Curriculum Design with Systematic Analysis, Interdisciplinary Collaboration, and Research

Juhong Christie Liu Ph.D.
James Madison University, liujc@jmu.edu

Eric M. Stauffer
James Madison University, stauffem@jmu.edu

Jim R. West
James Madison University, westjr@jmu.edu

Dominic "Nick" D. Swayne
James Madison University, swaynedd@jmu.edu

Follow this and additional works at: https://commons.lib.jmu.edu/letfspubs

Part of the Curriculum and Instruction Commons, Educational Technology Commons, Online and Distance Education Commons, and the Scholarship of Teaching and Learning Commons

Recommended Citation

This Presentation is brought to you for free and open access by the Libraries at JMU Scholarly Commons. It has been accepted for inclusion in Libraries by an authorized administrator of JMU Scholarly Commons. For more information, please contact dc_admin@jmu.edu.
Curriculum Design with Systematic Analysis, Interdisciplinary Collaboration, and Research

Juhong Christie Liu, Ph.D., Eric Stauffer, Jim West, Nick Swayne
James Madison University

Association for Educational Communications & Technology (AECT)
2019 International Convention

Las Vegas, NV, USA
October 24, 2019
Outline

- Curriculum Design with Systematic Analysis
- Language Alignment with SMEs
- ID Project Management
- Shared Space with Institutional Support
- Technology Selection through Interdisciplinary Collaboration
- Course Design
- Support & Orientations
- Feedback
Determine objectives

Select instructional format

Analyze, evaluate and select existing materials and resources

Design and develop new materials

Coordinate implementation, orientation, & support

Formative evaluation

Decision making at program & institution levels

Communication + Collaboration

Diamond, 2008
Language Alignment with SMEs
ID Project Management

Planning with Goal and Standards
- Identify curriculum goal
- Project a development timeline
- Exchange syllabus language

Developing with ongoing analysis
- Analyze existing materials
- Construct common spaces for design and development
- Select technologies with intention & applied research

Supporting both faculty and students
- Establish course design and development community
- Provide orientations for student success
Shared Spaces with Institutional Support
Curriculum-level Needs Analysis

Resource Analysis

Course-level Needs Analysis

Student Needs Analysis
# Curriculum-Level Needs Analysis

## External Factors

<table>
<thead>
<tr>
<th>FACTORS</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>The curriculum meets accreditation standards.</td>
<td>VDOE, NAUIC, CAPE</td>
</tr>
<tr>
<td>The curriculum is up to date and sensitive to changing needs in the field.</td>
<td></td>
</tr>
<tr>
<td>The Discipline’s needs are met by exiting courses in the program.</td>
<td>Alignment with VDOE</td>
</tr>
<tr>
<td>There is support for curriculum development.</td>
<td>Design, development, and teaching support needs will be different. Meeting the needs of teacher shortage. Summer sponsorship of course development. Time commitment; subscription needs of software, different computer applications, Camtasia Studio,</td>
</tr>
<tr>
<td>Resources are available for the new curriculum development.</td>
<td></td>
</tr>
</tbody>
</table>

## Internal Factors

<table>
<thead>
<tr>
<th>FACTORS</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>The teaching, learning and assessment approaches in the current EERE program are good foundations for a new program.</td>
<td></td>
</tr>
<tr>
<td>Core learning outcomes are clearly stated for all students.</td>
<td></td>
</tr>
<tr>
<td>Assessment are emphasizing higher order competencies.</td>
<td></td>
</tr>
<tr>
<td>There is a variety and choice in assessment across the program.</td>
<td></td>
</tr>
<tr>
<td>Students are supported in their learning in EERE programs.</td>
<td></td>
</tr>
</tbody>
</table>
## Resource Needs Analysis

<table>
<thead>
<tr>
<th>Resource Category</th>
<th>Description</th>
<th>Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human capital</td>
<td>Including the training, experience, and teaching insights, etc.</td>
<td></td>
</tr>
<tr>
<td>Financial</td>
<td>Program management &amp; coordination</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Technology infrastructure</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Source of students</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tuition</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Scholarship</td>
<td></td>
</tr>
<tr>
<td>Educational &amp; Organizational</td>
<td>Technologies for teachers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Technologies for students</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Instructional materials for teachers (text, video clips, audio, video coaching, interactive assessment, etc.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Learning materials for students (textbooks, access to library resources etc.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Student Services</td>
<td></td>
</tr>
</tbody>
</table>
OK – from the monitoring of activity perspective – a security camera device would probably be the best. That’s essentially what you’re trying to accomplish (remote monitoring of the room) so they are specifically designed for that application – but – most of them won’t work on our wireless system. You can’t authenticate them on the network. I’ve tried a couple of options here to do that and haven’t discovered anything that works well – yet.

For bringing in remote speakers on a conference call, I would use a different system entirely. If he doesn’t mind connecting to a laptop and doing a skype/webex call then the Logitech system will probably do the trick. The camera is really good so the remoter person will be able to see what’s going on in the room. The speakers and microphones are good enough for a temporary situation (I wouldn’t want to have a whole semester of lectures from a remote professor using that system though). That system can be boxed up after use and it’s pretty easy to setup – it does need to be connected to a computer (laptop is OK) but it’s a USB connection (not wireless) and I would recommend connecting the laptop to a wired network port to ensure consistent connections.
PHETE camera project

Overview:

CTS has installed a high quality 32x zoom PTZ IP camera in Godwin 140. The idea is for the JMU professor to be in the office while graduate students lead a class in Godwin 140.

The camera’s image is accessed via a web browser pointed to a JMU only accessible IP address. The PHETE professor can login to the camera and use its PTZ functions to observe the class.

Communications with the graduate students are possible via WebEx. The PHETE faculty member can utilize WebEx’s “Personal Meeting Room”*. The graduate students leading the class will connect via WebEx to the professor utilizing mobile phones and Bluetooth earphone/mic sets.

The WebEx session may also be accessed by anyone around the world that has been allowed to join the PHETE professor’s WebEx Personal Meeting Room. Note that anyone connected to the WebEx meeting will be able to see what the PHETE professor shares via the screen sharing function. All participants will also be able to hear communications between the PHETE professor and the graduate students teaching the class.

WebEx has a recording function, so the entire instructional event can be recorded. In addition, by using Techsmith Relay, the browser window can be recorded.

WebEx information is available here: http://www.jmu.edu/computing/webex/

Techsmith Relay information is available here: https://www.lib.jmu.edu/vms/relay/

Hi Christie,

See attached.

Jim

James R. West – M. Ed.
Director – Classroom Technology Services
James Madison University
Carrier Library 22C – MSC 1704
Harrisonburg, VA 22807
540-568-7382
Hey all,

After our last conversation, I visited VT and found an audio solution they are using with Zoom. Jim, any experience with this mobile solution?


---

Sennheiser TeamConnect Wireless Audio Conferencing System 506687

www.bhphotovideo.com

Buy Sennheiser TeamConnect Wireless Audio Conferencing System with Case featuring Turns Any Room into a Conference Venue, Easy Setup Connects Quickly, Connects up to 24 People in Any Room, Bluetooth, Wired USB, & 3.5mm Connection, Supports Multiple Audio Channels, Professional High-Speech Intelligibility, Includes Durable Carry Case.

---

Best,

E. Stauffer
Director of Instructional Design and Technology
Libraries and Educational Technology
James Madison University
Course Design
Student Support

Technology Literacy

Writing Literacy

Learning Community building through connection with advisors
Faculty Feedback

- Organized weekly layout and expectations
- Helpful examples (other professors’ syllabi, canvas, surveys...)
- Supportive Canvas posts (forms, presentations...)
- Access to support and follow up
Juhong Christie Liu, Ph.D.
Associate Professor
Libraries
James Madison University
liujc@jmu.edu

Eric Stauffer
Assistant Professor
Director of Instructional Design and Technology
James Madison University
stauffem@jmu.edu

James R. West
Director – Classroom Technology Services
James Madison University
westjr@jmu.edu

Nick Swayne
Executive Director, 4-VA
Founding Director, JMU X-Labs
James Madison University
swaynedd@jmu.edu