

Creating Wicked Students

Designing Courses that Improve
Student Authority

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Before we begin, if you please . . .

- Form a small group
- Choose a group reporter, someone:
 - Who is comfortable speaking in public
 - Whose voice can be heard well in a large room
 - Who can read bad handwriting

Let us consider for a moment:
what do the following have in common?

- Brexit
- The 2016 United States Presidential Election
- North Korea
- Terrorism/IS
- Global Climate Change
- Social Media/Technology

Wicked Problems

- Dynamics/parameters are constantly changing
- Resistant to resolution/previous solutions
- 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
- Rise of nationalism/authoritarian governments
- Austerity/Climate Change = New fiscal realities/opportunities



- Engineers
- Doctors
- Journalists
- Law enforcement
- Artists
- Educators . . .

And perhaps 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?

- ▶ 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



The Next Question:

What does it take to create
wicked students?

▶ Ignatius: The Whole Student

- Mind
- Body
- Spirit

More Recently. . .

- Mind
- Body
- Spirit
- Emotions
- Creativity
- ?????

- Another, very traditional answer:

$$\begin{aligned} &\text{Whole Student} = \\ &\text{Content knowledge} \\ &+ \\ &\text{Skills} \end{aligned}$$

But perhaps . . .

Wicked Student =

Content knowledge

+

Skills

+

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



Wicked Student =

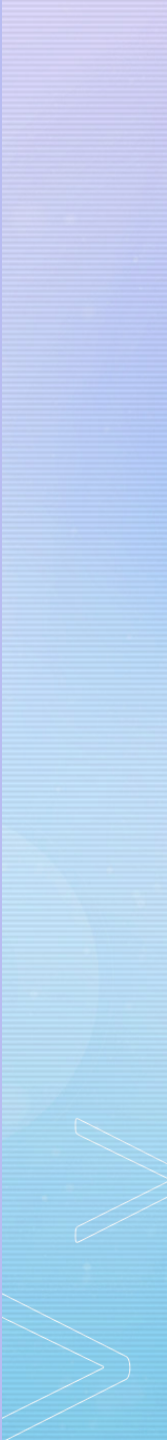
Content knowledge

+

Skills

+

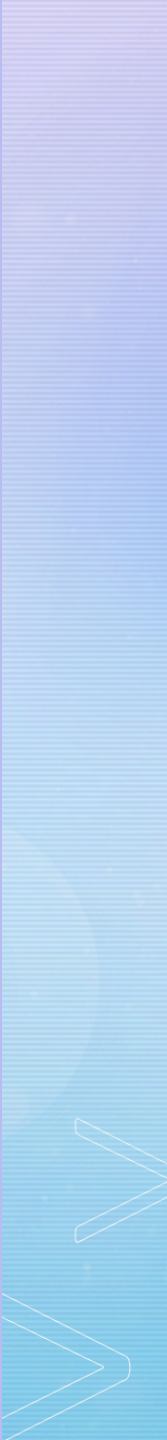
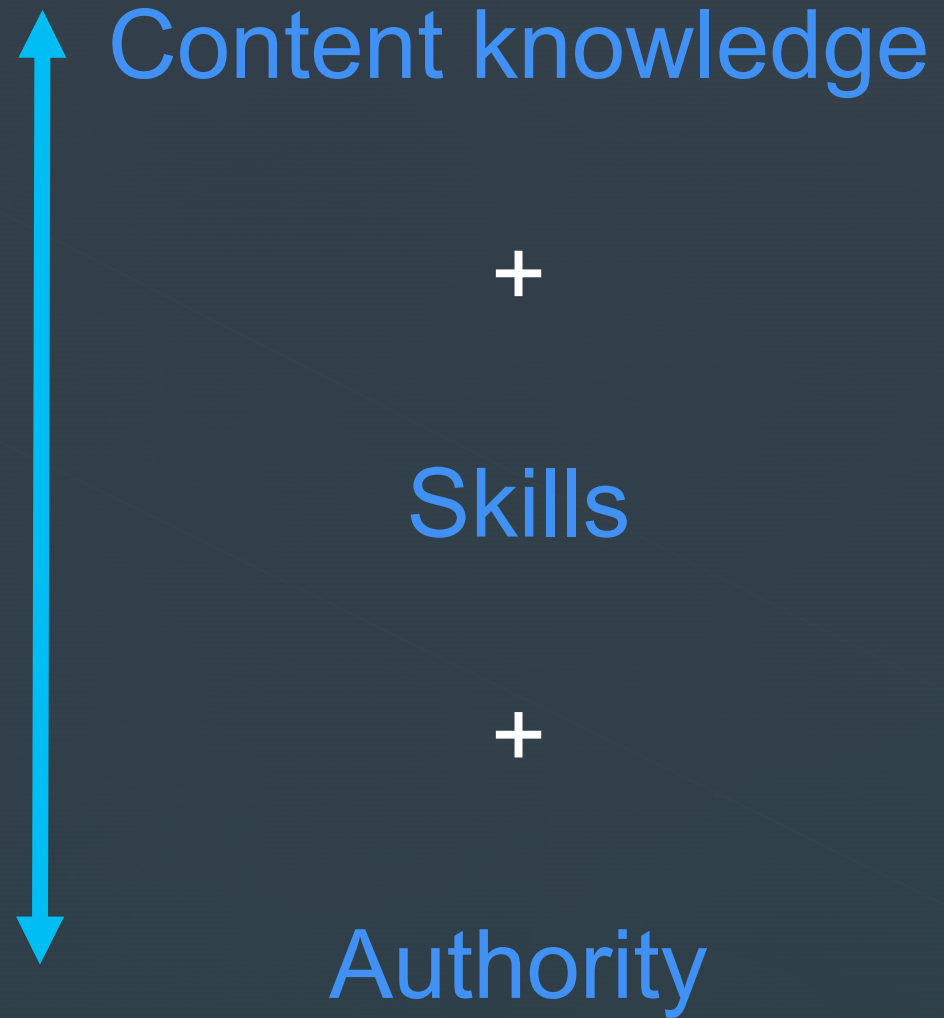
“Authority”



▶ What I do **not** mean by “Authority”:

- Authoritarian
- Arrogant
- Controlling
- Overly confident
- Efficacious

“Authority” in this context draws from experience and learning—it must be *earned.*



Further:

Authority relates to

“**authorship**”:

the **creation** of new realities and understandings of how the world works/could work.

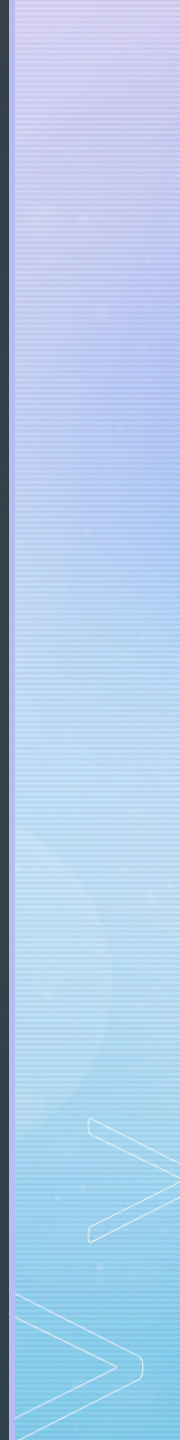
Content knowledge

+

Skills

+

Authority



- ▶ A brief discussion with your group:
 - Questions?
 - Clarifications?
 - Ideas?

▶ The next question . . .

How do we develop a sense of

AUTHORITY

in our students?

Or more accurately . . .

How do we create contexts that allow students to assume Authority?

High Impact Practices



George Kuh

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

But what about in
“ordinary” classes?

A momentary pause . . .

- Jot down a class that you're currently teaching or that you'd like to teach where you would be comfortable experimenting a little bit
- Keep this class in mind as we go through the next few slides . . .

Randy Bass:

High Impact Practices work because, among other things, they:

- Offer the opportunity to **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:

- Synthesize
- Make meaning
- Draw conclusions
- Particularly in **contexts of uncertainty**



Three Areas

- Projects/Papers
- Exams
- Day-to-day teaching



Projects/Papers



Topic

Writer/Speaker

Audience



A topic discussed by
experts in the field



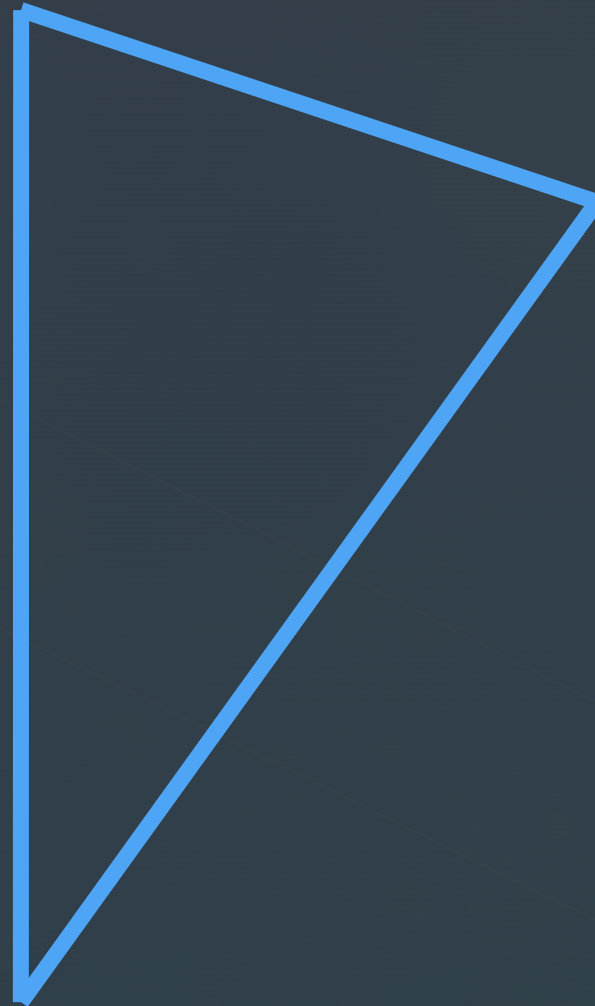
A student
with
limited
expertise

A professor
with unlimited
expertise (and
a grade book)

Subject

Professor

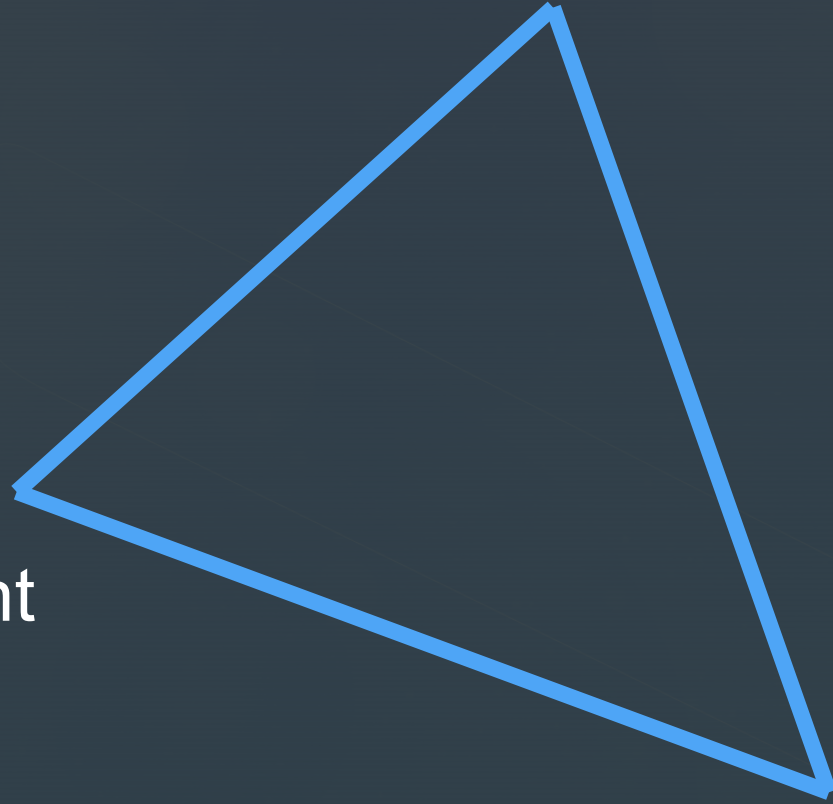
Student



Subject

Student

Less
informed
Audience



Biology:

Create an informational pamphlet on an emerging infectious disease, pitched to parents of small children. Include causative agent and vector, threat to local population, and possible measures to reduce risk.

▶ 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, the long-term goals for community impact, and a budget.



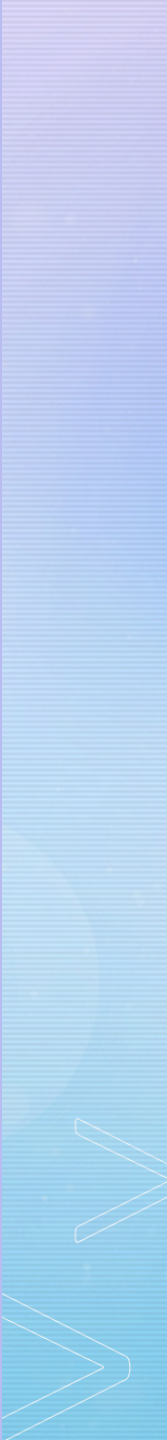
Nutrition:

The government of New York State is developing a list of recommendations regarding the lifestyles of primary-school age children. Develop an appropriate menu for breakfast, providing a carefully researched rationale that takes into consideration . . .



Poetry

The medical school faculty is revising its curriculum. Provide a rationale for the inclusion of a literature course in this curriculum, citing and carefully analyzing three particular poems.



Mathematics:

Write a letter to the editor against raising the sales tax on the grounds of it being regressive. Explicitly use ratio and proportion to explain to the uninformed reader the meaning of . . .

And what about. . . ?



- Posters
 - Possible audiences?
 - Possible purposes?
- Short Films
 - Possible audiences?
 - Possible purposes?
- Oral Presentations
 - Possible audiences?
 - Possible purposes?
- Websites
 - Possible audiences?
 - Possible purposes?

Victorian Literature Final Project

Part 1:

In groups, develop a 3-7 minute YouTube video pitched to peers that argues for the reading of a particular Victorian work/author.

- The film must demonstrate complexity of thought about both the Victorian era and our present age.
- Must include list of sources

Victorian Literature Final Project

Part 2:

Individually, write a carefully researched rationale. This should include:

- An analysis of the issue portrayed in your film, examining both the Victorian era and the current age and explaining why this topic is relevant
- An explanation of the artistic choices you made in creating your film: what did you include and why? What did you leave out and why?
- A bibliography

Exploring Alternatives:

1. Go back to your course topic
2. Brainstorm a list of *less informed* audiences appropriate for this topic
3. Develop an assignment (or two or three) for your course.
4. Clarify the audience, the genre, and the purpose.
5. Share the assignment with a neighbor, offering and receiving feedback.
6. Revise
7. Write your course topic and the assignment on a notecard



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?



Humanities course in literature:

- 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.



Biology course on physiology:

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



Philosophy:

Philosopher A and Philosopher B meet at a bar for drinks and conversation. By the end of the evening will they end up:

- A) Fighting?
- B) Dancing the night away?

Justify your answer by quoting and analyzing at least three different essays by each philosopher.

► Sociology Course:

- Sociologists say that “Sociology is everywhere. That in mind, citing at least three major concepts we’ve covered this semester, make an argument for including sociology in the study of one these fields:
 - Medicine
 - Art
 - Engineering

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. . . .

Exploring Alternatives:

- ▶
 1. Go back to your course topic
 2. Brainstorm a list of wicked exam questions that you might ask your students. Think about bringing synthesis, meaning making, and uncertainty into play.
 3. Share an exam question or two with a neighbor, offering each other feedback and advice.
 4. Revise
 5. Write your course topic and the exam question on a note-card



Day-to-Day Teaching





Consider:

- The kinds of authoritative thinking/tasks we're asking students to do are complex
- And counter to many of their educational experiences thus far
- Further, it's problematic to engage high-stakes grading without first making sure students are familiar with the kinds of skills and ways of thinking we value.



That in mind, students need to practice authoritative tasks *throughout* a course

- In increasingly complex ways
- In ungraded, minimally graded, or proportionally graded contexts

- ▶
 - 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
 - **Proportionally Graded**

Example:
Geo-Science

- Four “mini-essays” written in groups
 - Answer a question about the day’s reading posed by a group member
 - Each mini-essay worth 5% of the final grade
 - End of semester essay worth 25% of final grade
 - **Minimally Graded**

Example:
Literature

- 10 lab reports throughout the semester
- The science is graded; the writing is responded to in a limited way, but remains ungraded
- At midterm and end of semester, students revise and turn in two lab reports, along with a rationale
- “Ungraded”

Example: Physics

If you please:

- ▶
 - List a few teaching methods that **currently** exist in your course where students have an opportunity to practice the kinds of thinking that would prepare them for their larger projects/exams.
 - Remember:
 - Synthesis
 - Drawing conclusions
 - Meaning-making
 - Uncertainty

If you please:

- ▶
 - Now explore 1 to 2 **new** tasks where students in your class might practice essential skills/ways of thinking.
 - Share both lists with a colleague and discuss.
 - Choose the best task and revise/polish.
 - Write your course topic and student task on a note-card



Final thoughts?

Questions?



A few cautions:

When adding new assignments or pedagogies, remember to:

- Not overwhelm yourself
- Adapt pedagogies to your own style
- Take a few risks
- Revise/adapt after early failures

Assessment (DR. KIM FILER)

	Beginning	Emerging	Demonstrating
Competence	Developing the foundational knowledge and skills in the discipline	Demonstrating consistent foundational knowledge and skills	Not intimidated in—to the point of actually seeking out—new competences
Context	Focus on individual ideas as interpreted through “me” (i.e. “my ideas”, “my interpretation”)	Showing understanding of ideas positioned in contexts (time, political, social)	Ability to transfer and adapt ideas into new and appropriate contexts.
Authority	Reliance on external authority and sources	Actively working on constructing new way of making meaning—includes questioning of self and others	Trust the internal voice sufficiently to craft a <i>philosophy</i> of life...and to contribute (to the field, society...)



Thank you for your hard work!

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