Webinar Introductions

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Agenda

This webinar will cover the following topics.

- **Digital Learning**
  - EducateWorkforce Defined and Course Offerings
  - Course Design Overview
  - Workflow

- **Educational Technology**
  - Open edX Platform
  - LMS, CMS, and Insights
  - Hosting Architecture

- **Support Protocol**
  - Help Form, Email for Communication, and Tracking Support Tickets

- **Questions and Answers**
4 Pillars of Workforce Development

Digital Learning: Providing digital tools to increase access to information using virtual reality and e-learning

www.educateworkforce.com

Career Pathways, College Affordability & Graduation Improvement: Developing scholarship opportunities, innovative articulation programs, and stackable certificate options for postsecondary education

K-12 STEM Education Initiatives: Facilitating recruitment, professional development, student engagement, and outreach and support

Research, Advocacy & Networking: Integrating education, industry, research, organizations and the public to create awareness of workforce development challenges and resources
Digital Learning
Courseware Offerings and Components
EducateWorkforce Defined

Online learning platform tailored to unique needs of 2-year institutions and industry partners, focusing on technician education for the advanced manufacturing sector.
EducateWorkforce Offerings

- Introduction to Metrology
- Manufacturing Safety
- Quality in Manufacturing
- Manufacturing Processes & Production
- Manufacturing Maintenance
- Exploring Advanced Manufacturing
- Basic Electricity
- Workforce Fundamentals
- Exploring Engineering
- Soft Skills in Manufacturing
- Pathway to Technology Entrepreneurship
Educational Design

Goal
Student Learning and Performance

Learning Theory

Technology

Workflow
Learning Theory

CAST: Universal Design for Learning (UDL)

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<th>The WHY of Learning</th>
<th>Provide Multiple Means of Engagement to stimulate interest and motivation</th>
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<td>Recognition Network</td>
<td>The WHAT of Learning</td>
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<td>Strategic Network</td>
<td>The HOW of Learning</td>
<td>Provide Multiple Means of Action &amp; Expression to provide options for expressing knowledge</td>
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UDL as a foundation for EducateWorkforce Curriculum

Affective Network

Principle 1

The WHY of Learning

Provide Multiple Means of Engagement to stimulate interest and motivation

- Assessments are interactive, authentic, & allow for self-evaluation
- Learning materials provide opportunities for tactile manipulation of virtual and web-based resources
- Scaffolded learning is provided in the form of Introductions, Summaries, Connecting to New Knowledge, schedules, progress tracking, etc.
Principle 2

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Recognition Network

The **WHAT** of Learning

Provide Multiple Means of **Representation** to reach all learning styles

- Key content presented in multiple formats
- Key terms are highlighted and defined
- Content adheres to web accessibility standards

Open Text & ePub
Video Lectures
Virtual Reality
Glossary
UDL as a foundation for EducateWorkforce Curriculum

**Principle 3**

**Strategic Network**

The *HOW* of Learning

Provide Multiple Means of *Action & Expression* to provide options for expressing knowledge

- Items vary in format: Multiple Choice, True/False, Drag & Drop, Open Response with Rubrics, Virtual Manipulatives
- Activities & Assessments
- Virtual Reality
Question and Answers
Educational Technology
Platform for Course Delivery, Management and Tracking

• Free to use and extend
  • Github
• Dedicated support
  • Slack (openedx)
  • Mailing Lists
  • Confluence
• Technical Documentation
• Utilized by several large contributors
  • MIT and Harvard founders
Learning Management System (LMS)

Navigating the LMS interface:

- Dashboard of Enrolled Courses
- Course Introduction and Overview
- Modules and Sections
- Review and Progress
Content Management System (CMS)

- Improve course development efficiency, consistency, and errors.
  - Course Components for EducateWorkforce
    Add a content page to a new module section within an existing course.
  - Template Course
    Create a three module course with limited number of sections per module.
Insights (Analytics)

Who are my students?
- Enrollment
  - How many students are in my course?
  - Activity
  - How old are my students?
    - Demographics > Age
  - What level of education do my students have?
    - Demographics > Education
  - What is the student gender breakdown?

What are students doing in my course?
- Engagement
  - How many students are interacting with my course?
  - Content
  - How did students interact with course videos?
    - Videos

How are students doing on course assignments?
- Performance
  - How are students doing on graded course assignments?
  - Graded Content
  - How are students doing on ungraded exercises?
    - Ungraded Problems
Insights Analytics: Enrollment

- Demographics (Education) presents data computed for the 80.0% of enrolled students who provided a highest level of education completed.

* All metrics below are computed from the provided highest level of education completed from account settings.

- Advanced Degree
- College Degree
- High School Diploma or Less

Account Settings

Insights Analytics: Engagement

- Content
  number of active students and specific activities (watch video, tried problem) engaged with.

  * Information is presented weekly.

  - Active Students
    visited one page of course content.
  - Watched a Video
    played one or more videos.
  - Tried a Problem
    submitted answer for standard problem.

Engagement Computations
Insights Analytics: Engagement

- **Video Viewing Pattern**
  - chart shows number of learners who watched each segment of the video, and the number of replays for each segment.
  - *View Live button reveals LMS content.
  - **Completion Rate**: estimated percentage of learners who watched the entire video.
  - **Started Video**: learners who started watching the video.
  - **Finished Video**: learners who watched the video to the end.

Insights Analytics: Performance

- Graded Problem Content
each bar shows the average number of correct and incorrect submissions for problems within a section.

* Only the last submission from each learner is counted.

- Activities are setup to have infinite attempts.

- Module Reinforcements generally allow for 1 attempt.

(Exception: Drag and Drop problems due to difficulty level; these problem types are setup as infinite attempts)
On-Premise Hosting Infrastructure

- Cost savings were a factor when deciding to host locally.
  - Future hosting will migrate to a cloud provider to accommodate more users and keep costs lower.
- Data store (MySQL, MongoDB) and web applications (Insights, LMS, and CMS) are fault tolerant and reliable systems.
Question and Answers
Support Protocol

Technical support provided
Help Form

- Provides easy way for learners to submit issues to the EducateWorkforce support team.
- Three ways to submit an issue through this form.
  - **Report a problem**
    - Account Registration, Login, or Activation
    - Page Error
    - Course Content or Problem
  - **Make a suggestion**
  - **Ask a question**
Email Response

- Correspondence through email between EducateWorkforce support staff and the ticket submitter.
- Provides open line of communication and tracking.
Customer Support

- Ability for the EducateWorkforce support team to keep track of progress of issues submitted.
- Ticket details include information necessary for evaluating a group of tickets as time progresses with the system.
Question and Answers
What is the pricing model for EducateWorkforce?
- Answer: Individuals can access and evaluate the course material at no cost for trial and full course offerings on the courses page. Please contact info@educateworkforce.com to discuss the Class Section and Subsite options.

How difficult is it to setup a hosting environment for Open edX?
- Answer: Open edX is a complex online learning platform that requires in-depth knowledge of server and hosting infrastructure technology. Here are some links that will help you get started installing Open edX in your environment.
  • Releases - https://openedx.atlassian.net/wiki/display/DOC/Open+edX+Releases
  • Documentation - http://docs.edx.org/

What type of hardware is needed to use the EducateWorkforce platform?
- Answer: Desktop computer with any common browser (Internet Explorer, Firefox, Chrome, Safari). Refer the https://educateworkforce.com/resources page for additional information.

How to register for an account on the EducateWorkforce platform?
- Answer: Go to https://educateworkforce.com/register page, complete the required fields then click the Create Account button to continue. Click the link provided in the activation email to verify that the registered email on the newly created account is yours. This will provide you with continued usage of the EducateWorkforce system after initial account creation.

How do I reach technical support?
- Answer: Click the Help Form located on the left side of any Learning Management System (LMS) page then submit your issue to support. An email will be sent to your registered EducateWorkforce account email. All correspondence is handled through email with EducateWorkforce support. Alternatively you can send email directly to support@educateworkforce.com.