

The Boyer Model of Scholarship

Agenda

- Goals of this workshop
- Why talk about the Boyer Model of Scholarship?
- What is the Boyer Model?
- What is Scholarship?
- Questions (put them in the chat and we'll answer them here)
- Examples
- Questions
- Next Steps

Goals of this workshop

- Provide context for the Boyer model
- Explain what the Boyer model is
- Explain the impact of the Boyer model on our conception of scholarship
- Provide examples
- Talk about next steps

Why talk about the Boyer Model of Scholarship?

- PSU has been using this model of scholarship for at least 10 years
 - Discussed in the Faculty Handbook (Section 2.4.G) with identical language in AAUP Collective Bargaining Agreement (Article 7.4.2)
 - Plymouth State University values diversity in scholarship that is informed by the Boyer Model of Scholarship as described below. This framework considers the multiple forms that scholarship may take; there is no requirement that candidates involve themselves in all of these types of scholarship.
- But many people seem to be confused

Why do we use the Boyer Model of Scholarship?

- Carnegie Foundation work that changed the face of academic work in early 1990s
- Most faculty at non-R1 institutions are hired primarily to teach but are evaluated primarily on "research"--discovery of new knowledge
 - This was true even with teaching loads of 4 or 5 classes per semester
- Boyer model expands our definition of scholarship to go beyond traditional "research"

What is the Boyer Model of Scholarship?

- Faculty work still consists of three areas:
 - Teaching
 - Service
 - Scholarship
- Boyer model is only about scholarship
 - We still have teaching and service requirements in most faculty work
 - The Boyer model doesn't help us define or evaluate good teaching or good service

What is the Boyer Model of Scholarship?

- Expanded definition of scholarship (the following comes from our Faculty Handbook):
 - Scholarship of Discovery (traditional "research"):
 - Building new knowledge through research or creating new works
 - Scholarship of Teaching and Learning:
 - Investigating teaching theory and/or processes for the purpose of optimizing learning
 - Scholarship of Integration:
 - Making connections across disciplines and advancing knowledge through synthesis
 - Scholarship of Engagement (also called Scholarship of Application):
 - Utilizing relevant research by linking theory and practice in collaboration with community stakeholders to solve pressing social, civic, or ethical problems

What is the Boyer Model of Scholarship?

- Scholarship of Teaching and Learning:
 - Investigating teaching theory and/or processes for the purpose of optimizing learning
 - Although related to the faculty work area of teaching, not all teaching is scholarship
- Scholarship of Engagement (also called Scholarship of Application):
 - Utilizing relevant research by linking theory and practice in collaboration with community stakeholders to solve pressing social, civic, or ethical problems
 - Although related to the faculty work area of service, not all service is scholarship
- So what makes something scholarship?

What is Scholarship?

- Scholarship is both process and product
 - Traditional "research" goes through peer review which is a process
 - Traditional "research" results in a publication or presentation which is a product
- For something to be scholarship, the following six stages (process) must be documented and evaluated
 - Clear goals
 - Adequate preparation
 - Appropriate methods
 - Significant results
 - Effective presentation (product)
 - Reflective critique



Questions??

Process of Scholarship with Examples

We present 3 examples:

- Scholarship of Teaching
 - Assessing lab experiences in an organic chemistry class
- Scholarship of Integration
 - Creating an open educational resource for a game design class
- Scholarship of Engagement
 - Raising awareness about the issue of online preschool in NH

Process of Scholarship with Examples

Clear goals:

- Does the scholar state the basic purpose of their work clearly?
- Does the scholar define objectives realistic and achievable?
- Does the scholar identify important questions in the field?

■ **Scholarship of Teaching:** *Example: Assessing lab experiences in an organic chemistry class*

- Increase retention of foundation principles in sophomore class.
- Find better assessment method for Organic Chemistry labs
- Apply Course based Undergraduate Research (CURE) in Organic Chemistry Course
- Introduce cluster & CPLC in the Organic Chemistry Class

Scholarship of Integration: *Example: Creating an open educational resource for a game design class*

- My goal is to create a high quality OER for use in teaching game design. In particular, the OER should be freely available to my students in my *Creating Games* class (as well as to other interested parties).

Scholarship of Engagement: *Example: Raising awareness about the issue of online preschool in NH*

- The broad goal is to raise awareness of the importance of high-quality early childhood education and the concerns about online preschool.
- A more specific goal is to draw public attention to the potential negative impact of a NH Department of Education initiative to bring “online preschool” to New Hampshire in the form of the Waterford UPSTART program

Process of Scholarship with Examples

Adequate preparation:

- Does the scholar show an understanding of existing scholarship in the field?
- Does the scholar bring the necessary skills to their work?
- Does the scholar bring together the resources necessary to move the project forward?

Scholarship of Teaching: *Example: Assessing lab experiences in an organic chemistry class*

- Identify limitations of traditional assessment methods.
- Groundwork with professional development workshops.
- Revision of ideas for Plymouth State environment.

Scholarship of Integration: *Example: Creating an open educational resource for a game design class*

- Ten years experience teaching the course, using a variety of texts. Experienced in making choices about what material to emphasize, what to leave out, and what to supplement.
- Participated in Project-Based Learning Institute.
- Leader in PSU Cluster Pedagogy Learning Community.
- Familiar with tools and resources needed to bring the project forward.

Scholarship of Engagement: *Example: Raising awareness about the issue of online preschool in NH*

- Well-versed in research on impact of screen/digital media on young children's learning and development.
- Participated in advocacy organizations and trainings; have existing relationships with advocates, legislative staff, and state officials.
- Presented, published, provided professional development, and consulted on issues related to impact of screen media on young children.

Process of Scholarship with Examples

Appropriate methods:

- Does the scholar use methods appropriate to the goals?
- Does the scholar apply effectively the methods selected?
- Does the scholar modify procedures in response to changing circumstances?

Scholarship of Teaching:

- Designing methods and timeline.
- Literature search and identification of plant species by students.
- Collaboration with a variety of experts on campus.

Scholarship of Integration:

- Outlined topics for OER to cover.
- Examined previously written material to determine whether that material was adequate for my purposes.
- Completed a full draft of the OER in time for the first day of my class.
- Making notes about what I want to add, modify, and delete; adding a student work section to the OER.

Scholarship of Engagement:

- Investigated Waterford UPSTART online preschool program.
- Signed on to national letter of concern about online preschool with over 100 other "early childhood experts" and 20 organizations.
- Wrote an op-ed piece for the *Concord Monitor*, co-signed by my colleagues, expressing concerns about introducing online preschool in NH.
- Alerted early childhood advocates and allies about online preschool through social media, phone calls, and in person.
- Engaged early childhood students in advocacy.

Process of Scholarship with Examples

Significant results:

- Does the scholar achieve the goals?
- Does the scholar's work add consequentially to the field?
- Does the scholar's work open additional areas for further exploration?

Scholarship of Teaching:

- Scientific data collected and analyzed by students:
- *Melting Point, Infrared Spectroscopy, Mass Spectroscopy, Proton NMR, C-13 NMR, HPLC*
- Student involvement for research design/ Sample presentations
Almost all Students recalled scientific principles even in next semester labs.

Scholarship of Integration:

- Completed full draft of the OER in time for the start of the course. Students are using the text for free and were able to access the material immediately at the start of the class.
- Did a conference talk about my teaching of this class.
- Was asked to write about creating the OER by an editor for *Analog Game Studies*.

Scholarship of Engagement:

- NH Commissioner of Education wrote a response to the op-ed piece and requested a follow-up meeting.
- State officials, state legislators, and candidates contacted me to learn more about online preschool.
- Interviewed by a journalist doing a national investigation of online preschool.
- Working with the national advocacy organization Campaign for a Commercial Free Childhood on a one-pager about the concerns about online preschool.

Process of Scholarship with Examples

Effective presentation (product):

- Does the scholar use a suitable style and effective organization to present their work?
- Does the scholar use appropriate forums for communicating work to the intended audiences?
- Does the scholar present their message with clarity and integrity?

Scholarship of Teaching:

- Presenting collected data in the top National conferences ACS & BCCE.
- Extremely positive response from faculty members from other universities and many expressed their interest to collaborate.
- NSF-cCWCS awarded travel funding for presenting future research in more conferences.

Scholarship of Integration:

- The OER is available to review to see its style and organization. I am using my current students' understanding of the reading to think about what needs to be rewritten or supplemented.
- Have presented this work at conferences and used my personal learning network, via Twitter, my blog, Facebook, Yammer, and so on, to tell people about the OER.
- I have given appropriate credit, following Creative Commons guidelines, for any materials I am reusing and remixing in the OER.

Scholarship of Engagement:

- The op-ed piece conveyed salient information for a general audience.
- Shared the piece through twitter to reach a larger audience.
- Corresponded and/or spoke with various audiences--legislators, candidates for office, early childhood advocates, state officials, students, and others.
- The Children's Screen Time Action Network has included the op-ed piece in its resource library and featured the piece in its weekly email newsletter to over 1,000 members.

Process of Scholarship with Examples

Reflective critique:

- Does the scholar critically evaluate their own work?
- Does the scholar bring adequate depth of evidence to their critique?
- Does the scholar use evaluation to improve the quality of future work?

Scholarship of Teaching:

- End of the project survey and analysis.
 - Extremely positive feedback from students.
 - Number of students got interested in doing research after sophomore year.
 - Two Plymouth state students every year for past 5 years got engaged in this research and presented their results in various local and national conference.
 - Prospective students and freshman students are intrigued by these projects

Scholarship of Integration:

- I have honed my explanations of this material through talking about the concepts with students. I have made my explanations public over the years via my blog and have gotten feedback from other scholars about these explanations.
- Planning to revise the work based on what I'm learning from current students. I am adding student explanations, analyses, questions, and study guides to the OER.
- This OER is unlikely to ever be "finished"--will continue to think about how best to explain this content to students and get feedback from other game studies teachers.

Scholarship of Engagement:

- Sought input on draft of op-ed from colleagues and general readers.
- The Commissioner's op-ed piece helped me to think about other perspectives on online preschool and how to counter those perspectives.
- Talked with an early childhood advocate who described how she would have addressed the issue; this led me to reflect on other possible approaches to advocating on this issue.



Questions??

Next Steps

- PT&E Advisory Group will provide drop-in sessions if people are interested
- Make an appointment with a member of the PT&E Advisory Group to talk about your own work
- Resources available at bit.ly/BoyerModel
- We will repeat this workshop during University Days
- We will provide a follow-up workshop during University Days for people to discuss the process and documentation of their own scholarship