THANK YOU

The 8th TCU International e-Learning Conference 2017

Innovative Innovations in Education

BITEC Bangna, Bangkok, Thailand
July 20-21, 2017
Talent is equally distributed in a society but Opportunity is not.
Education Empowers Talent and Enables Opportunity
Education is one of the most powerful social and economic change agents in the world.
Free and Open Educational Resources hold the promise to empower TALENTS and enable OPPORTUNITIES for ALL!
An Invitation to “OPEN” DOORS for ALL TO LEARN

- Open Educational Resources (OER)
- OpenCourseWare (OCW)
- Open Enrollment (MOOC’s)
- Open TextBooks
- Open Access Journals

OPEN = Free of Cost
= Permissions to Use
= Free to Choose How to Learn In Your Context
Free and open educational resources have been around for over 20 years.

WHY HASN’T EDUCATION BEEN TRANSFORMED by OER Innovations?
Why Haven’t OER Innovations Gone VIRAL?
INNOVATION Lifecycle

- Visions of a better future by doing things differently—IDEAS
- Sharing ANTICIPATED benefits of the innovation—POLITICS
- Institutionalizing innovations—IMPLEMENTATION
Step 1: IDEAS
Takes 1 person to create ideas.
Step 2: Politics
Takes a few people
to market benefits.
Step 3: Implementation

Takes a lot of people, resources, and time to integrate innovations into everyday life.
Implementation is where innovations fail. How can we help OER succeed and OPEN LEARNING FOR ALL?
Enabling Ecosystems
with policies, leadership, business models

Developing Demand
with communications, training, professional development

Creating Capabilities
with convenient & affordable access to content through technologies

Leveraging Content Providers
All free and open educational resources, open enrollment course (MERLOT, MOOCs, and More)
MERLOT provides a central collection of OER's and free open educational services.

www.merlot.org

CREATE CAPABILITIES with Libraries

Search MERLOT

My MERLOT

Membership

Submit to JOLT, the Journal of Online Learning and Teaching

Create Materials with Content Builder

News & Information

About MERLOT

MERLOT

Add To
Search Many OER Collections Conveniently
Smart Search of the web

Shaped by the PROFILE of the MERLOT User
CONVENIENT CHOICES: Open eTextbooks Aligned with Courses

COOL4Ed
California Open Online Library for Education
<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
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<tbody>
<tr>
<td>COMP 122</td>
<td>General Course Description</td>
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**eTextbook**

- *How to Think Like a Computer Scientist: Learning with Python 3*
- *Introduction to Computer Science*
- *Programming Languages: Application and Interpretation*
- *Structure and Interpretation of Computer Programs*
Course Description:

More advanced and detailed treatment of concepts of data on trees, graphs and storage allocation and collection. Applications include symbol tables, string search, and optimization.

Quote

*The main motivation for adopting the open textbook was to provide access to the material online from anywhere using an internet connection.*

Learn How I Use This Open Textbook in My Course

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Course Description:

This is an advanced Java programming course. Through extensive exercises and projects, students are expected to have a much deeper understanding of major aspects of object-oriented programming and significant improvement in programming and problem solving ability.

Quote

*After overall comparison, I decided to adopt this open textbook due to its accessibility in various forms and will save our students a lot of.*
- U.S. Dept of Labor invested $2 Billion in community colleges to create OER for workforce development.
- Open courseware for almost 700 fully online courses in career and technical training – Advanced Manufacturing, Information Technology, Healthcare, Energy, Construction, and more
- READY TO DOWNLOAD, REUSE, and REVISE for Thai MOOCs

www.skillscommons.org
Showcases

Grant Project Showcase
Explore selected TAACCCT grant projects by Industry that have significant contributions in SkillsCommons.

Reuse Showcase
Explore a showcase of TAACCCT material that has been reused by other TAACCCT grantees and others.

Makeover Showcase
Explore a showcase of TAACCCT material that has been made over by other TAACCCT grantees and others.

Open CourseWare Showcase
Explore selected Collections of Open CourseWare Showcases submitted by TAACCCT grantees.

Project Outcomes Showcase
Explore the outcomes produced by the TAACCCT grant projects and review the impact on learners and industry.

Campus Presidents’ Showcase
In this podcast series, community college presidents discuss the impact of the TAACCCT grant projects on their institutions and learners.
What Is Open CourseWare?

Open CourseWare are collections of fully online learning materials organized in the scope and sequence of a college course. The online course materials are free and open for anyone to use and the learner can use the open courseware to acquire skills and knowledge at their own pace and on their own time. There is no instructor for open courseware.
Vital Signs eLearning Simulation

This simulation is designed to enhance and illustrate vital signs for healthcare students who have received initial instruction or information on this topic. This is accomplished through nine illustrated simulations that show individuals needing vital signs. Students are asked to respond to each simulation to determine their knowledge of different body systems.

Basic First Aid eLearning Simulation

This simulation is designed to enhance and illustrate basic first aid for healthcare students who have received initial instruction or information on this topic. This is accomplished through nine illustrated simulations that show individuals needing basic first aid. Students are asked to respond to each simulation to determine their knowledge of basic first aid guidelines and processes.

Physical Assessment eLearning Simulation

This simulation is designed to enhance and illustrate basic physical assessment for healthcare students who have received initial instruction or information on this topic. Seven simulations, each focused on a different body system, present basic physical assessment situations. Students are asked to respond in order to determine their knowledge and skill. A quick overview of each of the seven body systems is presented followed by case studies.

Therapeutic Communications eLearning Simulation
Autonomous Robots is a lab-based course that introduces the basic concepts of robotics, focusing on the construction and programming of autonomous mobile robots. This course consists of 15 lessons along with corresponding labs and class activities. Topics covered include the basic principles of mechanical robot construction, electronics, sensors, motors, and robot programming; troubleshooting techniques and strategies to identify, localize, and correct malfunctions; and safety and systematic preventative maintenance. In addition, students will work in groups to build and test increasingly more complex mobile robots.

Preview Online Course: Autonomous Robots
View & Download Materials: Autonomous Robots

Engineering CAD & Drafting is a survey course that covers CAD modeling and drafting techniques specific to mechatronic systems. This course consists of 15 lessons along with corresponding labs and/or class activities. Topics covered include sketching techniques, multi-view drawings, dimensioning, solid-modeling techniques, documentation drawings, file management, drawing standards, and assemblies. The course embeds preparation for the SolidWorks Associate (CSWA) exam, and culminates in a mechatronic-specific CAD project.

Preview Online Course: Engineering CAD and Drafting
View & Download Materials: Engineering CAD and Drafting

Electrical Systems is a study of the basic electrical components in a complex mechatronics system. This course discusses basic functions, physical properties, and roles of electrical components and systems, such as transformers, electric circuits, and AC and DC motors; troubleshooting techniques, such as strategies to identify, localize, and correct malfunctions; systematic preventative maintenance; and electrical and mechanical component safety.

Preview Online Course: Electrical Systems
View & Download Materials: Electrical Systems

Industrial Robots is a study of the working of mechanical manipulators in a safe manner and the uses of industrial robots in manufacturing. This course consists of 15 lessons along with corresponding labs and/or class activities. Topics covered include robotic nomenclature, classifications, applications, input/output sensor interfacing, and work cell design; different methods for programming an industrial robot using manufacturer software and for computing the spatial positions, orientation, and frames of a robot manipulator design; troubleshooting techniques and strategies to identify, localize, and correct malfunctions; and safety and systematic preventative maintenance.
Why Haven’t OER Innovations Gone VIRAL?
Implementation Strategy For OER

Enabling Ecosystems
with policies, leadership, business models

Developing Demand
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Developing Demand

How do you get people to want something like free educational resources 24 X 7?

- **YOU** are the innovation required and your friendship with people will be the critical ingredient for putting educational innovations into practice.

- **YOU** become the innovators explaining the ideas and the benefits of education and OER to those who haven’t had the opportunity to learn.
Educational Innovations
Required Local Implementation

- Enabling Ecosystem
  - Local Leadership
  - Local Priorities and Needs
  - Local Culture and Policies
  - Local Business Models

- Implementation Requires More Innovators

Enabling Ecosystem
YOU need to open the doors of opportunity for all by being a trusted friend to invite people to develop their talents through education.

Implement Innovations Through Friendships
Why Friendship?

- **Friends** – You do things with friends that you don’t normally do – you do innovative things!
- **Friends** – You get social support when life is difficult, challenging, and/or frightening – you do innovative things!
- **Friends** – You share the good times and opportunities with others.
Friends understand the complex situations and the hidden nature of people’s talents.

You will are the required ingredient to successfully implement innovation— to be a friend of learners who trust you on their journey to discover and develop their talents.
Give a Gift
And
Not a Burden
How do we “connect the dots” of opportunity with people’s talents?
The world provides some dots of opportunity…
Can you tell what it means?
Free educational resources through MERLOT & SkillsCommons can provide more opportunities but ...
Your Friendships connect the dots so ALL can develop their talents through TCU.
Want to Give a Gift of OER to Others?

- Hands-On Workshop Friday afternoon
  - Learn to find OER through MERLOT and SkillsCommons

- Make friends, taste MERLOT (virtually), and take them on an educational picnic!
Shall We Make Education MORE Successful?
And Move the World With MORE Innovations Together?

Mass = Educational Innovations

Mass = MERLOT & Thai Community of Friends
THANK YOU
Questions?