Curriculum Development for a Technology-Rich English Language Learning Environment



Introduction

- Using technology to assist language learners is much in demand by students, but...
- teachers lack confidence in technology use and feel outside their "comfort zone" when...
- Their own teachers in years past often used little or no technology, so...
- Today's teachers often feel less sophisticated than their students in....
- Most literature reports one-time tests and limited guidance on curriculum design

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Technology-rich Learning environment

The goal is NOT to simply use more technology

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- The goal is to improve learning by using technology that enhances learning activities
- Technology is used as a means and part of the lesson plan
- The RIGHT technology for the BEST outcomes
- · Today we explore how to do this by...

Theoretical Framework:

Cognitive Psychology, Constructivism and Active Learning

- Cognitive psychology & constructivism
 - Understanding of psychology-people learn and think by connecting the dots
 - Teacher role is to help students fit new information in with what they already know (constructivism)
 - Lecture/memorization is inadequate

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Active learning

- · Student-centered active learning
 - Learn by doing ("hands-on"use of the language), active engagement, not passive reception of information

Technology provides broad availability of authentic learning materials and social activities.

What is "Technology Rich"?

- Environment using technology for several kinds of learning activities
- Each separate use is planned and selected to contribute to the learning experience
- Each achieves desired beneficial learning outcomes
 - Not using technology ONLY for the sake of using technology, or just "for show"

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Curriculum Development

- An effective curriculum must reflect the philosophy, goals, measurable objectives, learning experiences, instructional resources, and assessment plans
- · Twins sins of traditional curriculum design
 - Activity-oriented planning (hands-on but not minds-on)
 - Planning for "covering" the content, not deep understanding
- Alternative

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- Focus on understanding & knowledge transfer
- Design curriculum "backwards" from outcomes

Technology-Rich Instructional Design Process

1. Identify outcome goals/objectives based on marketplace requirements

2. Choose instructional activities

- 3. Select technology by affordances
- 4. Develop complete lesson plans
- 5. Teach the class
- 6. Evaluate success to plan next time

1. Outcome Goals/Objectives

- Any instructional program needs outcome goals. Clarifying course goals acts as the first step.....
- Overall curriculum goals based on marketplace requirements
 - Measurable objectives for each class needed to achieve those goals
 - Individual lesson objectives to meet those class and curriculum goals
- Know KPIs before you begin teaching

2. Instructional Activities

- · Do not think yet about the technology
- Plan logical mix of measurable instructional activities to achieve each of the class outcome objectives
 - Textbook reading
 - Lecture (20 minutes or less, please)
 - Discussion
 - Student presentations
 - Drill and practice
 - Etc.

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Plan HOW to measure success for each

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Use student-centered active learning

- Introduction of new knowledge may be more traditional, but...
- Activities must make students active in applying their new knowledge again and again until they have mastered it
 - Task-Based Language Teaching, Gamification, etc.

TBLT/TBID

- Task-Based Language Teaching (TBLT) and Task Based Instructional Design (TBID)
 - Specific things that the students need to accomplish, or problems they need to solve,
 - By a certain deadline
 - Clear connections to outcome goals of the class
 - Clear to students why beneficial
 - Students need to be held accountable for completing the task
 - In most cases, being accountable means that it contributes to their grade

3. Technology Affordances

- Only after you know the learning tasks can you pick technology by which they can be performed
- Evaluate by "affordances"
 - "The qualities or properties of an object that define its possible uses or make clear how it can or should be used"
 - In this case, the functions and benefits the technology can provide toward learning

Example

- Technology can help with learning tasks requiring repetition.
- Transfer repetition out of classroom to technology allows teacher to focus on higher-level instructional functions in classroom
- Technology can also help in tasks requiring social interaction (Line, FB)
 - Engages and motivates students more

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Kennedy & Levy (2009)

Technology must be...

"An essential part of the course it is designed for and

beneficial to all the students for a sustained period of time,...

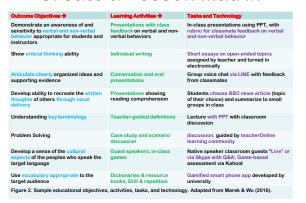
not just an extra option that appeals until the novelty wears off and is useful to only some of them"

Criteria for tech choice

- Accomplishes learning outcome objectives? Measurable results?
- Familiarity or need for induction training?
- How will students use the technology?
 - Brief uses or longer periods of time?
- Will it fit their lifestyles?
- Novelty versus sustainability?

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Create a Lesson Matrix



Technology Rich

- You will likely use technology for several different outcome objectives
 - Likely different types of technology for different learning activities
 - "Technology-rich" in curriculum design means using technology wherever it is beneficial...
 - Not just in one limited category of learning activities

4. Create Lesson Plans

- When the big picture is complete (goals, objectives, learning activities, technology)...
- Create the detailed lesson plan
 - How will the multiple learning activities be scheduled on a weekly or daily basis throughout the semester?
 - On what class meeting will give each specific assignment be made to students?
 - On what days will they be due?
 - What will happen in each individual classroom meeting? This is a standard thing that teachers always do, but the inclusion of more technology in the class may require more detail.

5. Teach the Class

- Issues may appear the first time a new instructional approach is used
 - May need to teach a course two or three times before the lesson plan and operation of the class is perfected
- Teacher can often address problems as soon as they are discovered.
- In other cases, make notes about things to change next time the course is taught
- · Ask the students directly what they think:

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- "What advice do you have for the next time I teach this class?"
- Some answers may not match the instructional philosophy or goals, but students will likely have good ideas

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6. Evaluate Success to Plan Next Time

- Evaluation must be an on-going process
- Always watch for things needing to be "fine-tuned."
- When the semester is over, go back to the measurement plans made when establishing the goals and measurable objectives
- What lessons result from these measurements?

Evaluation & Analysis

- Think about what Constructivism says about how students learn. Did the technology use:
 - Help students be active learners?
 - Help them "connect the dots" between new information and what they already knew?
 - Help them "learn by doing" so that learning was natural, not artificial?
 - Help students feel confident about their learning?
 - Were they more motivated to learn?
- The answers to each of these questions will help improve the class next time it is taught

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Best Practices

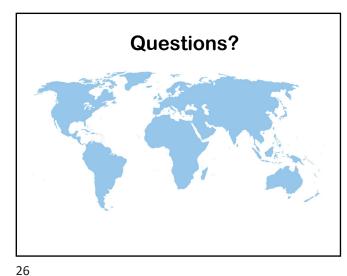
- Here is advice based on this theory-based approach to curriculum design
 - Explain the benefits of the ways we are using technology
 - Select tech that the students relate to well
 - Motivate students to use technology outside the classroom and to make learning as part of their life
 - Make it part of the curriculum and part of the grade
 - Don't abandon your students to technology engage with them, monitor and correct
 - Give students encouraging feedback, so they experience success

Final Thoughts

- Teachers need to get to the point in their personal professional development where...
- The infusion of meaningful technology into their classes is automatic and their normal way of teaching
- Learning via technology is not a "gimmick" or something that exists off to the side of the normal instructional interaction since little learning is gained by.....

Final Thoughts

- Technology-rich learning environments are a way of life for the students. Should be a way of life for faculty. But both need computer literacy
- It is a strategic planning, requiring both research and critical thinking, but...
- The evidence is clear that a technologyrich language learning environment contributes to improved student confidence, motivation and ability



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References

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