Designing for Difficulty: Social Pedagogies as a Framework for Enhancing Student Learning

Randy Bass,
Georgetown University (U.S.A.)

University of Queensland
November 5, 2009

http://tinyurl.com/socialpedagogiesUQ

In collaboration with Heidi Elmendorf, Georgetown University, Co-PI, Social Pedagogies Project; funding by the Teagle Foundation
Sir Ken Robinson, “How Education Kills Creativity”
Sir Ken Robinson, “How Education Kills Creativity”

“What we need is a new conception of human ecology, one in which we start to reconstitute our conception of the richness of human capacity.”
John Seely Brown: Practice to Content

Reversing the Flow

Learning about

Learning to be

Explicit

Tacit

Key: unleashing productive inquiry

content

practice
Driving questions

How do we make formal learning environments more like informal learning?

How do we make classroom learning more like participatory culture?
Driving questions

How do we make classroom learning more like participatory culture?

- Features of participatory culture
  - Low barriers to entry
  - Strong support for sharing one’s contributions
  - Informal mentorship, experienced to novice
  - Members feel a sense of connection to each other
  - Students feel a sense of ownership of what is being created
  - Strong collective sense that something is at stake

---

Jenkins, et. al., The Challenge of Participatory Culture
Driving questions

How do we make formal learning environments more like informal learning?

How do we make classroom learning more like participatory culture?

How do we go about designing for that kind of experience?

In what ways do we have to rethink our pedagogical and assessment practices to make that kind of learning effective?

What new dimensions of learning demand our attention?
Visible Knowledge Project Findings

January 2009

NEW MEDIA TECHNOLOGIES AND THE SCHOLARSHIP OF TEACHING AND LEARNING

Issue edited by Randy Bass with Bret Eynon and an editorial group from the Center for New Designs in Learning and Scholarship (CNDLS) at Georgetown University-- Eddie Maloney, Susannah McGowan, John Rakestraw and Theresa Schlafly.

Capturing the Visible Evidence of Invisible Learning

Posted January 7th, 2009 by Randy Bass and Bret Eynon
0 Comments | 1743 Page Views

This is a portrait of the new shape of learning with digital media, drawn around three core concepts: adaptive expertise, embodied learning, and socially situated pedagogies. These findings emerge from the classroom case studies of the Visible Knowledge Project, a six-year project engaging almost 70 faculty from 21 different institutions across higher education. Examining the scholarly work of VKP faculty across practices and technologies, it highlights key conceptual findings and their implications for pedagogical design. Where any single classroom case study yields a snapshot of practice and insight, collectively these studies present a framework that bridges from Web 1.0 to Web 2.0 technologies, building on many dimensions of learning that have previously been undervalued if not invisible in higher education.

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Academiccommons.org
Visible Knowledge Project Findings

- **Adaptive expertise**: if you want to cultivate “flexible performance” with knowledge and “judgment in uncertainty” then you have to pay attention to intermediate thinking processes. You have to provide ways to capture student work processes in addition to summative assessments. Important stuff may be on the cutting room floor.

- **Embodied pedagogies**: rich intellectual capacities are not just cognitive; new media pedagogies are not distancing and impersonal, but engaging of creativity, affect, intuition. The more authentic the learning situation the more expansive the dimensions of learning.

- **Socially situated pedagogies**: learning with new media is fundamentally social; new media pedagogies can situate learning in intellectual communities that reach beyond the classroom.
Definition: Social Pedagogies

- Social Pedagogies are design approaches for teaching and learning that are communication-intensive, strive to build and work with a sense of intellectual community, and seek to bridge disciplinary understanding with broader contexts for learning.

- Social pedagogies build in iterative cycles of engagement with the most difficult material, not just as content but through ways of thinking, ways of acting, ways of communicating.

Randy Bass and Heidi Elmendorf (Funded by the Teagle Foundation, 2007)
Definition

- We recognize that most faculty have communication elements in their courses; the major premise of this work is that the act of representing knowledge to others becomes a central design point to the pedagogy.

- With social pedagogies, the representation of knowledge for others is intrinsic to deepening understanding, not just for the purpose of presenting a product that represents their learning at the end.

*Randy Bass and Heidi Elmendorf (Funded by the Teagle Foundation, 2007)*
Range of social pedagogies

Large enrollment courses designed as inquiry-based & participatory

CASPiE

Using social tools at scale

Michael Wesch, World History Simulation
Range of social pedagogies

Smaller courses that stress social learning, public products, and intellectual community

Digital stories

Sample Digital Stories

Chocolate Innocence (Charea Batiste, CSUMB)

Reacting to the Past (role playing simulation)

Use of video “think alouds” to teach students problem solving in Calculus
Range of social pedagogies

Activities that link curricular and extracurricular learning

Weblogs while studying abroad

Electronic portfolios

Biology Teaching Thesis
Some Provisional Claims

- Social pedagogies are particularly effective at engaging students with the difficult dimensions of core (threshold) concepts.

- Social pedagogies bridge disciplinary understanding with embodied dimensions of learning.

- Social pedagogies open up a set of filters or conditions for student learning—such as prior knowledge, identity, uncertainty, “troublesome knowledge”—that can be ignored or suppressed through more bounded, traditional pedagogies.

*Randy Bass and Heidi Elmendorf (Funded by the Teagle Foundation, 2007)*
### Social Pedagogies

Create opportunities for students to:

<table>
<thead>
<tr>
<th>Student and Course Contexts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engage with Authenticity and Difficulty</td>
</tr>
<tr>
<td>Value Process and Product of Learning</td>
</tr>
<tr>
<td>Represent Knowledge for Others</td>
</tr>
<tr>
<td>Participate in an Intellectual Community</td>
</tr>
<tr>
<td>Connect the Affective and Cognitive</td>
</tr>
</tbody>
</table>

Such that they develop:

<table>
<thead>
<tr>
<th>Student and Course Contexts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deepened and Contextualized Understanding</td>
</tr>
<tr>
<td>Flexibility with Knowledge in Open-ended Contexts</td>
</tr>
<tr>
<td>A Sense of Audience and Voice</td>
</tr>
<tr>
<td>Learning and Feedback from Multiple Perspectives</td>
</tr>
<tr>
<td>An Integrated Sense of Personal and Intellectual Significance</td>
</tr>
</tbody>
</table>
Student Learning Goals
(Student development...)

- Sense of Personal and Intellectual Significance
- A Sense of Audience and Voice
- Learning and Feedback from Multiple Perspectives
- Flexibility with knowledge in open-ended contexts
- Deepening Disciplinary Understanding
- Connect the Affective and the Cognitive
- Engage with Authenticity and Difficulty
- Value process and product in learning
- Represent Knowledge For Others
- Participate in an Intellectual Community

Design Elements (Create opportunities for students to...)

Social Pedagogies

Student and Course Contexts
Key elements: Social Pedagogies

- **Design**: Focus on constellation of design principles
- **Practice**: Focus on social process embedded in intellectual work
- **Evidence of learning**: Focus on captures of practice at multiple points
Connecting Intermediate Processes to Practice

NOVICE → MIRACLE → EXPERT

Product → product
Connecting Intermediate Processes to Practice

NOVICE processes

LEARNING processes

LEARNING processes

LEARNING processes

evidence of process

EXPERT practice

How can we better understand these intermediate processes?

How might we design to foster and capture them?
Connecting Intermediate Processes to Practice

- NOVICE processes
- LEARNING processes
- LEARNING processes
- LEARNING processes
- EXPERT practice
- Interviews, think alouds, performance
- ePortfolio samples: drafts, reflections
- "Thin slices" of online discussion or blog
- Classroom assessment techniques
- Evidence of Process
Student Learning Goals (Students develop…)

A Sense of Audience and Voice
Learning and Feedback from Multiple Perspectives
Sense of Personal and Intellectual Significance
Engage with Authenticity and Difficulty
Value process and product in learning
Represent Knowledge For Others
Participate in an Intellectual Community
Connect the Affective And the Cognitive
Deepening Disciplinary Understanding
Flexibility with knowledge in open-ended contexts

Social Pedagogies

Design Elements (Create opportunities for students to…)

Student and Course Contexts
#1: Social Pedagogies and a Large Lecture Course

Heidi Elmendorf, Georgetown University

Foundations of Biology
BIOL-103

1st year Biology course

250 students

science majors & pre-meds
Traditional Course Design Elements
(and evidence of learning)

- Readings
- Class
- Lab and lab reports
- Problem Sets
- Research Paper
- Exams

Heidi Elmendorf, Georgetown University
Heidi Elmendorf, Georgetown University

Social Pedagogy

Course Design Elements

- Readings & On-line Conversation
- Class & Think-Pair-Share
- Lab & Partnered Inquiry
- Problem Sets & Group Effort around Authentic and Challenging Problems
- Research Paper & Shared Steps
- Exams & Room for Uncertainty

Student Learning Goals (Students develop…)

Sense of Personal and Intellectual Significance

A Sense of Audience and Voice

Social Pedagogies

Learning and Feedback from Multiple Perspectives

Flexibility with knowledge in open-ended contexts

Deepening Disciplinary Understanding
Communicate about the reading. **One of the best ways to learn something is to talk about it.** Air your bafflement, express your wonder, ask your questions, try out a new idea of your own... And while I hope you will talk often about biology this semester with your classmates, I want to be sure you have an official forum for these conversations – and that you are rewarded for the effort you will expend having them.

- We have created **Discussion Forums on Blackboard** for each day.
- What should you say? Really... anything. Ask a question, make a connection, pursue an idea beyond the textbook, etc. But most of all – converse! **Don’t just toss out your own ideas. Read what others have already written and be responsive...**
- You must contribute to the conversation by midnight the day before class meets. **I like to see your conversations before finalizing my class preparation ...**
- These conversations will not be graded. **You will receive full credit simply for participating.**
### Discussion Board

<table>
<thead>
<tr>
<th>Display Order</th>
<th>Forum</th>
<th>Total Posts</th>
<th>Unread Posts</th>
<th>Total Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Conversation Builder for Class on Tuesday Sept 8th</td>
<td>316</td>
<td>309</td>
<td>183</td>
</tr>
<tr>
<td>2</td>
<td>Conversation Builder for Class on Thursday Sept 10th</td>
<td>265</td>
<td>261</td>
<td>172</td>
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<tr>
<td>3</td>
<td>Conversation Builder for Class on Friday Sept 11th</td>
<td>207</td>
<td>207</td>
<td>152</td>
</tr>
<tr>
<td>4</td>
<td>Conversation Builder for Class on Tuesday Sept 15th</td>
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<td>166</td>
<td>144</td>
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<td>Thread</td>
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</tr>
<tr>
<td>10/13/09 12:51 AM</td>
<td>Hairpin</td>
<td>Samuel Dowling</td>
<td>Published</td>
<td>6</td>
</tr>
<tr>
<td>10/13/09 8:59 AM</td>
<td>promotors</td>
<td>Lane Feler</td>
<td>Published</td>
<td>6</td>
</tr>
<tr>
<td>10/13/09 1:29 PM</td>
<td>Mediterranean diet lowers risk of depression?</td>
<td>Raina Aggarwal</td>
<td>Published</td>
<td>11</td>
</tr>
<tr>
<td>10/13/09 4:10 PM</td>
<td>STIA majors!</td>
<td>Alexandra Greco</td>
<td>Published</td>
<td>8</td>
</tr>
<tr>
<td>10/13/09 4:12 PM</td>
<td>HIV Life Cycle and RNA</td>
<td>Kirsten Nelson</td>
<td>Published</td>
<td>6</td>
</tr>
<tr>
<td>10/13/09 5:25 PM</td>
<td>mitochondria and DNA</td>
<td>Alisse Hannaford</td>
<td>Published</td>
<td>6</td>
</tr>
<tr>
<td>10/13/09 5:25 PM</td>
<td>tRNA &amp; mRNA</td>
<td>Krishna Chandrasekaran</td>
<td>Published</td>
<td>3</td>
</tr>
<tr>
<td>10/13/09 9:05 PM</td>
<td>use of genomes in medicine</td>
<td>Caitlin Hickey</td>
<td>Published</td>
<td>6</td>
</tr>
<tr>
<td>10/13/09 11:42 PM</td>
<td>f-Meth</td>
<td>Samuel Kareff</td>
<td>Published</td>
<td>3</td>
</tr>
</tbody>
</table>
At the end of chapter 15 when talking about codons, the textbook says, "with a few minor exceptions, all codons specify the same amino acids in all organisms."

I was just curious which organisms are these exceptions?

Box 15.1 on page 326 mention some of the exceptions:

“For example, in the single-celled eukaryotes Tetrahymena and Paramecium, UAA and UAG code for glutamine instead of stop; and in the year Candida cylindracea, CUG codes for serine instead of leucine. In a few species other codons in addition to AUG initiate protein synthesis”

The box is also helpful in explaining why the genetic code is nearly universal with a few minor exceptions.

To add on to this question, the book also says that basically two codons code for each amino acid. Does this suggest a codon and its opposite pair both code for the same amino acid?? What does this mean for genes...

Don't have an answer for anyone, but I was just wondering if anyone could think of an explanation as to why there is only one start codon, yet there are three possible stop codons. What would be the advantage of this difference?

Thanks, this is very helpful... However, can anyone answer the original question?

I just want to say how amazing I think it is that it took a ton of time and effort to put together the table of which codon code for which amino acids and now it is available in every biology textbook. I just wanted to reflect on how impressive that discovery is.

On that note of how cool this stuff is... as I read, I was amazed by how ordered these processes are (obviously necessarily in order to turn out a living organism, but still). Building blocks seem to lead to other building blocks which lead to yet more building blocks—and everything is important, right down to the reading frame. It really makes me wonder, though, how often things must go wrong, and what the consequences are.
Jose Feito, on the importance of “not knowing”

“The theme of not-knowing [has] emerged as a key factor in the maintenance of a truly collaborative intellectual community within the classroom.

In order for a shared inquiry to proceed productively, the participants must be able to regularly acknowledge their lack of understanding, offer partial understandings, and collectively digest the resulting discourse.

Not-knowing is characterized by a group’s ability to defer meaning, tolerate ambiguity, hold divergent perspectives, and postpone closure. In order to develop, it requires a relatively non-judgmental classroom atmosphere, but not an uncritical one.”

Jose Feito, St. Mary’s University
(Moraga, California, U.S.A.)
Second Conversation

What purpose do noncoding sequences serve? Is it every possible for introns to be changed back into exons and actually expressed genes? What happens to the introns after they are removed?

Also, can someone describe more about how the spliceosome works? How are the exons put together?

I do not believe that the introns are able to be, in a sense, rearranged in order to form a sequence that can code for mRNA because they are degraded immediately after being spliced during the formation of mRNA's.

The spliceosome bends the in the introns after attaching the snRNPs to the primary RNA transcript. These ribonucleoproteins are designed to "clump" together in order to cut the intron from the exon and work like a single enzyme to then bind the exons after looping the intron to prepare it for degradation inside the cell.

The book said that introns are degraded back into RNA pieces after they are removed.

http://www.youtube.com/watch?v=HSD1AI1r4Y&feature=related

This video was somewhat helpful visually.

regarding your question on the function of introns, I do not think we actually know what their functions are yet.

It seems to me, though, that they must have some sort of important function that we are not yet aware of. The fact that more complex organisms posses a higher proportion of introns, suggests that they must have some meaning, or some role. Also, why would our bodies put so much energy into making something that just gets thrown out later on? Maybe they used to have a function, but over time, we evolved in such a way that we no longer needed them, and so they are just relics from the past. I don't really know. This would be an interesting research question though.

Thanks, that video was really helpful and showed the whole splicing process really clearly. I agree that introns are degraded right after they're spliced out so they're probably not turned into exons. However, like you guys were saying, I guess it could be possible that introns have some larger function we are unaware of at this point.

This is an interesting point. We seemed to have dismissed/accepted the strange behaviors of introns!

I understand that introns are removed in reference to a certain gene, but is it possible for a segment of DNA to be an intron at one time and an exon at another? Maybe not in a larger genome where there are large gaps between genes, but in smaller genomes where the genes are more crowded together?
Student Learning Goals (Students develop…)

- Sense of Personal and Intellectual Significance
- A Sense of Audience and Voice
- Learning and Feedback from Multiple Perspectives
- Flexibility with knowledge in open-ended contexts
- Deepening Disciplinary Understanding

Social Pedagogies

Social Pedagogy

Course Design Elements

- Readings & On-line Conversation
- Class & Think-Pair-Share
- Lab & Partnered Inquiry
- Problem Sets & Group Effort around Authentic and Challenging Problems
- Research Paper & Shared Steps
- Exams & Room for Uncertainty

Heidi Elmendorf, Georgetown University
My Surprise…

- The instantaneous community my students formed on-line
- Their expectations of this community
- The quality of their conversations

Belief (w/o formal evidence at the mid-point of this semester) that it is the pervasive social nature of our class - and the authentic challenges they are facing.

Heidi Elmendorf, Georgetown University
Social Pedagogies and an Introductory Writing Class

Writing, Invention, Media
HUMW-011

1st year writing course
Gen Ed
25 students

Randy Bass, Georgetown University
Humanities & Writing 011

- First-year required writing course
- Section theme: “Writing, Invention, Media”
- Core concept: “writing is a social act”
- Core theme: Changes modes of learning, the participatory culture of Web, and the nature of the University
- Assessment through contract, crowd-sourcing (peer rating and aggregation), and professor judgment
First Project (1-2 months)

- Collectively write an essay responding to the claim that Universities are radically out of step with new modes of learning (“participatory culture”) of the Web.
- 20 students acting collectively as “author”
- Write it together through crowd-sourcing and collaborative editing—test the hypothesis that all of them together could write something better than any one of them
- Intent from the beginning is to publish it on the Web
Participatory Learning and the Future of Education: One Class’s Response


NOTE: This essay was produced by a group of student authors through the first month of the course, Humanities & Writing 011, at Georgetown University (Fall 2009, Randy Bass and Michael Swacha, instructors). The project began with two readings—"The Future of Learning Institutions in the Digital Age" (Cathy Davidson and David Theo Goldberg) and "From Knowledgeable to Knowledge-able," Michael Wesch—and the assertion that "school" (the university, in particular) is radically out of step with new modes of learning, particularly those characterized by the participatory culture of the Web. The essay is an experiment in participatory writing, developed and edited through a series of crowdsourcing and collaborative activities.

(We all should work on the entire piece, but we should all especially work on tuning up our own pieces; few suggestions in red, organization in big right now)

(Just a quick note we should make one font for these headings because I think some people made titles for their document and it’s a tad confusing to know which are groups and which are titles)

[Outline (proposed by the organization/arrangement group):
(I merged Davidson/Goldberg Summary with Introduction Thesis because they are one in the same.)]
Social Bookmarking

Reversing the Flow

dimensions of knowledge
(Michael Polanyi)

Explicit

Tacit

unleashing productive inquiry

...
Social Bookmarking

Group HUMW011-Georgetown's feed | Diigo - Groups
- NTLF Vol. 16 No. 1 2006 - Teaching Naked Sep 29, 2009 2:29 am
  Comments: The author used to be chair of the music department here at Georgetown. - Randall Bass
  Tags: no_tagby: Randall Bass
- Internet credibility Sep 21, 2009 8:24 am
  Tags: no_tagby: Joo Hee Park
- BBC NEWS | Technology | Is computer use causing children? Sep 20, 2009 12:20 pm
  Tags: no_tagby: Sasha Pulido
- The Organization Kid - The Atlantic (April 2001) Sep 19, 2009 12:46 pm
  Highlights and Sticky Notes: floating sticky note HAHHAHA a little outdated? - Tyler Sax
  Tags: no_tagby: Tyler Sax
- Constructivism (learning theory) - Wikipedia, the free encyclopedia Sep 16, 2009 8:55 am
  Tags: It, reviewby: Noelle Braddock
- What Teachers Have Learned - Room for Debate Blog - NYTimes.com Sep 15, 2009 11:10 pm
  Comments: Room for Debate readers offer views on whether teacher training or subject-area expertise matters most in classroom. - Joo Hee Park
  Tags: no_tagby: Joo Hee Park
- Ping - Technology Doesn't Dumb Us Down. It Frees Our Minds. - NYTimes.com Sep 15, 2009 8:34 pm
  Could be an interesting response to Carr article. Comments: Could be an interesting response to Carr article - Nancy Odou
  Highlights and Sticky Notes: it freed engineers from wasting time on mundane tasks so they could spend more time creating. But over the course of human history, writing, printing, computing and Googling have only made it easier to...
- Negative Effects of Computers in Classrooms Sep 15, 2009 9:30 pm
  Highlights and Sticky Notes: Are these computers really necessary? Who already has the education in technology about this...
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[Outline (proposed by the organization/arrangement group):
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Collaborative Editing (discussion)

Potential part of the conclusion

ark55 Potential part of the conclusion
I think if we all gave our own opinions on what we would want our education to look like, it will make for a strong conclusion. Just a few sentences each saying what we want. We could combine the common ones and through that we will give our readers exactly what changes we want to see in the education system. Does anyone else think this is a good idea and that it could work?
Posted Oct 4, 2009 3:15 pm - [points]

tps32 re: Potential part of the conclusion
I think this would be great. In order to avoid repetition, we could keep it to just a one-sentence blurb each. It wouldn't even have to summarize your whole opinion on the issue, just a quick thought from each of us all put together would be pretty cool.
Posted Oct 4, 2009 9:47 pm - [points]
Participatory Learning and the Future of Education: One Class's Response


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CommentPress

A remains a resource largely underexplored or neglected by the current educational environment. Our task in this response is not only to continue this discussion, but to explore possibilities for the future of education. It is important to note that participatory learning should be a hallmark in this future, however it is participatory learning in the context of today’s new media environment where the true possibilities lie.

So, where do we go from here?

The first step would be to ask questions. What would a future classroom look like? How would a future classroom function? How would the role of the teacher change? What would the aim of education in a technological age be? How would technology play a role in revolutionizing education? After the questions have been laid out in the open, the search for answers can begin.

Background:
To put today’s learning changes into perspective, one should first learn of three previous ‘information revolutions’ that have redefined teaching methods and information accessibility. Each of these changes has yielded a new way for how knowledge is stored, classified and has challenged and affected the institutions that inherited the task of keeping this knowledge. The first, and most important, revolution that occurred was the invention of writing, in approximately 3500 BC, by the Mesopotamians. Like many cultures at that time, the Mesopotamians found a need for commercial and administrative records. (Ancient Mesopotamia: The Invention of Writing) Similar to today’s technologies, the invention of the written word increased access to information and began to

Total comments on this page: 100

COMMENTS on paragraph 8

RAMONITA JIMENEZ:
Is the introduction too long and wordy? Would we lose readers interest quickly?
October 18, 2009 2:25 pm

VISHAL KHANDHERIA:
Yeah I think she’s right. We may lose some interest. Maybe reduce the number of questions at the end. There’s clearly some unnecessary repetitiveness. I also feel like the ending of the introduction could be stronger.
October 18, 2009 4:42 pm

SASHA PULDE:
I think that these questions are thoughtful except we go into the background of the participatory learning in the next paragraph which is misleading... maybe these questions can be incorporated into a later paragraph?
CommentPress

7 So, where do we go from here?

8 The first step would be to ask questions. What would a future classroom look like? How would a future classroom function? How would the role of the teacher change? What would the aim of education in a technology age be? How would technology play a role in revolutionizing education? After the questions have been laid out in the open, the search for answers can begin.

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[Comment on page 8]

FARIS AL-SULAYMAN:
ARG: I mentioned this in class, but I think the questions being posed here are not actually the ones we come to answer below. Maybe we need to change the questions so that they align more closely with the issues we tackle below. I also agree that too many questions may be bewildering.

October 19, 2009 12:17 am

Reply »

ADAM ROSENFELD:
Agree with the statement above...the questions posed here are not answered in the rest of the response. By posing these questions, the reader would expect these to be some central questions answered by the end of the response. We either have to answer the questions, or change them completely.

October 19, 2009 9:56 am

Reply »
Designing for Difficulty: it is just not good enough yet to publish

Engage them continuously as their consultant

(1) Reflection: objective critique of wiki, narrative of their contributions, analysis of how this process raises threshold concepts of writing

Led to (2) “Rereading” exercise—they decided they had not sufficiently integrated readings into argument
Student Learning Goals (Students develop…)

- A Sense of Audience and Voice
- Sense of Personal and Intellectual Significance
- Learning and Feedback from Multiple Perspectives

Design Elements (Create opportunities for students to…)

- Engage with Authenticity and Difficulty
- Value process and product in learning
- Represent Knowledge For Others
- Participate in an Intellectual Community
- Connect the Affective And the Cognitive
- Deepening Disciplinary Understanding
- Flexibility with knowledge in open-ended contexts

Social Pedagogies

Student and Course Contexts
Social Pedagogies and

Latino Life Stories
CSUMB

Oral History

25 students

Gen Ed
<table>
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<th>PROCESS</th>
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<td>what students produce</td>
<td>what students do</td>
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<tr>
<td>short biography</td>
<td>draft, write</td>
</tr>
<tr>
<td>story script</td>
<td>rethink, condense, refine</td>
</tr>
<tr>
<td>digital story</td>
<td>rethink, condense, translate</td>
</tr>
<tr>
<td>theorizing paper</td>
<td>explain, reflect, (rethink?)</td>
</tr>
<tr>
<td>interview for our project</td>
<td>explain, reflect (rethink)</td>
</tr>
</tbody>
</table>

Michael Coventry, Georgetown
Key elements: Social Pedagogies

Creating the conditions for openness, judgment, and reflection (metacognition)
Social Pedagogies: Creating Designs Around Practice to Increase Impact of Authentic Pedagogies

Yesterday…

Tim Kastelle

“Successful Open Business Models”

• Aggregate

• Filter

• Connect
Student Learning Goals

Learning and Feedback from Multiple Perspectives
A Sense of Audience and Voice
Flexibility with knowledge in open-ended contexts
Deepening Disciplinary Understanding

Sense of Personal and Intellectual Significance

PRACTICE: Features of Participatory Process

Aggregate (research, conversation)
Filter (content, exemplars of process)
Connect (intellectual community inside / outside)

Value process and product in learning
Represent Knowledge For Others
Participate in an Intellectual Community
Connect the Affective And the Cognitive

Engage with Authenticity and Difficulty
Design Elements
Aggregate, Filter, Connect

Michael Wesch (Anthropology)…Course Site as Portal—creating an intellectual community inside the course and connecting to intellectual communities outside

A feed of all Diigo annotations spread across the web, by students and the professor

A feed of student weblog posts

Updates from the course wiki
Aggregate, Filter, Connect

Networked research group
Aggregate, Filter, Connect

Networked research group

Yahoo Pipes
Networked research group
Any mechanism for aggregating, feeding, filtering, tagging…

Shared course blog or teacher / tutor space
Rajagopalan Balaji, Capstone Course in Engineering (University of Colorado) (Design competition)

70+ students  12 teams  two projects

Central RSS feed

Team blogs
Teacher watches, coaches

(key source of capture for intermediate processes)

Central RSS feed

Team blogs
**PRACTICE:**
Features of Participatory Process

- Help students create markers of certainty and uncertainty
- Provide opportunities for relearning
- Design opportunities for meaningful reflection on practice

**Design Elements**
- Engage with Authenticity and Difficulty
- Value process and product in learning
- Represent Knowledge For Others
- Participate in an Intellectual Community
- Connect the Affective And the Cognitive

**Student Learning Goals**
- Sense of Personal and Intellectual Significance
- Learning and Feedback from Multiple Perspectives
- A Sense of Audience and Voice
- Flexibility with knowledge in open-ended contexts
- Deepening Disciplinary Understanding
Student Learning Goals (Students develop…)

A Sense of Audience and Voice
Learning and Feedback from Multiple Perspectives
Sense of Personal and Intellectual Significance
Flexibility with knowledge in open-ended contexts
Deepening Disciplinary Understanding

Social Pedagogies

What does evidence look like for these kinds of student learning goals? Where do you look? How do you get it?
Social pedagogies open up a set of filters or conditions for student learning—such as prior knowledge, identity, uncertainty and troublesome knowledge—that can be ignored or suppressed through more bounded, traditional pedagogies.

Interest in adaptive expertise requires us to pay attention to the artifacts of process as an intrinsic part of building knowledge through practice.
Collaborators

- Thanks to the Teagle Foundation for their Support of the Project
- The Social Pedagogies Project is directed by Randy Bass and Heidi Elmendorf (Georgetown University).
- bassr@georgetown.edu and hge@georgetown.edu
- Members of the Social Pedagogies Working group, including Michael Marx, Catherine Berheide, Bret Eynon, Cecilia O’Leary, Joe Ugoretz, Rachel Theillheimer, Michael Coventry, Peter Felten, Tricia Ferret, Joanne Stewart and Dan Bernstein.
- Michael Coventry (Georgetown) and Matthias Oppermann (Humboldt) for their meta-project, the Digital Stories Multimedia Archive.