



Reimagining

POST-SECONDARY EDUCATION

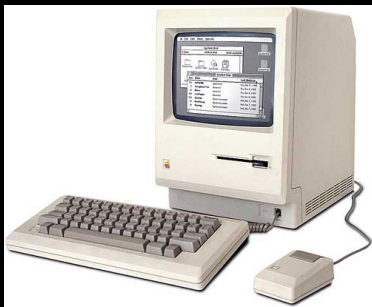
- Inessa Chapira
- Master of Design in
- Strategic Foresight + Innovation
- 2015

The Internet 1982

Enrollment in distance education increased in late 2000s

Macintosh 1984

Desktop computers introduced in universities in 1990s



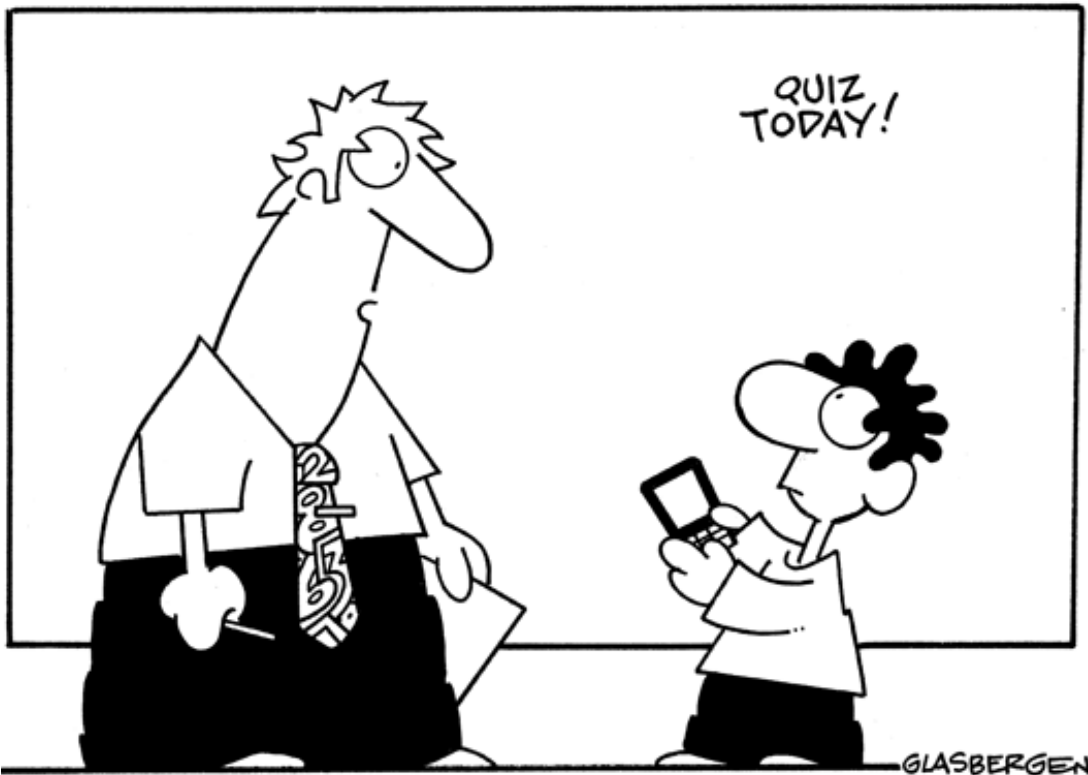
1998

PSE institutions start introducing Learning Commons Libraries in early 2000s

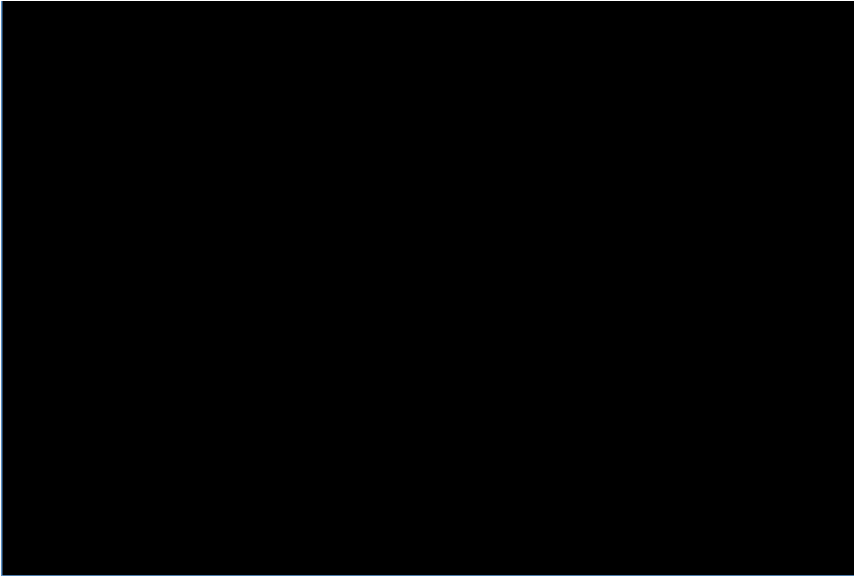
iPhone 2007

Digital, mobile technology is a norm and is an expected standard with the current generation of students

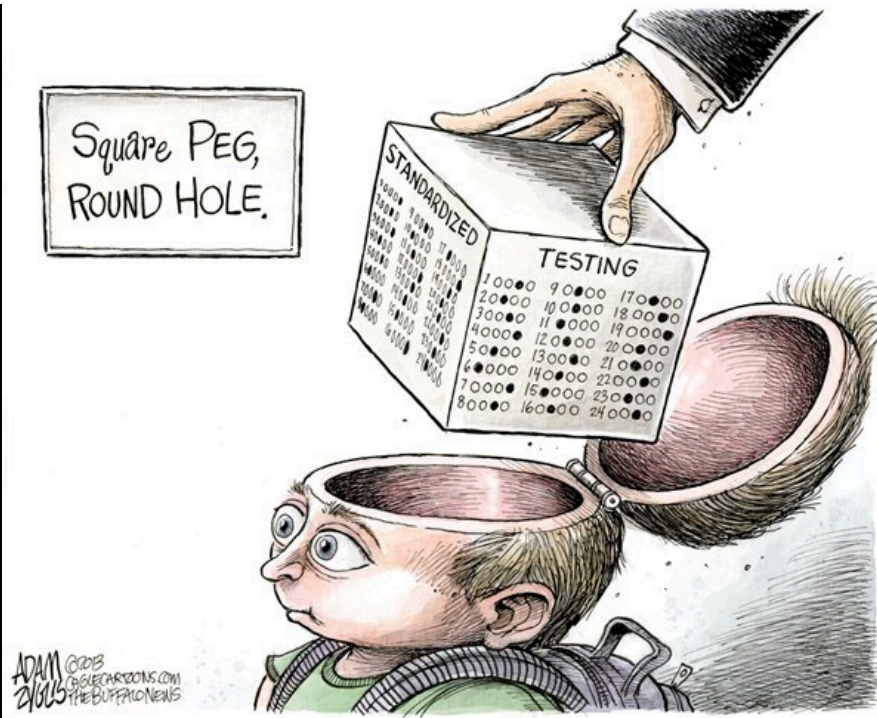




- Disconnect between PSE institutions' offers and students' expectations due to industries' offers

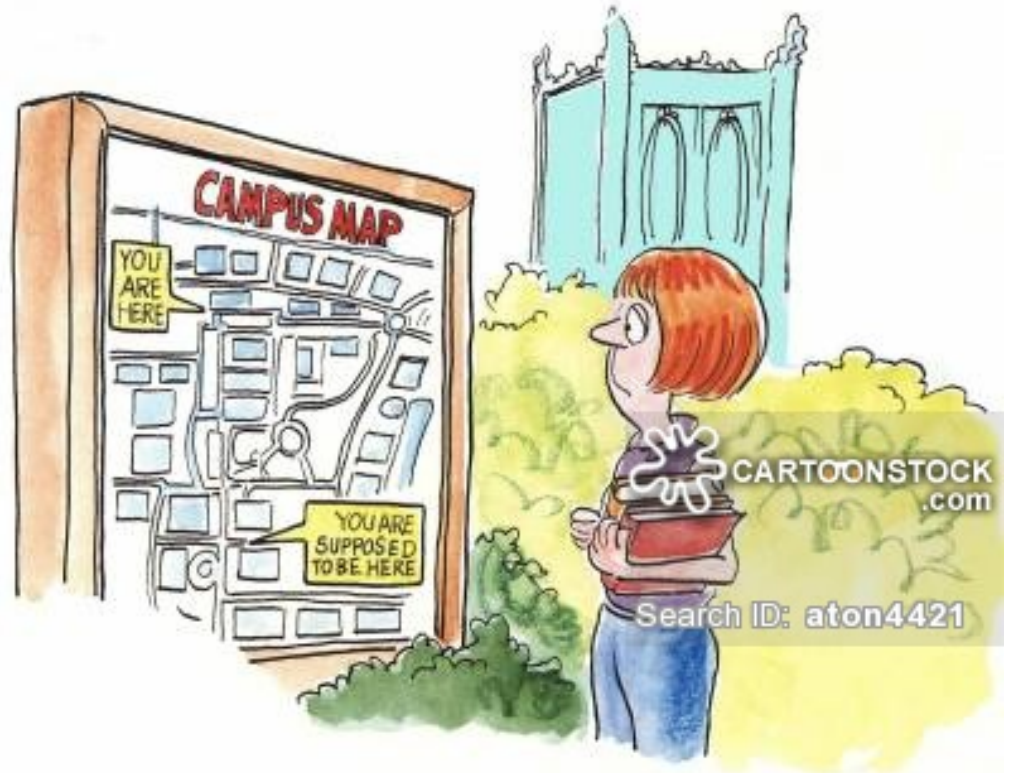


"How can I trust your information when you're using such outdated technology?"



- All students are treated the same regardless of their status or learning styles

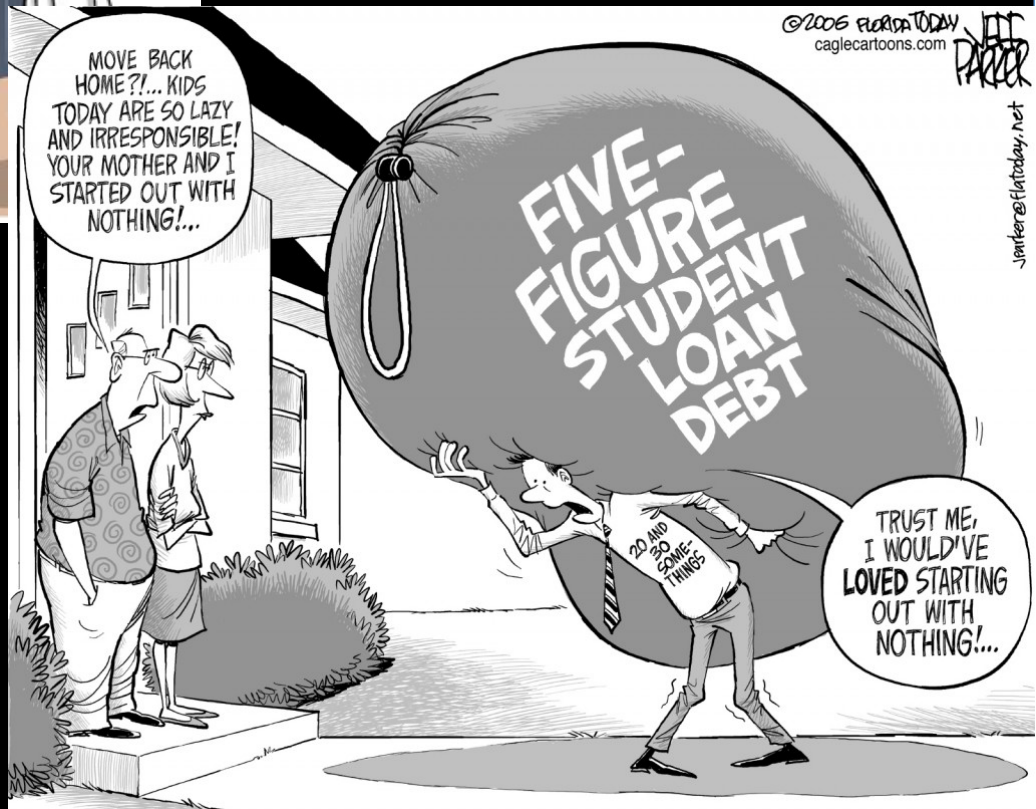
- Universities systems are complex and difficult for students to navigate





- No job prospects after graduation
- The Canadian youth (age 15-24) unemployment rate is 14.5 %
- 67% of unemployed teachers

- More than 400,000 students graduate with an average debt of \$27,000





- Students' lack of practical skills;
- Not many internship opportunities

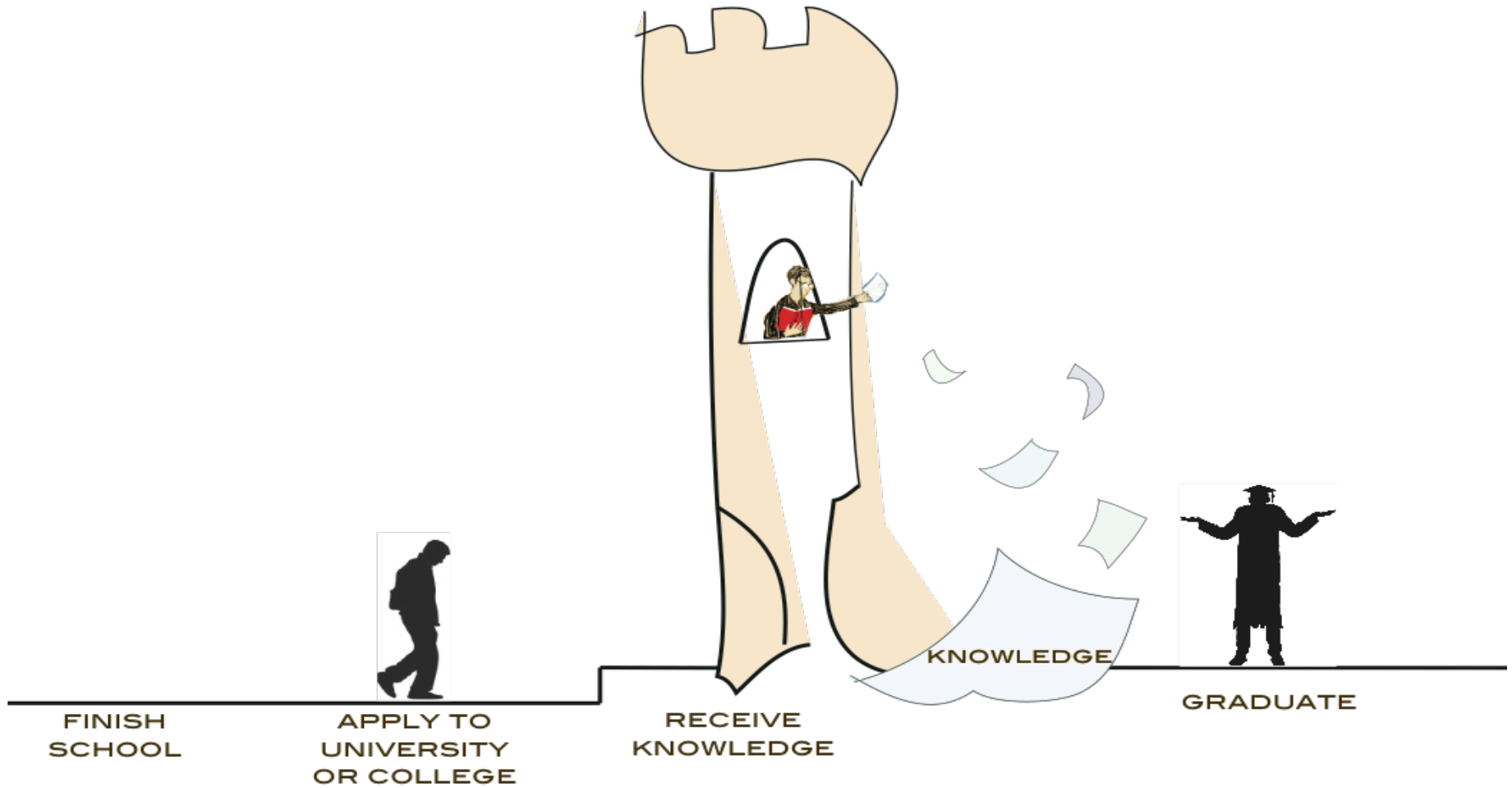


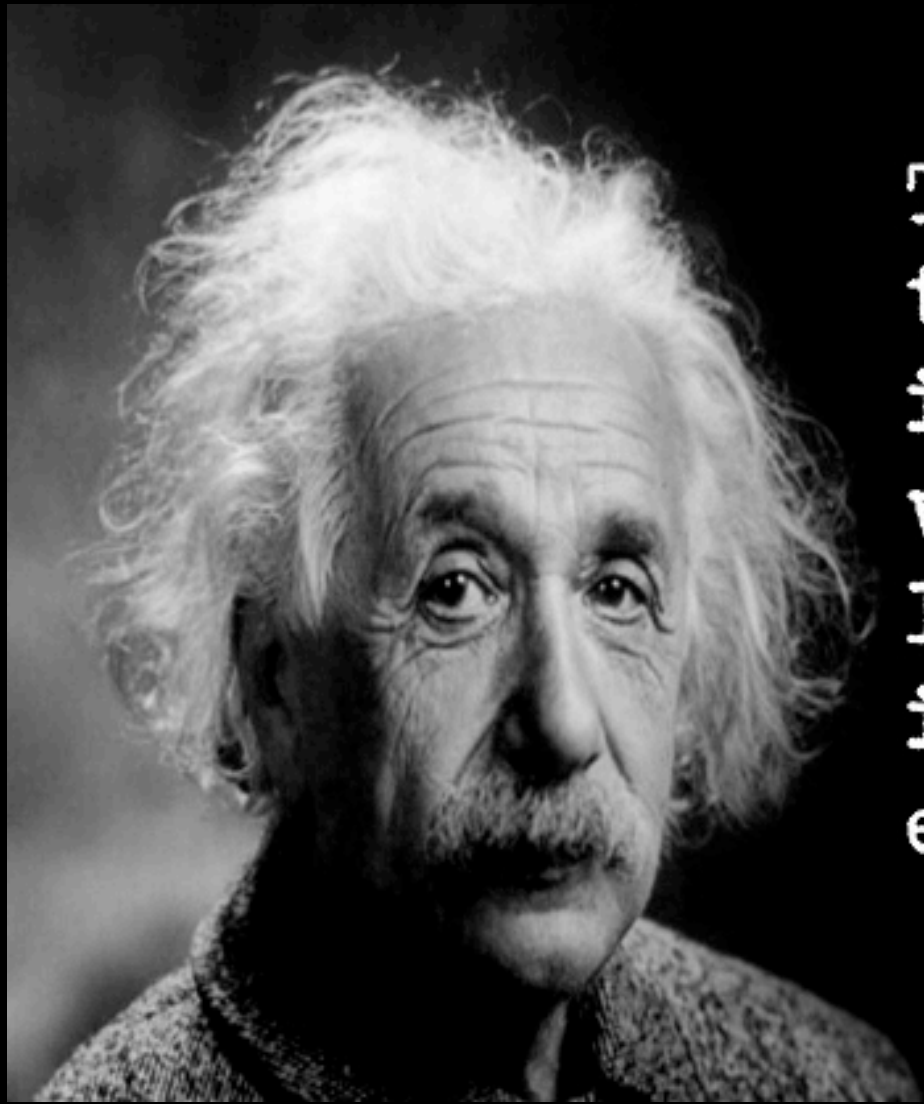
- Needs for continued education courses;
- Continue education courses provided by Industries : Autodesk, Lynda.com + LinkedIn, MOOC ...



PSE linear system

IVORY TOWER
OF KNOWLEGE





The only
thing that
interferes
with my
learning
is my
education.

- Albert Einstein

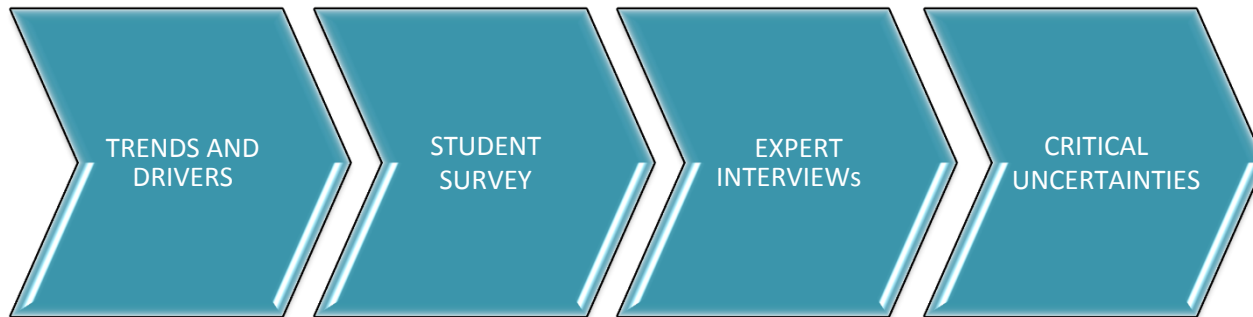
RESEARCH QUESTIONS:

- What is the future of the post-secondary educational system?
- Is the centralized, linear university business model the best model to integrate digital technology and efficient financial resources?
- How might the higher educational system be developed into a long-term, holistic, adaptable business model?
- What are the viable user-centric methods that can be applied to a new educational model?



**Transform
PSE to a student-centered
multifaceted, holistic system**

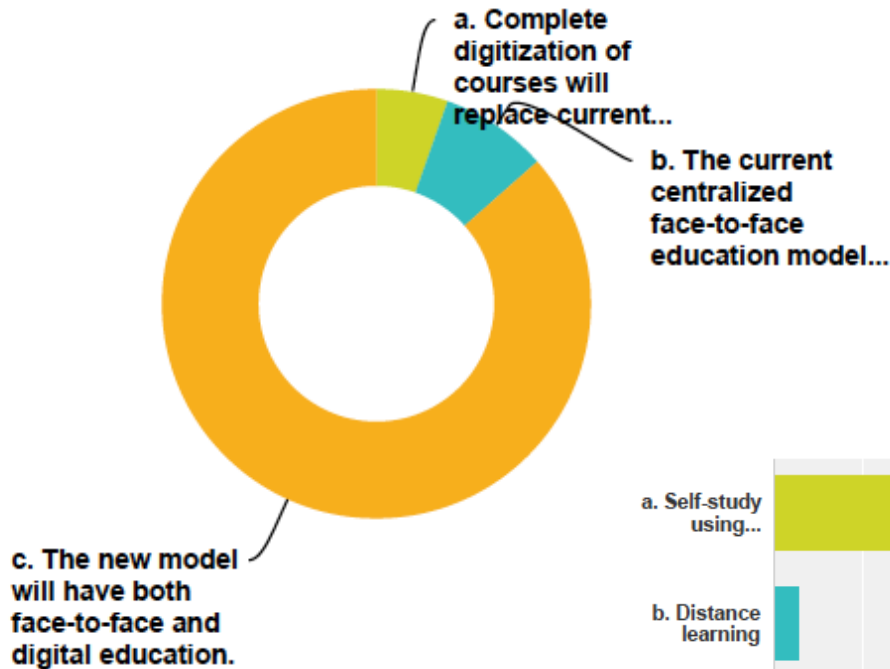
PROJECT PROCESS



ENVIRONMENTAL SCANNING



STUDENT STATUS AND DESIRED OUTCOMS

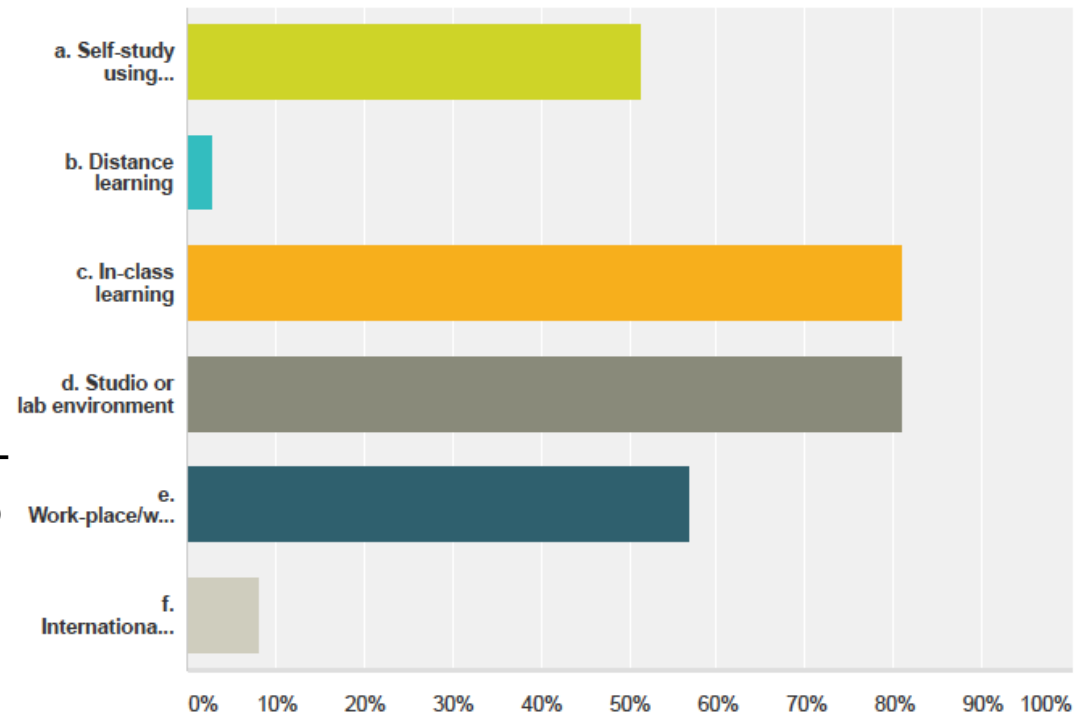


How do you imagine the post-secondary environment in the future?

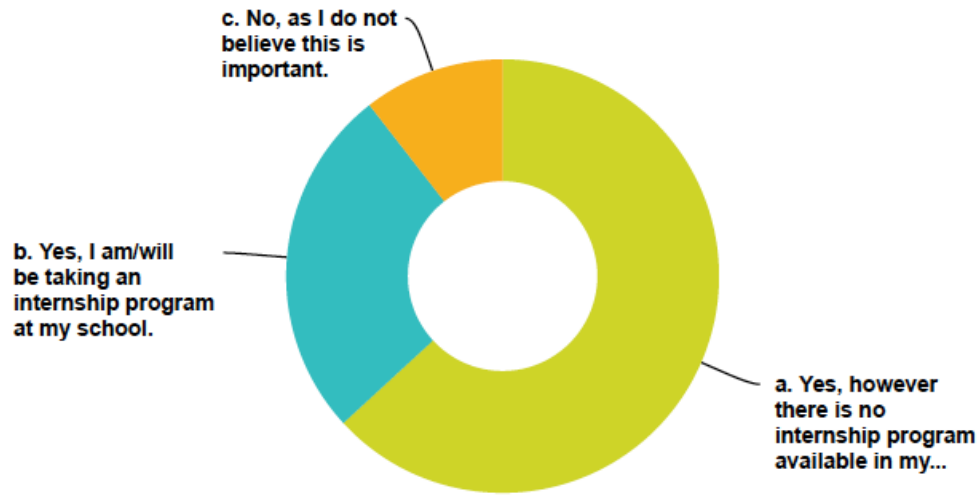
- 86% of students would like to see a blended delivery method of face-to-face and digital education

Which are the most important courses in your program?

- 30 out of 39 students feel that in-class learning and a studio or lab environment is best suited for their studies.



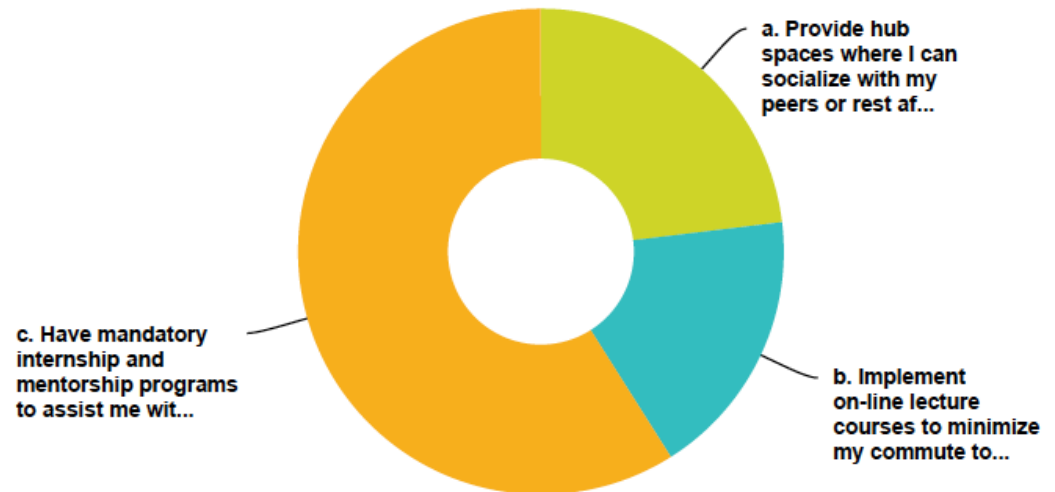
STUDENT STATUS AND DESIRED OUTCOMS



- 59% of students would like to participate in a mandatory internship or mentorship program if available.

63% would like to be a part of an internship program if available through their school.

- Overwhelmingly, 76% of students believe that they would benefit from obtaining practical skills.



EXPERT OPINIONS



Nabil Harfoush



Patrick Saavedra



Mark Robertson

Peter Thompson



Sylvia Link



Andrew Clifford



Vincent Hui

ONLINE VERSUS IN PERSON LEARNING

A young man wearing a grey beanie, a grey scarf, and a dark jacket is sitting on the grass, leaning against a large tree trunk. He is using a silver laptop. A blue backpack is sitting on the grass next to him. The background shows a park-like setting with trees and a building in the distance.

“Those who are born in the 90s or later are immersed in technology from day one”

-Sylvia Link

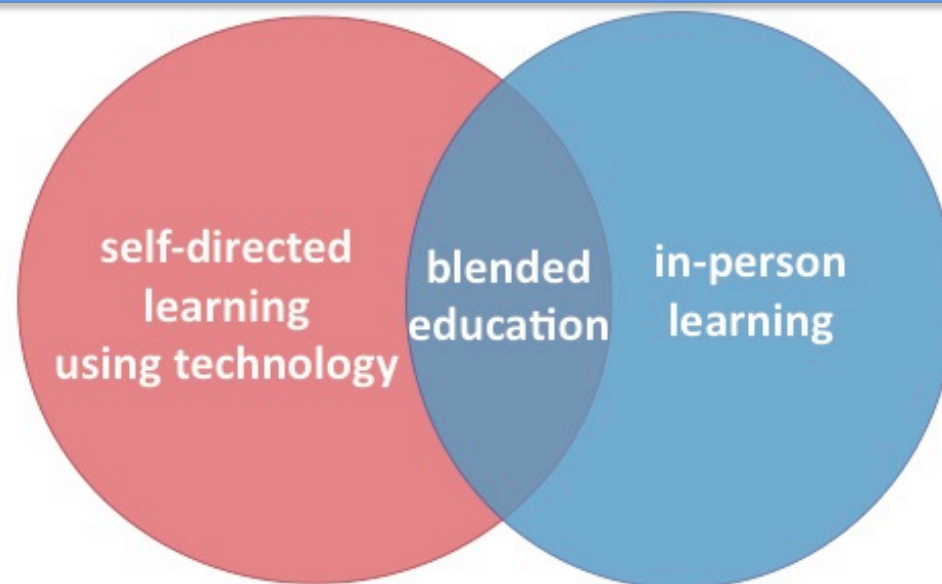
“The millenials have been brought up with the Internet. They will find information on their own for how to do things just by the motivation of their own power”.

-Vincent Hui

ONLINE VERSUS IN PERSON LEARNING

“Some evidence shows that finding the right balance becomes some form of a blended environment of both the use of technology and a face-to-face model. With online learning, technology is going to be part of ecology, an essential part, but it is not a matter of replacing, as it is more of a supplementing and enhancing element. Students are so immersed in technology that this is one of the touchstones, the ways they operate, so there is an expectation that much of it will be accessible through technological modes”.

-Mark Robertson



HAVING A CHOICE

A man in a dark suit and white shirt is shown from the chest up, slightly out of focus. He is pointing his right index finger towards a digital interface. The interface consists of several glowing blue icons of two people, representing social networks. One icon in the center is larger and has a blue banner below it with the text "social network". A bright blue horizontal line of light passes through this central icon. The background is a dark blue gradient.

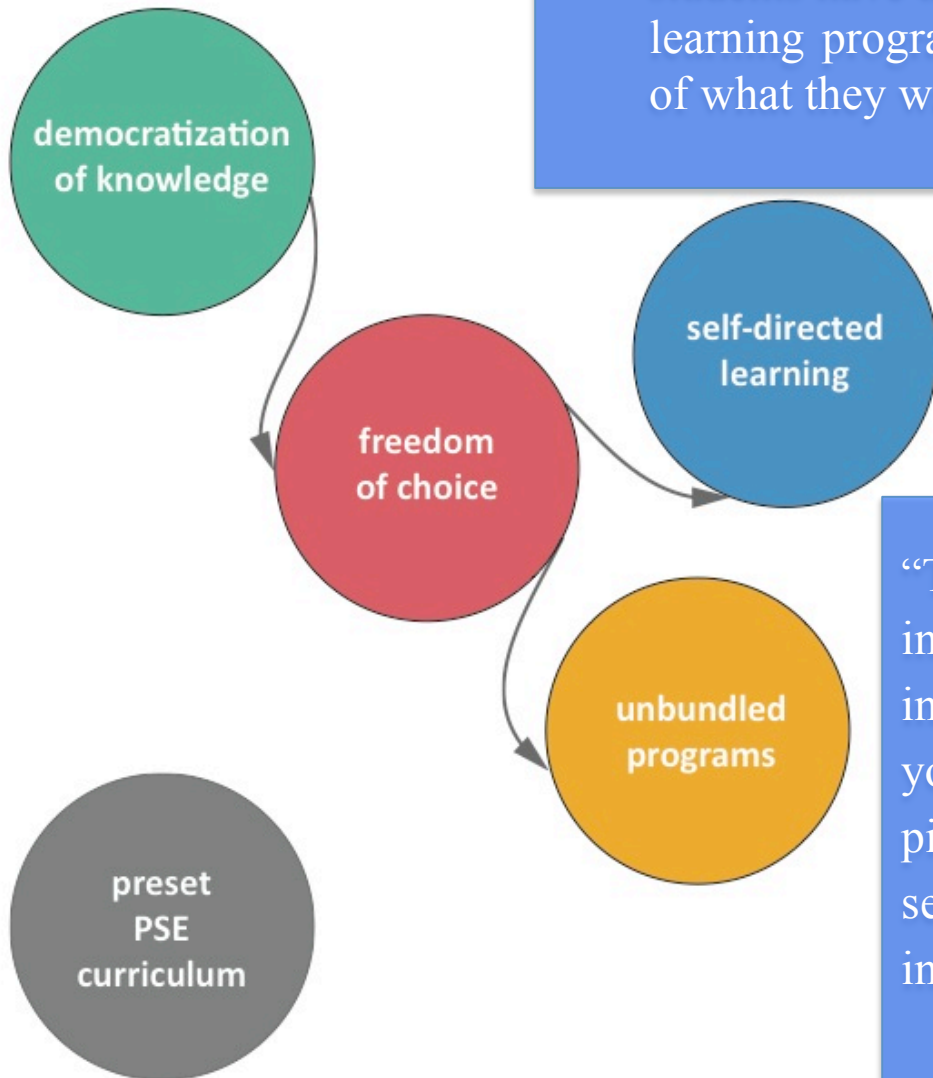
“People who have access to information will know what exists and find ways to improve themselves. That drive is independent and fosters learning”.

-Vincent Hui

HAVING A CHOICE

“The main driver is the democratization of learning. The students have a choice in whether to follow a university-offered learning program or fulfill their desire for a broader spectrum of what they want to do by developing their own learning”.

-Nabil Harfoush



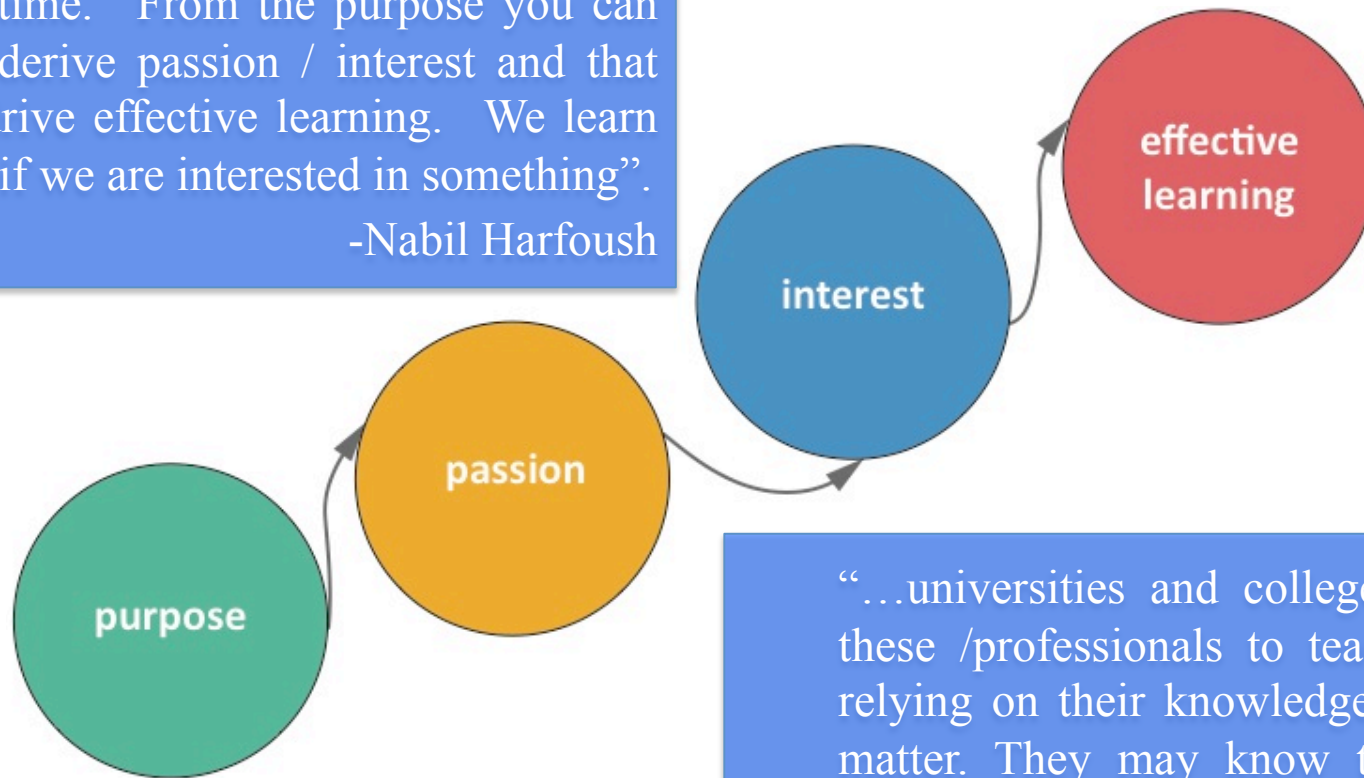
“The topic that you are studying should be of interest to you. Intellectual curiosity is driving the independent investigation of the topic and drives your motivation to study. That then becomes the pivotal skill that helps you become innovative and self-directed because you are just genuinely interested in learning and motivated to learn”.

-Sylvia Link

EFFECTIVE EDUCATION

“I think the most effective way to learn is to help students discover their purpose and this purpose will evolve over time. From the purpose you can then derive passion / interest and that can drive effective learning. We learn most if we are interested in something”.

-Nabil Harfoush



“...universities and colleges should train these /professionals to teach; rather than relying on their knowledge of the subject matter. They may know the subject but they may not be able to teach”.

-Patrick Saavedra



LIFE-LONG LEARNING

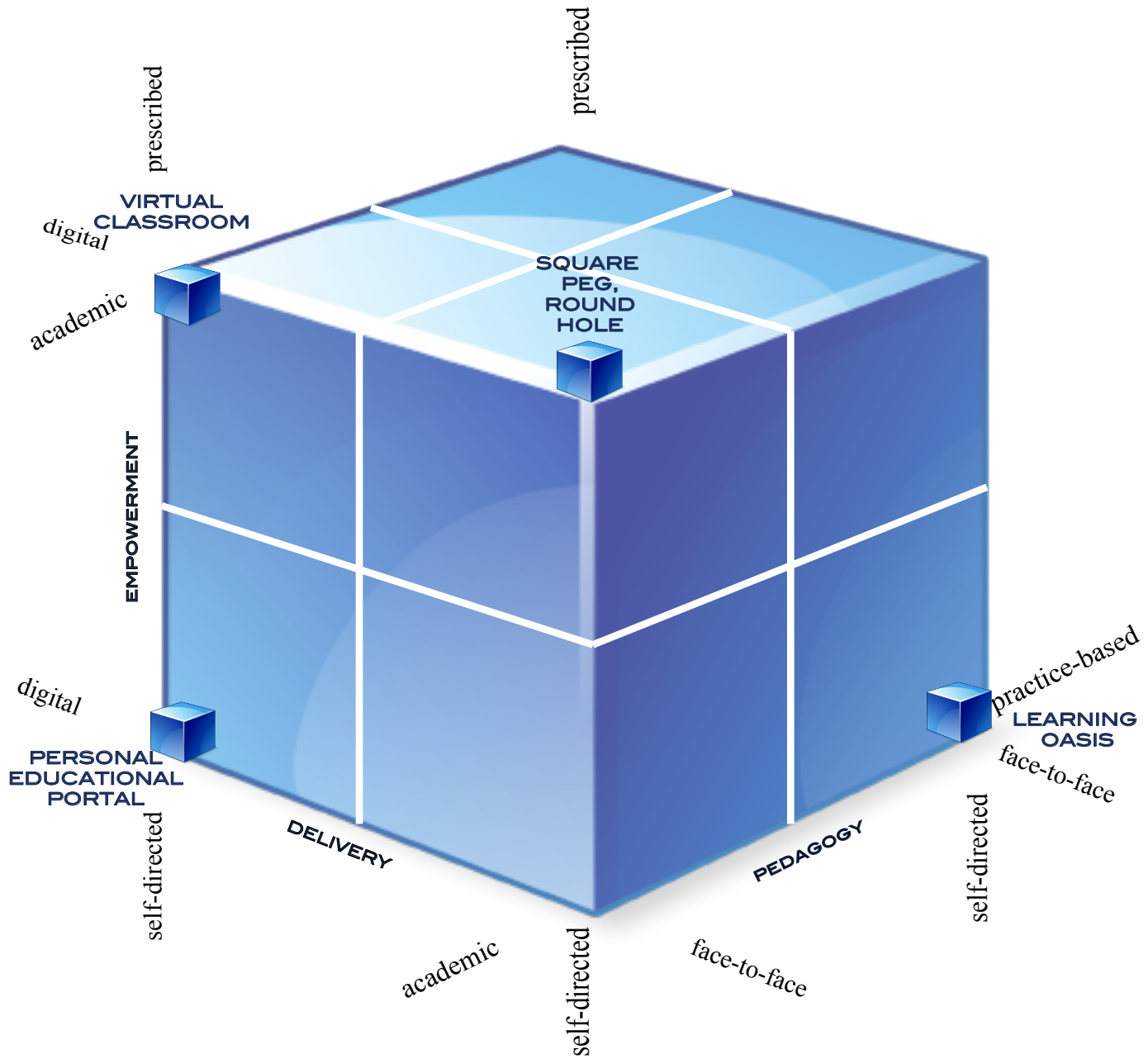
“Everything is changing so quickly that one degree might not last your entire life”.

-Mark Robertson

“Why not allow those people to perhaps change their career or upgrade themselves to get educated at a significant discount at 50 or younger for them to be able to re-immerge with the most current information. These people can move up in the ranks if they know computers or get more versatile in technology”.

-Vincent Hui

SCENARIOS



- 
- Reduction in public funding;
 - Increase in tuition fees;
 - Technological delivery of education as a disrupter to conventional PSE institutions;
 - Lecture content moves online;
 - Availability of cost effective prescribed educational modules online;
 - Students' new educational experiences through virtual classrooms and wearable technologies.
 - Affordability of new personal devices through 3D printing
 - New online forms of teacher-student advising and mentorship;

VIRTUAL CLASSROOM

LEARNING OASIS TECHNOLOGY ASIDE

- Surplus of university students;
- Increased frequency of cyber attacks;
- Constant connection through technology becomes a nuisance;
- People disconnecting from personal technological devices;
- Abandoning online learning and turning to studio-based education;
- Preference of face-to-face interaction;
- Students direct interface with industry professionals;
- Mandatory internship programs;
- Collaborative and group works in the natural settings of green lounges and lecture halls;
- Peer-to-peer learning;
- Learning through case-studies and analogue examples;



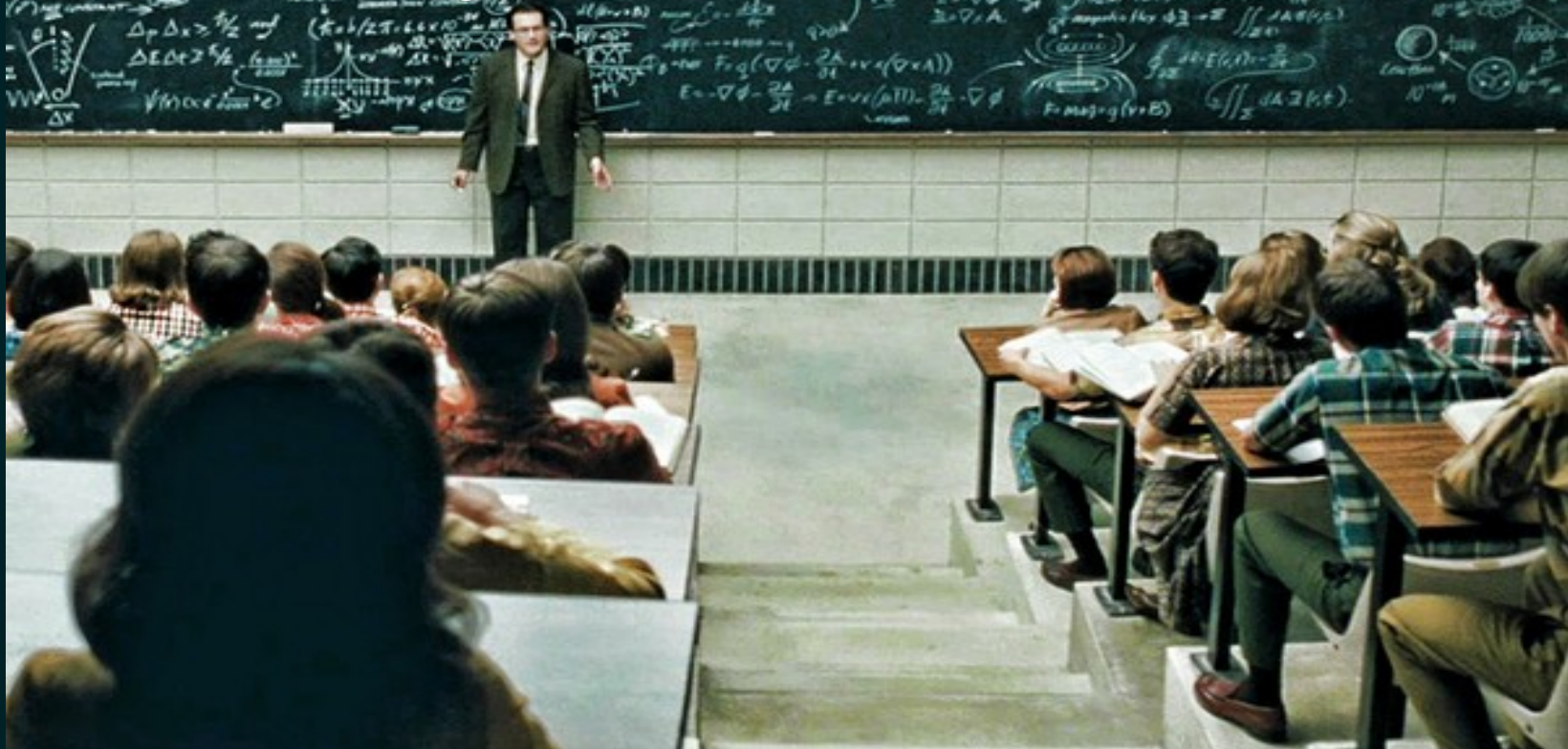


- Importance of time, flexibility and mobility;
- A significance of personal choice;
- Service-driven, user-centric PSE system;
- Self-directed learning process;
- Self-directed portal;
- Life-time learning.
- Delivery of education through personal technological devices.
- Personalized career navigation and tracking portal;

PERSONAL EDUCATIONAL PORTAL

SQUARE PEG, ROUND HOLE

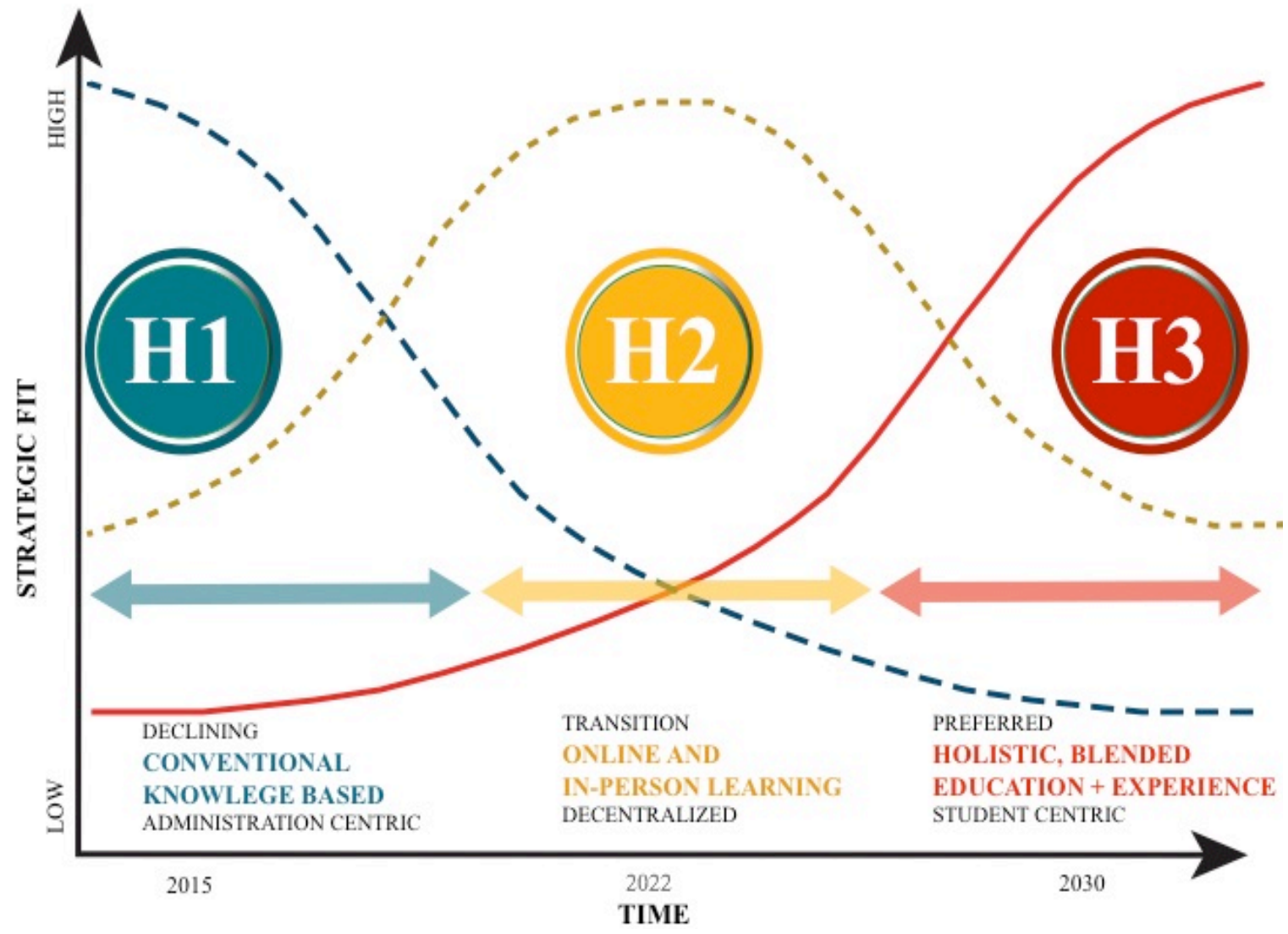
- High cost of PSE tuition;
- PSE non-changing environment of rigid and bureaucratic system;
- Administrative control;
- Prescribed theoretical knowledge of PSE curriculum;
- Lack of experience and no experiential education;
- PSE institution disconnection from industries;
- Students treated equally;
- No choices for courses offered;
- New alternative courses offered by smaller private organizations;
- Students diverge from PSE environment to seek new alternatives;



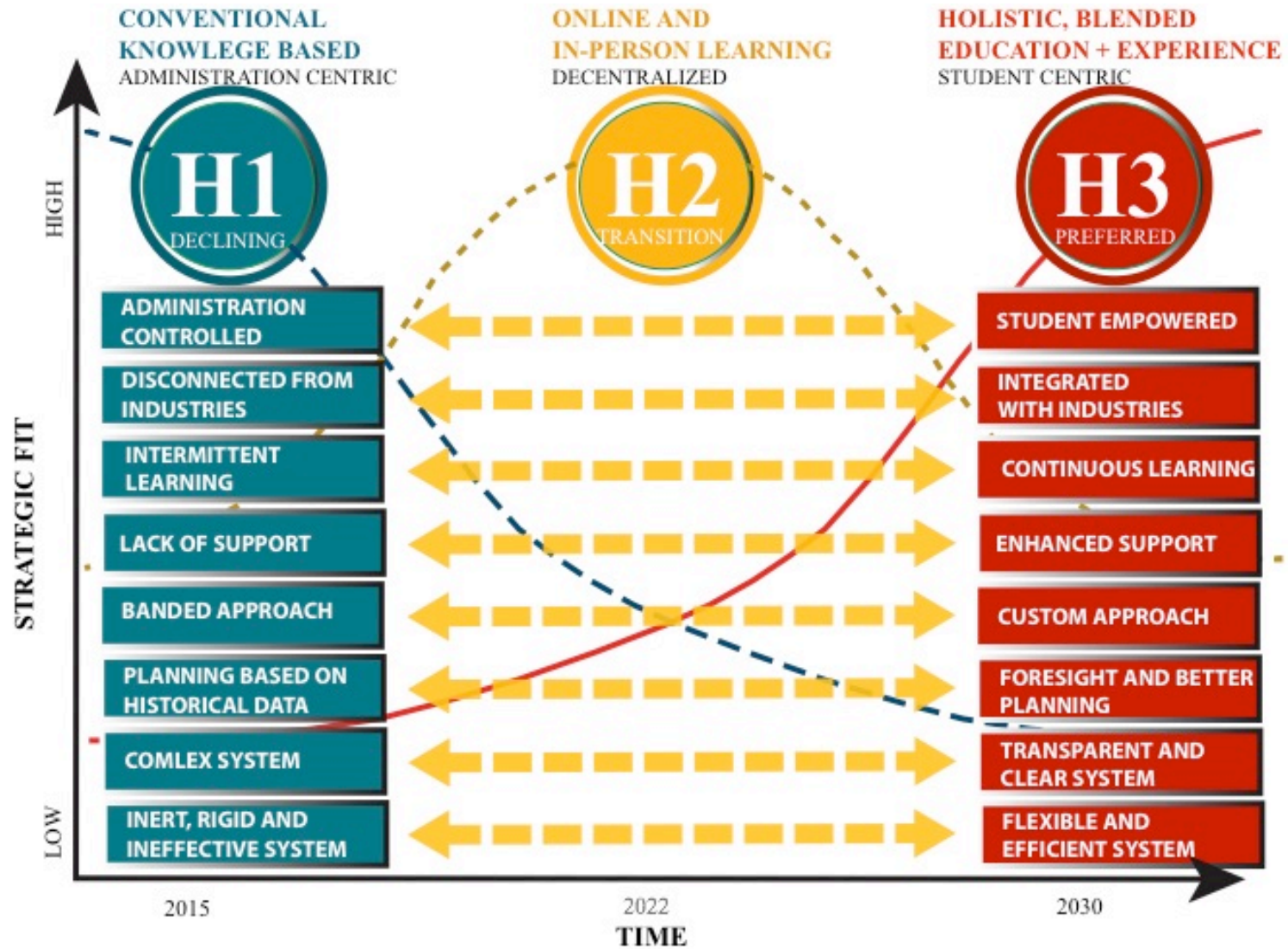
- 
- A hiker with a backpack stands on a rocky peak, looking out over a vast mountain range under a clear blue sky. The hiker is wearing a purple shirt and shorts. The landscape is rugged with dark rocks and some greenery. In the distance, a range of mountains stretches across the horizon. The sky is a deep, clear blue.
- Awareness of global economic issues;
 - Increase in population, migration and urbanization;
 - Surplus of graduates and high market competition;
 - Need for diverse education;
 - New innovative technologies;
 - Training based on real cases;
 - Increased peer-to-peer learning;
 - Self-directed learning;
 - Life-long learning;
 - Holistic education;
 - Increased support for students and faculty;
 - Implementation of foresight into PSE curriculum;

RE-IMAGINARY EDUCATION

THREE HORIZONS



THREE HORIZONS



STRATEGIC APPROACHES

INDIVIDUALIZED

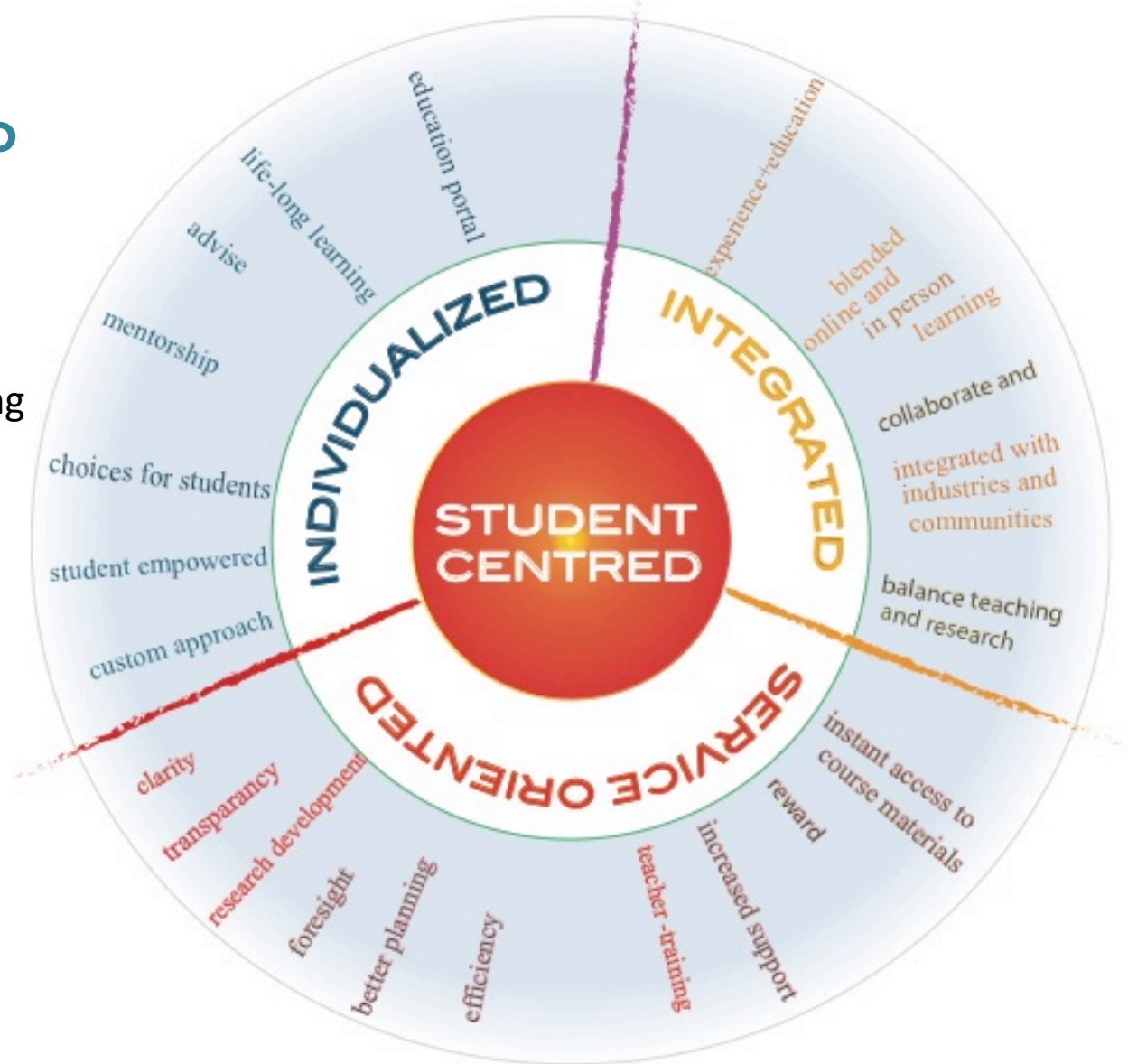
approach

INTEGRATED

Education + experience
Online & in-person learning

SERVICE ORIENTED

Model



NEW APPROACHES:

INDIVIDUALIZED



- **Mentorship and Advice**
 - On-line faculty advising;
- **Smaller Class Size**
- **Choice**
 - Through Unbundled Programs
- **Personal Student Portal (PSP)**
 - Plan your career;
 - Find desired courses at a convenient time and location worldwide;
 - Track your progress and credits
- **Life-Long Learning**
 - Through University Membership

INTEGRATED



- **Blended On-line and In person Learning**
- **Education + Experience**
 - Receive Quality education;
 - Internship placement in industry or community;
- **Collaborate**
 - Through Peer-to-peer Learning
- **Balanced Teaching & Research**

SERVICE-ORIENTED



- **Instant Access to Course Materials (online)**
- **Increased Support**
- **Clarity & Transparency**
 - University's information is clear and accessible via PSP
- **Efficient PSE Institution**
 - Receive fee discount for courses;
- **Well Planned**
 - Link to universities' events;
 - Listen to testimonials of industry professionals;
- **Forecast personal progress with PSP**

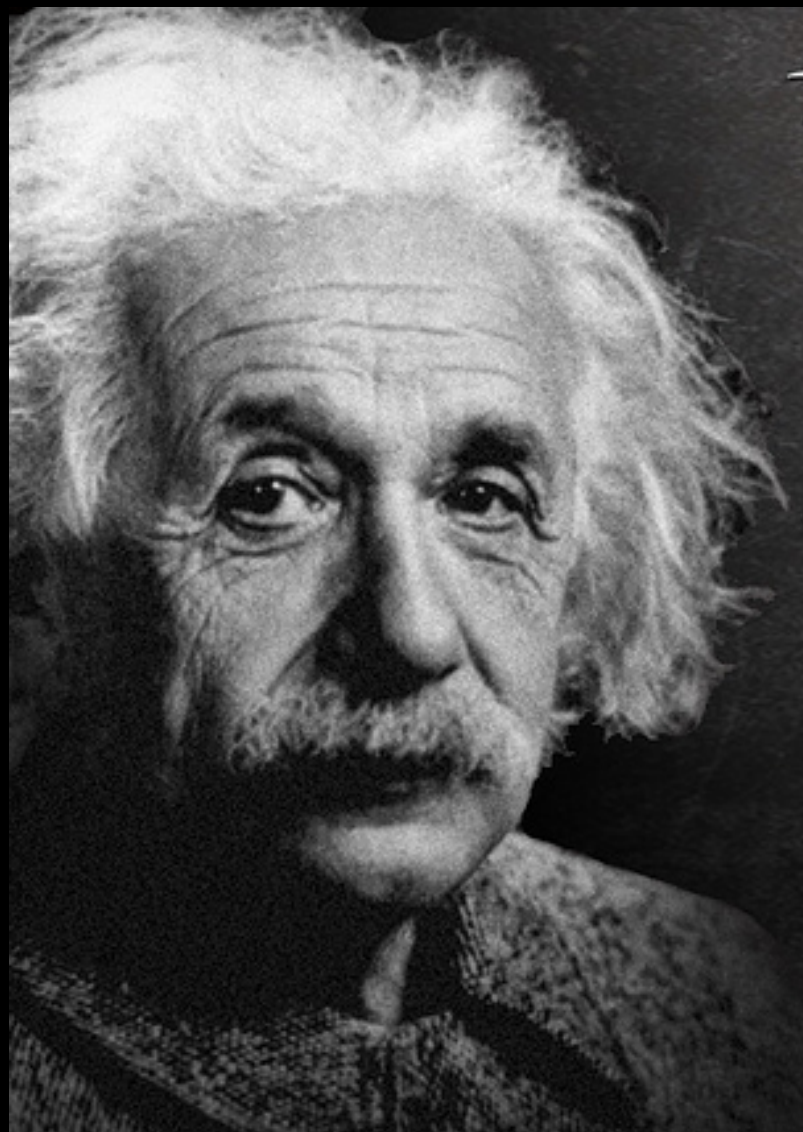
How can we make this happen?

A CALL FOR RADICAL APPROACH

- Disrupt the current PSE system with a smaller scale, unconventional educational model that is independent of the existing PSE system

PSE BUSINESS MODEL INNOVATION

VALUE PROPOSITION	CUSTOMER SEGMENTS	REVENUE STREAMS
Blended face-to-face & online education	High-school graduates	Students' reduced tuition fee based on cost cuts for online courses paid by industry ads
Credentials		Savings on students' self-directed administrative service
Personal Educational Portal (PEP)		Small advising fee for retired faculty
Online advising		Revenue from larger number of students interested in unbundled & distance learning courses
Unbundled courses & virtual classrooms	International students	Savings from maintenance of physical facilities
Experience in industry or community	University or College graduates	University's membership
Life-long learning	Professionals after 50	Research funds & students' commercial projects
Research & commercial students' projects	Industries	



TEACHING SHOULD BE
SUCH THAT WHAT IS
OFFERED IS
PERCEIVED AS A
VALUABLE GIFT AND
NOT AS A HARD DUTY.

A. Einstein

Reinvent P.S. Education,
don't settle for the status quo.

Thank you