#### Report on the Training on Digital Education

Organized by the Permanent Commission on Quality Assurance and
Internal Quality Assurance Office

Epoka University

25-26 September 2019

#### **Executive Summary**

In pursuit of ongoing improvement in education at EPOKA University, the Permanent Commission on Quality Assurance at Epoka University organized the Training on Digital Education on the 25<sup>th</sup>-26<sup>th</sup> of September 2019. Two representatives from Pearson Publishing House, Ms. Erzsébet Csibi and Ms. Marina Mudrenovic and Assoc.Prof.Dr. David Felsen, the Vice-Rector for International Relations at EPOKA University were invited to talk respectively about Digitalization in Higher Education in the Global Arena, Digital Teaching Systems and Tools Used by Top Colleges in the World, and Common Challenges in the Use of Digital Technology in Learning Environments . Participants were also invited in computer labs for Hands-on Demonstrations of Digital Teaching Systems and Tools.

#### Report on the Training on Digital Education

#### Organized by the Permanent Commission on Quality Assurance

#### **Epoka University**

#### 25-26 September 2019

Following in the established tradition of providing staff training twice each year, the Permanent Commission on Quality Assurance (PCQA), in cooperation with Internal Quality Assurance Office (IQAO) organized a training for staff for September 2019. The Permanent Commission on quality assurance decided on the organization of the training on Digital Education given that Digitalization in higher education is becoming a serious reality since such technologies bring efficiency and effectiveness in education.

The purpose of this training was to familiarize EPOKA University academic staff on the developments in this area and create a platform of discussion on the benefits and drawbacks of digitalization in higher education.

Two representative of Pearson Publishing House and the Vice-Rector for International Relations at EPOKA University, were invited to lead a two-day training on these topics. The training included presentations, remarks, discussions, and questions and answers.

#### **Summary of Workshop**

#### **Training Session 1**

In the first day of the training, 25 September 2019, Pearson representatives introduced the participants with the eight key trends on the way the learners across the globe seek education in 2019, based on Pearson Global Learner Survey, which captures Global Learner Sentiment on learning and education today.

They also talked about how digital education products aligned with learning science help to achieve better learner outcomes. The trainers shared the model of SAMR to guide thinking about the degree to which technology can alter previous learning experiences. The Person representatives introduced them with the steps on how to build an effective digital learning experience as well as e-learning benefits.

Specifically, they talked about, Massive Open Online Courses (MOOCs), online simulations which improve students' employment prospects by giving them the chance to apply theory to practice while they are studying as well as Blended or Hybrid learning approach to education that combines online educational materials and opportunities for interaction online with traditional place-based classroom methods. They

emphasized that in order to have a successful e-learning the institution needs to set out an e-learning strategy.

Finally, they introduced the participants with the best e-learning tools and platforms used for an effective teaching and learning.

(Note: Presentation of the session is attached to this report).

#### **Training Session 2**

In the second day of the training, 26 September 2019, Assoc. Prof. Dr. David Felsen talked about common challenges and advantages in the Use of Digital Technologies in Learning environments.

This session addressed some important issues:

- Strategic use of the digital technology in the classroom;
- Digital Technology in the Classroom advantages and challenges;
- Advantages and challenges of use of Desktop, laptops, tablets, smartboards and social media in classroom environment.

(Note: Presentation of the session is attached to this report).

Following Assoc. Prof. Dr. Felsen's presentation, training participants were invited in the computer labs where Pearson Representatives demonstrated different digital systems and tools used in higher education. These technologies included digital books and other e-learning tools and platforms.

#### **Evaluation of the training**

At the end of the training, the evaluation forms were sent to the participants through google form in order to evaluate the activity. The participants evaluated positively overall content of the training and its organization. In terms of content, most of the participants evaluated that they were well informed about the objectives of the training, that the training lived up to their expectations and that the content was relevant to teaching and learning. In terms of training design, most of the participants highlighted that the training activities stimulated learning, that that training activities gave them sufficient practice and feedback and that the pace of the training was appropriate. For the trainers, most of the participants evaluated that they were well prepared and that they were very helpful. The participants in their evaluation forms, provided suggestions on how to improve in future these types of trainings. They suggested to make training activities more stimulating. They also suggested make the trainings more practical rather than theoretical training.



# Digitalization in Higher Education in the Global Arena

Erzsébet Csibi

Account Manager Pearson CEE





- 1. Global Learner Survey & Opportunity for HE Paper
- 2. Beyond the Hype: Digital learning based on learning science
- 3. Research findings and other thoughts
- 4. E-learning tools and platforms





## Global Learner Survey & Opportunity for HE Paper

September 2019



## Global Learner Survey & the Future of Higher Education

Our objective is to give the world insight and perspective on the changing tides of education and learning, globally

To do this, we have launched 2 initial pieces of content in September 2019:

- 1) A first-of-its kind survey that captures global learner sentiment on learning and education today
- 2) A point-of-view on the state and potential for the future of higher education



What we've learned



## What we have found

- Biggest **economic change** since the industrial revolution
- <u>Future of Skills: Employment in 2030</u> (2017 research) the future of work and its implications for education = **lifelong learning** is essential
- Pearson Global Learner Survey 19 countries, 12,000 people ages 16-70
- Learners increasingly take control of their education with a DIY mindset
- **Opportunity for Higher Education in the Era of the Talent Economy** (white paper) repositioning HE in support of lifelong learning
  - 3 foundational principles:
    - learning that is continuous,
    - supported by distributed investment (of time and money)
    - outcomes-based



## A fresh perspective on the future of learning and education

- We're in the midst of the biggest economic change since the Industrial Revolution. It's time for learners to have their say.
- 2. Learners are taking control with a "**DIY" mindset,** adding on to their traditional education with a mix of options- from self teaching to online education.
- 3. This is being driven by the shifting **economic landscape**, easy access to technology and wavering trust in education systems.
- 4. This is the greatest opportunity in human history to reinvent learning to meet the needs of the new economy.



### **Key Trends**

Our survey uncovered eight key trends that learners across the globe tell us characterize the way they seek education in 2019.

#### 1 A DIY mindset is reshaping education.

With ready access to technology and a changing global economy, people are taking matters into their own hands. They are patching together their education from a menu of options and they believe that self-service learning will become even more commonplace as people seek education across their lives.

#### 2 The 40-year career is gone, replaced by life-long learning and diverse career paths.

The talent economy has arrived and the traditional, linear career path is a thing of the past. Learners are molding education into what they need for today's work world, which means 'bite-sized' learning across their entire life.

#### 3 People expect digital and virtual learning to be the new normal in the next decade.

People are using technology in every aspect of their lives and they are now embracing it as part of their education. From online degrees, artificial intelligence (AI) tools and smart devices, people see the future of learning made easier and more engaging with technology.



#### 4 Confidence in educational institutions is wavering.

Many around the world feel education somehow isn't working for them. It's failing their generation, not preparing them for work, is too costly, or out of reach.

#### 5 Some young workers think you can do OK in life without a college degree.

The incoming workforce in many countries is open to alternative pathways, especially vocational training.

#### 6 Markets like China and India are leading the world in upskilling while the US and UK lag behind.

Workers in China, India, Brazil and Hispano-America are upskilling at far higher rates than their US and UK counterparts, driven in large part by the influence of technology and automation on their jobs.





#### 7 Learners believe soft skills will give them the advantage over automation.

While STEM skills aren't forgotten, people realize the skills which make us uniquely human are actually the hardest to learn. Skills like creativity, originality, problem-solving and the ability to learn give humans an advantage over machines and learners say they need help mastering them.

#### 8 People now cite social media and bullying as contributing factors to school safety concerns.

Acts of violence have always been the main driver of concerns over school safety. But now learners say that online bullying and social media are making school more difficult for today's students.



## **Opportunity for Higher Education in the Era of the Talent Economy**

Higher education institutions are uniquely qualified to chart the new lifelong learning models needed today & in the future.

## 3 learner-centric principles

that are required to deliver the lifelong learning options that learners and employers need and want

- 1. People will seek learning experiences at specific moments of need across their lifetime, delivered with the flexibility that their circumstances demand, so we must find ways to **enable continuous learning**.
- As learning will be continuous over a lifetime, rather than concentrated at a
  young age, we must tackle the issue of cost in a new way, working toward a
  system which distributes the investment in learning including
  money and time throughout life, and build a sensible cost structure to match;
  and
- 3. Outcomes-based learning will become the new normal. Education will increasingly need to develop the knowledge and skills that deliver the learning and employability outcomes that learners, and employers, seek. The divide between "learning for its own sake" and "learning for employment" will, therefore, close. There will also be demand for clarity about the knowledge and skills required for specific careers or jobs, as well as how to acquire, assess and refresh those over time.

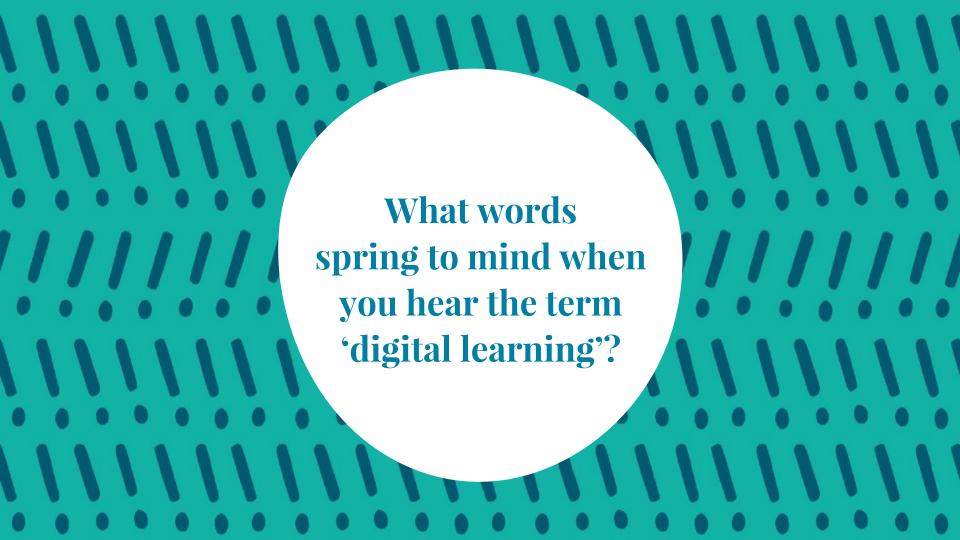




## Beyond the Hype: Digital learning based on learning science

#beyondthehype







## **Beyond the Hype – main ideas**

- 1 Educational technology supports teachers and learners
- 2 The design of digital education products must align with learning science
- 3 Use technology to do something new
- 4 How to build an effective digital learning experience
- 5 It's all about the people



Dan Belenky,
Director of Science of
Teaching and Learning
Research



## **Educational technology supports educators and learners**



	Problem	Solution
1	Not knowing what aspects students are struggling with	Insight and analytics
2	Hard to pitch content right as students are of differing levels	Personalized activity selection
3	Hard to support individuals throughout learning process as their needs are different	Personalized feedback
4	Students don't engage deeply	Monitoring and adapting based on engagement
5	Students don't see the relevance of what they are learning	More authentic learning & assessment (e.g. simulations)
6	Lecturer wants to spend more time giving detailed feedback to individuals	Shifting teacher focus



## The design of digital education products must align with learning science



## Four principles of learning

Effective learning is generally the result of learning behaviors and instructional materials that:<sup>6</sup>

- Focus on clearly defined knowledge and skills (e.g. have learning objectives and minimize distractions)
- Construct meaning and demonstrate relevance (e.g. move beyond passive learning<sup>7</sup>)
- Provide timely, actionable feedback (e.g. description of how to improve)
- Align with how memory works (e.g. avoid cognitive overload)



## Use technology to do something new

3



### Redefinition

Digital technology enables an entirely new experience

M

### Modification

Digital technology is used to redesign an existing experience

A

### Augmentation

Digital technology substitutes for analog technology, but with a functional improvement

S

### Substitution

Digital technology substitutes directly for analog technology, with no functional improvement

#### **EXAMPLE**

Students work on an interactive simulation to build a nuclear reactor

Instead of studying a static diagram of a physics concept, students watch a video and predict what happens next

A diagram on a digital computer displays labels when students click its various parts

Displaying a diagram on a digital projector instead of an overhead projector

TRANSFORMATION

ENHANCEMENT

## How to build an effective digital learning experience



Identify	<ul> <li>Define your goal</li> <li>Identify the best instruction method</li> <li>Research products that match your need</li> <li>Appraise the context in which the technology will be used</li> </ul>
Plan	<ul> <li>Gain leadership support</li> <li>Ensure you have the appropriate technology infrastructure</li> <li>Make time within the teaching schedule</li> <li>Ensure alignment between learning materials and activities</li> <li>Articulate roles, training, and ongoing support for educators</li> </ul>
Execute	Implement the plan and track progress
Evaluate	<ul> <li>Use data to make judgements about the technology supported intervention</li> </ul>



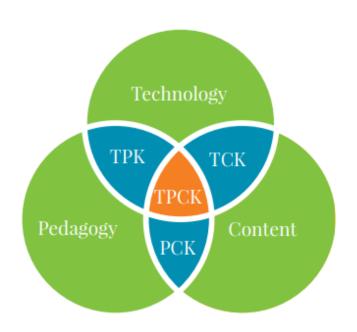
## It's all about the people - Overcoming skepticism

Administration	<ul> <li>Match technology to their goals</li> <li>Suggest low cost pilot</li> <li>Use this paper to communicate the value</li> <li>Use successful case studies</li> </ul>
Educators	<ul> <li>Use this paper to communicate the value</li> <li>Group exploration sessions</li> <li>Find champions to work with</li> <li>Use successful case studies</li> <li>Adopt user friendly technology</li> <li>Training and support</li> </ul>

Learners	<ul> <li>Adopt user friendly technology</li> <li>Explain the value (use student endorsements)</li> <li>Training</li> <li>Allow time to get familiar</li> <li>Technical support</li> <li>Use technology to move up SAMR model</li> <li>Short reading tasks can be digital</li> </ul>
Parents	<ul> <li>Talk to parents about the value, the link to results, and support available</li> <li>Show how it can give parents more visibility</li> </ul>

## **It's all about the people**The TPCK framework





### Questions to consider:

- How does the technology permit new pedagogical approaches or place restrictions on current ones?
- What implications would those changes have for learning goals?
- Does the technology make new learning goals possible?
- If so, what changes to pedagogical practice do those require?

## It's all about the people A guide to professional development



**Pedagogical** 

Social

Managerial

**Technical** 

Professional development must focus on all four roles an educator plays when facilitating digital learning



## **Current e-learning models**

- 1. Blended or hybrid learning
- 2. The flipped classroom
- 3. Self-paces online courses
- 4. Blended online courses
- 5. Massive Open Online Courses (MOOCs)
- 6. Blended MOOCs





## How successful has e-learning been in HE?

- 91% institutions use blended learning
- 82% offer online learning courses
- Joint inter-institutional collaboration
- Online examinations
- BUT only 1/3 involve all or most students in e-learning
- Most frequent areas: business&management, education, teacher training, engineering (law and arts are rare)





## How successful has e-learning been in HE?

- Faculty e-learning strategies ~14%
- Institution-wide strategies~50%
- E-infrastucture and support (80%)

Digital courseware Wi-fi, computer rooms

Online repository Online library

Tools Campus licenses for software

Management systems Online course catalogues

Student portals Social media

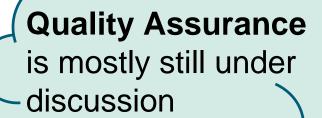
Student email accounts Online examinations





What can make e-learning successful?

- Institutional profile and mission
- Availability of resources
- Access to funding
- Focus on certain subject areas
- Type of students they attract
- Different stages of experience in e-learning
- Paces of technology adoption
- Openness of staff
- Staff skills







## Benefits of e-learning

- Better educational outcomes for students
- Changes the approach to learning
- Deepens student engagement
- Catalyst for changes in teaching methods
- Offers greater accessibility
- Provides world-class education for anyone with broadband connection
- Lowers costs in post-secondary education
- Opens alternative revenue for institutions





## Why teachers don't use technology



## Why teachers don't use technology



- Lack of training
- Wrong kind of training technical rather than pedagogical
- Wrong kind of training not relevant to teaching context
- Wrong trainer
- Wrong technology

- Lack of syllabus integration
- Lack of consultation
- Lack of support
- Lack of infrastucture
- Unrealistic expectations
- Unneccessary





## What the future holds - challenges

- Keeping focus on LEARNING rather than teaching
- Moving to a student-centered model
- Supporting architecture (finance, infrastructure, training)
- Providing sufficient tools for implementation
- Providing training to staff and technical assistance to students
- Leveraging the power of e-learning



## 7 factors of a successful e-learning implementation

- Clear, measurable objectives
- LMS implementation plan
- Team leaders and dates
- Quality standards
- Risk management guildelines
- Training timetable
- Communication and promotion strategy







## **Benefits** & challenges

Own schedule
Own pace
Own place
Repetition
Updated content
Consistency
Effectiveness

. . .

Planning
Self-discipline
Persistence

Motivation and engagement Keeping focus Internet connection Time management



32



\*\*\*

## **Impact on learning**

- Immediate feedback AND guidance
- Regular homework and testing
- Tutoring activities
- Multimedia and interactive activities
- Adaptive tutoring and testing
- Customized content, customized learning



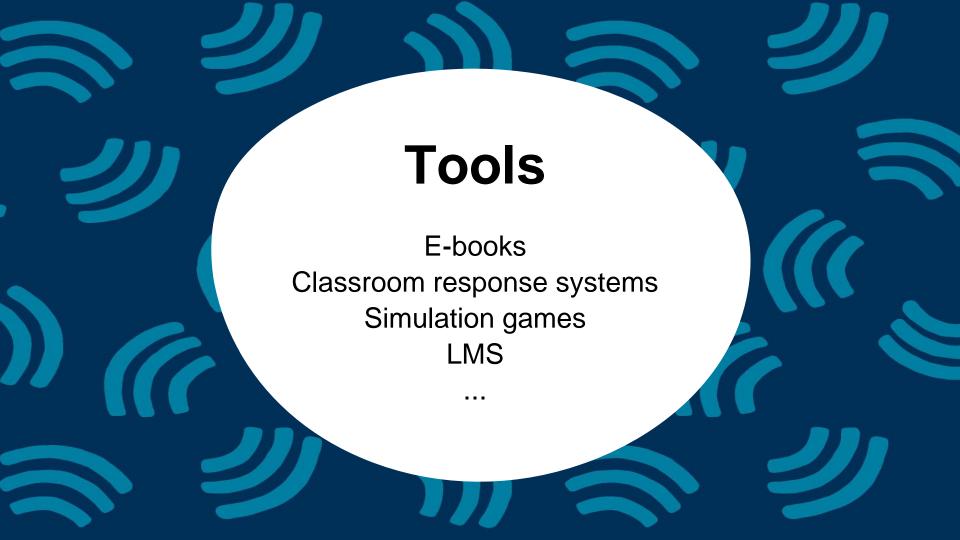


## Impact on learning (eg. simulations)

- Experiential learning: practical experience
- Management skills, soft skills
- Realistic learning environment: more confidence
- Dynamic knowledge
- Engagement, motivation, deep learning
- Learner-controlled study
- Employability skills: leadership, enterpreneurship, problem solving







#### **Interactive eBooks**

#### Depending on the format, e-books can

#### Increase engagement with interactive features

- Lecturers can add and share notes with the class
- Students can make notes and highlights
- Easy to search and navigate

#### Improve accessibility

- Access from most devices
- Integrate with most learning management systems
- Online and offline delivery



### **Key features**



the eBook is a fun way of learning and thus enables me to want to learn more.

- first year student, University of Pretoria.

## Classroom response systems



"I appreciate the text, Kate, but next time you can just raise your hand."







Poll Everywhere

go formative



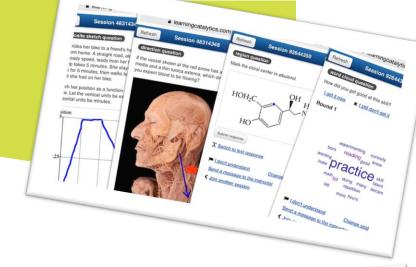
Give every student a voice with

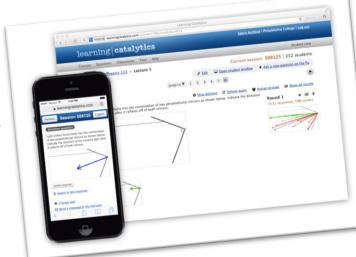
## Learning Catalytics

## A bring-your-own-device classroom response system

- Founded by Eric Mazur, a guru in peer instruction, and enables peer instruction
- 18 different question types including open-ended questions to develop critical thinking skills
- Gradebook gives lecturers insight into individual and course level performance
- Lecturers write their own questions, use Pearson's bank, or the community bank
- Allows lecturers to flip the classroom
- Avoids the administrative load of using physical clickers







## **Experiential Learning:** Online simulations

MyMarketingExperience



MyStrategyExperience



MyLegalExperience

My**Legal**Experience

### "Learning by Doing"

- Let students put theory into practice by forming their own companies
- Learn soft-skills communication, problem solving, critical thinking, and analysis of both verbal and financial data - improving employability
- Make better use of contact time

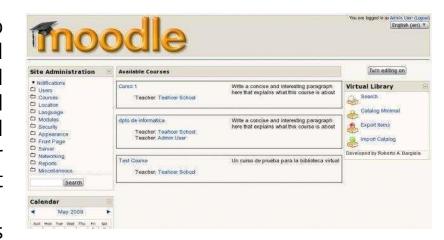






Moodle is a learning platform designed to provide educators, administrators and learners with a **single robust**, **secure and integrated system** to create personalised learning environments. You can **download the software** onto your own web server or ask a knowledgeable Moodle Partners to assist you.

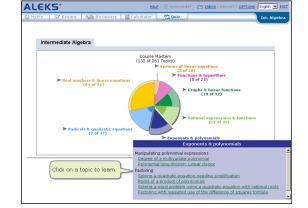
Moodle is built by the Moodle project which is led and coordinated by Moodle HQ, which is financially supported by a network of over 80 Moodle Partner service companies worldwide.







**ALEKS** is an adaptive, artificially**intelligent** learning system students with provides an individualized learning experience tailored to their unique strengths and weaknesses. With decades of scientific research behind creation, ALEKS strives to bring the most advanced and efficient students learning system to worldwide.



#### Features of Aleks:

- "Artificial Intelligence" to map the details of each student's knowledge until subject area mastery is gained
- Avoids multiple-choice questions and instead uses flexible and easy to use answer input tools that mimic what would be done with paper and pencil
- Immediate feedback on assignment questions and suggestions for correcting mistakes



**Disciplines Available:** Accounting, Behavioral Sciences, Business Math, Chemistry, Mathematics (learning and standardized, readiness assessment), Physics, and Statistics



**Connect** is a teaching and learning platform designed to boost performance.

#### Connect offers:

- one destination for all course content
- assignment and quiz banks
- deep insights into student performance
- recommendations for students to improve
- adaptive learning features that customize the student experience



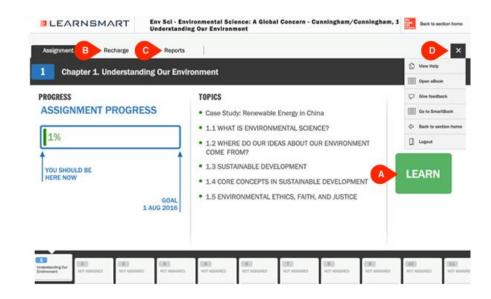


**Disciplines Available:** Accounting, Anatomy & Physiology, Astronomy, Behavioral Sciences, Biology, Business Communication, Business Law, Business Math, Business Stats, Chemistry, Criminal Justice, Economics, Education, Engineering, English, Finance, Genetics, Geosciences, Humanities, IT, Intro to Business, Management, Mathematics, Marketing, Microbiology, MIS, Nursing, Nutrition, Operations Management, Physics, Psychology, Statistics, Student Success, World Language

#### LEARNSMART®

LearnSmart is an online study tool that maximizes time spent with your course textbook or eBook that tests your knowledge of key concepts and pinpoints the topics on which you need to focus your study time. With LearnSmart, you'll be ready for your exam and prepared to get a better grade.

**LearnSmart** is marketed and sold directly to students as a subscription



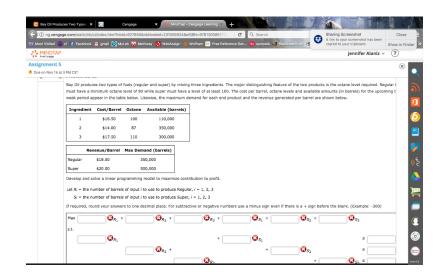


**Disciplines Available:** Astronomy, Biology, Calculus, Chemistry, Composition, Economics, Electrical Engineering, English, Environmental Science, Genetics, Geosciences, History, Human Development, Mathematics, Nutrition & Health, Physics, Political Science, Statistics



**MindTap** fuses authoritative textbook pedagogy with customizable student "learning paths," an innovative "**App" model** of instructional utilities, Learning Management System interoperability and the power of social media to create a truly personal learning experience for today's mobile students.

Serves 45+ course areas across Humanities, Social Sciences, Quantitative Business, Qualitative Business, Science, and Careers





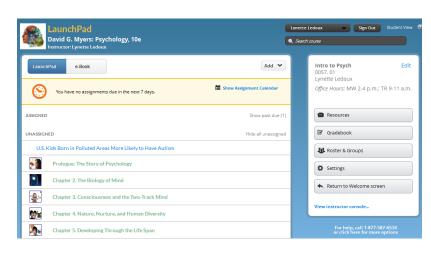


We designed **LaunchPad** as a resource to help students achieve better results. Our goal was to increase their confidence by providing a place where they could read, study, practice, complete homework, and more.

#### LaunchPad offers:

- Interactive e-book
- LearningCurve adaptive quizzing
- Video-based assignment submission
- Faculty gradebook
- Social commenting tools
- LMS integration

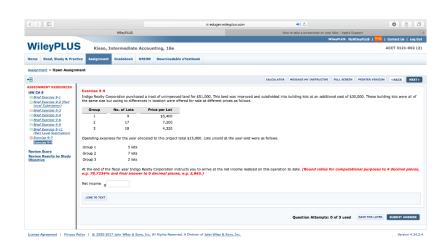




**Disciplines Available:** Astronomy, Biology, Calculus, Chemistry, Composition, Economics, Electrical Engineering, English, Environmental Science, Genetics, Geosciences, History, Human Development, Mathematics, Nutrition & Health, Physics, Political Science, Statistics

### **WileyPLUS**

WileyPLUS is a research-based online environment for effective teaching and learning. WileyPLUS builds students' confidence because it takes the guesswork out of studying by providing a clear roadmap; what to do, how to do it, if they did it right. With WileyPLUS, students take more initiative so you'll have a greater impact.



**Disciplines Available**: Accounting, Anatomy & Physiolog, Biology, Biochemistry, Culinary, Earth Science, Economics, Education, Engineering, Finance, Geosciences, Intro to Business, IT, Management, Marketing, Mathematics, MIS, Nutrition, Physics, Psychology and World Languages

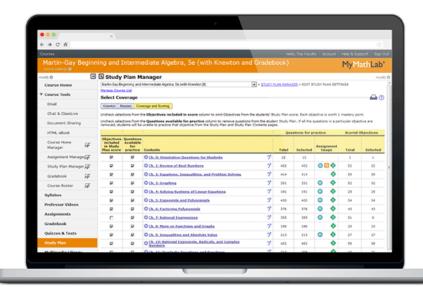


## Pearson | MyLab | Mastering

MyLab and Mastering is the world's leading collection of online homework, tutorial, and assessment products designed with a single purpose in mind: to improve the results of all higher education students, one student at a time.

With input from more than 11 million student users annually, MyLab and Mastering create learning experiences that are truly **personalized** and continuously **adaptive**.

MyLab and Mastering react to how students are actually performing, offering data-driven guidance that helps them better absorb course material and understand difficult concepts.







## **Disciplines available**

Accounting and Taxation Engineering: Civil and Environmental Music

Anthropology Engineering: Electrical Nursing and Health

Art Engineering: Mechanical Philosophy

Biology English: Composition Physics

Business & Management Finance Politics

Chemistry Geography Psychology

Communication: Mass Comm Geology Religion

Communication: Speech Comm History Social Work/Social Welfare

Computer Science Information Systems Sociology

Decision Science Law Sports Science

Economics Marketing Study Skills

Education Mathematics World Languages



## **Core Features of MyLab & Mastering**

Built in mini-simulations, videos, LearningCatalytics, etc.

MyLak
-------

Interactive tutorial exercises with immediate feedback

A personalized Study Plan

Pearson eText: access anytime, anywhere

Pearson eText companion app

### Mastering

Everything you need in an easy-to-use format

A powerful gradebook

Diagnostics and insights that help you guide the class

Wrong-answer feedback personalized for each student

Hints that offer clear guidance to students

Dynamic, best-in-class content



# They embed seamlessly into a variety of platforms, allowing for a single sign on message

**Engage Students** 

Improve Results

Time efficiency











# There's so much more to learn

Find out more about us at <a href="http://www.pearsoned.co.uk">http://www.pearsoned.co.uk</a>

erzsebet.csibi@pearson.com



## Core Features of MyLab & Mastering Built in mini-simulations, videos, LearningCatalytics

#### MyLab

#### Interactive tutorial exercises with immediate feedback

- exercises are correlated to the exercises in the textbook unlimited opportunity for practice and mastery
- exercises include guided solutions, sample problems, and learning
- immediate feedback

#### A personalized Study Plan

- personalized Study Plan based on test results
- links directly to interactive, tutorial exercises
- unlimited practice
- · guided solutions and multimedia learning

#### Pearson eText: access anytime, anywhere

- access to your textbook anytime, anywhere
- note taking, highlighting, and bookmarking
- interactive and sharing features

#### Pearson eText companion app

 access titles on an iPad or Android tablet for either online or offline viewing



#### Mastering

#### **Everything you need in an easy-to-use format**

- rich and flexible set of pre-built courses and
- can be used as is or customized to fit specific teaching needs
- Calendar View displays upcoming assignments and due dates

#### A powerful gradebook

records all scores for automatically graded assignments

#### Diagnostics and insights that help you guide the class

- diagnostics provide insight into class and student performance
- view charts that summarize the most difficult problems, identify vulnerable students, indicate grade distribution and score improvement

#### Wrong-answer feedback personalized for each student

- offers wrong-answer feedback that is specific to each student
- guides students towards the correct final answer without giving the answer away

#### Hints that offer clear guidance to students

- provides hints of two types that help students work through, and ultimately solve, problems
- declarative hints provide advice on how to approach the problem
- Socratic hints break a problem down into smaller sub-problems

#### Dynamic, best-in-class content

continually improving based on data generated through classroor

#### References

The Future of Skills - https://futureskills.pearson.com/

Global Learner Survey - <a href="https://www.pearson.com/corporate/news/global-learner-survey.html">https://www.pearson.com/corporate/news/global-learner-survey.html</a>

Opportunity for HE - <a href="https://www.pearson.com/content/dam/one-dot-com/global/Files/news/gls/Opportunity\_for\_HE\_Sept2019.pdf">https://www.pearson.com/content/dam/one-dot-com/one-dot-com/global/Files/news/gls/Opportunity\_for\_HE\_Sept2019.pdf</a>

Beyond the Hype - <a href="https://www.pearson.com/content/dam/one-dot-com/one-dot-com/global/Files/efficacy-and-research/reports/pearson-beyond-the-hype.pdf?fbclid=lwAR2NJ-CZ7sS0T2cjByrd4Ylp9HEmASpnTntl6fziROeCj8vibcyxcFMuwiQ</a>

E-learning in European Higher Education Institutions - <a href="https://eua.eu/resources/publications/368:e-learning-in-european-higher-education-institutions.html">https://eua.eu/resources/publications/368:e-learning-in-european-higher-education-institutions.html</a>

How successful has eLearning been in higher education? - <a href="https://blog.wiziq.com/higher-education-software-success/">https://blog.wiziq.com/higher-education-software-success/</a>

7 factors to ensure a successful e-learning program - <a href="https://www.shiftelearning.com/blog/bid/210351/7-key-factors-to-ensure-a-successful-elearning-program">https://www.shiftelearning.com/blog/bid/210351/7-key-factors-to-ensure-a-successful-elearning-program</a>

Nick Peachey: 11 reasons why teachers don't use technology - <a href="https://www.linkedin.com/pulse/11-reasons-why-teachers-dont-use-technology-nik-peachey/">https://www.linkedin.com/pulse/11-reasons-why-teachers-dont-use-technology-nik-peachey/</a>





Digital Teaching
Systems and
Tools Used by
Top Colleges in
the World



Marina Mudrenovic September 2019









## Overview

- The Digital Landscape
- Technology in teaching what, why and how?
- Incorporating technology into the learning / teaching environment – some examples.
- The journey from refugee to immigrant overcoming difficulties.



## The Digital Landscape

Born and brought up in a world of technology. Often enthusiastic users.

**Digital Natives** 

Adapted to technology later in life and uses it.

**Digital Immigrants** 

Watching from a distance, but not actively involved with technology.

**Digital Voyeurs** 

In denial, ignorant of / terrified of technology.

**Digital Refugees** 



## Immigrant, Refugee or Voyeur?

## Do you have your own:

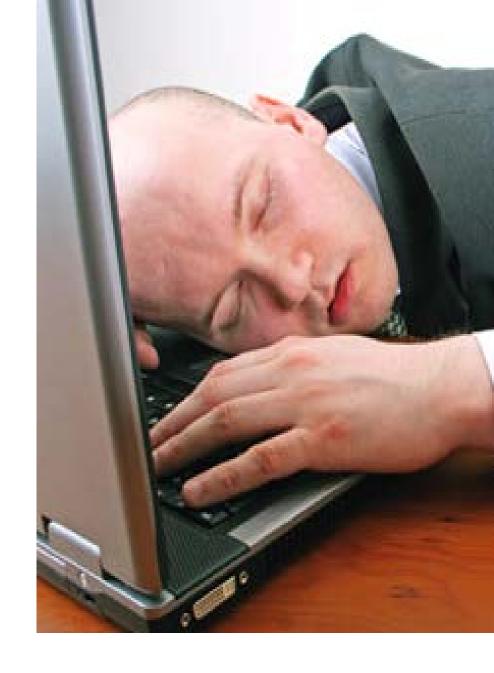
computer	1 point
ipad / tablet	1 point
music streaming account (eg Spotify)	4 points
cloud storage	4 points
online bank account	5 points
avatar	8 points



1 – 6 Wow! You're either really old or are good at balancing your life.

7 – 15 Okay, you're normal.

16 + Uh, it might be time to turn off the electricity for a while.





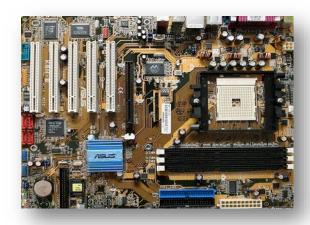






It goes wrong

## A refugee's guide to technology:



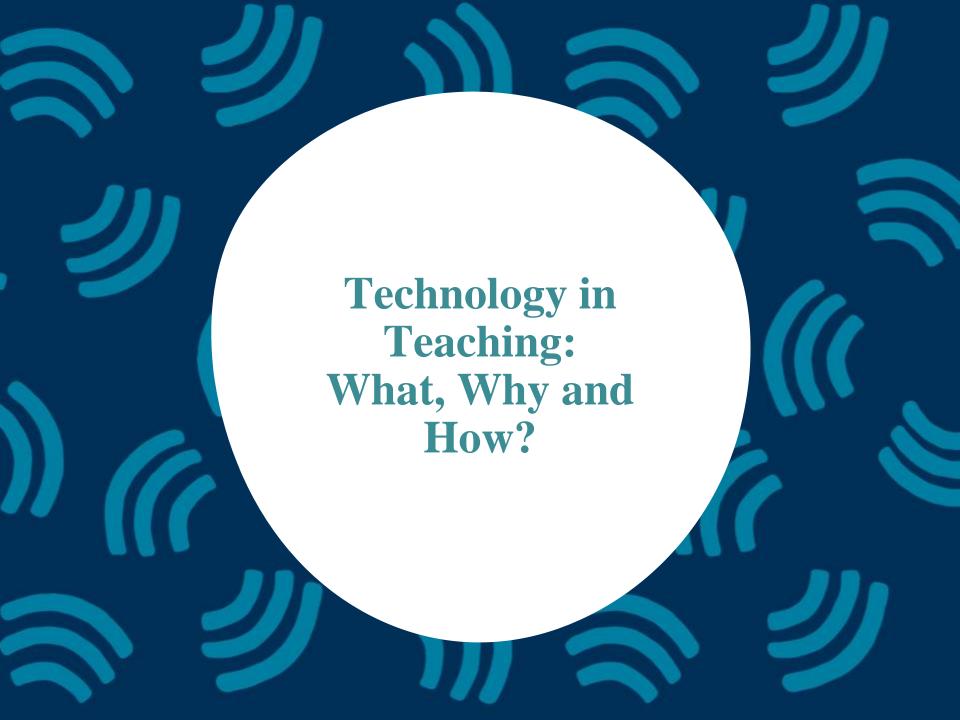




I don't know how it works Pearson

I don't like computers

I'm OK as I am









## **Vital**source

More than 2400 titles now available in one enhanced online platform.

You can choose from wide range of specialized titles carefully selected in the basis of our experience.

Fully integrated with every e-learning management system.

No matter what Virtual Learning Environment is already implemented at your University – our new solution would perfectly fit to it.

Powered by Vital Source to ensure our eBooks are accessible for institutions and students.

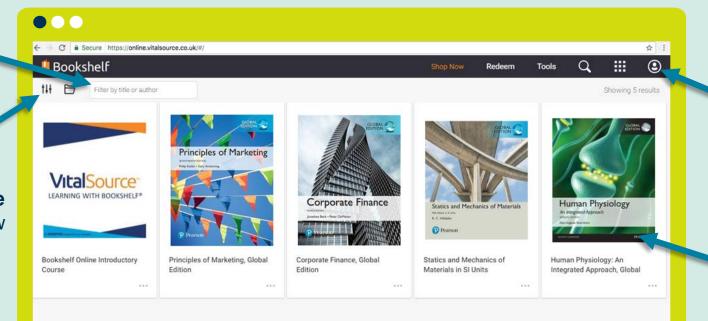
We are expanding our tools to deliver our content as eBooks in line with the needs of your institution.



#### Your Bookshelf – basic view

You can filter by title or Author.

Personalize
the overview
of your
Bookshelf sort and
view as
covers or
as a list.



Easy access to your account info.

Click on the cover to open a book.

### Navigation – it is so easy

Return to Library, Home or Main Menu

Table of Contents, Search, Notebook and other Study Tools. All with direct links to content.

Easy navigate by **page number** or add/select a **Bookmark**.

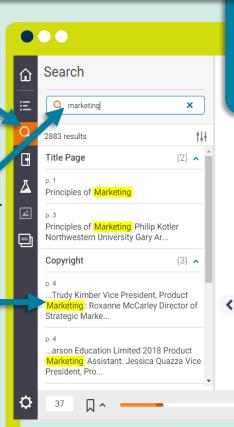


### **Quick Search**

Finding a topic is quick and easy.

Use the Search box to search inside the book. Click on the X to clear.

Click on a search result to go to that content.



**95%** of students report that search functions have a positive impact on their learning.

urces

A\$ *-₹*/

nomic well-being of the communities in which they operate.

One prominent marketer calls this *Marketing* 3.0. "Marketing 3.0 organizations are values-driven," he says. "I'm not talking about being value-driven. I'm talking about 'values' plural, where values amount to caring about the state of the world." Another marketer calls it *purpose-driven marketing*. "The future of profit is purpose," he says.<sup>11</sup>

As **Figure 1.4** shows, companies should balance three considerations in setting their marketing strategies: company profits, consumer wants, *and* society's interests. Online grocer Door to Door Organics operates this way:<sup>12</sup>

Door to Door Organics delivers fresh, high-quality, organic, natural, and local meat, dairy, produce, and groceries directly to homes, offices, and schools in 16 states across the country. Customers order online and receive weekly deliveries to their doorsteps year-round. But Door to Door Organics does much more than just sell groceries

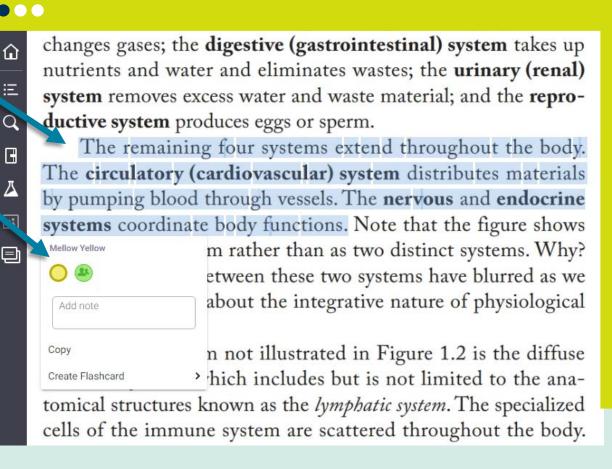
Your search term will be highlighte d in the text.

### **Simple Study Tools: Highlights**

**Select the text** you want to highlight.

Select the highlighter color.

Use color to **organize your highlights** for more efficient learning – assign a color for revision, exams, questions etc.



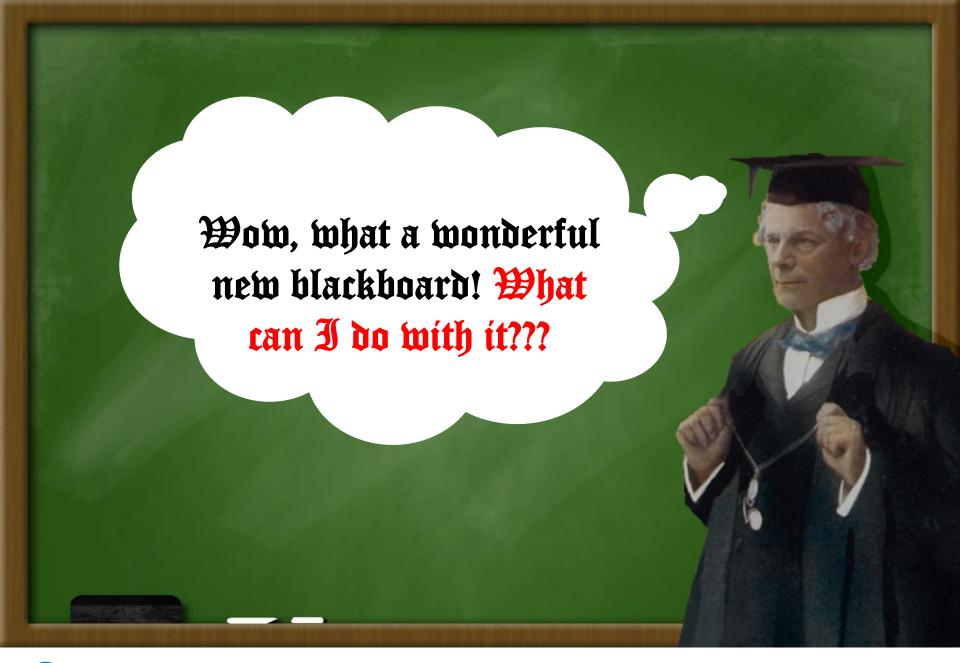
### **Study with Flashcards**

To create a flashcard from text in the eBook, select the text with your mouse and choose the "Create Flashcard" menu option.

**84%** of student users report that the interactivity of eTextbooks has had a positive impact on their learning.

When a force is a for the body to rotate about a point that is not on the line of action of the force. This tendency to rotate is sometimes called a *torque*, but most often it is called the moment of a force or simply the *moment*. For example, consider applying a force to vrench used to unscrew the bolt in Fig. 3–1a. The magnitude s directly proportional to the magnitude of **F** and the tance or moment arm d. The larger the force or the longer Add note the greater the moment or turning effect. If the force **F** is Copy  $\triangle A \neq 00^{\circ}$  Fig. 3–1b, then it will be more difficult to turn Create a new deck to hold your  $= d \sin \theta$  will be smaller than d. If **F** is applied along the its moment arm will be zero since the line of action of **F** will microcci point  $\mathcal{O}$  (the z axis). As a result, the moment of

**F** about O is also zero and no turning can occur.













Wow, what wonderful new technology! That means teaching and learning will be...



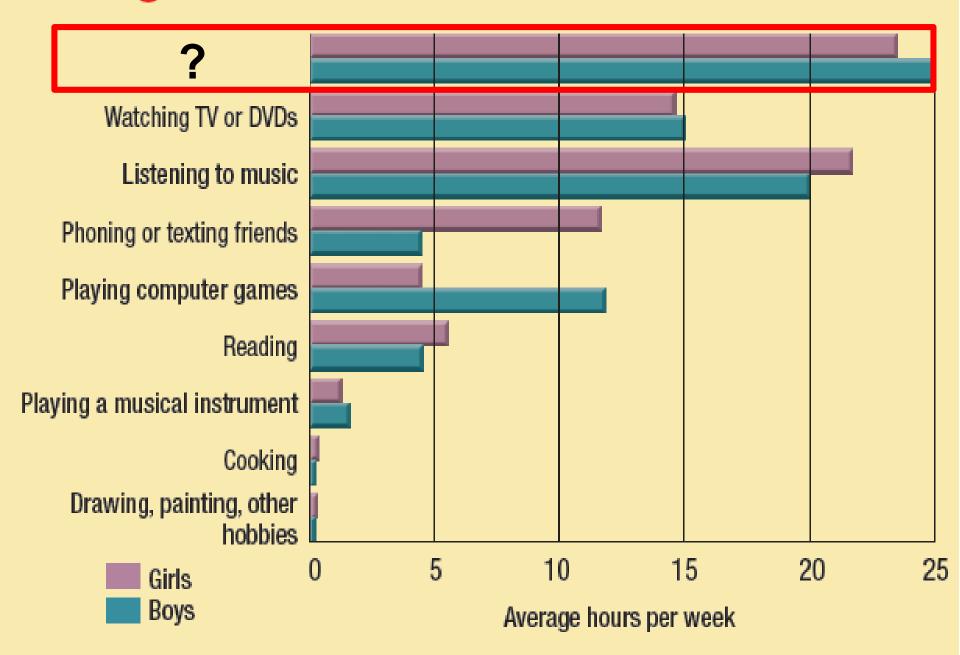
more contemporary more efficient more flexible more comfortable more interesting more convenient

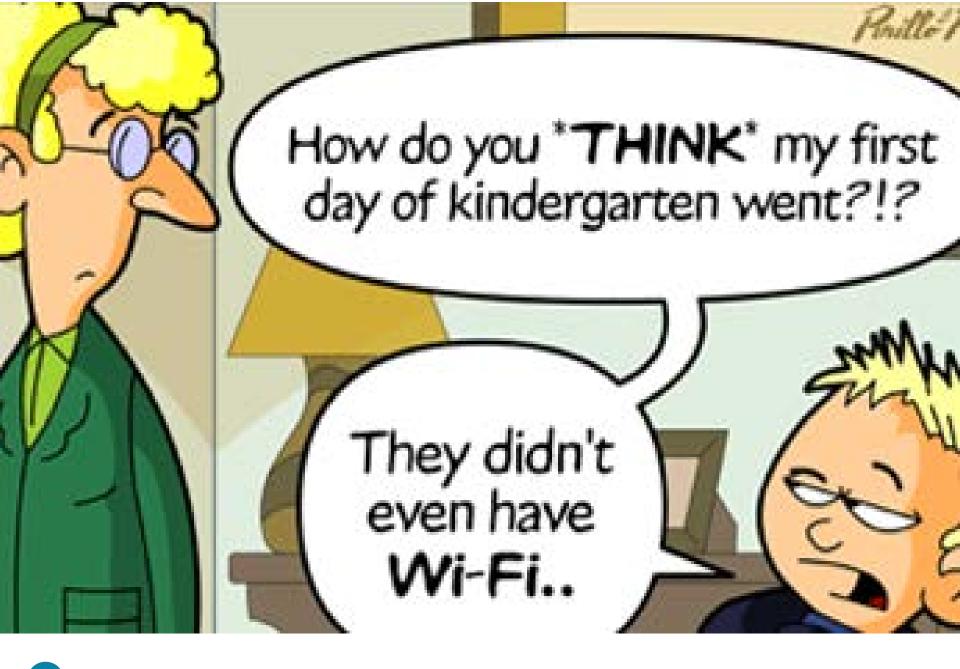


Wow, what wonderful new technology! That means teaching and learning will be...



## Teenagers' free time 1 At home







## Bridging the gap...

# **Engaging interactive** online practice



**Blended Learning** 

# appealing interactive classroom





## What is Blended Learning?

Blended learning is an approach to education that combines online educational materials and opportunities for interaction online with traditional place-based classroom methods. It requires the physical presence of both teacher and student, with some elements of student control over time, place, path, or pace

## a.k.a.

- The hybrid classroom
- A flipped classroom
- Computer assisted learning
- Integrated learning
- Flexible learning

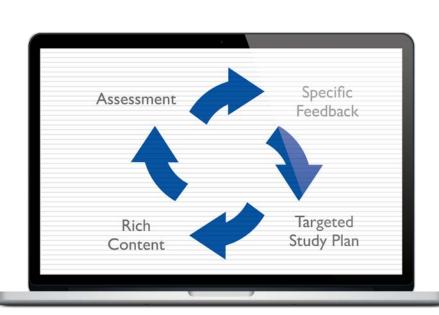


# MyLab & Mastering

Suite of online homework, tutorial and assessment systems that complement classroom activity.

- Customisable content
- Practice exercises and homework
- Rich media and interactive tutorials
- Personalized study plans made possible by real-time assessments
- Integrates with most LMS
- Integrated grade book







## Variety of disciplines

# MyEconLab®

MyMarketingLab™

MyMISLab™

**Mastering Engineering®** 

MyAccountingLab<sup>®</sup>

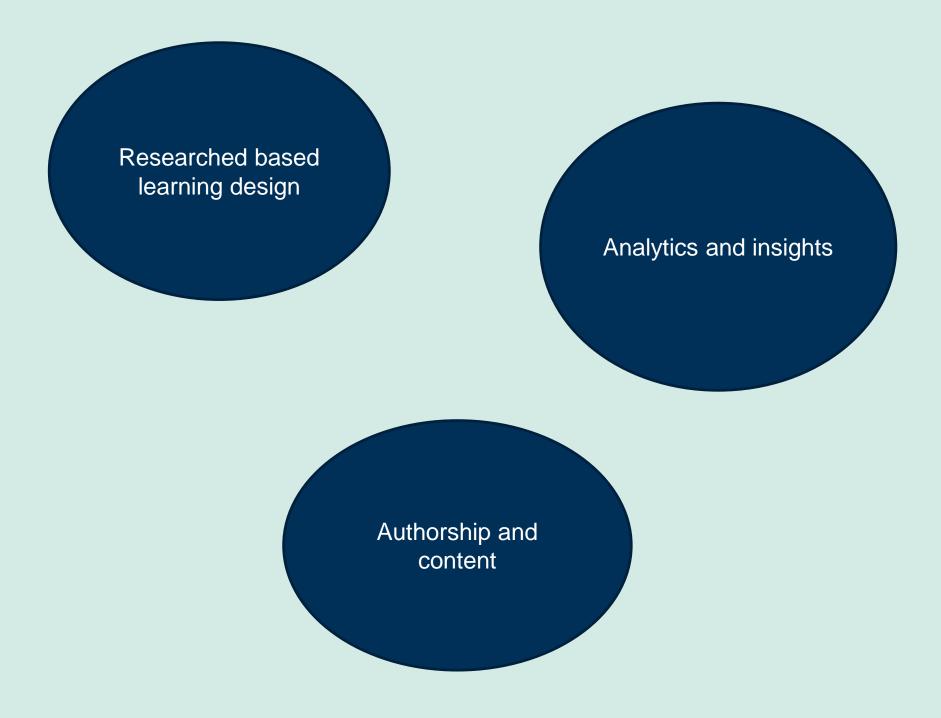
MyOMLab<sup>™</sup>

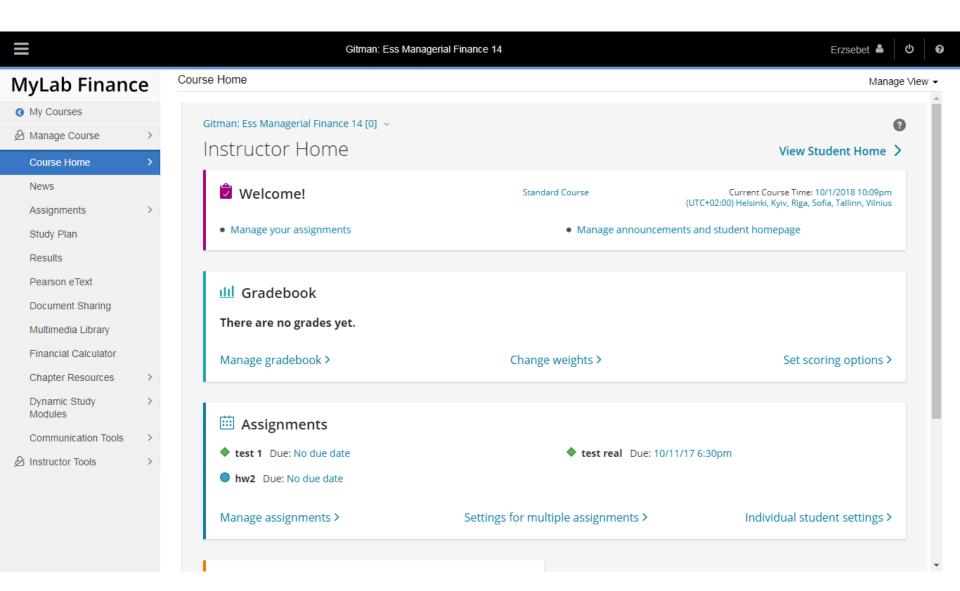
MyManagementLab®

MyMathLab<sup>®</sup>

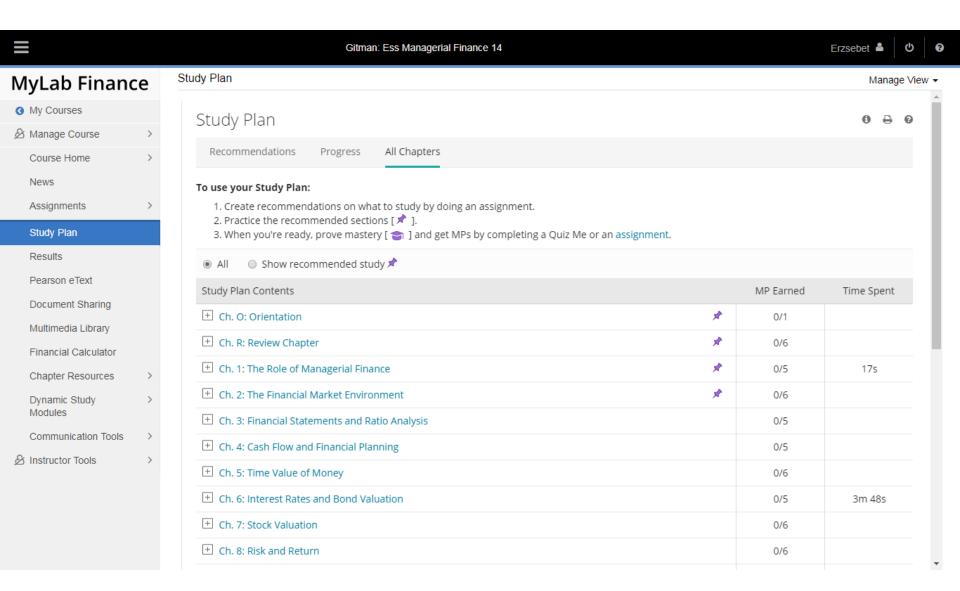
**MyFinanceLab**<sup>™</sup>









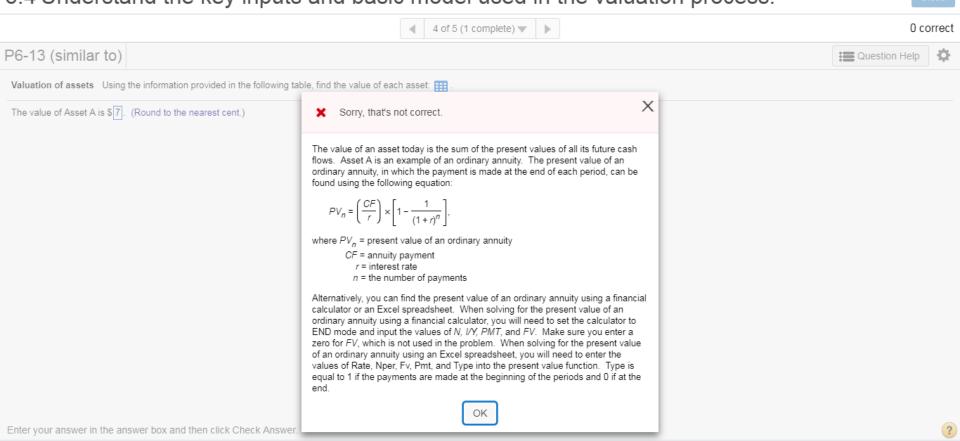




≡	DE Chemistry 2018 Sept											rzsebe	et 🚨 🔞
MasteringChemistry®	Students per pag									first < prev			next > last >
My Courses	NAME	▲ Introdry	01 Matew	02 Cheew	03 Cheer	Chaptees	Chaptens	Chaptees	Chaptees	Chaptens		Chap	TOTAL
my oodises	Essays	42.00						,	24.00		,		see all
Course Home	Assigned Points	12.00											0.2
Assignments	Class Average  Anaab-Bisi, Va	0.0		0.0	0.0	0.0	5.8	0.0	0.0	0.0		_	0.0
	Anayo-Ezikeoha	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0
Roster		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0
Gradebook	Aydın, Melissa Bangera, Kavya	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0
Item Library	Benyi, Maame	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0
Pearson eText	Blessing, Abow			0.0	0.0		0.0					_	0.0
		0.0			0.0	0.0		0.0	0.0	0.0		===	6.0
Course Materials	Cetinel, Eren	6.0					_					===	
	Cheruvari, Pra	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		я.	0.0
Instructor Resources	Dam, Khiet	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		я.	0.0
Course Settings	darafshi, mehr	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		91	0.0
	Doan, Khanh Ha	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		91	0.0
	Ekpo, Ima	12.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		91	12.0
	Elmughrabi, Ya	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		91	0.0
	Elshafie, Moha	0.0		0.0	0.0	0.0	0.0	0.0	0.0				0.0
	Ethirajulu, Sh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	<b>-</b>	0.0
	Students per pag	e: 25 ▼							<<	first < prev	1 2 3	<u>4</u> <u>5</u>	next > last >

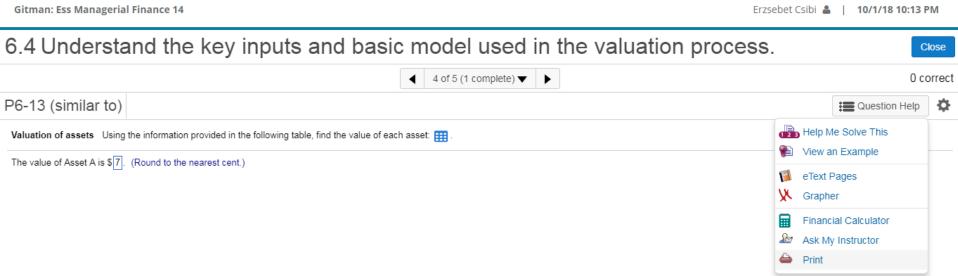


### 6.4 Understand the key inputs and basic model used in the valuation process.

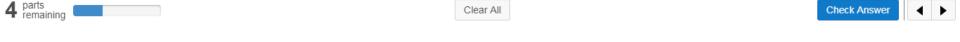


Clear All

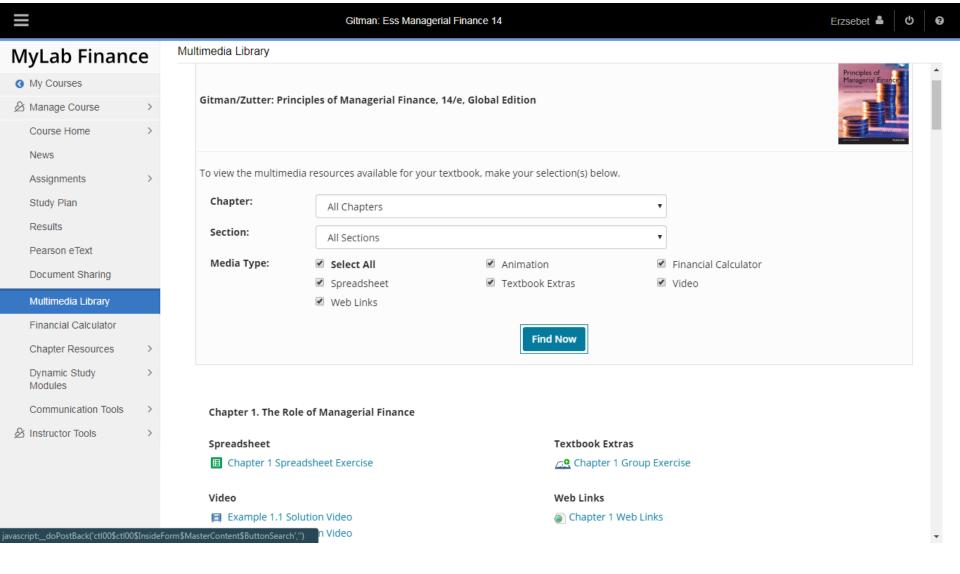




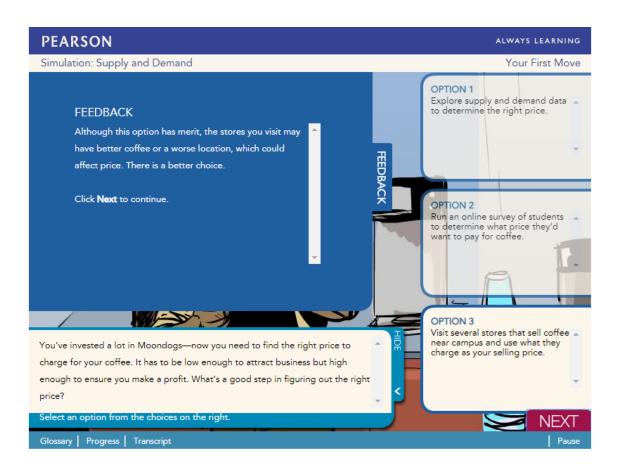
Enter your answer in the answer box and then click Check Answer.











ttps://pe-xl-prod.knowdl.com/content/atm\_sims/v1\_08.html



**Educators** 

Results

Features Training & Support

LMS Integration

## Results

# Improving lives through learning

Used by more than 11 million students each year,
Pearson's MyLab & Mastering programs deliver
consistent, measurable gains in student learning
outcomes, retention, and subsequent course success.
Start your search for user-provided evidence now.



## MyLab & Mastering 10 Best Practices

This report outlines the implementation practices common among the most successful MyLab & Mastering adopters and provides supporting examples from a wide range of disciplines, institution types, and course delivery methods.

View as PDF

Explore results >



Athens State University

Monash University, Australia

University of Nebraska - Lincoln

North Georgia Technical College North
Carolina
State
University

University of New Mexico

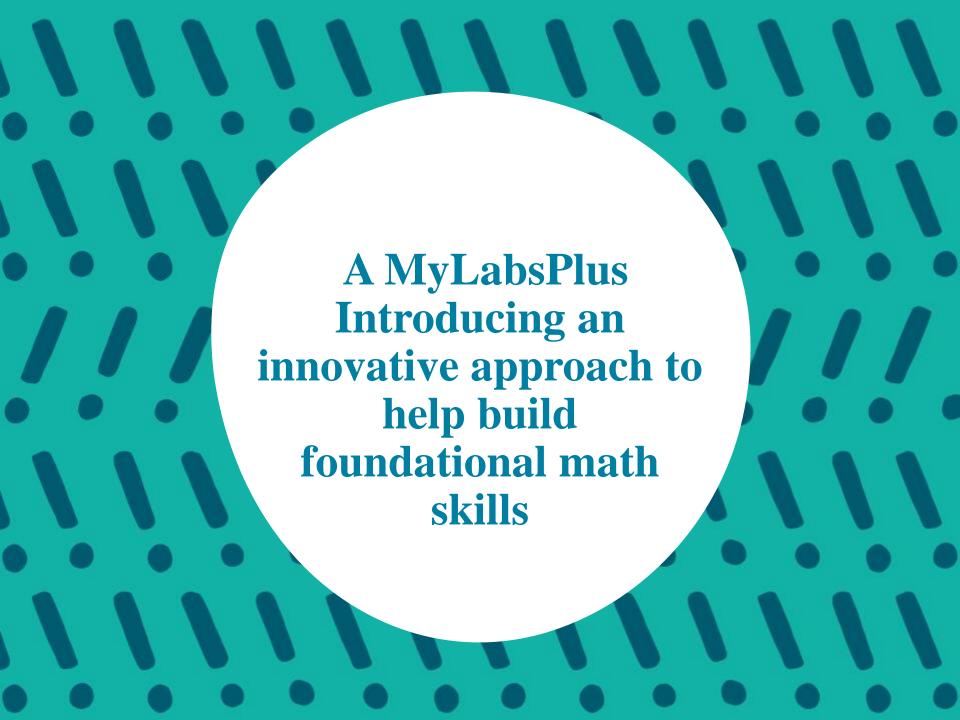
San
Francisco
State
University

University of Manchester, UK

Queen Mary University, London







#### **Edmond Muhaxeri**

University of Central Arkansas

Traditional lecture and in-class tutorial mode

Self paced, completion of one module per week

It has placed us at the front of the latest techniques in course delivery



Ease of use

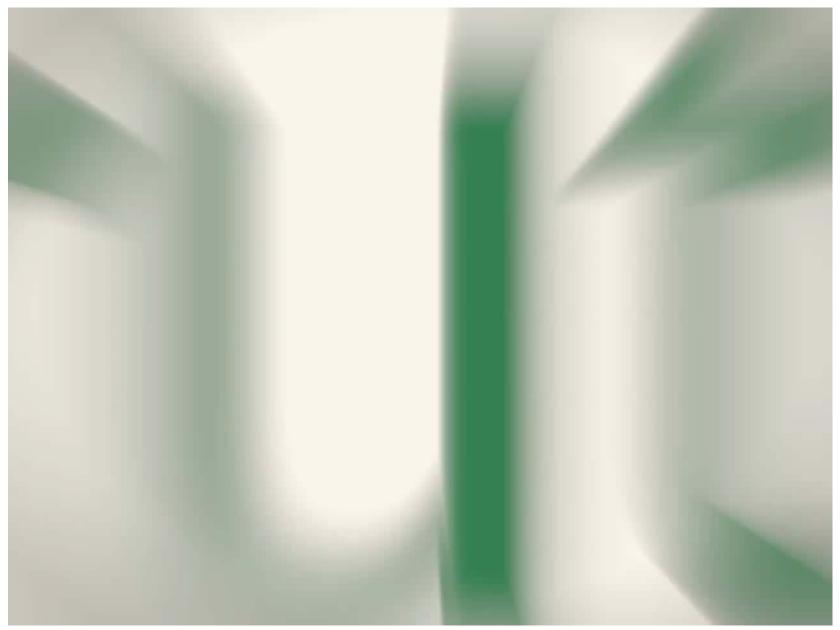
More structured assignments

The ability to keep up with modern teaching practices

Student preference of MyLab over previous curriculums

Use with other courses throughout the university including other mathematics, statistics and accounting















## B.Y.O.D



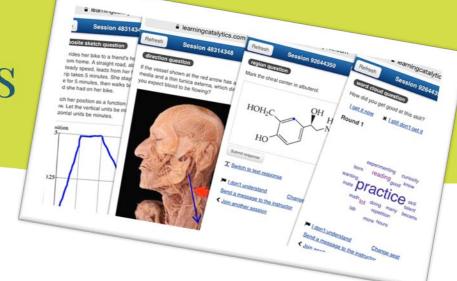


Give every student a voice with

## Learning Catalytics

## A bring-your-own-device classroom response system

- Founded by Eric Mazur, a guru in peer instruction, and enables peer instruction
- 18 different question types including open-ended questions to develop critical thinking skills
- Gradebook gives lecturers insight into individual and course level performance
- Lecturers write their own questions, use Pearson's bank, or the community bank
- Allows lecturers to flip the classroom
- Avoids the administrative load of using physical clickers







## Students discuss in assigned groups



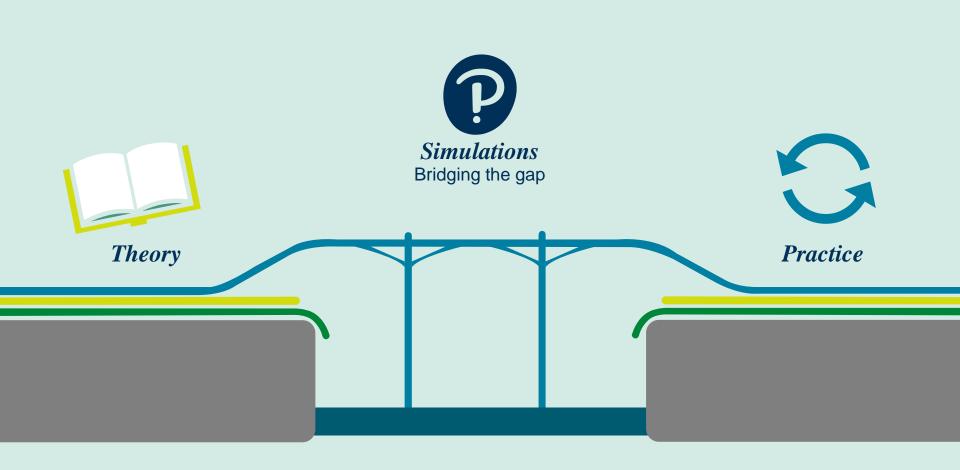




# Experiential and immersive learning



Pearson's online simulations improve students' employment prospects by giving them the chance to apply theory to practice while they are studying



## They bring theory alive by setting students realistic professional challenges to solve

#### MyMarketingExperience



#### MyStrategyExperience



#### **MyLegalExperience**



## MY MARKETING EXPERIENCE

#### **▶ DASHBOARD**

- METRICS & ANALYSIS
- **▶ NEWS BULLETINS**
- **STRATEGIC DECISIONS**
- **TACTICAL ACTIONS**

**END OF GAME** 





**GET MARKETING PLAN** 



Q6 Place

NO MORE UPCOMING CALCULATIONS







Q1 Analysis & Objectives

Targeting

Q2 Segmentation & Q3 Positioning & Branding

Q4 Product & Price Q5 Promotion

Q7 People & Process Q8 Physical **Environment** 

ALWAYS LEARNING

**PEARSON** 



- **▶ DASHBOARD**

- ➤ NEWS BULLETINS
  ➤ STRATEGIC DECISIONS
  ➤ TACTICAL ACTIONS

**METRICS & ANALYSIS** 

Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8 END

MARKET INFORMATION

MARKET POSITIONING

**FINANCIAL RESULTS** 

SALES AND DEMAND

DISTRIBUTION PERFORMANCE

MARKET SHARE

SALES WITHIN TARGET GROUP

SCORECARD

MARKET RESEARCH

MARKET INFORMATION III

Market Positioning

MARKET POSITIONING



Financial Results

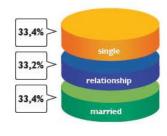
SALES REVENUE	Product		
	<b>Total</b> € 1.143.852	Men € 598.092	Women € 545.760
Cost of sales			
Materials	€ 400.000	€ 200,000	€ 200.000
Manufacturing	€ 100.000	€ 60.000	€ 40.000
Labelling/supply	€ 32.000	€ 16.000	€ 16,000

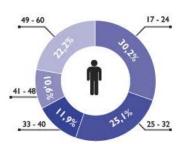
**PEARSON** 

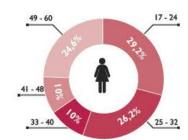
- **▶ DASHBOARD**
- **METRICS & ANALYSIS**
- ► NEWS BULLETINS ► STRATEGIC DECISIONS ► TACTICAL ACTIONS

#### MARKET INFORMATION

 $\equiv$ 





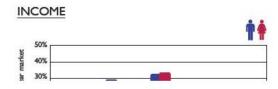


**GENDER** 



SOCIAL MEDIA





**PEARSON** 



#### Ivana First Komen

Postgarudate specalists' studies as a course in itself

In class focus was given to the analysis of the simulation results

Marketing and management students





#### Technology definitely has its place, but...



Don't throw the baby out with the bathwater...

"Any teacher that can be replaced by a computer probably should be."

Arthur C Clarke talking to Sugata Mitra
TED.com







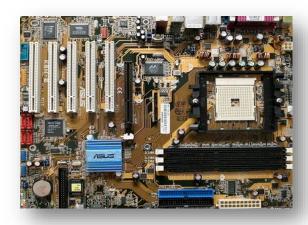






It goes wrong

#### A refugee's guide to technology:







I don't know how it works Pearson

I don't like computers

I'm OK as I am



## From Refugee to Immigrant

We can't afford it
You might not have
to...





# Put fist through keyboard to continue.

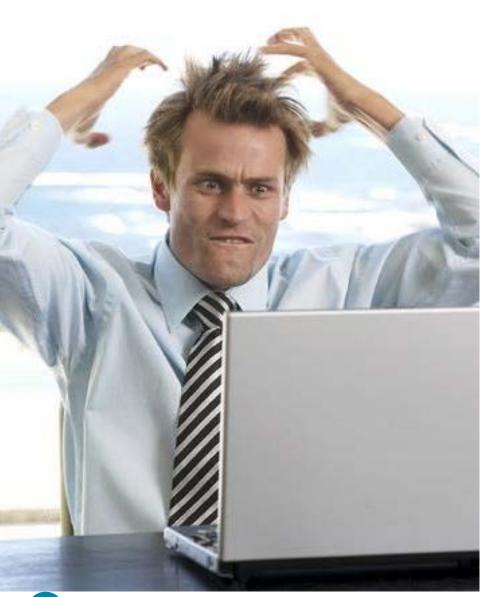


## From Refugee to Immigrant

It goes wrong.

So do pens and pencils





## From Refugee to Immigrant

I don't really like computers. Computers are for kids and nerds.

You don't have to like a device to appreciate its usefulness

















## From Refugee to Immigrant

I don't know how it works

Does that matter?





It's not about knowing HOW it works...





...but knowing what to do with it!



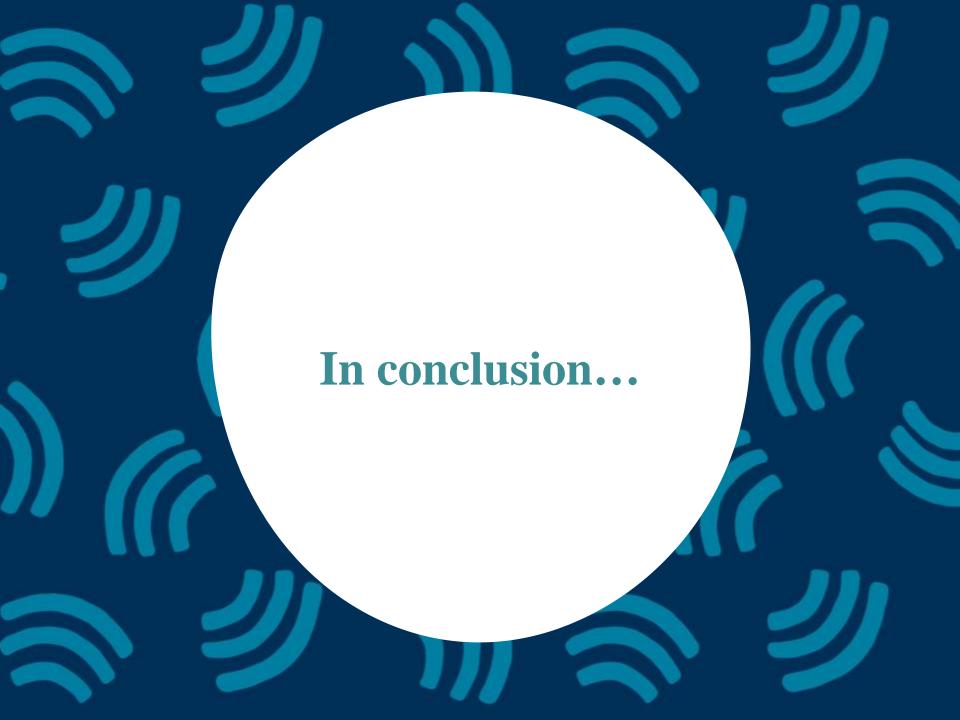
## From Refugee to Immigrant

I'm OK as I am.

Your students might not be.

Your institution might not be.







It's not about knowing HOW it works...



...but knowing what to do with it!





#### Thank You

marina.mudrenovic@pearson.com





# Common Challenges in the Use of Digital Technologies in Learning Environments

Assoc.Prof.Dr.David Felsen Vice-Rector

for International Relations



#### STRATEGIC USE OF DIGITAL TECHNOLOGY IN THE CLASSROOM

- •EDUCATORS SHOULD CHOOSE THE RIGHT TECHNOLOGY OR COMBINATION OF TECHNOLOGIES TO ENRICH LEARNING IN THE CLASSROOM
- •EDUCATORS SHOULD ENSURE THAT TECHNOLOGY IS APPROPRIATE FOR THE SPECIFIC COURSE, PROGRAM OR LEVEL OF INSTRUCTION
- •EDUCATORS NEED TO THINK ABOUT HOW IMPLEMENTATION SHOULD OCCUR TO ENHANCE QUALITY OF PEDAGOGY
- •EDUCATORS SHOULD COMBINE TECHNOLOGY WITH TRADITIONAL

  METHODS OF PEDAGOGICAL TOOLS LIKE TEXTBOOKS AND READINGS



# DIGITAL TECHNOLOGY IN THE CLASSROOM: ADVANTAGES

- •TECHNOLOGY USE ALLOWS STUDENTS TO LEARN 'DIGITAL LITERACY'

  AND BECOME 'DIGITAL CITIZENS'
- •TECHNOLOGY CAN IMPROVE KNOWLEDGE AND RESEARCH SKILLS
- •TECHNOLOGY CAN MOTIVATE STUDENTS AND IMPROVE CLASS PARTICIPATION
- •TECHNOLOGY CAN BUILD A SENSE OF COMMUNITY LOCALLY AND GLOBALLY
- •TECHNOLOGY USE ALLOWS LECTURERS TO MOVE BEYOND TRADITIONAL PEDAGOGY OF TEXTBOOKS, PROPS, VISUAL AIDS
- •TECHNOLOGY ALLOWS MORE PEER-TO-PEER LEARNING

CAN YOU THINK OF OTHER ADVANTAGES?

### DIGITAL TECHNOLOGY IN THE CLASSROOM: SOME CHALLENGES

- •LECTURERS MUST BE RESPONSIBLE FOR MAINTAINING

  THE LEARNING ENVIRONMENT BOTH OFFLINE AND DIGITALLY
- •EDUCATION COMMUNITY AND PARENTS EXPECT TEACHERS TO BE WELL-VERSED IN TECHNOLOGY
- •FINDING TIME AND RESOURCES FOR PROFESSIONAL DEVELOPMENT TO EFFECTIVELY MASTER TECHNOLOGIES AND UPDATE SKILLS
- •INTEGRATING TECHNOLOGIES CAN BE TIME CONSUMING



## DIGITAL TECHNOLOGY IN THE CLASSROOM: SOME CHALLENGES (CONTINUED)

- •STUDENTS ARE OFTEN MORE SKILLED AT VARIOUS TECHNOLOGIES
  THAN LECTURERS CREATING PRESSURE
- •INTEGRATION OF TECHNOLOGIES IN THE CLASSROOM MAY INTERRUPT LESSON TIME AND FLOW OF LECTURES
- •DIFFERING TECHNOLOGIES AMONG PEERS (ANDROID VS. I-PHONE)
  OR SPEEDS (VERSIONS) CAN IMPACT LEARNING
- •IN OTHER WORDS, PRESSURES INSIDE AND OUTSIDE OF THE CLASSROOM CAN RESULT IN CHALLENGES TO PEDAGOGY





#### USE OF DESKTOPS, LAPTOPS AND TABLETS IN THE CLASSROOM: ADVANTAGES

- •COMPUTERS AND TABLETS ALLOW ACCESS TO INTERNET AND A WORLD OF EDUCATIONAL RESOURCES
- •PERMIT KNOWLEDGE SEARCHES IN REAL TIME AND DEVELOPMENT OF RESEARCH SKILLS
- •PERMIT DEVELOPMENT OF ANALYTICAL SKILLS
  IN DISCERNING GOOD CONTENT FROM BAD
- •PERMIT VISUAL LEARNING THROUGH VIDEOS/SLIDES
- •ALLOWS TRACKING OF PROJECTS AND CLASS PROGRESS

#### USE OF DESKTOPS, LAPTOPS AND TABLETS IN THE CLASSROOM: CHALLENGES

- •CHALLENGE OF TRANSITIONING AND RE-ENGAGING STUDENTS
  AFTER USE OF COMPUTERS DURING CLASSROOM TIME
- •POTENTIAL INTERRUPTION OF THE FLOW OF CLASS
- •ENGAGING BORED/LESS ATTENTIVE STUDENTS WHO MAY FIND TECHNOLOGY AN EASY WAY TO TUNE OUT
- •LECTURERS CAN LOSE TIME IN GUIDING AND MONITORING ONLINE SEARCHES TO MAINTAIN CONTROL
- •WHAT ARE OTHER EXPERIENCES/CHALLENGES IN YOUR USE OF DESKTOPS, LAPTOPS, AND TABLETS?



### USE OF SMARTBOARDS IN THE CLASSROOM ENVIRONMENT: ADVANTAGES

- •SMARTBOARDS CAN ALLOW CONTINUAL INTERACTIONS BETWEEN PROFESSORS AND STUDENTS
- •SMARTBOARDS CAN BE PAIRED WITH OTHER DEVICES SUCH AS LAPTOPS, DESKTOPS AND TABLETS
- •SMARTBOARDS CAN INCORPORATE SEVERAL TEACHING CHANNELS – VISUAL, AUDIO, LECTURING, MAPPING
- •SMARTBOARDS CAN MOTIVATE STUDENTS BY ALLOWING STUDENTS TO ADD TO CONTENT DIRECTLY



### USE OF SMARTBOARDS IN THE CLASSROOM: CHALLENGES

- •LECTURERS MAY ENCOUNTER TECHNICAL PROBLEMS AND MUST RESOLVE DIFFICULTIES WITH SMARTBOARDS WITH PROJECTION, AUDIO OR TOUCHSCREEN
- •LECTURERS REQUIRE TRAINING ON USE OF SMART BOARDS AND SPEND TIME ON PROFESSIONAL DEVELOPMENT
- •SMARTBOARDS MAY ALSO RESULT IN DISENGAGEMENT OF SOME STUDENTS WHO ARE LESS MOTIVATED

WHAT ARE YOUR EXPERIENCES/CHALLENGES

WITH THE USE OF SMARTBOARDS?







- •LECTURERS MAY CREATE SOCIAL MEDIA GROUPS
  OR FORUMS
- •LECTURERS MAY OFFER ONE-ON-ONE SUPPORT TO STUDENTS
- ·SOCIAL MEDIA CAN GLOBALIZE THE CLASSROOM
- •SOCIAL MEDIA WILL ENSURE THAT STUDENTS THINK
  ABOUT THE LESSONS OUTSIDE OF THE
  CLASSROOM
- •STUDENTS CAN BLOG, SET UP ONLINE PORTFOLIOS IN BUSINESS, ENGINEERING, COMPUTERS, DESIGN, ETC....







- •LOST OF CLASS FLOW IN TRANSITION BETWEEN LECTURE
  AND SOCIAL MEDIA
- •TOO MUCH USE OF SOCIAL MEDIA PREVENTS BENEFIT OF STRUCTURED ENVIRONMENT OF THE CLASSROOM FOR STUDENTS
- •MODERATING SOCIAL MEDIA TIME-CONSUMING AND RISK OF ABUSE
- •LESS MOTIVATED STUDENTS MAY CONTINUE USING SOCIAL MEDIA IN THE CLASS (HAVE YOU EVER SEEN A STUDENT LAUGHING IN CLASS FOR NO REASON?)
- •LECTURERS MAY LACK REQUIRED TECHNOLOGICAL SKILLS TO GOVERN THE SOCIAL MEDIA SPACE

WHAT ARE YOUR OTHER EXPERIENCES IN SOCIAL MEDIA?
WHAT SOCIAL MEDIA IS BEST FOR YOUR CLASSES?



#### SOME CONCLUDING REMARKS

- •LECTURERS MUST BE STRATEGIC IN THEIR CHOICE OF DIGITAL TECHNOLOGIES IN THE CLASSROOM
- •DIFFERENT ACADEMIC DISCIPLINES WILL BENEFIT FROM SOME TECHNOLOGIES MORE THAN OTHERS
- •CHOOSING TECHNOLOGY FOR THE CLASSROOM IS A DYNAMIC PROCESS AND EVOLVES OVER TIME
- •KNOW YOUR STUDENTS IN ORDER TO UNDERSTAND WHAT TECHNOLOGIES WORK BEST



#### **DISCUSSION QUESTIONS**

- •WHAT ARE YOUR PREFERRED TECHNOLOGIES
  FOR THE CLASSROOM?
- •WHAT ARE SOME OF THE CHALLENGES EXPERIENCED WITH YOUR TECHNOLOGIES?
- •WHAT SOCIAL MEDIA IS THE MOST EFFECTIVE PEDAGOGICAL TOOL?
- •DOES SOCIAL MEDIAL ENHANCE MORE OR
  DISTRACT MORE IN THE CLASSROOM?

## THANK YOU!

