Creating Wicked Students

Rethinking Our Courses to Improve Student Authority

Paul Hanstedt
Director of Pedagogical Innovation
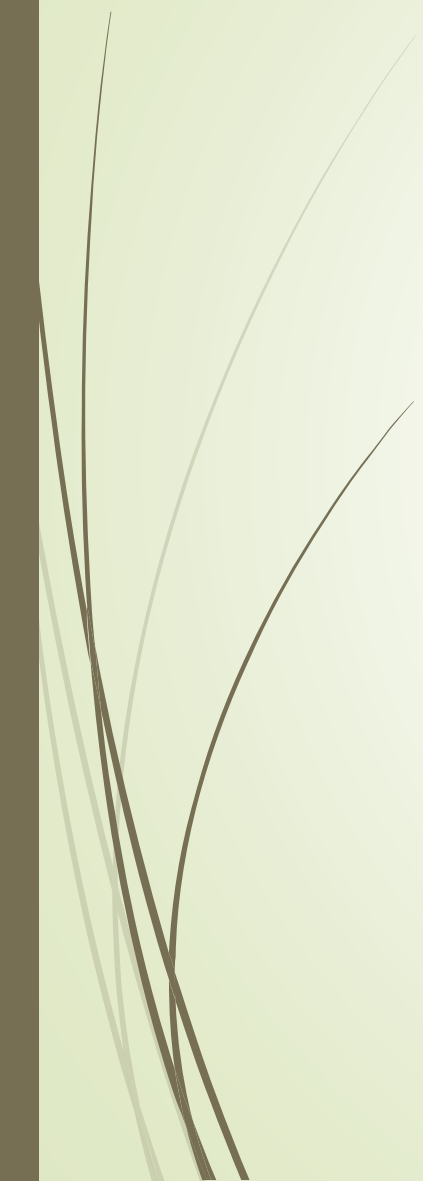Roanoke College, Virginia, USA

Let us consider for a moment: what do all of these have in common?

- Brexit

- The 2016 United States Presidential Election

- Terrorism/IS

- The environment

  - Glaciers

  - The Great Barrier Reef

- Urban Planning in Hong Kong

  - Housing? Business? Tourism?
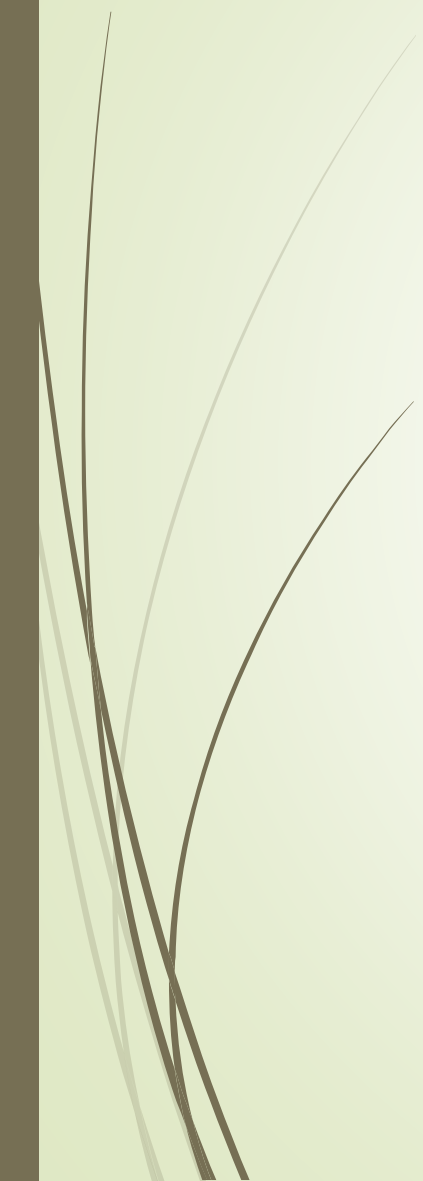
  - Victoria Harbour

Wicked Problems

- Dynamics/parameters are constantly changing
- Resistant to resolution
- Data is incomplete
- Data is contradictory
- The problems themselves are difficult to recognize

Why consider these things?

As often as not, these are the kinds of problems our students will face in their jobs and lives.

Because . . .

The workplace is changing

- New technologies = problems & solutions

- Globalization = New markets/new clientele/new cultures

- Austerity/Climate Change = New fiscal realities/opportunities

- Engineers

- Doctors

- Architects

- Journalists

- Law enforcement

- Artists

- Educators . . .

And most importantly . . .

- Engaged citizens are barraged by data/information/opinions/complex problems daily . . .

- . . . and must find ways to sift through this information to find solutions that extend beyond any single lesson they've encountered in any single class.

A question:

What does it take to live in a wicked world?

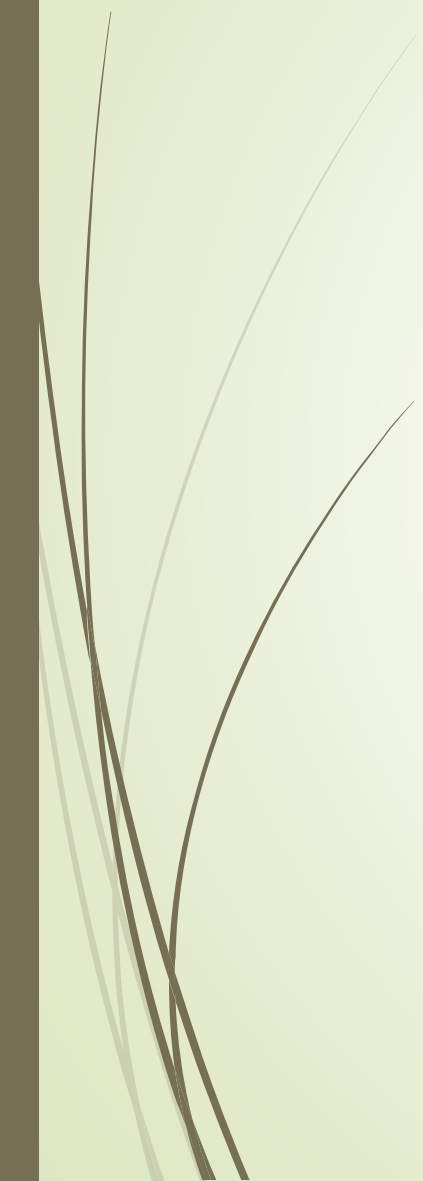# According to Ignatius . . .

➡Mind

➡Body

➡Spirit

More Recently. . .

- Mind

- Body

- Spirit

- Emotions

- Creativity

- ????

Arum and Roksa, 2011: *Academically Adrift*

- Students tend to view tertiary education as a certification process—that is, as a means of assuring a greater income . . . And little else.

- For many students, little of what is learned at university has any real meaning or significance in the "real" world.

I would like to propose (and I am not alone . . .):

Wicked Students

Wicked Students

- Deliberate and thoughtful

- Able to ask the right questions

- Able to know *when* to question

- Open to new challenges

- Able to draw from multiple areas

- Able to adapt ideas/technologies to new settings

- Not afraid to fail/able to try again

What does it take to create wicked students?

The traditional answer:

Content knowledge

+

Skills

What does it take to create wicked students?

An alternative answer:
Content knowledge

+

Skills

+

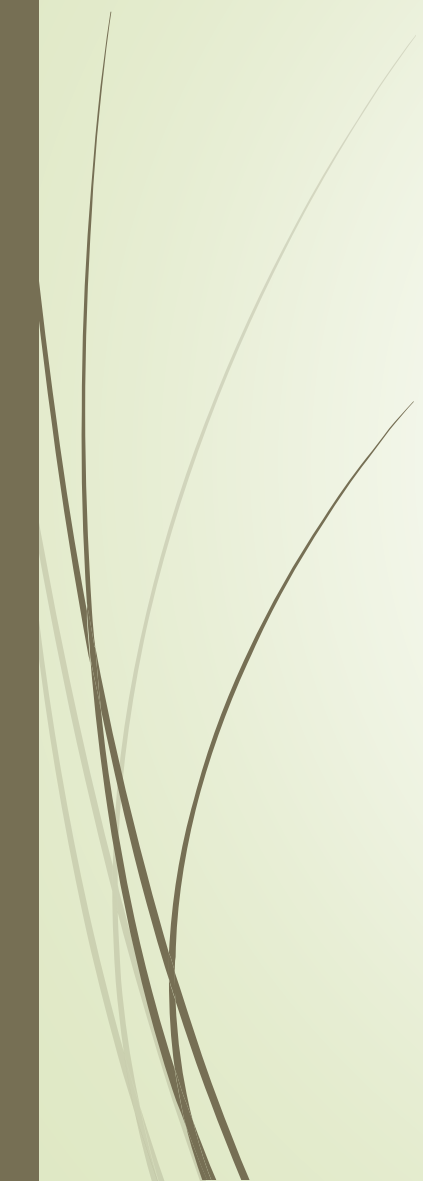A sense of our ability to engage in the meaningful questions of the day

What does it take to create wicked students?

An alternative answer:

Content knowledge

\+

Skills

\+

"Authority"

What is *not* meant by "Authority":

- Bossiness

- Arrogance

- Confidence

- Efficacy

"Authority" in this context draws from experience and learning—it must be _earned_.

Content knowledge

+

Skills

+

"Authority"

Further:

Authority relates to

"authorship":

the creation of new realities

and understandings of how the
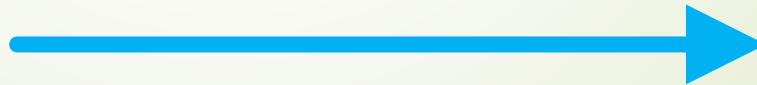
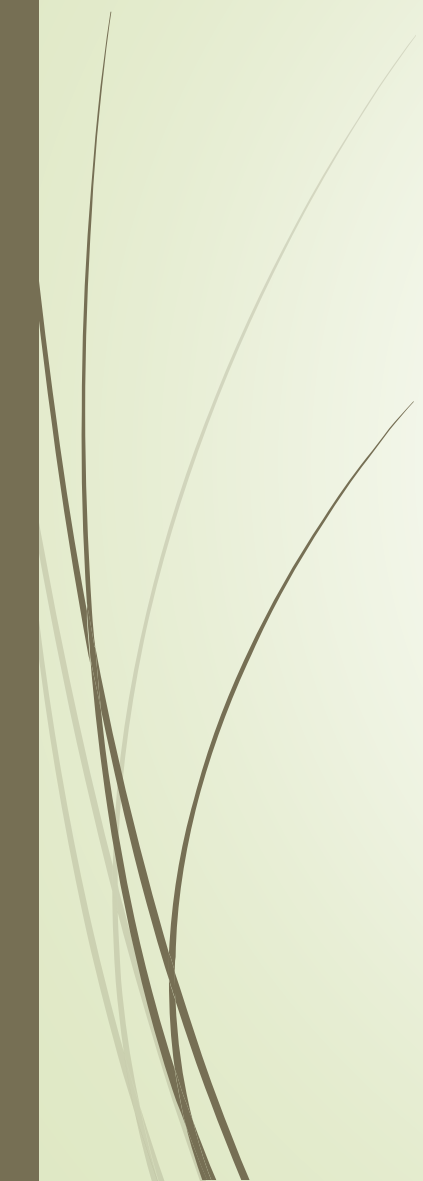world works/could work.

Content knowledge

+

Skills

+

"Authority"

So, our next question
(as wicked educators!):

How do we create
wicked
students?

First Thought:

- A person cannot learn wicked competencies in the abstract.

- The only way to *become* wicked is to *do* wicked.

Second Thought: High Impact Practices

George Kuh

- First-Year Seminars
- Study Abroad
- Undergraduate Research
- Collaborative Assignments
- Internships
- Capstones
- Community-Based Learning
- ePortfolios

But what about in "ordinary" classes?

Randy Bass (Georgetown University):

HIPs work because they:

- Offer the opportunity to integrate, synthesize, and make meaning

- They ask students to draw conclusions in the midst of uncertainty

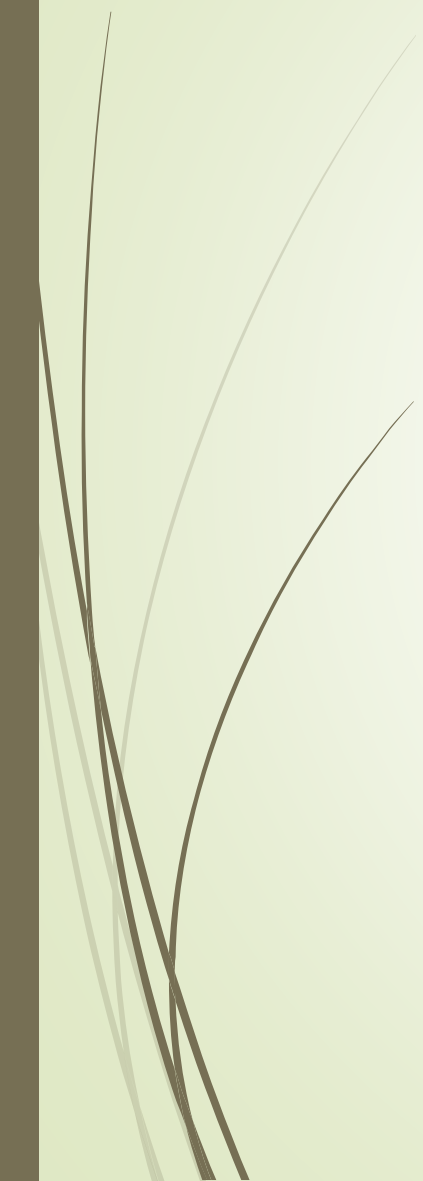# That in mind . . .

Whatever we develop in our classes should ask students to:

➡ Integrate

➡ Synthesize

➡ Make meaning

➡ Draw conclusions

➡ Particularly in contexts of

 <u>uncertainty</u>

Three Areas

- Projects/Papers

- Exams

- Day-to-day pedagogies

Projects/Papers

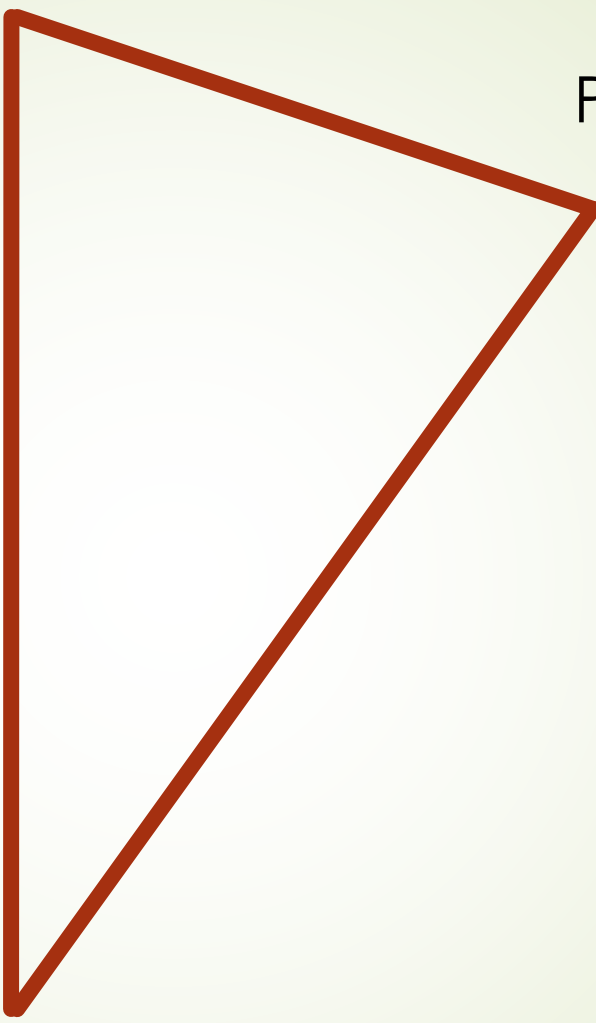A topic discussed by experts in the field

A student with limited expertise

A professor with unlimited expertise (and a grade book)

Subject

Professor

Student

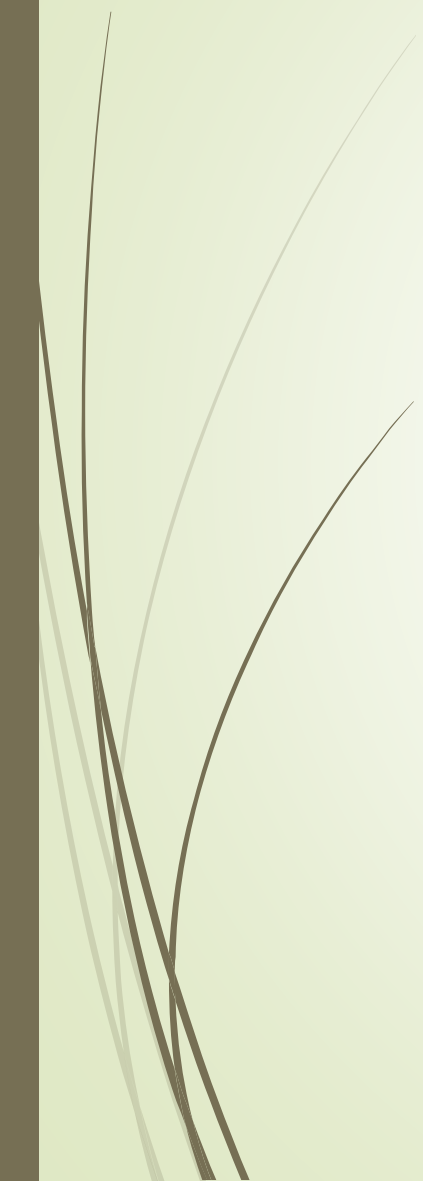Subject

Student

"Uninformed" Audience

Marine Biology:

You are on an environmental policy board looking at the issue of land reclamation in Victoria Harbour. You are the sole marine biologist on the board. Your job is to make a recommendation with regard to the impact on marine life. What potential hazards do you see? How might you explain those hazards in a carefully researched way?

Art: Community Murals

Create a proposal for a local public mural for possible grant/funding applications. Include: a description of project, several means of creating community input and involvement, the long-term goals for community impact, and a budget.

Exams

Exams

- Certainly it's essential that our exams test both content knowledge and skill levels . . .

- But isn't there also room to test integration, synthesis, and meaning making, in contexts of uncertainty?

- . . . particularly as these more challenging tasks carry within them basic knowledge and skills?

Exams:

Biology course on physiology:

- Argue for or against the feasibility of a dragon, drawing on our work this semester.

Exams:

Literature Course:

➨ Here's a poem you've never seen before; analyzing both style and content, make an argument for which poet most likely authored this work.

Exam Question

Any Class in Any Field

What did you learn in this class that *matters*? Argue for a single idea/concept/work, citing and closely analyzing three thinkers/texts/equations/ theorems/etc. . . .
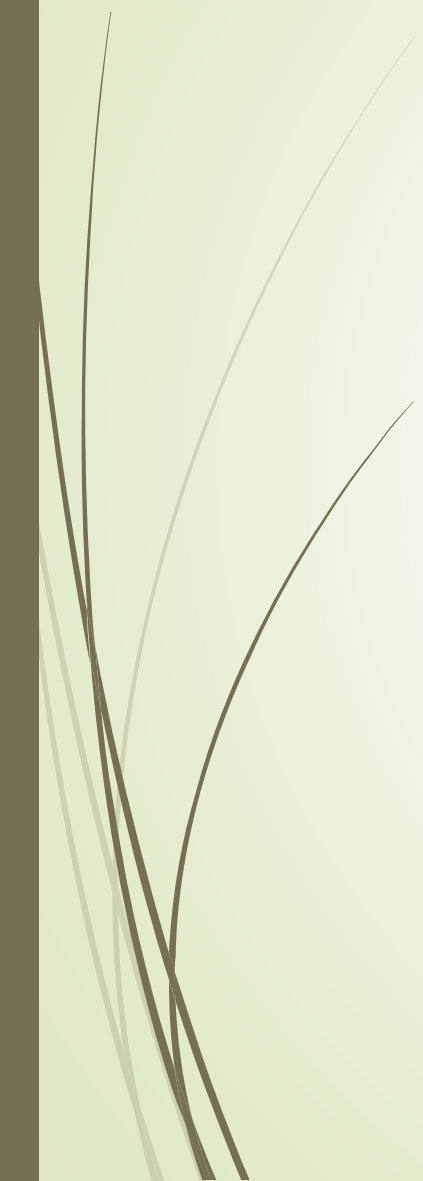
Day-to-day Pedagogies

It goes without saying that if we're asking students to perform tasks and answer exam questions that don't fit "traditional" models, it is only ethical that we properly prepare them for those tasks.

No-preread Conferences

- Collect drafts ahead of time

- Read/skim during conference while student writes:

  - Changes already know going to make

  - Changes considering

  - Questions for you

- Discuss, beginning with student's comments
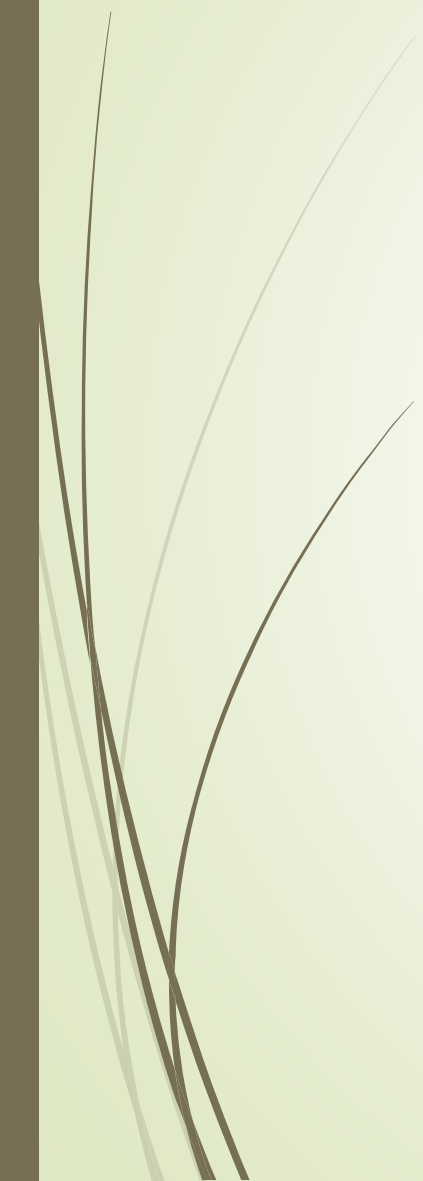
Computer Science

- In-class: Instructor demonstrates a particular application or approach to programming

- Students practice several sample problems

- Students then work collaboratively to solve similar but more complicated problems

- Early data analyses: minimal "noise," one (or two) clear conclusions

- Middle data sets: moderate noise, two or three possible conclusions

- Final data sets: heavy noise, multiple possible conclusions that must be constructed by students

In summary:

- The world is full of complex problems that often don't match the "static" dynamics of the classroom

- Preparing students for this world takes more than memorizing content and skill

- It means addressing students' sense of themselves and their ability to engage the world in thoughtful, meaningful change

- Achieving this requires more than just words: we must explore changes to our day-to-day teaching methods, as well as to our assessments.

Thank you
for your patience!

hanstedt@roanoke.edu

@curriculargeek