Active Learning Online

Engaging students in meaningful discussion and creating a “learning community”

<table>
<thead>
<tr>
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<th>Jim Vanides</th>
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<tbody>
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<td>Online Instructor, MSU</td>
<td>Online Instructor, MSU</td>
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<tr>
<td>“World of Motion”</td>
<td>“Science of Sound”</td>
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Models of Online Learning

Dimensions:

- Completely Online vs. Hybrid (with F2F)
- Synchronous vs. Asynchronous
- Self Study vs. Instructor Facilitated Cohort
- Self Paced vs. Scheduled

*NTEN courses are online (only), asynchronous, instructor facilitated, scheduled (6 week) course for science teachers (elementary through high school).*
Personal Introductions

- Get out a piece of paper and pen/pencil
- Write down your name, area of expertise, and your location
- Pass the paper to your site facilitator to enter into the chat window

- or –

- If you are logged into your own computer, enter your info yourself

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Personal Introductions

**F2F**
- “Let’s go around the room…”
- “Pair-up & meet; introduce one another”

**Online (sync)**
- Silent (parallel) introductions

**Online (async)**
- Tells us about yourself! (Name, location, what grade you teach, why you are interested in this course; Please don’t forget to upload a photo of yourself…)
Instructional Design

The Scientific Method (typical)

Hypothesize → Experiment → Observe (data) → Analyze → Conclude

Instructional Design

The Scientific Method (realistic)

Question? → Research → Explore → Analyze & Model → Apply Model → Share → Experiment

By Jim Vanides © 2008
The Learning & Teaching Cycle

Instructional Design Elements
(eg: Jim’s “Science of Sound” course)

- A kit of supplies for hands-on experiments
- Reference material to read
- Multimedia to watch / explore
- Private science notebook
- Public “classroom” discussions (with thoughtful & active facilitation)
- Café (“a friendly place to relax and talk to one another…”)
- Sandbox (for practicing posting)
Reflection

- Get out a piece of paper and a pen/pencil
- Think of the WORST class you’ve ever been in as a student
- Why was this class such a disaster for you?

F2F (usually async)
- Homework
- Weekly “diary”
- Science notebook

Online (async)
- Weekly reflection (self assessment “quiz”)
- “Science Notebook” (private discussion thread)
Students need to feel supported

They should:

• know what is required of them, and how to succeed.
• feel that there are folks with whom they can exchange ideas.
• have someone to answer their questions readily, or at least pay attention to their questions. This applies to both content-related and delivery-related issues.
• have the opportunity for social as well as academic interaction.

Design for Community

Course design contributes in important ways to feelings of community

• Encourage (better, require) that students interact with each other, and not just with the instructor. Leading discussions can be a shared responsibility, and online break-outs are often useful.

• It’s important at the outset to have students and instructors introduce themselves (or each other) to the group. Sharing of personal information is OK to the extent that comfort levels are respected.
Design for Community

(cont’d)

• The structure should be transparent – no need to puzzle out “what to do next”. Checklists are useful!

• Deadlines need to be frequent, reasonable, clear, and enforced. (But be flexible when circumstances call for it…)

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Discussion Topics

• Meet One Another (week 0 orientation)
• Small group discussions ("team")
• Private Science Notebooks
• Weekly “whole class” discussions
• Social Space (Coffee House)

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Science of Sound - Week 1 Checklist

Hands-On Exploration
- Do the Choice Mystery
- Write about your experiment in your science notebook and in our class discussion area

About Being Science
- Read The Learning Cycle and The Scientific Method

Describing Sounds
- Post your best words in our Discussion Area by Thursday
- By Friday, respond to at least one of the postings with constructive comments, questions, and any other Sound Ideas that come to mind (see our guidelines for online discussions).

Reflecting on Week One
- Fill out the discussion self-assessment "survey"
Small Group Discussion
(3 minutes max)

• Break into groups of two (if you are online by yourself, send Jim or George a private chat message)
• Share your “worst class” experience with each other (30 seconds each)
• Discuss how these examples affect (or could affect!) your approach to teaching (2 min)

Small Group Discussion

F2F
• 2-4 students
• Discussion prompt or project
• “Pair and Share” or…

Online (sync)
• Breakout “rooms”
• Private group chat

Online (async)
• Semi-private (assigned) discussion thread
Whole-Class Discussion

• Who would like to share a “worst class” experience and its accompanying “implications for instruction”?
• Can be yours or one you just heard about

Whole-Class Discussion

F2F tips
• Wait time -> count to 10 before calling on someone
• Don’t always call on the “most eager” person

Online (async) tips
• Instructor presence
• “speak” to everyone in the whole class discussion threads
• Expect and grade participation
• Explain what a “meaningful response” looks like
Weekly Participation Self-Assessment

- Reinforces participation expectations
- Open ended reflection provides weekly insights about participants
- Instructor provides feedback weekly

Facilitating Discussions

Facilitating Online Learning: Effective Strategies for Moderators
By Collison, Elbaum, Haavind, and Tinker; Atwood Publishing, 2000

Learning & Leading With Technology, May 2007, Vol. 34 No. 8
See www.vanides2.com/publications for PDF reprint
Instructor Presence

… is key to students' feelings of support and community

• “being there” but not being a dominating presence

• responding promptly to student questions, or to student remarks directed at them (turnaround time is important)

• responding in ways that encourage further interaction, even when not providing pat answers (or providing direct answers at all)

Instructor Presence

… also means:

• articulating high standards while also being respectful of students' efforts

• acknowledging differences in students' needs for communication. What seems appropriate (or even barely adequate) to some may feel like pestering to others.
What instructors can expect

- **Course design:** The content is the same, but you’re designing a new experience
- **Your role:** More focus on students, less on “presenting information”
- **Your time:** It’s not easier – just different; If students are spending 8-12 hours a week, you will be spending at least that much time, too
- **Student response:** HIGH satisfaction and MANY postings; a very rich conversation

More Questions?