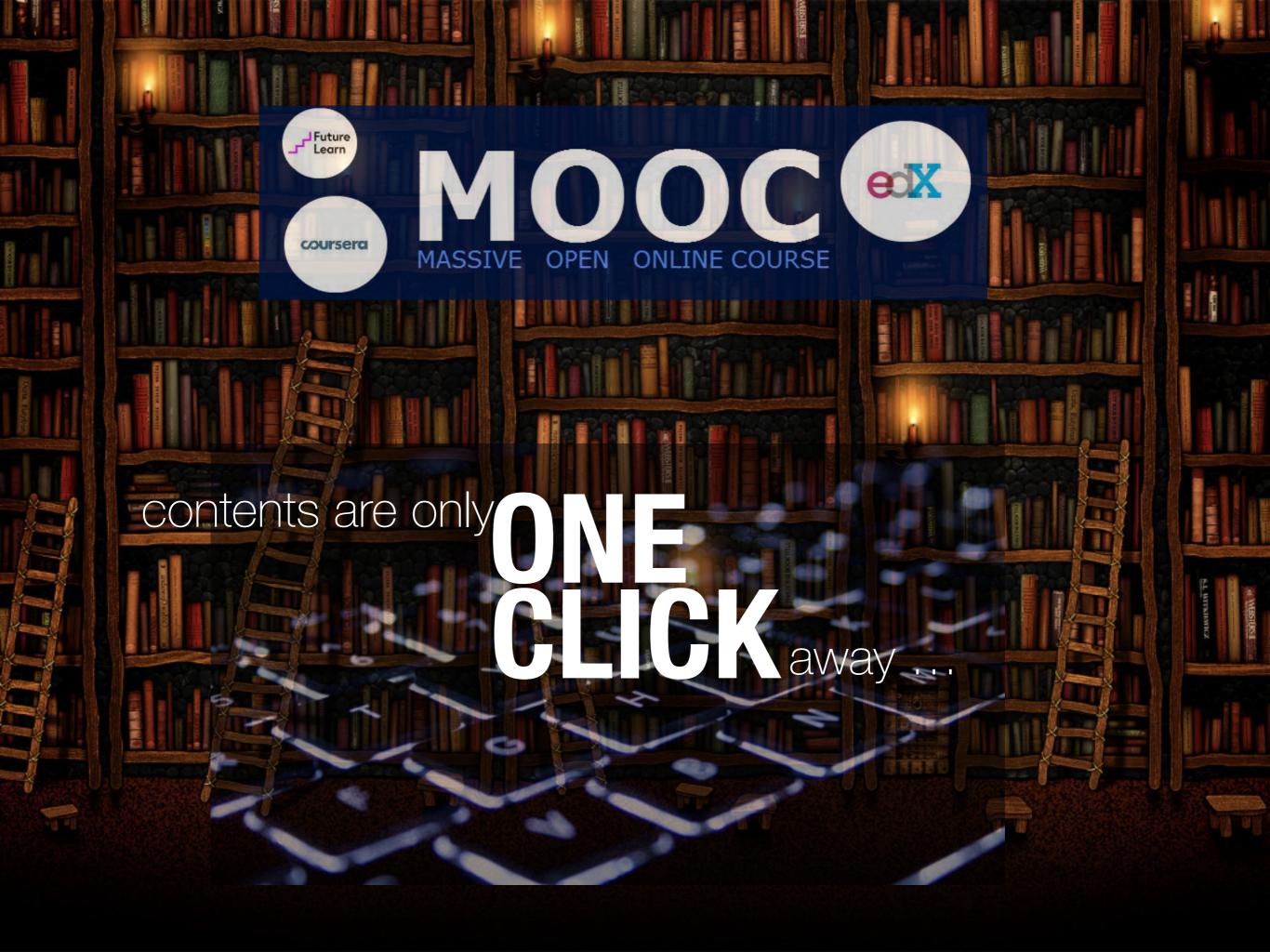
CONLES based EDUCATION:



TQF September 19, 2016 Assoc. Prof. Bundit Thipakorn Deputy Secretary-General for Higher Education Commission









The Economist

MANUARY SETH-DATH 2014

Economist co

If the French ran America

China cracks down on microblogs

New opportunities for organised crime

Regulators go soft on Europe's banks

Google and the internet of things

Coming to an office near you...





it is about transforming business models and how we engage ...

5 Cs of Digital Disruption

The way we CONNECT socially

The way we CONDUCT business



The way we engage CULTURALLY



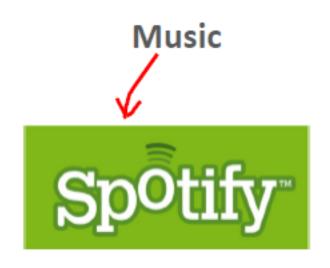
The way we CREATE value



The way we CONSTRUCT our thinking













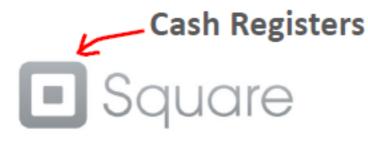


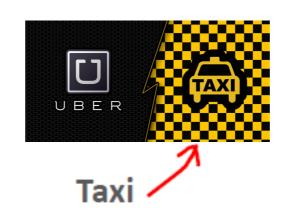


new 21st century services













Mobility as a Service enables new market approach



- Free public transport in home city area Up to 100 km free taxi
- Up to 500 km rental car
- Domestic public transport 1500 km

15 minutes package for 135 €/ month:

My mobility operator

Business world package for 800 €/month:

- 5 minutes pickup in all EU
- Free taxi in home city
- Lease car and road use Taxi roaming worldwide

Family package for 1 200 €/month:

- Lease car and road use
- Shared taxi for all family with 15 minutes pickup
- Home city public transport for all Domestic public transport 2 500 km



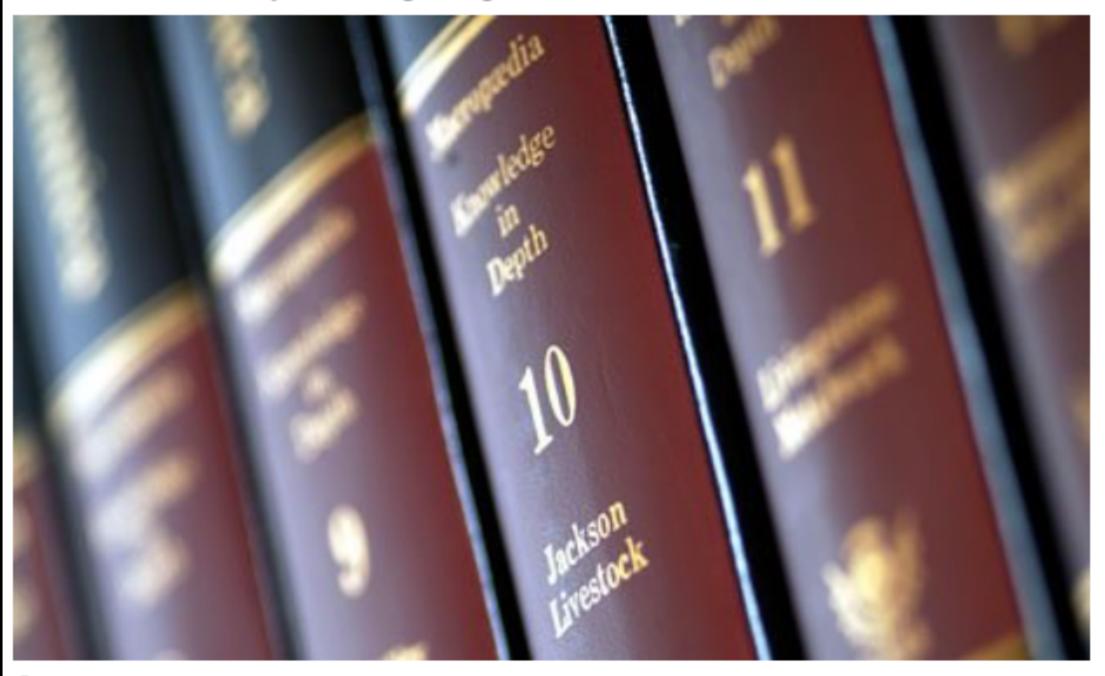


E don't know hat will happen tomorrow ...

Encyclopedia Britannica halts print publication after 244 years

March 13, 2012

The paper edition of the encyclopedia ends its centuries-long run, but is it a victim or beneficiary of the digital age?

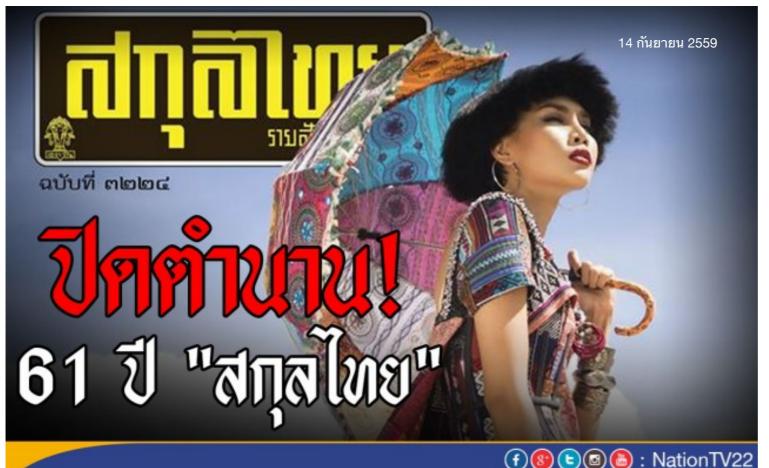


Seven million sets later, Encyclopedia Britannica will no longer publish volumes in print. Photograph: Robert Mullan / Alamy/Alamy



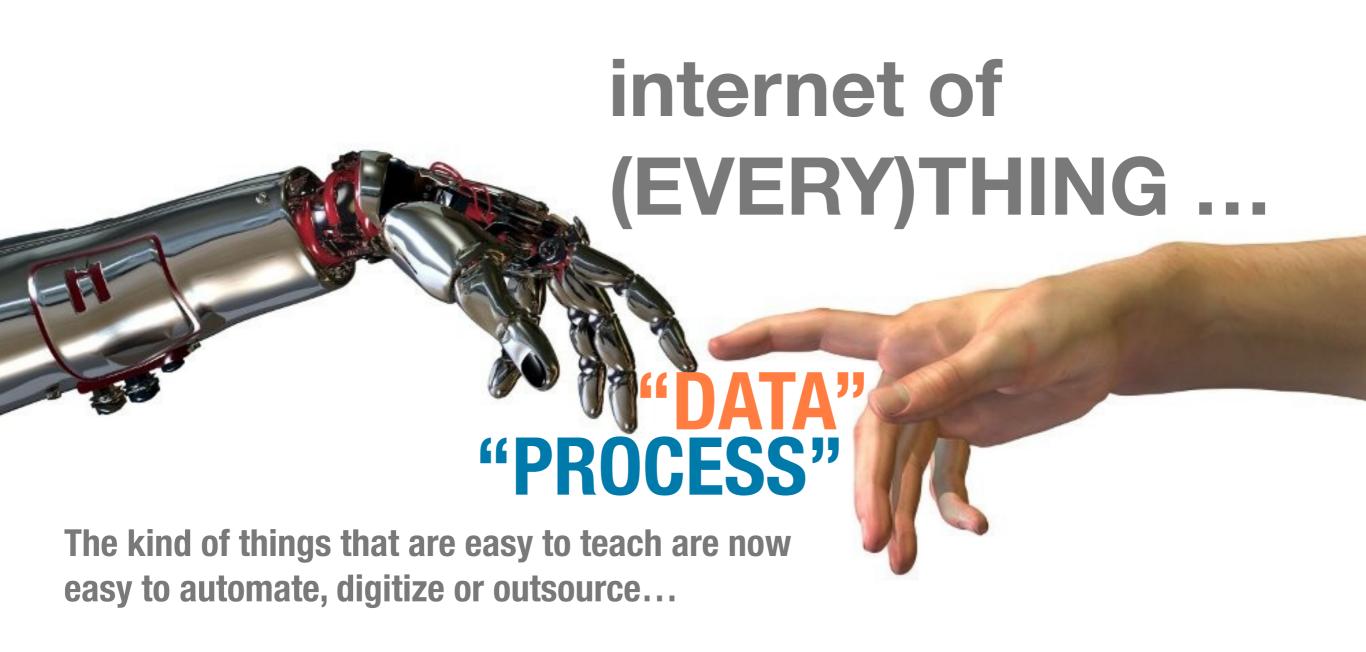
สกุลใทย ใม้ยืนต้นบนถนนนิตยสาร

บนแผงหนังสือเมืองไทย มีนิตยสารต่าง ๆ เกิดขึ้นอย่างมากมาย ในแต่ละปี แต่ ในขณะเดียวกันก็มีนิตยสารอีกจำนวนไม่น้อยล้ม หายตายจากไป อันเนื่องจากปัจจัยต่าง ๆ แต่บนถนนนิตยสาร เมืองไทย มีนิตยสารฉบับหนึ่งซึ่งยืนหยัดมาอย่างยาวนาน ตั้งแต่ การวางจำหน่ายครั้งแรกเมื่อวันที่ 1 พฤศจิกายน พ.ศ.2497 ด้วย ความหนา 60 หน้า ในราคาเล่มละ 3 บาท และมีคุณบุญปรุง ศิริธร เป็นแบบปก ซึ่งนิตยสารเล่มนั้นก็คือ'สกุลไทยรายสัปดาห์'



Nation TV - เว็บไซต์สถานีข่าวอันดับ 1 ของเมืองไทย "เรียนผู้อ่านสกุลไทยทุกท่าน

เนื่องด้วยสภาพเศรษฐกิจ พฤติกรรมผู้บริโภคที่เปลี่ยนแปลงไป และเอเย่นต์จัด จำหน่ายที่ลดลง ทำให้นิตยสารกระดาษค่อยๆลดบทบาทลงในในยุคของสื่อดิจิตอล เช่นทุกวันนี้ด้วยเหตุนี้ สกุลไทยจำเป็นอย่างที่สุดที่ต้องแจ้งต่อท่านผู้อ่านว่า คณะผู้ บริหารนิตยสารสกุลไทยได้มีมติให้ยุติการจัดทำนิตยสารสกุลไทย โดยฉบับที่ ๓๒๓๗ ซึ่งจะวางจำหน่ายวันจันทร์ที่ ๓๑ ตุลาคม พุทธศักราช ๒๕๕๙ จะเป็นฉบับสุดท้าย" อ่านต่อที่: http://www.nationtv.tv/main/content/entertainment/378516929/

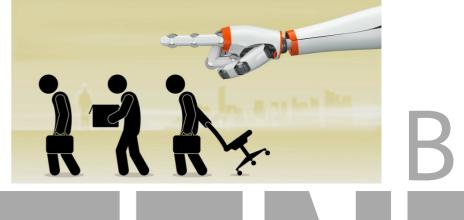


future employers may required a custom set of competencies as an alternative to a traditional degree ...

new-generation students are demanding to "LEARN" in a way that makes "SENSE" to them ...

the education that universities
the job market.... "IRRELEVANT" in

As the world grows smarter, our **GRADUATES** need to



COMPETENT

21st-Century Skills

Foundational Literacies

How students apply core skills to everyday tasks



1. Literacy



2. Numeracy



3. Scientific literacy



4. ICT literacy



5. Financial literacy



Cultural and civic literacy

Competencies

How students approach complex challenges



7. Critical thinking/ problem-solving



8. Creativity



9. Communication



10. Collaboration

Character Qualities

How students approach their changing environment



11. Curiosity



12. Initiative



13. Persistence/ grit



14. Adaptability



15. Leadership



16. Social and cultural awareness

Success is increasingly about building skills beyond formal education

Skills are everybody's business

Putting skills to effective use Skills will only translate into better economic effectively

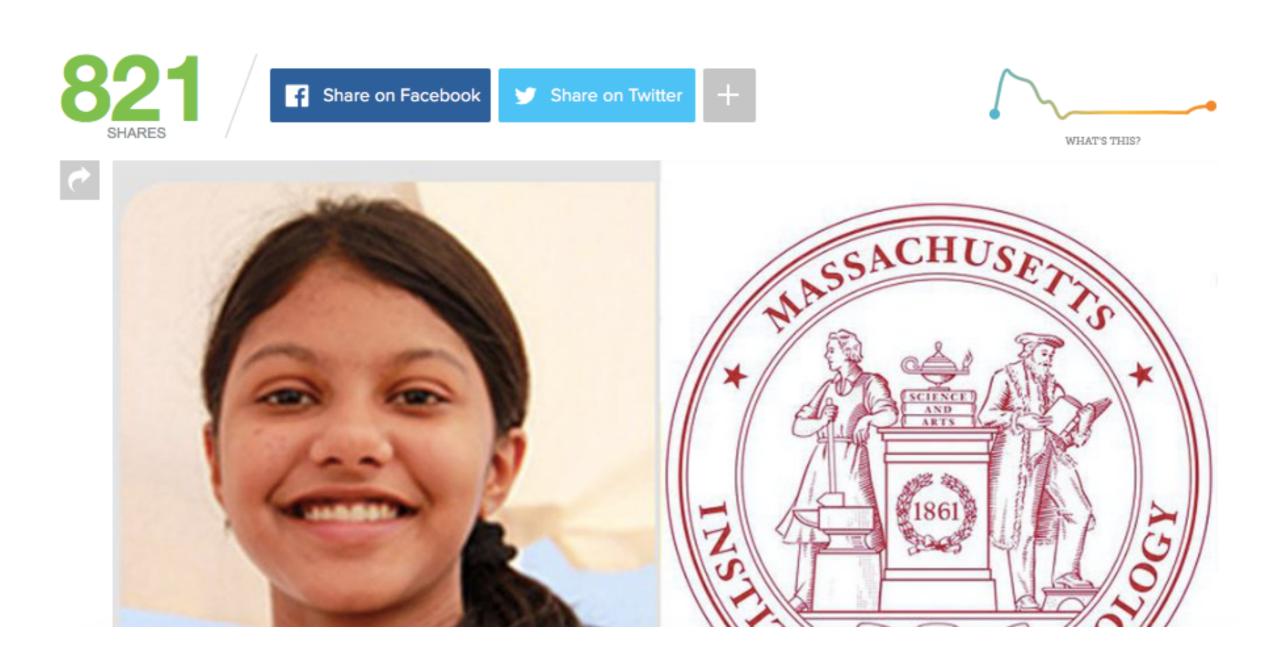
More education does not automatically translate into better skills, better jobs and better lives



SURVEY OF ADULT SKILLS



MIT accepts student who never finished school





Taiwan's new digital minister is a transgender software programmer who wants to make government more open

e nice to Ah Guas. One day they may be your minister. Understand? Now is 2016 liao http://j.mp/2bxc2fV

This wasn't a rebellious act, Tang said, instead the broadcasts "were intended to

encourage people to talk,

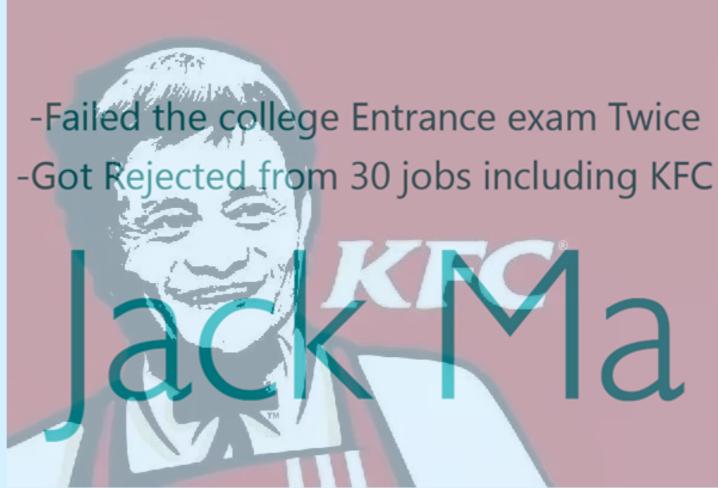
that's all."



new concept of "Communication"



BORN TO INSPIRE



(FOUNDER AND EXECUTIVE CHAIRMAN, ALIBABA GROUP) "RICHEST MAN OF CHINA"







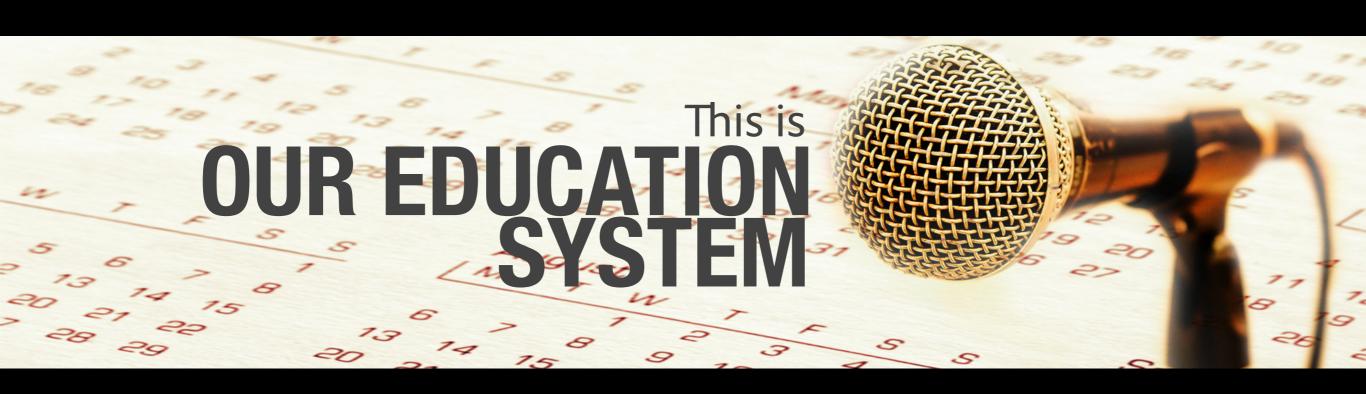






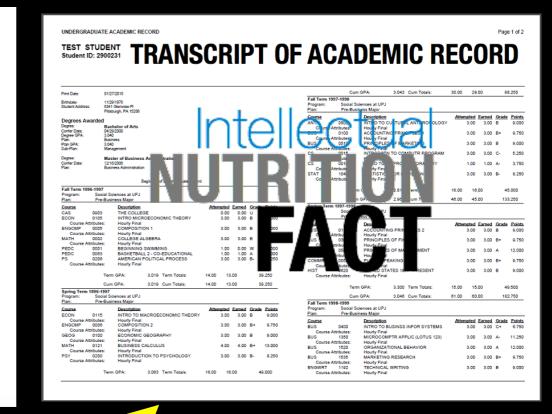


This is OUR EDUCATION SYSTEM



WHAT WE PRODUCE





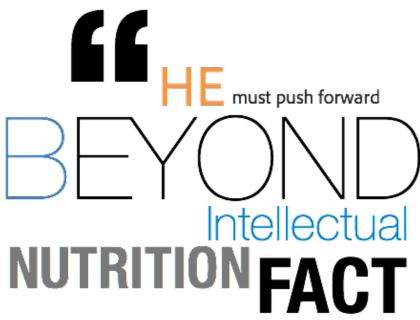
COUT PUT Dased EDUCATION

OUTPUT



OUTPUT







for the sake of our students ...







improving student "ACHIEVEMENT" during college ...

towards getting somewhere
IS TO DECIDE THAT YOU ARE NOT going to stay

WHERE YOU ARE



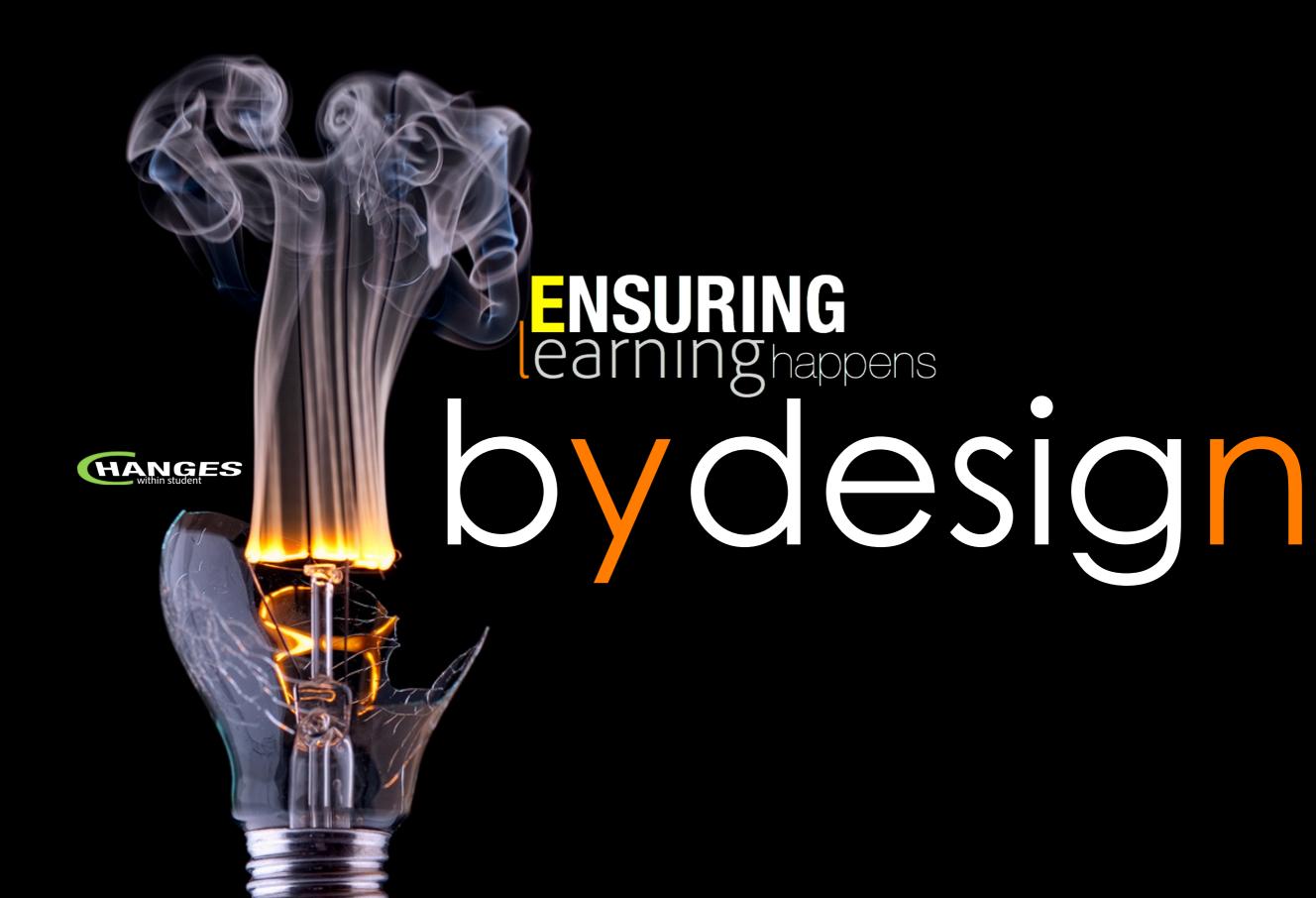
CONES based EDUCATION

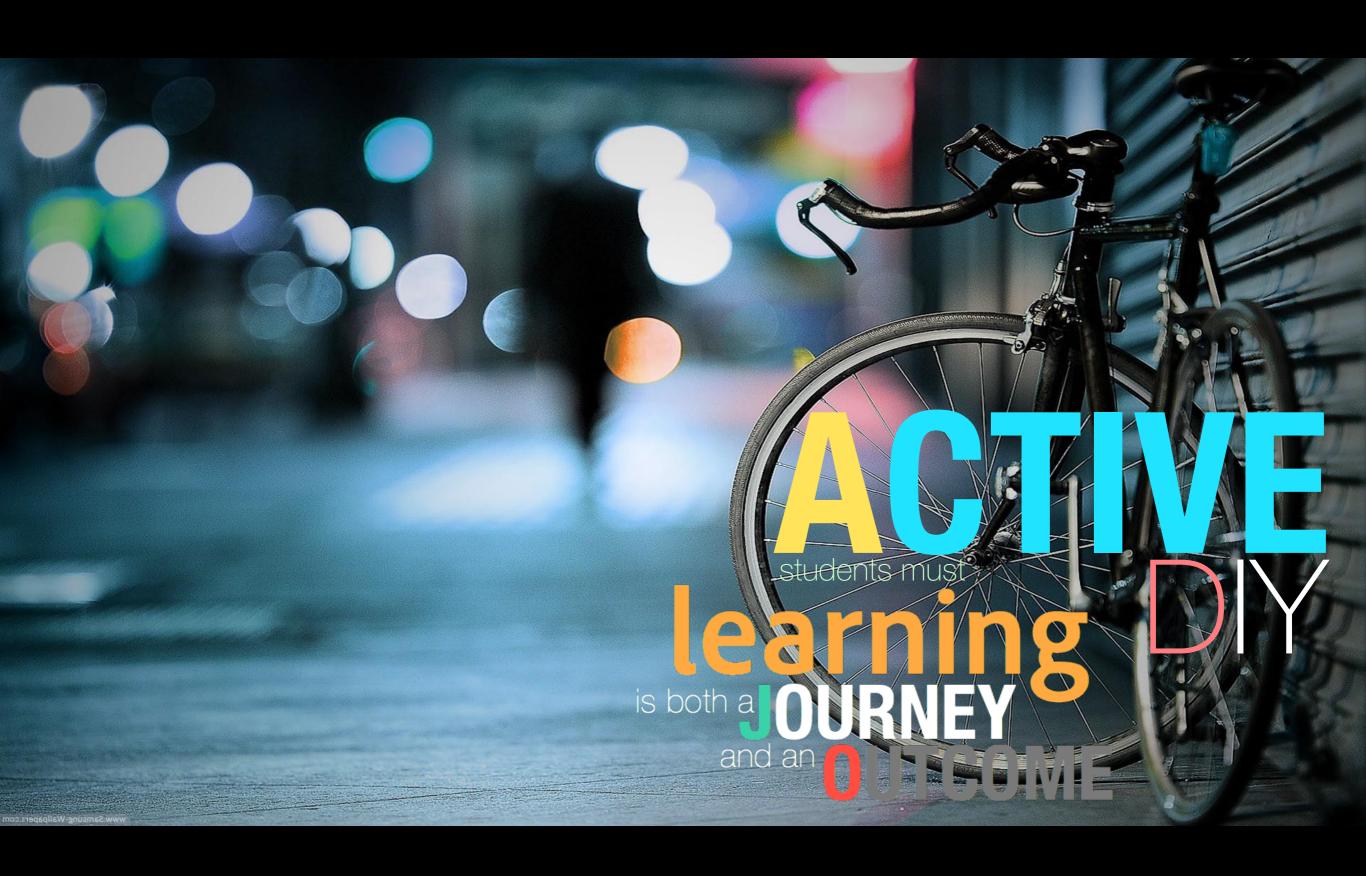
OUTCOME

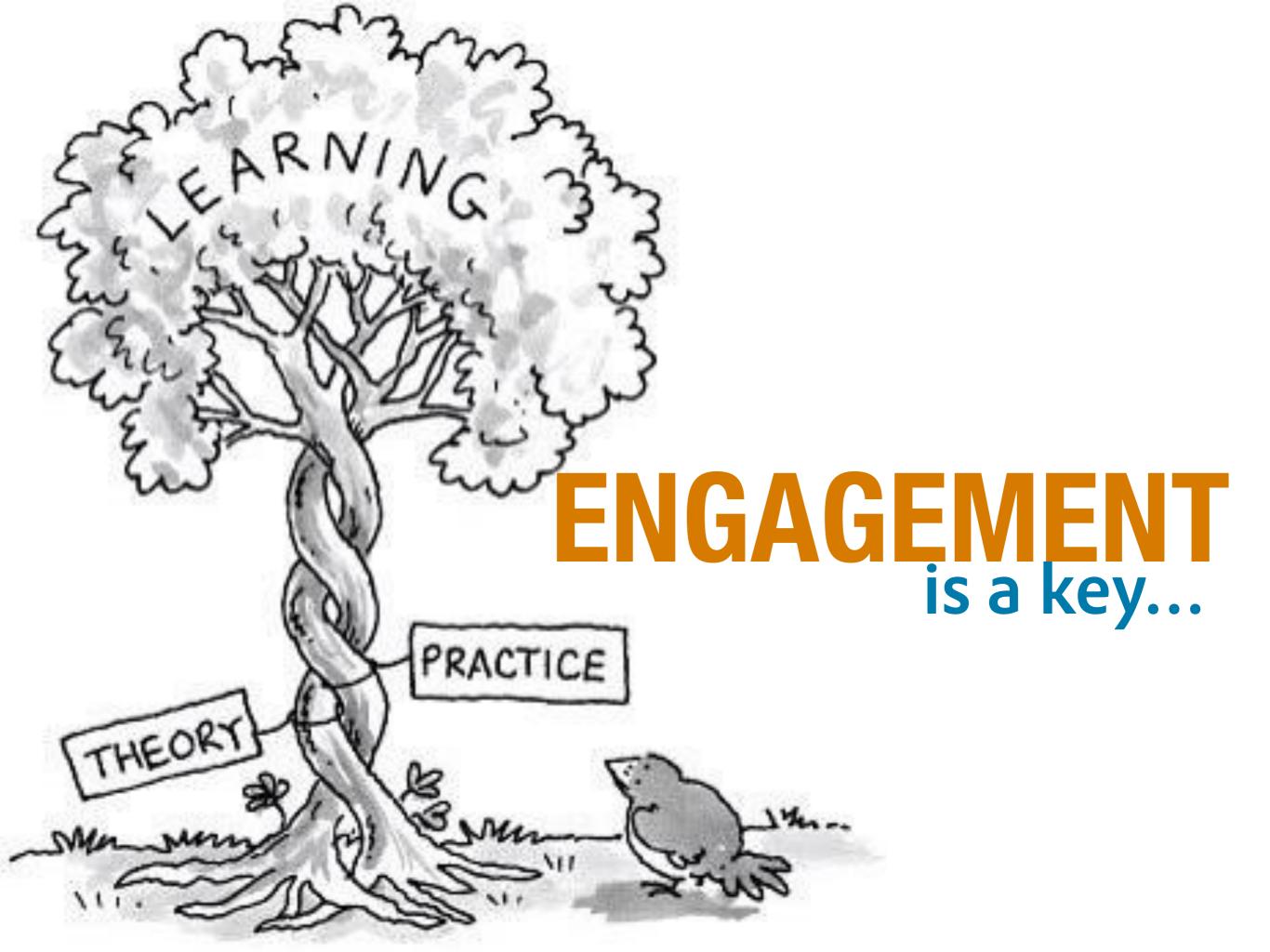
"PROCESS" is what we design...



GOUCATION 646









This is what "EDUCATION" is for...





COMPETENT





achievement of student from learning







nurture students for their life after college ...

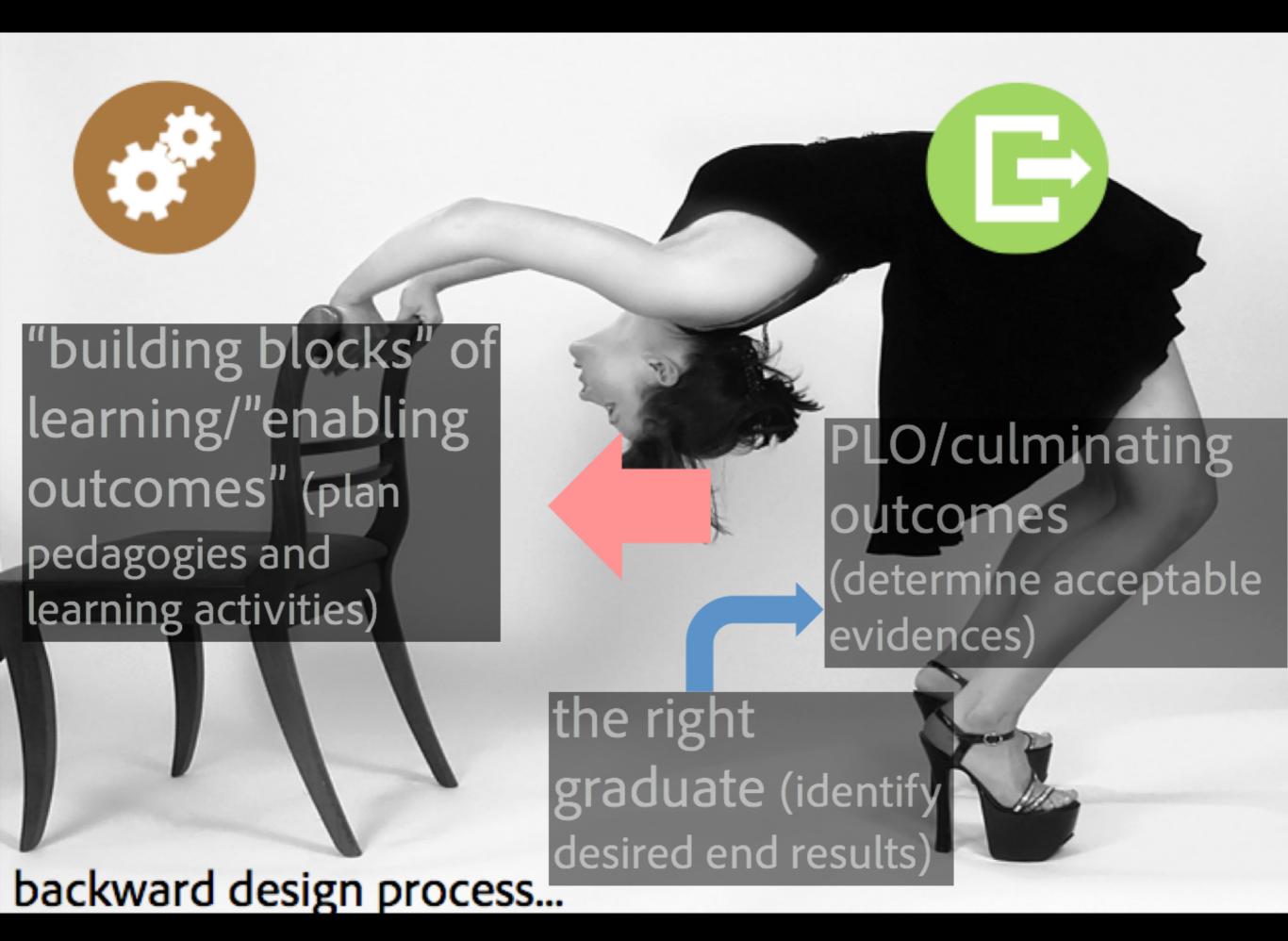
SUCCESS OF OUR STUDENTS



can you answer these following questions ?:

- what is the learning outcomes of each course in your curriculum?
- what is the linkage between each course in the same series?
- what is the linkage between the core courses, the options courses, and the free elective courses? Why do you design that way?
- what is the programme learning outcomes of you curriculum?





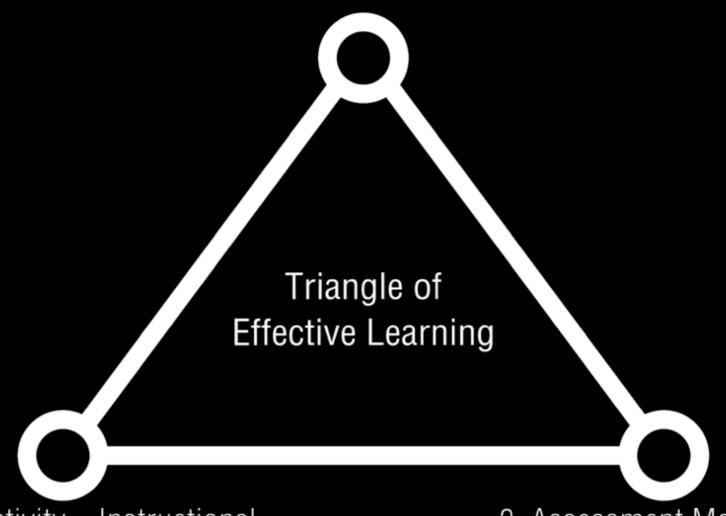
COMES define the CURRICULUM

"WHAT" is important for students to be able to do (their "ACHIEVEMENT")...

"HOW" to make sure such learning ultimately "HAPPENS"...



onstructive ALIGNMENT 1. Objective and Course Learning Outcomes



3. Activity + Instructional strategies

2. Assessment Method

Methodology for Competency-Based Curriculum Development

Phase 1: Outcomes Development											
Core Competencies											
Generic Compete	encies	Domain-Specific Competencies									
Phase 2: Learning Plans Development											
	The "Wh	at" of Lear	ning								
Knowledge	Sk	ills	Attitudes								
The "How" of Learning											
Learning Activities	Instruc	ctional egies	Materials & Resources								
The "Evidence" of Learning											
Formative Assess	ments	Summative Assessment									

PROGRAMME LEARNING OUTCOMES		RNING OUTCOMES	PLOs SPECIALIZATION							
		Generic knowledge in Social Sciences and Humanities	O1 – Students have general knowledge about culture, world history and Vietnam history; guidelines and policies of the Communist Party and the State.							
Ş.	Knowledge	Specialized knowledge in International Relations	O2 – Students acknowledge the nature and the importance of International Relations as a global activity. O3 – Students can employ the theories and methods in International Relations research to practically analyze global issues.							
	Thinking	Integrative Thinking	O4 – Students are eligible to assemble and systematize the data information from various resources (primary and secondary) O5 – Students are eligible to self-learning.							
		Critical Thinking	O6 – Students are eligible to build up convincing arguments and present their multidirectionally critical comments.							
Global	Skills	Transfera <mark>bl</mark> e (soft) Skills	O7 – Students have the abilities to write and present effectively. O8 – Students have the abilities to apply information and communication technologies to their work. O9 – Students have the abilities to work in groups and work individually.							
		Professional (hard) Skills	O10 – Students are at a high level of proficiency in English O11 – Students are able to negotiate effectively O12 – Students have a thorough grasp of protocol etiquette							
	Attitude	Global Citizen's Disposition	O13 – Students respect the diversity O14 – Students are eligible to integrate O15 – Students are eligible to acknowledge and obey the laws							
		Pioneering	O16 – Students have a sense of serving the community O17 – Students have a capacity of leadership							

This is WHAT WE MUST DO



toTEACH



HOW to TEACH



MHAT student can DO

"LEARNING OUTCOME"

With MATA ACTIVITIES and HOME to TEACH

OUT COMES ased EDUCATION

HON to ASSESS In the designing process we must address these following questions:





verification



Elements of the **Programme Specification**

Trigger Questions:

Aims of the Programme



Learning Outcomes of the Programme: Competences (Professional and Generic)

Process informed by:

University Level **Descriptors**

Professional/Statutory **Bodies Requirements**

Subject Benchmarks

What's the purpose of the programme?

What should students know and be able to do on completion?



Programme learning outcomes broken down by level to ensure incremental attainment over duration of course

Module Learning Outcomes

Outcome for

Level Attained through:



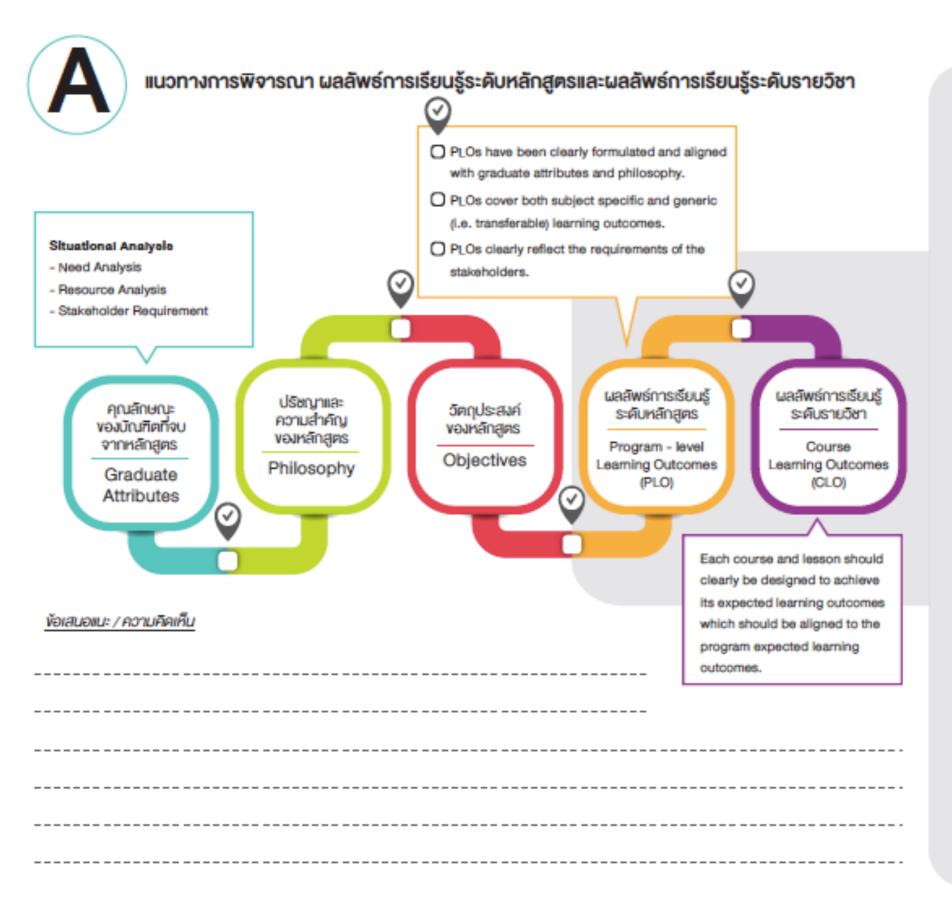
Module **Assessment**



Assessment Criteria

Attainment verified by:

Grades awarded according to:





AUN-QA Criterion (Expected learning outcomes / Program-level learning outcomes)

- The formulation of the expected learning outcomes takes into account and reflects the vision and mission of the institution. The vision and mission are explicit and known to staff and students.
- 2) The program shows the expected learning outcomes of the graduate. Each course and lesson should clearly be designed to achieve its expected learning outcomes which should be aligned to the program expected learning outcomes.
- 3) The program is designed to cover both subject specific outcomes that relate to the knowledge and skills of the subject discipline; and generic (sometimes called transferable skills) outcomes that relate to any and all disciplines e.g. written and oral communication, problem-solving, information technology, teambuilding skills, etc.
- 4) The program has clearly formulated the expected learning outcomes which reflect the relevant demands and needs of the stakeholders.

B แผนที่การกระจายความรับผิดชอบ (Curriculum Mapping)

Course Learning Outcomes (CLOs) for Bachelor's degree of MYLE

		Course	A							В								c								
			A1	A2	A3	A4	AS	AG	AZ	81	82	80	84	95	Re	87	C1	C2	ca	C4	CS	CE	C7			
	Code	Name	Lx1	Laci	LK2	LWZ	Liva	LEA	Lx5	Lan	Len	UA.2	LVZ	Liva	LK4	LVS	LET	Lun	Luz	Lez	Lara	LEA	FAR			
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	Course xxx	NEXCONENED NEXT NO.				٠,					1								Ĵ		1					
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(core courses)	Course xxx	MENNONCINE NEWSCHOOL.																		٠.		_				
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Diagnostio Questions Tips

Checklist

- Do all the key courses address at least one PLOs?
- 2 In the core courses, are all PLOs addressed in a logical order?
- 3 Do multiple offerings of courses address the same outcome, at the same level, why?
- Do same PLOs get more coverage than others?
- 6 Are students expected to show high level of learning too early?
- B Do students get practice on all the outcomes before being assessed, e.g. in capstone?
- Does the level of a course learning outcome aligned with the level specific by the curriculum designer?
- OR Do all CLOs address the curriculum outcome requirements?
- etc.



Definitions and Examples

ผลลัพธ์การเรียนรู้ของหลักสูตร (Program - level Learning Outcomes; PLO)

เป็นความคาดหวังพฤติกรรมที่เป็นรูปธรรมของผู้เรียนที่เป็นผลสำเร็จและแสดง ออกถึงความรู้และความเข้าใจที่เกิดจากกระบวนการเรียนรู้ตลอดหลักสูตร ผลลัพธ์ การเรียนรู้ระดับหลักสูตร จะเป็นข้อความอธิบายพฤติกรรมอย่างกว้างๆ สะท้อนเป้า ประสงค์บัณฑิตตามปรัชญาของหลักสูตร คุณลักษณะบัณฑิตที่พึงประสงค์ของมหา-วิทยาลัย (KMUTT Student QF) และ ความต้องการของผู้มีส่วนได้ส่วนเสียที่ เกี่ยวข้อง

EXAMPLE

Program: Master of Mechanical Engineering

Program - level Learning Outcomes; PLO:

At the end of this program, graduates will be able to

PLO A: identify, formulate, and solve engineering problems

PLO B: communicate effectively

PLO C: design a system, component, or process to meet desired needs

PLO D: work professionally in both thermal and mechanical systems areas, including the design and realization of such systems

PLO E: design and conduct experiments, as well as to analyze and interpret data.

PLO F: use the techniques, skills, and modern engineering tools necessary for engineering practice

PLO F:

ผลลัพธ์การเรียนรู้ระดับรายวิชา (Course Learning Outcome; CLO)

เป็นพฤติกรรมที่ผู้เรียนสามารถแสดงออกเป็นรูปธรรมและสามารถวัด และประเมิน ผลได้ภายหลังจากจบการเรียนรู้ในแต่ละรายวิชา ซึ่งผลลัพธ์การเรียนรู้ของแต่ละราย วิชาจะเป็นพฤติกรรมจำเพาะของผู้เรียนแต่ละขั้นที่จะก้าวไปสู่ผลลัพธ์การเรียนรู้ของ หลักสูตร

EXAMPLE

Course: ME471; Design

PLO A: identify, formulate, and solve engineering problems

Course Learning Outcome; CLO:

At the end of this course, student will be able to

- A working knowledge of estimation techniques, rules of thumb, and engineering heuristics
- An ability to solve common engineering problems, including problems involving
 - The selection of materials for mechanical components based on manufacturing issues

can you define what students should be able to do after finishing these courses?

Select A Curriculum

Biology

Biology

Introduction to Biology Full course description

This introductory course defines biology and its relationship to other sciences. It examines the overarching theories of life from biological research and also explore the fundamental concepts and principles of the study of living organisms and their interaction with the environment. Key concepts include how life is organized into hierarchical levels; how living organisms use and produce energy; how life grows, develops, and reproduces; how life responds to the environment to maintain internal stability; and how life evolves and adapts to the environment. This course is a part of our Community College (CC-OLI) series. Courses in this series are particularly well-suited to the needs of introductory community college courses, but are open for use by any instructor or student.

Modern Biology @ Full course description

This course provides more advanced treatment of specialized areas including cellular biology, molecular biology, biochemistry, and genetics. It does not cover organismal biology or taxonomy. The course is built around six Key Concepts that provide unifying explanations for how and why structures are formed and processes occur throughout your study of biology.

Biochemistry @ Full course description

This is an introductory course in biochemistry, designed for both biology and chemical engineering majors. A consistent theme in this course is the development of a quantitative understanding of the interactions of biological molecules from a structural, thermodynamic, and molecular dynamic point of view. This course assumes that students have taken introductory chemistry, including basic thermodynamics, as well as introductory organic chemistry.

what does the cupcake look like?

CUPCAKE 2

Eton's Mess Cupcakes Yellow Cake with Cream, Meringue, and Strawberries

CUPCAKES

1 1/2 cup flour

1 1/2 tsp baking powder

1/2 tsp salt

1/2 cup butter

1 cup sugar

1 tsp vanilla

2 eggs

1 cup milk

TOPPING

4 egg whites 1 cup sugar pinch of salt

whipped cream chopped strawberries Mix flour, baking powder, and salt. In a separate bowl, cream butter and sugar on medium until light and fluffy. Reduce speed to low and add vanilla and eggs. Add milk and flour mixture alternately while still mixing. Pour into lined cupcake pan. Bake at 350 for 30 minutes, or until toothpick comes out clean.

Beat the egg whites until they hold soft peaks. Gradually add sugar and vanilla and beat until mixture is stiff and glossy. Using knife or pastry bag, make meringue shapes on parchment or aluminum foil. Bake at 225 until shapes are crisp and firm. Frost cupcakes with whipped cream, and pile with strawberries and meringue.



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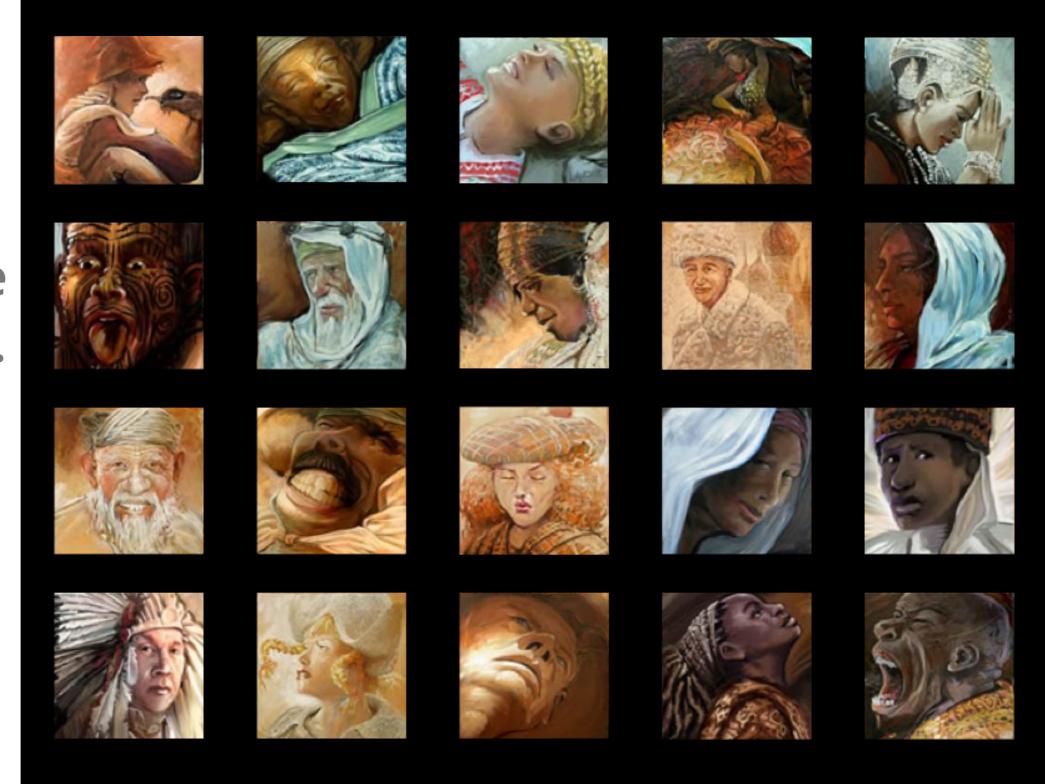
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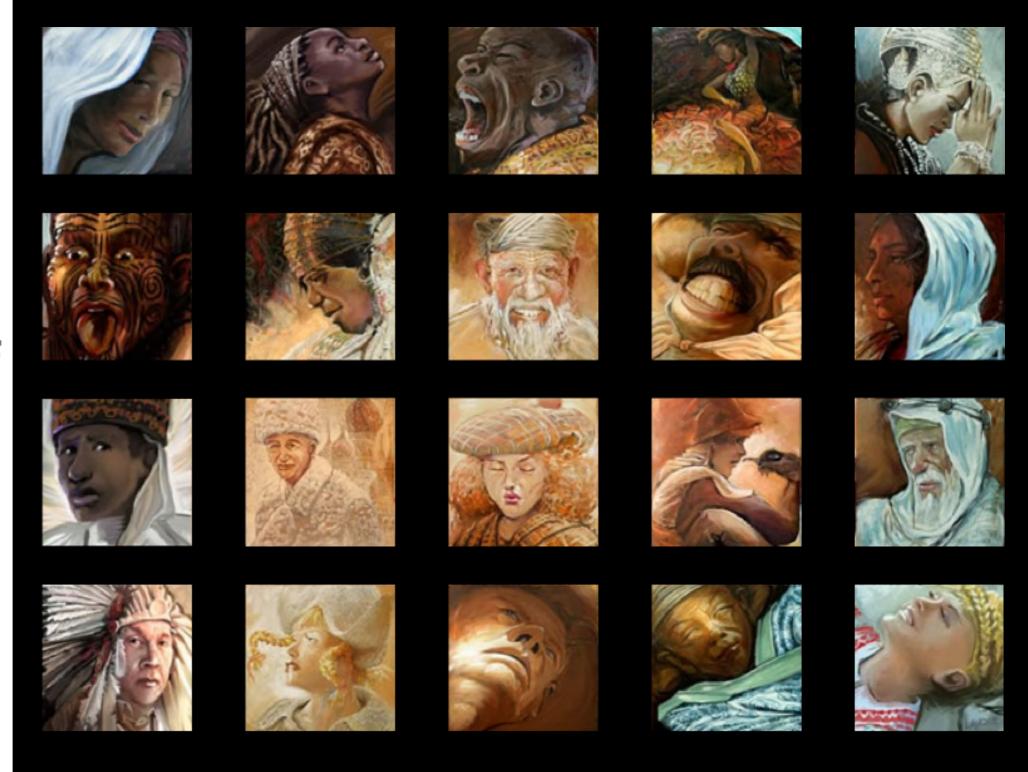
course description...



Culminating
Outcomes



building blocks of learning (enabling outcomes)...



at the END of each learning unit what will student be able to do that they could not do as well before each unit...

How are you going to teaching these learning units?









that is all about

Anthus Multiples ASIUUC SSIUUC





goal

ACHIEVE MENT





OBE is an education system that bases each

part of the system around **EOalS**. By

the end of the learning experience each student

should have a chieved the

goals...



The primary aim of OBE is to facilitate desired

changes within the

STUCENTS, by increasing the

levels of cognitive skills, developing non-cognitive skills and/or positively influencing attitudes, values and judgment...

the systemic structures within which the



clearly focusing and organizing

EVERYTHING in a teaching

and learning system on what is essential for all

students to be able to CO

SUCCESSFULLY at the end of their learning experiences

Source: William G. Spady (1994) Outcomes-based education: Critical Issues and Answers.

The American Association of School Administrators

So how I implement outcomesbased education in my university ...

Outcomes-based education is not a single idea or set of procedures. Rather outcomes-based education is like democracy – there are many different versions practised in different ways in different places, all with the label outcomes-based education.

Lawson; April 2007 prepared for Association of Independent Schools of SA



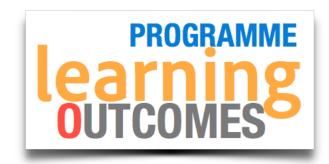


Traditional OBE can be simply performed by using the existing curriculum. It does not have the clear picture of intended learning outcomes that lie beyond the curriculum. It should be labeled "curriculum-based objectives (CBO)" since the outcomes come after the curriculum in the design process. The traditional OBE is focused on "shortterm", "subject-specific" outcomes ...



Transformation OBE is based on the concept of equipping all students with all the knowledge, competence, and orientations needed for success after graduating the college. It is the highest evolution of OBE introduced by Spady. For Spady, learning is not significant unless the outcomes reflect the complexities of real life ...







Transitional OBE focuses outcomes that reflect higher order competencies which cut across traditional subjects. It addresses the question: "what is most essential for students to know, be able to do, and be like in order to be successful when they have graduated". Content is used as the vehicle to attain higher order competencies such as problem solving, critical thinking, effective communication and technological applications. An integration-across-thecurriculum approach is adhered to ...

CONES based EDUCATION Spady, (1994)

demonstration knowledge of not only CONTENT but also ability is the point...

Using learning outcomes to INSTRUCTIONAL PLANNING



- IMPROVE it
- PROVE it
- DO what you say
- say what you WAN

OBE