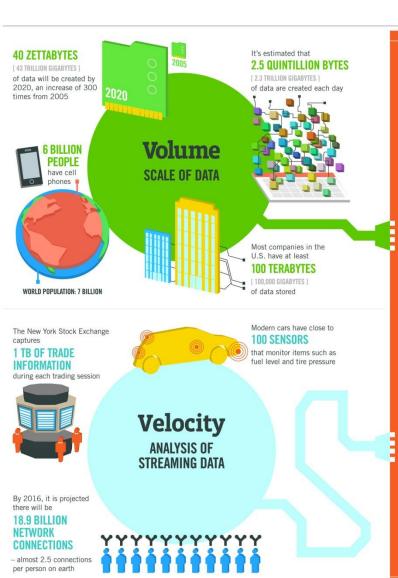
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the world in digital age (the 21st century):







The FOUR V's of Big **Data**

break big data into four dimensions: Volume. Velocity, Variety and Veracity

4.4 MILLION IT JOBS



As of 2011, the global size of data in healthcare was estimated to be

150 EXABYTES

[161 BILLION GIGABYTES]



30 BILLION PIECES OF CONTENT are shared on Facebook every month

Variety DIFFERENT

FORMS OF DATA

HOURS OF VIDEO are watched on YouTube each month

4 BILLION+

By 2014, it's anticipated

WEARABLE, WIRELESS

HEALTH MONITORS

there will be

420 MILLION



are sent per day by about 200 million monthly active users



don't trust the information they use to make decisions



in one survey were unsure of how much of their data was inaccurate



Poor data quality costs the US economy around \$3.1 TRILLION A YEAR



Veracity UNCERTAINTY

OF DATA



Sources: McKinsey Global Institute, Twitter, Cisco, Gartner, EMC, SAS, IBM, MEPTEC, QAS



content before the digital age (then):



content in the digital age (Now):

itanni

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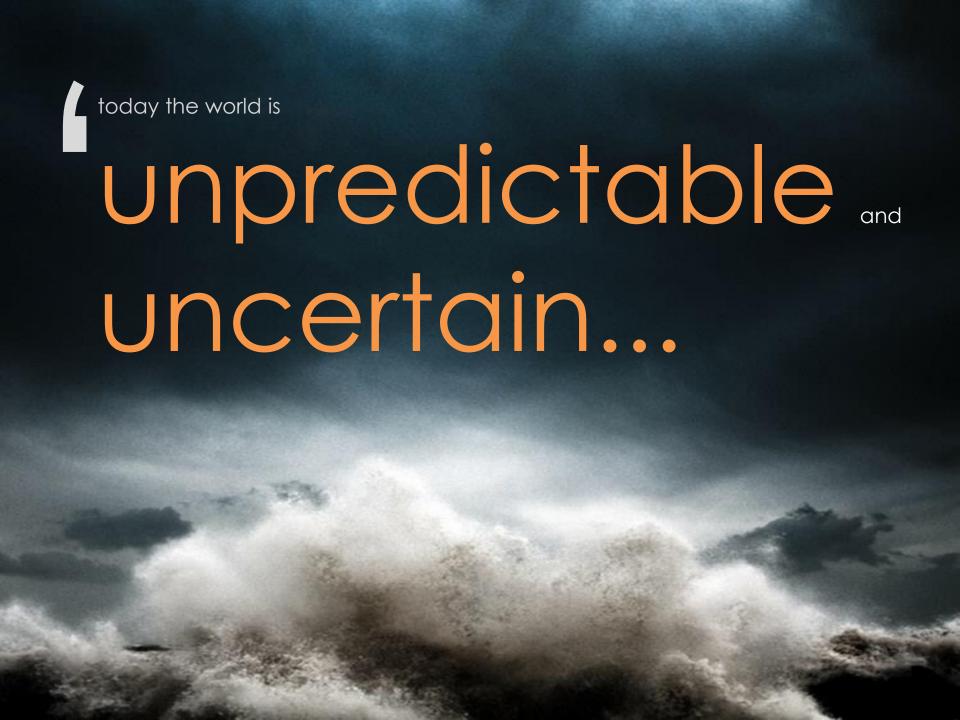
XXXX-X Date: 26-10-2014

MICROPÆDIA

Knowledge has shelf life...



the rapidly changing world...







in the 21st century, higher education will deal with the:

UNKNOWN jobs, technologies, and problems...

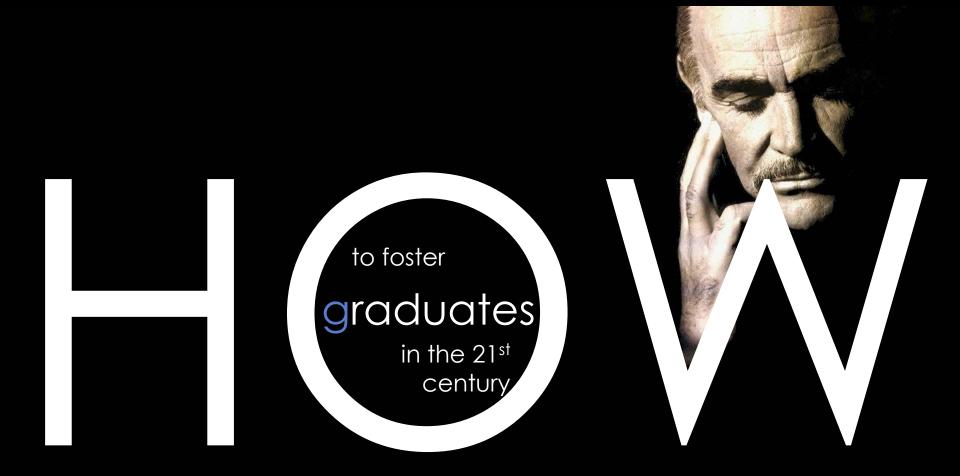
so we will be running an ...

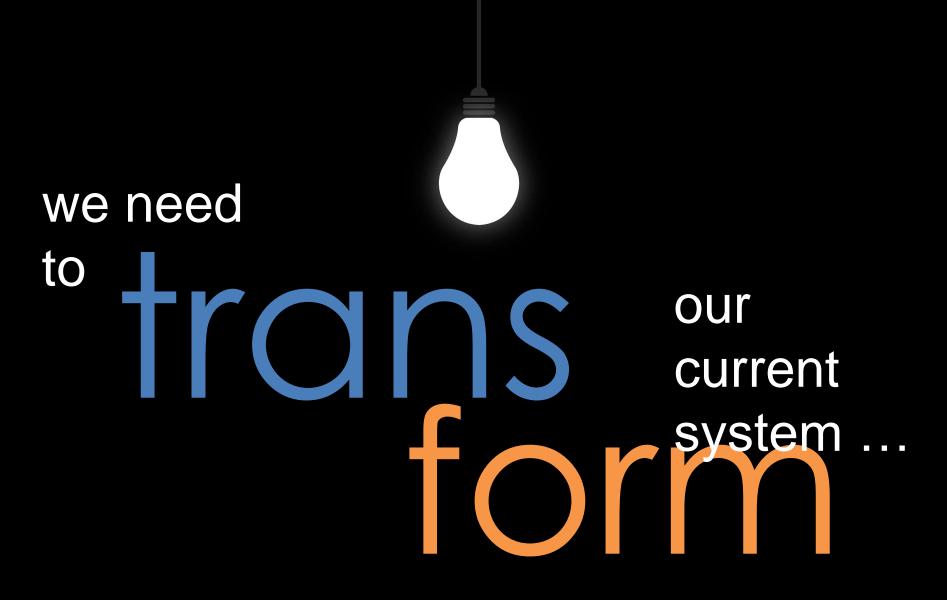


"blindfoldin

G" higher education

challenges facing the higher education the 21st education the 21st







do something



p p e n s

guarantee

can we

employment of our graduates...

contents and specific skills

won't help our graduate to survive



ment

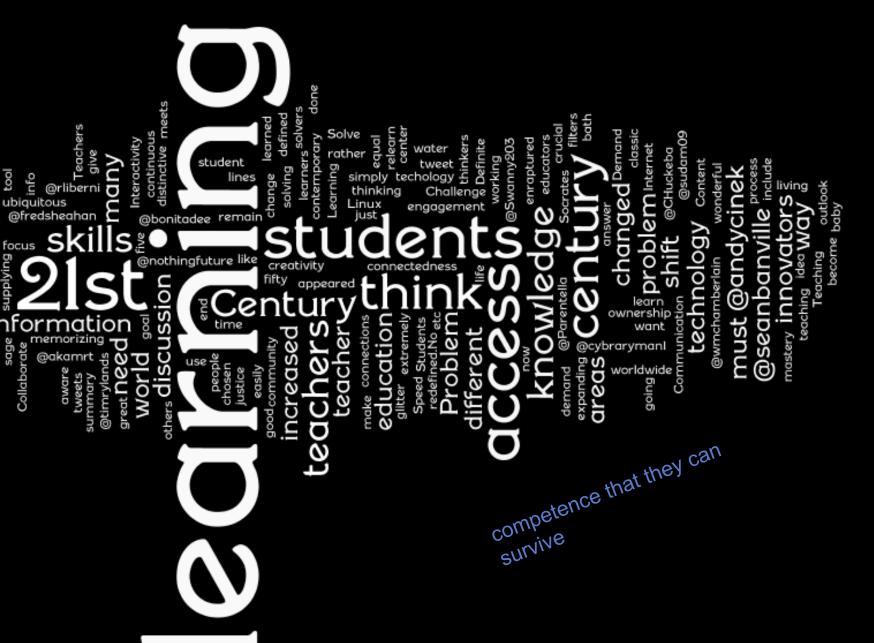


employ



employ





tool

focus

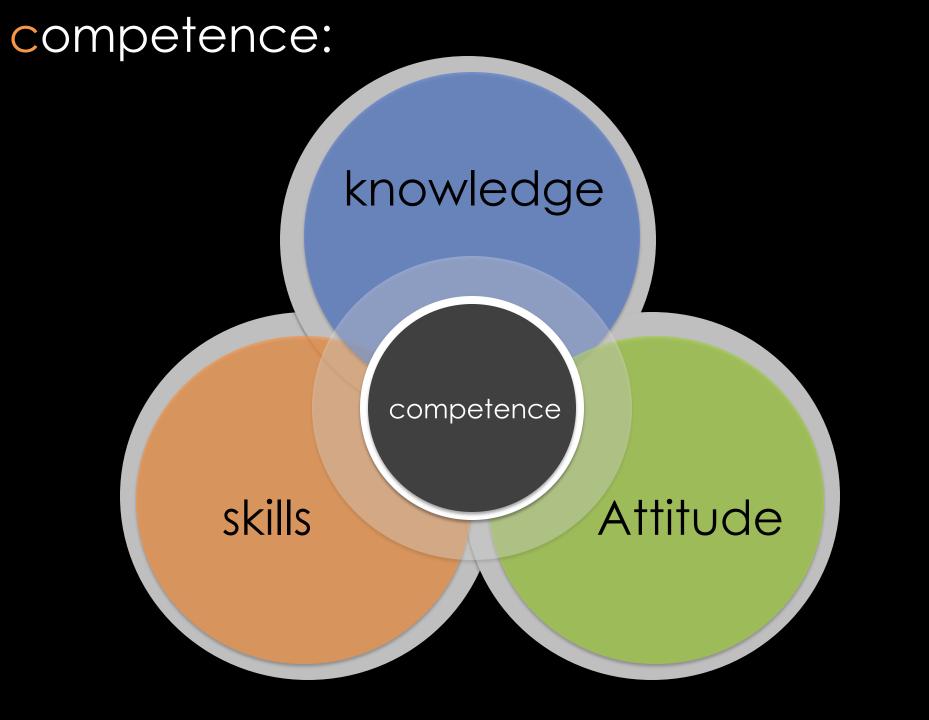
@openstudy always

supplying

sages

Collaborate

opportunities therefore



Competence based higher education system ...

communicate on-exis career

HE in digital age must help students:



new set of competence is needed to survive in digital age ...

numan development

higher education is:



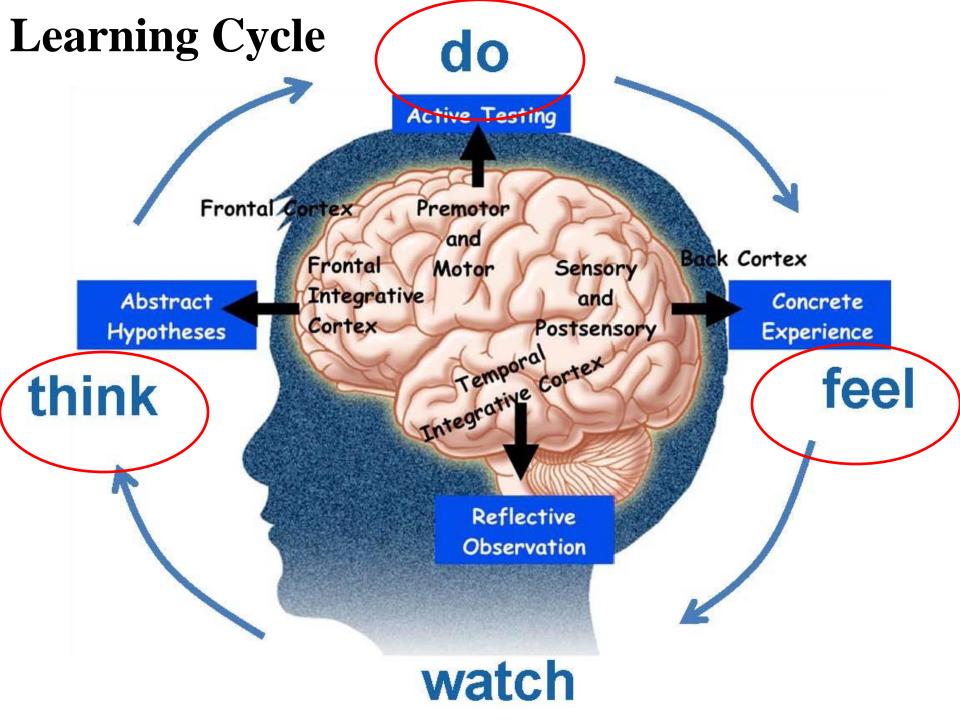
TEACHing process to help them

LEARN



"การเรียนรู้เป็นกระบวนการ เปรียบเสมือนการเดินทางที่ ต้องทำด้วยตนเอง...

ไม่ใช่สิ้นสุดที่การถ่ายทอด จากอาจารย์สู่ศิษย์



ditch out the lecture (broadcasting

information) inside classroom





competence is abstract ...



is called

Learning Outcome

student must learn how

to:

UNDERSTAND and be able to

DO...

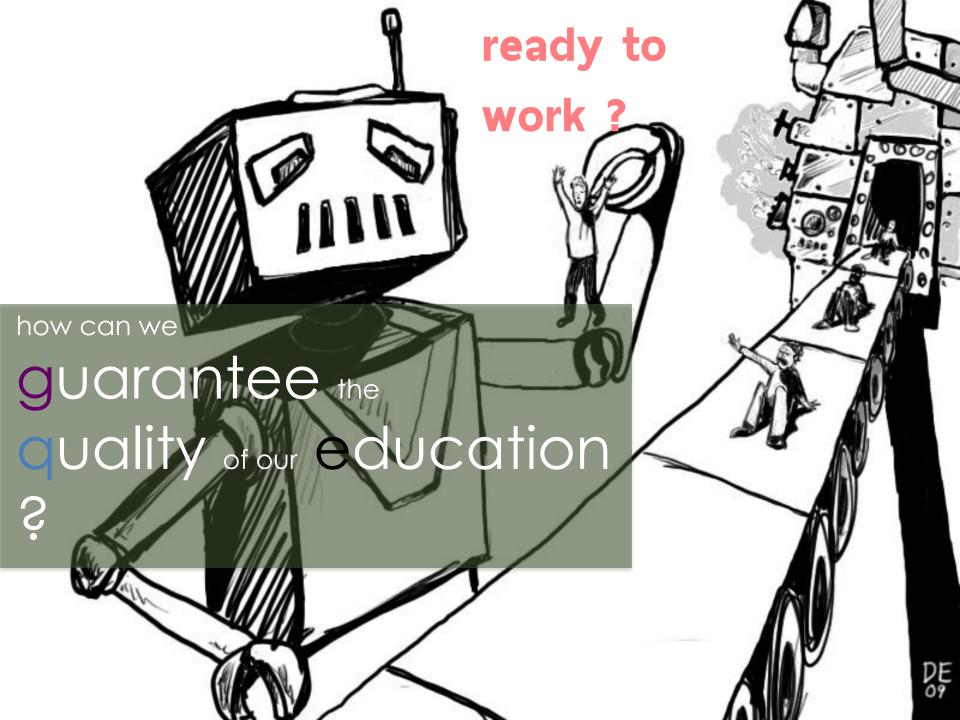


shift from define

Teaching Objectives to

define

Learning Outcomes



shift from Variable to Fixed Outcome

- How can we facilitate them to achieve them?
- How can we close the gap?
- How do we know whether our students have achieved them?
- How can we guarantee the learning outcomes of our students?



can we embed

this process into our

education?...











shift from

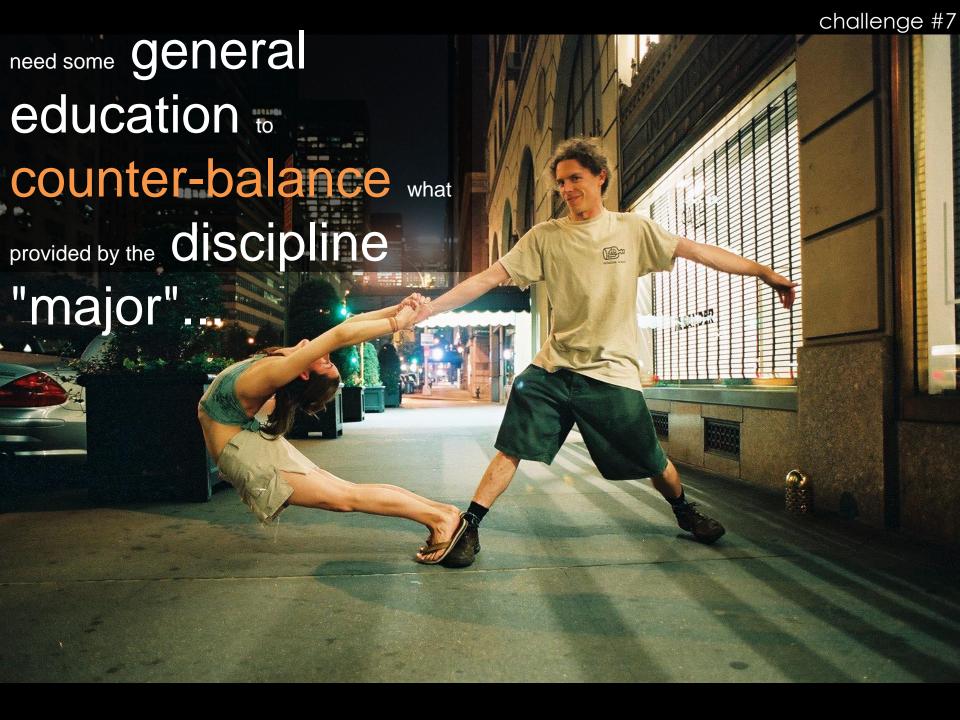
Standardize to ndividualize Curriculum

student needs to learn to

majors or specializations Manpowe

make human be a truly scholar (educated person)...

well-educated manhood



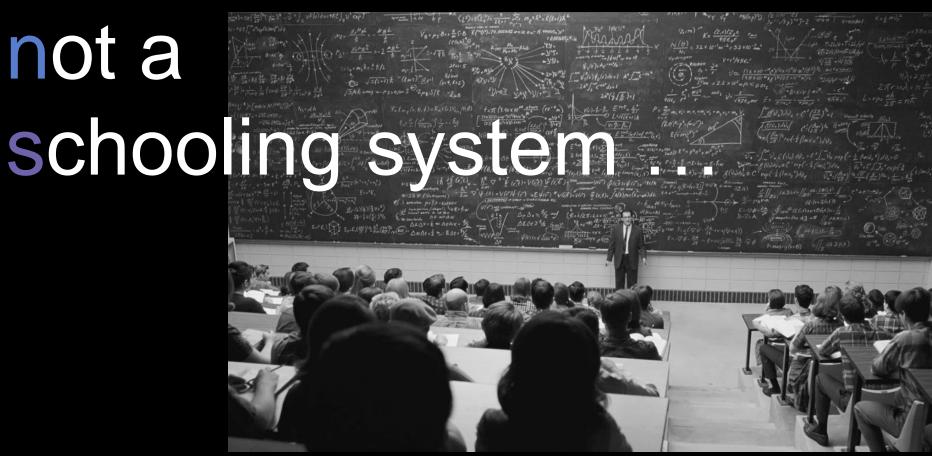
to comply with all those challenges higher education needs...





a new HE framework to foster s & t students for the 21st century ...

not a



KMUTT 3.0



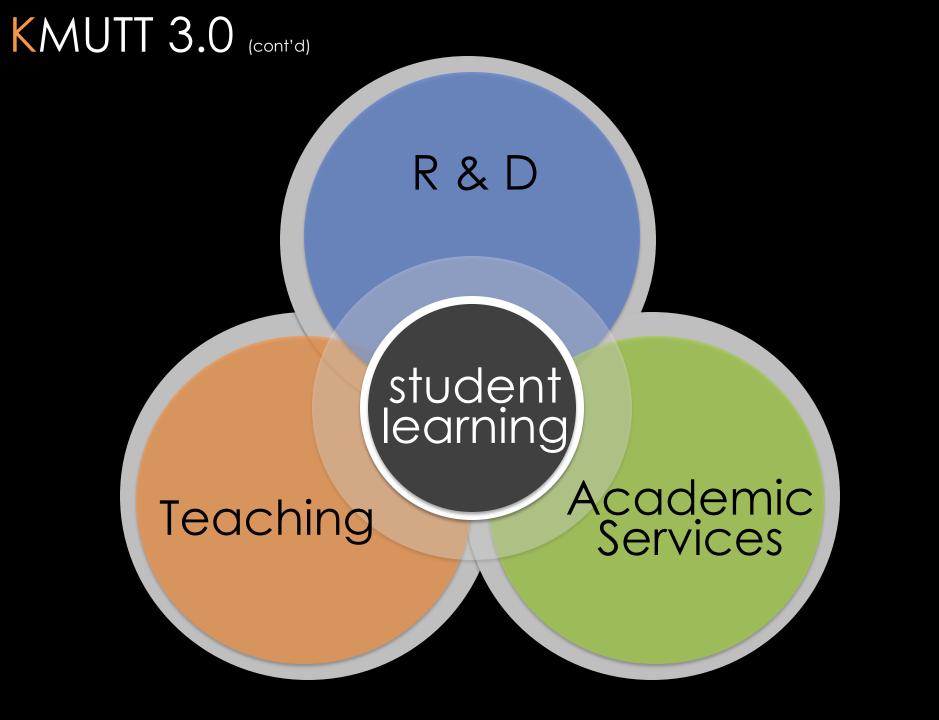
human development with:

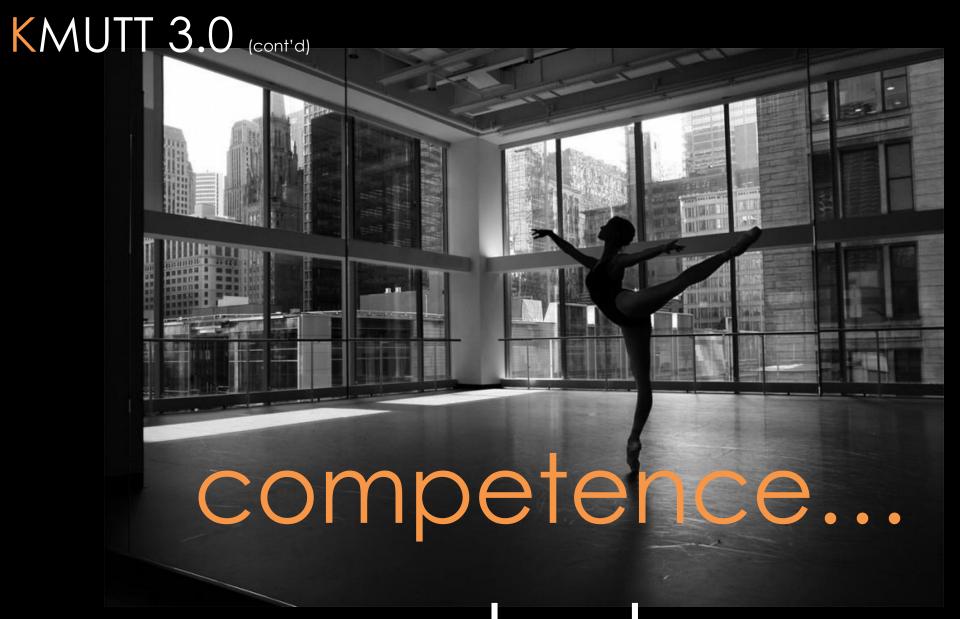




KMUTT 3.0 (cont'd)



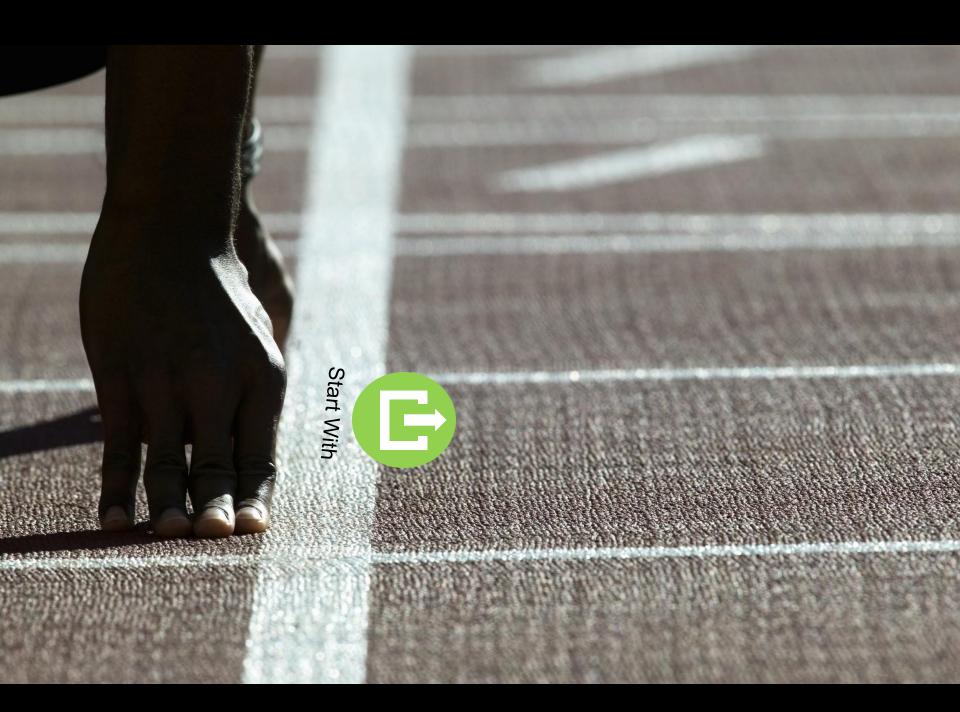


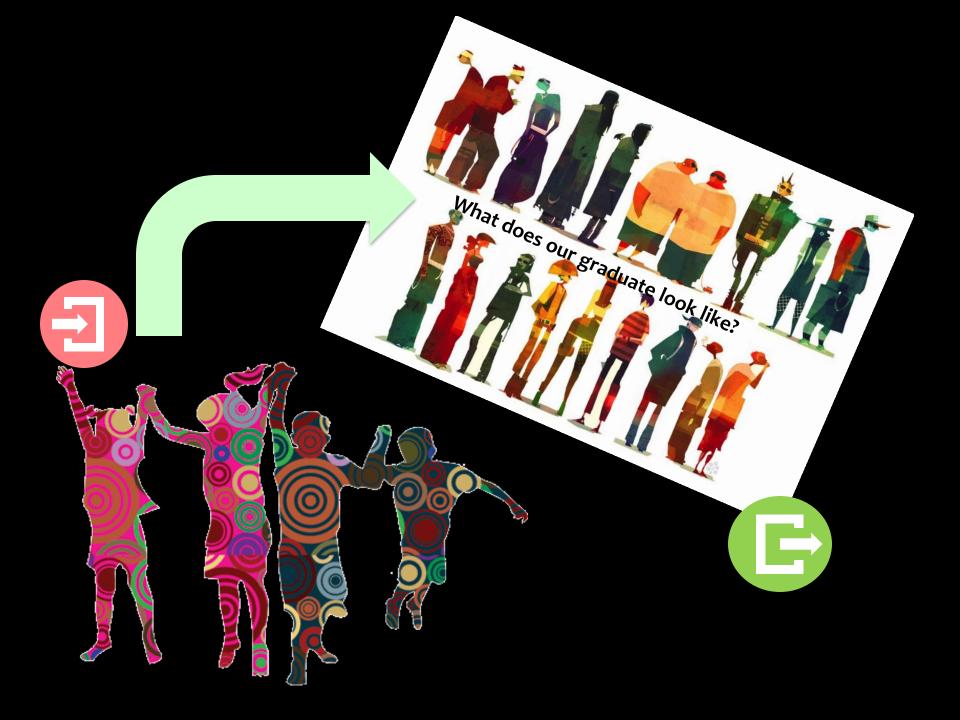


shift the focus from Content to

earning outcomes can be easily cefine if we know exactly what the graduate looks **E** at the end of program ...

backward curriculum designed ...





our stakeholder is shifted from industry to society.

but preserve our substance

. . .

ENGINEERIN



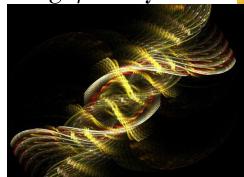
DNA of IMAGINEER

Social Attributes



Liberal Arts

Design/Beauty



IMAGINEERING

STEMLA²

Basic DNA



STEM









Launching Tomorrow's

Social Change Agent (Imagineer)

"Fostering quality learning attitude for personal development towards leadership in the 21st Century Society"



KMUTT Student Profile

Goal:

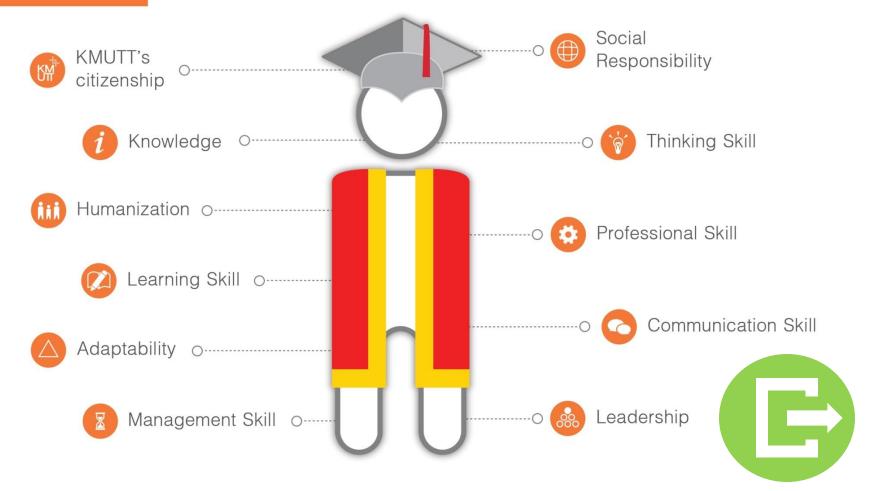




KMUTT 3.0's Qualification Framework

THE KMUTT GRADUATE

Upon completion of studies at KMUTT, students will gain the following skill sets and attributes in addition to their academic qualifications.



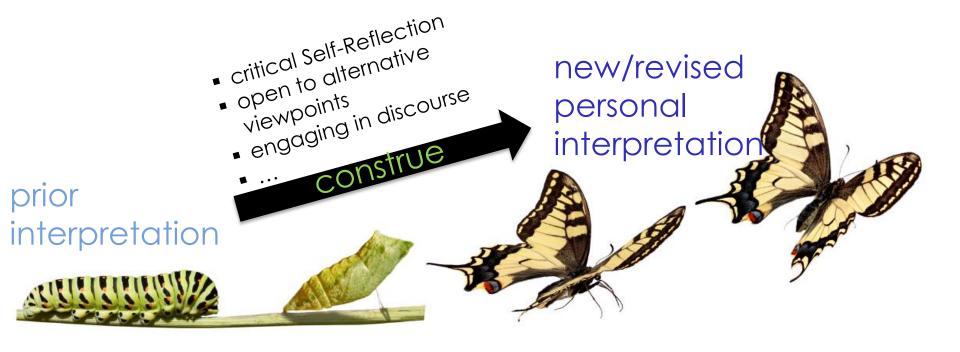




TEACHing process to help them

LEARN

to TRANSFORM...









Curriculum

Integrated and Modular Curriculum

Research/Work /Service Integrated Learning





Advance Subjects for each Discipline



Service Learning

Core Subjects for each Discipline





Cross – Culture Exchange

Foundation Year:
Introduction to
Science,
Engineering, Design
,Scientific
Knowledge,
General Education



English Proficiency,
Professional and Personal and
Interpersonal Skills/Attributes











High Scholl Student Profile

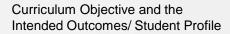


Feel/Why

Knowledge/What

Do/Hew

Design Learning Activities, and Teaching System (Teaching and Assessment methods)





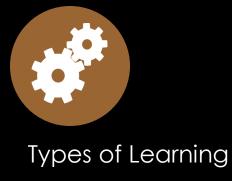


"Lecturing"



"Hand On"







"Exploring"





"Constructing"

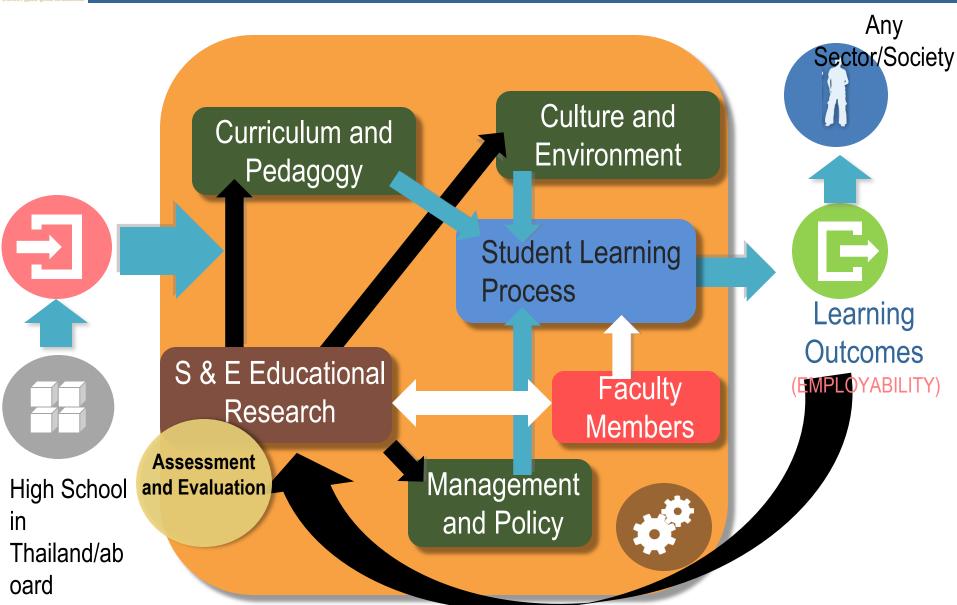


Types of Learning



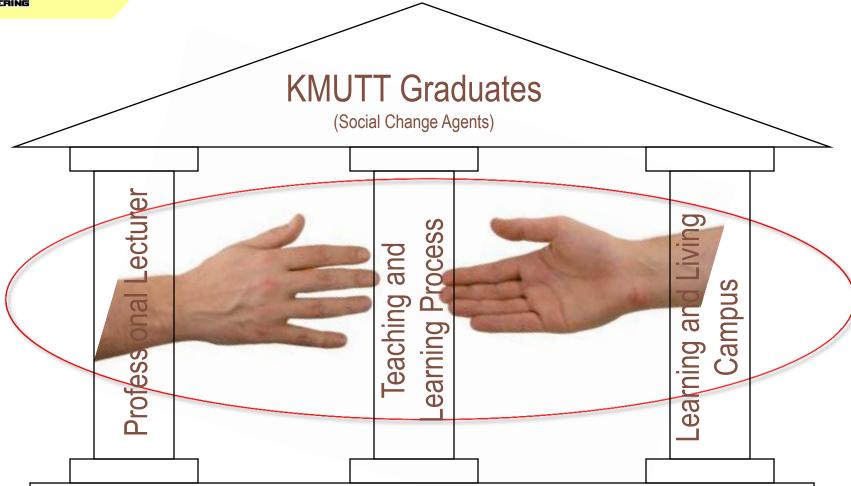


KMUTT 3.0 Educational System





Keys to Success



Curriculum, Competences, Learning Activities/Facilities

Management, Policy and ICT







Keys to Success



KMUTT Graduates

(Social Change Agents)

Professional Lecturer

Teaching and Learning Process

earning and Living

Curriculum, Competences, Learning Activities/Facilities

Management, Policy and ICT

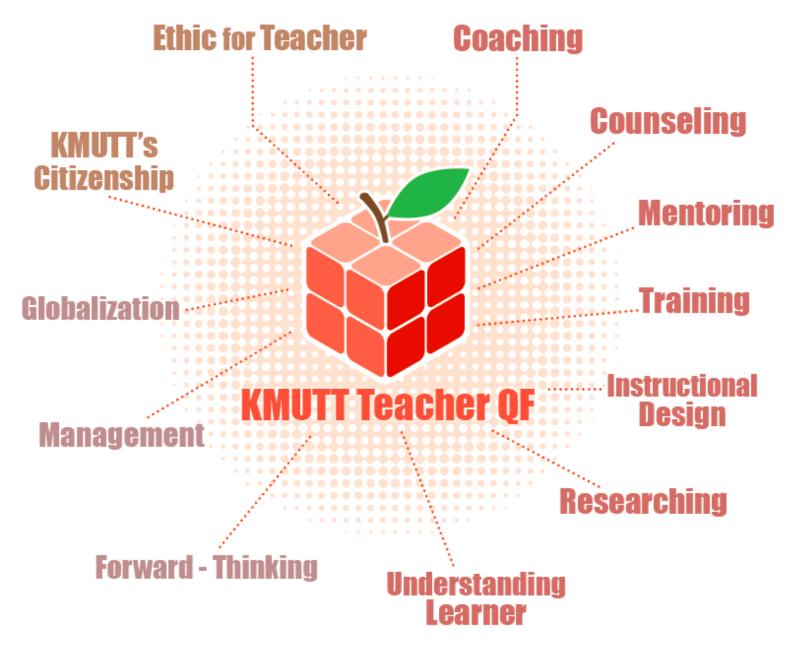






KMUTT Faculty Qualification Framework

กรอบคุณลักษณะของอาจารย์ที่พึงประสงค์ ของ มจธ.

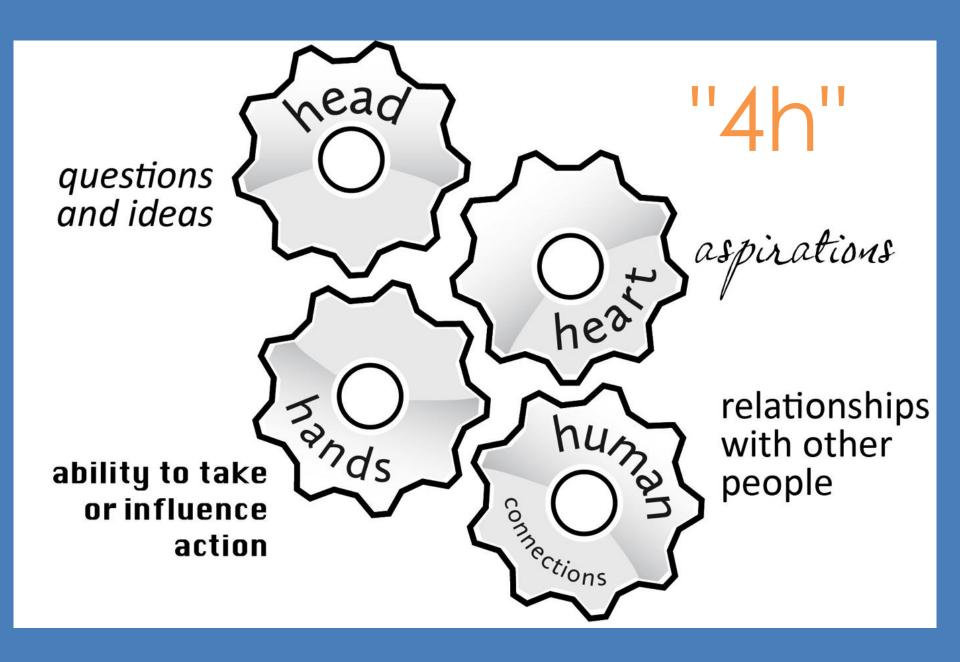








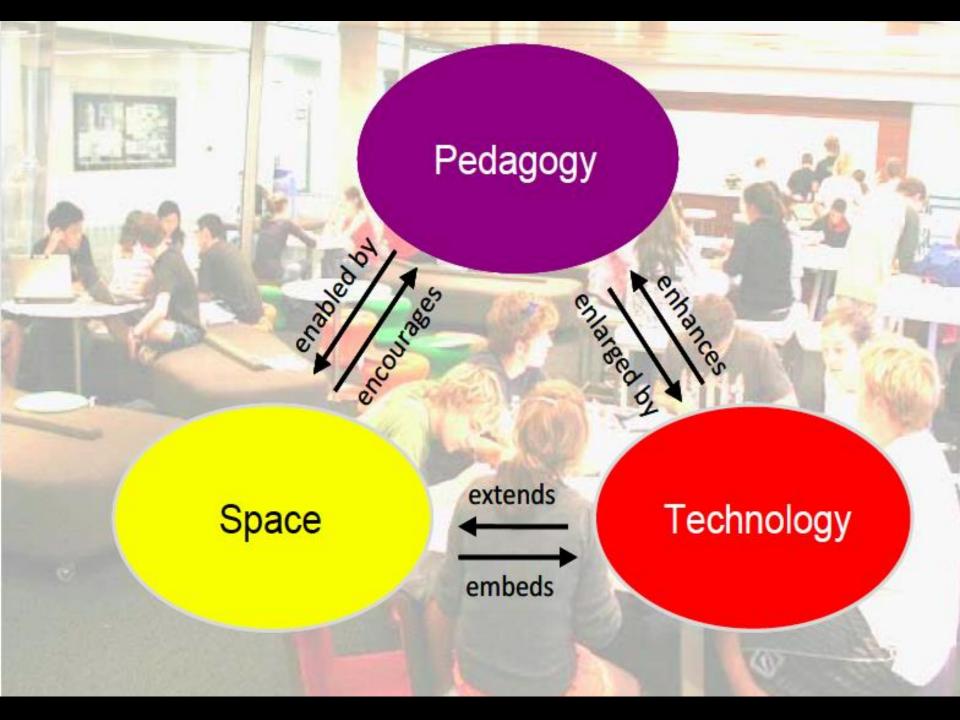
to nurture imagineer the learning process must foster ...

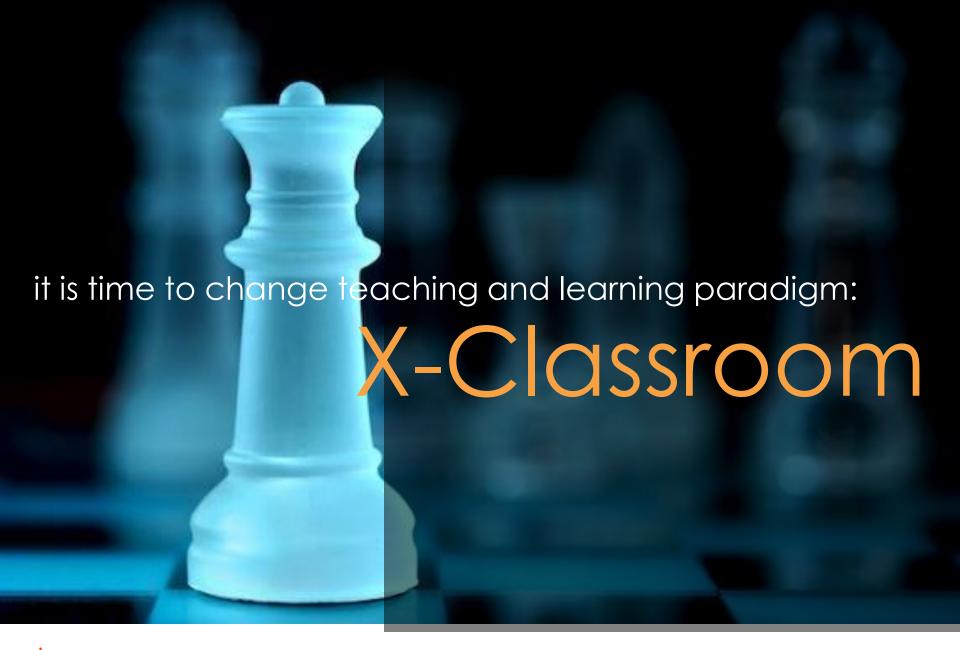
















involve students to



Help them to UNDERSTAND principle knowledge and know how to APPLY such

knowledge to ANALYSIZE and EVALUATE real problems for CREATING

their own implicit knowledge.









