General Education Day 2012   Table Comments

Critical Thinking   Communication   Quantitative Literacy

- What does or should General Education do to promote…
- What intellectual virtues do you try to instill or promote and how ….
- What has/has not worked in your General education courses to promote this skill

CRITICAL THINKING

CT Table 1: Adrian O'Connor
- Promote:
- 2 Challenges
    - Remedial Needs vs. Pedagogical Ambitions
    - Prompting vs. "Leading"

- Shared Goal: to show shared processes/analytic goals across/within disciplinary norms and boundaries (different idea of "conclusion," but shared process)

- Socialization
- Intellectual Virtues: Diligence; Creativity; Identify and Assess Evidence; Openness to alternative analyses (Recognition of Reasonableness); Self-criticism
- Successes/Failures: Constructive Confusion; Provocation; Comparative formal models; Devil's Advocate; Disciplinary "Mixing"; Group Work?

Extended Notes:
What does or should General Education do to promote Critical Thinking?

This question was approached through what turned out to be a fruitful digression. Before we got to the topic of critical thinking per se, a side-conversation about the role of online education in the university and, more specifically, in the GE program took over. While there were several advocates of online education at the table, who claimed both that online courses were good-in-themselves and good as part of GE (in both cases arguing that such courses promote "self-directed" learning and prepare students to take both initiative and responsibility in later courses), there was an equally strong sense that the place of such courses in GE (and in the university) should be interrogated rather than simply embraced, and that the proportion of GE courses offered (and taken) online is something the GE committee should consider weighing in upon in the future.

This digression led to a conversation about what is or should be done in GE courses. Central to the discussion were concerns about the difficulty of balancing some students' need for very remedial work with more ambitious pedagogical or intellectual goals. This returned us to a question discussed regarding online education, as to whether GE instructors ought to be aiming to provide students with "scaffolding" for future learning or "leading them" into and through material. It was proposed that perhaps the question is

poorly framed, and that a more suitable goal might be to aim to "provoke" students and to then engage them in using critical thinking skills to address/take up the provocation. Finally, we discussed ways in which such critical thinking skills did or did not differ across disciplines, focusing on the shared processes involved even in discipline specific work (the need to deconstruct a problem into its constituent elements; to think about the interplay among those elements or the processes at work upon them; to design research, experimental, or analytic means by which to interrogate those processes and elements; and the need to critically assess the results of those interrogations so as to formulate plausible and reasonable "conclusions"), even as we recognized that the nature of a "conclusion" might be very different across disciplinary lines. This was a particularly interesting part of the conversation (at least to my mind), and it gave rise to both questions about and ideas for "cross-disciplinary" engagements, assignments, and approaches in class. This led us to the intellectual virtues part of the discussion…

What intellectual virtues do you try to instill or promote and how?

The discussion focused on two attributes that have proven problematic in instructors' GE experiences: diligence and creativity. There was consensus that many students in GE courses are either unwilling to work hard enough to get much out of assigned materials or assignments, or they enter the course anticipating that because it is a GE course (and is often being taken simply to fulfill a requirement) the expectations of and demands placed upon students will be minimal. The inverse of this is the problem of creativity, in that many students view these courses, and the assignments within them, as simply box-checking exercises. On somewhat more optimistic notes, participants discussed trying to get students to recognize that topics in each field are open to a virtually infinite number of questions, each of which might be approached from a variety of perspectives. This open-endedness of intellectual and academic inquiry would, it was hoped, push students to be receptive to alternative intellectual and analytic positions. At that point, several people cautioned that such an approach can slide from intellectual virtue to relativistic vice pretty quickly, and emphasized the need to ground this open-endedness in the ability to identify and assess evidence and, at the same time, to recognize "reasonable" views on a subject, to recognize that some views or analyses simply are better, or are at least better supported, than are others.

This need to be at once open and critical in one's thinking led to a discussion of how GE courses should cultivate among students a habit of inquiry (dare I say "disposition") that will allow them to recognize the strengths of various approaches or forms of thought while also recognizing and acknowledging the pitfalls or failures of any particular approach, including (perhaps especially) their own. This would also promote civility, intellectual honesty, and intellectual charity (the giving of a fair, or charitable, hearing to views one might be inclined to reject). How to do all this? I suppose that's part 3:

What has/has not worked in your GE courses?

This part of the discussion began with a disagreement about the relative merits of group work. Several instructors see group work as an utter debacle that wastes time and causes

students to lose focus, with others swearing by it as a way to get students involved and to force them to hear, listen to, and engage with ideas or arguments other than their own. Weekly "blog" postings as preparatory exercises for class discussion or for group work were discussed, though it was unclear whether these were to be assessed critically or were simply warm-up exercises with indirect benefits but little or no oversight. In more GE-specific defenses of group work, it was noted that GE courses are good opportunities for students from different disciplines to mix and to discuss shared intellectual or academic content despite their different academic foci or inclinations. This, it was argued, has benefits in terms of both socialization and civility, as well as intellectual and academic benefits, as it promotes cross- and inter-disciplinary discussions and forms of "problem solving."

With regards to particular assignments or approaches, several success stories centered on the idea of laying out multiple modes of reasoning or of thinking critically within a particular field (e.g. Kantian ethics vs. utilitarianism), and then not just comparing them, but using them as "devil's advocates" to each other. It was proposed that this models for students how to critically assess different sorts of evidence and argumentation, and puts students in a position to recognize that one might plausibly approach the same problem (and same set of evidence) from a variety of perspectives, though those might not all produce equally reasonable outcomes or responses.

As part of this, and tying back into the discussion of "provocation" at the outset, an approach building upon "constructive confusion" was discussed, one in which instructors aim to destabilize what students *think* that they know about a subject, to re-frame the question or problem at hand, and to then work through the resulting confusion and disorientation. Its appeal lay in its ability to at once suspend any particular conclusion and to give students a stake in the pursuit of a new (even if provisional) position. Others worried that this may run afoul of the remedial vs. ambitious problem, and that in GE courses such confusion might be off-putting to students and might discourage them when the pursuit of a new "conclusion" proved problematic or difficult.

Alas, no magic bullet or panacea was discovered, though it was generally agreed that cross- and inter-disciplinary discussion of what had and had not worked was worthwhile, and that it ought to be repeated and further encouraged through other venues (GE driven or otherwise).

CT Table 2: Patricia Pettijohn

- How GE Promotes Critical Thinking Knowledge Skills- Research
- COE → Standards – NCTE
- Based on National Boards
- All → Digital resources present problems – Needs critical thinking
- Teacherly/critical disposition towards texts
- Reflexivity
- Response-ability/transformation
- Statis/agnon intellectual integrity
- Multiple but manageable SLOs each unit

- "Need more time" – Cancel last unit- Repeat 1st to assess student progress
- Portfolios
- Inquiry as argument
- Critical Reading
- Focus on Narrative
- "Pick 2 SLOs" (evaluating sources)
- Attitude of professor towards text
- Engagement Ideas vs. Digesting Content

Extended Notes:

What intellectual virtues do you try to instill or promote and how:
Curiosity; healthy skepticism; intellectual integrity; respect for cultural diversity; respect for diversity; responsibility (Trey Conner: response/ability; your ability to respond to others, to other ideas; teaching critical thinking in writing classes, as response/ability).
Intellectual integrity: the ability to stand your ground intellectually, to embrace your own beliefs. Students often see taking a stand as polarizing, prone to binary thinking, students unwilling to take a stand.
Vickie (COE): planning is critical for research; she tries to promote planning, strategic thinking, and attention to detail in her students.

What works:

Small Group work
Peer Review (students review each other's work in small group settings)
Literacy narratives (Trey): students begin by writing their own narratives, then reading each other's narratives; they cite each other's narratives to learn about citing research. Based on national boards for teaching English.
Assignments that require them to practice specific skills
John: Back up assignments with class activities and discussions
Kim: Using classroom activities; for music/art education classes, students create a musical instrument and use it to teach kids; for Foundation of special education class: she has students in small groups, each group is assigned to prepare

curriculum for a specific learning disability, i.e. ADHD, autism; and also to take on the role of specific learning disabilities/special education students

NCATE: COE, National Council for Accreditation of Teacher Education: national standards; Kim is board certified and relies on national standards whenever possible with assessments, which emphasize performance: subject area content knowledge; pedagogical and professional knowledge and skills

Trey, composition, using NCTE standards: rhetorical knowledge and critical thinking; Knowledge of Conventions; emphasis on writing process

Assess writing ability in a shared electronic writing environment; teaching students to "tag" their writing as a way of analyzing content; critical reading as well as critical thinking. Connection between student SLO's and student tags.

Portfolios: writing process and final draft

Inquiry as argument

Kim: Students keep research or resource notebooks; students create portfolios; Assessment of student Portfolios

"Getting them outside"

John: Try to get the students outside the classroom, what sets them apart is beyond the classroom; helps their individual growth, "intellectual virtues" as well as academic. Intro to Anthro, goes to Holocaust Museum, looking at race, culture, genocide; Intro to Archaeology, looks at world prehistory, human evolution; survey course.

Kim: volunteer hours. She requires 25 hours outside her classroom, inside special education classrooms, working with special ed teachers, in one GE class, and in her GE music/art education class she requires 10 hours volunteering to observe an art or music teacher in the classroom

Trey: service learning combined with client-based writing assignment; students become part of a "discourse community" such as a non-profit organization, and they complete a writing assignment on their behalf.

John: getting students to understand the biases of science, biases of own worldview, of one's place in history

What doesn't work/Obstacles and Problems experienced in Gen Ed:

First-year college students, some may be lost socially and struggling academically

Students that don't want to be there

Too many students to fix everything; can't focus on fixing writing, but can get them to practice writing

Not prepared for research

Need remediation in writing

Not enough time, esp. for teaching basic skills of grammar

Students may be proficient with social media, but not MS word or Google Docs

Students are not prepared for research; don't know how to evaluate resources; use Wikipedia instead of peer-reviewed journal articles

Digital resources pose specific challenges for critical reading and thinking

Takes a full week to teach research skills, how to evaluate resources, use the library

Would like to cancel the last unit and go back and repeat the first unit to see what progress the student has made

Pick TWO learning outcomes. Too many SLO's, too many options

Non-critical attitude towards text by the professors, rather than the students; lack of engagement with the material by the professor versus presenting content for students to digest

"Student bandwidth"

Significant differences in student performance based on both workload outside class and class load

Conflict between foundational work and critical work

CT Table 3- Hugh LaFollette

- Often need background knowledge
- Engagement/Overcoming Apathy (different ways)
- All a process
- Respect for ideas, differences, and persons
- Intellectual honesty
- Seek Mental Engagement
- Evaluation and informed judgment
- Writing Assignments
- Encouraging charity and self-reflection
- Focusing on language and context
- Think for themselves- Informed

Extended Notes:

What does or should General Education do to promote Critical Thinking

The Universal answer was: GE should do all it can to encourage critical thinking. There was some disagreement, however, about just how well our GE succeeded in doing that. At the same time, all of us around the table were fairly sure that at least *we* taught critical thinking. That, of course, is one of the problems. Even when we think that the GE fails, few of us think that we fail. Obviously not all of us can be right. Of course it might be that the people who showed up are more likely to be those who really do seek to instill a liberal education. In truth, we doubtless all fail to do at least some of what we think that we do successfully.

We also quickly discovered that not everyone agreed what "Critical Thinking" is. Some people were far more likely to focus on the discipline-specific ways of thinking, while others of us were more focused on common features of critical thinking, features that cut across disciplines.

Although not a formal question, we spent some time discussing the preconditions of teaching critical thinking. One point on which everyone agreed was this: the students must be engaged with the topic(s)/focus(foci) of the course. Some students come to all already engaged: they want to read the novel or the political treatise or the essay on the environment. Unfortunately, a number of students aren't engaged. They are indifferent unless it happens to be a GE course that (they think) contributes directly to their chosen major. As long as they think the sole purpose of a university is just to give them a ticket—and that is best achieved only by those courses they see as directly preparing them for the job they want, then they are unlikely to be engaged with some number of their GE course. So our job then must be, at least in part, to motivate them to care or help them see why they need to care. The problem is knowing how we can do that.

What intellectual virtues do you try and instill and promote . . . and how?

Of course the second part of this question bleeds into the third, so I will focus here on the first part of the question. Some of the virtues mentioned were:

- Intellectual honesty. This was the only virtue mentioned universally and emphatically.
- Mental activity. Help them become active thinkers rather than passive vessels.
- Mental imagination. Encourage them move beyond the limits of their current ways of thinking. (Thus, is closely related to a healthy skepticism). Help them see and appreciate options that had heretofore eluded them.
- Context sensitive. Get them to see that the meaning of words, phrases, and sentences is importantly shaped by the context in those they are uttered. Meaning is not context independent.
- Charitable. Be fair to views which are unfamiliar or to which they are "instinctively" opposed. Be fair in understanding opposing perspectives.
- Curiosity. Don't be satisfied with a simplistic answer to what is often a complicated question.
- Respect. Respect other people, ideas, and perspectives, no matter how different or strange.
- Mental passion. Learn to care about ideas and the search for the most defensible answer.

<u>What has /has not worked in your GE courses to promote this skill</u>
We never really discussed the failures. People mainly mentioned what they thought were (partial). Most faculty used writing requirements. Some people had students write a number of short papers turned in frequently; others had students write fewer but longer papers. Everyone thought it was essential to comment on student papers as a way of critically engaging their students—and to help their students improve.

Several people also use directed discussion to encourage or refine these skills. One method, mentioned by several people, was to put a key term on the board, and then ask students to define the term and/or to discuss its import or significance. Then, try to direct the discussion to isolate the similarities and the differences between the proffered analyses. Sometimes this process led some students to abandon their original analysis and to embrace that of someone else. Sometimes a totally new account emerged; in still others we would be left with two (or more) incompatible accounts. Nonetheless, this process helped students better understand what is at stake — what is really different — between competing views.

Everyone at our table thought that sometimes the teacher has to draw connections or contrasts the students do not already see. At the same time, everyone also thought that we can best promote critical thinking if we sometimes create the conditions which make it more likely that the students draw the connections themselves.

WRITING AND COMMUNICATION

WC Table 1- Morgan Gresham

What Has Worked:

- Involve students in discussions; Highlight the skills (i.e. music, sports, language) they already have and demonstrate how those can be applied to study.
- Have a sense of humor.
- Allow students to work collaboratively where discussion often flows more freely.
- Share teaching strategies that work with instructors.
- Involve student organizations.

What Hasn't Worked:

- Assigning readings
- Asking open-ended questions to the entire class.
- Giving students abundant options.

Extended Notes:

- What does or should General Education do to promote...
    - writing across the curriculum or writing in the disciplines programs
    - writing intensive courses
    - writing center awareness; faculty support of writing center
- What intellectual virtues do you try to instill or promote and how...
    - audience awareness
    - language awareness
    - habit of inquiry and life-long learning
    - transmission of ideas/organization
    - issues of transfer; skills in one discipline don't necessarily transfer to another discipline
    - critical thinking--always seeing another side
    - asking questions about where data/information comes from, questioning and probing without dismissing
    - respect for people, showing respect through language choices

- What has/has not worked in your General Education courses to promote this skill
    - big gen ed classes limit writing opportunities for students; teachers can't respond, peers sometimes fill the gap
    - require professional standards; just making students write isn't enough for learning; students need feedback and sense of how the writing fits in with the learning

WC Table 2- Deanna Michaell
<u>Work/Not Work</u>
- Quoting the <u>Gordon Rule</u> ?
- @ students doesn't work
- Direct Discussion of Transfer
- Directed Self-Reflection

<u>Promote</u>:
- Include writing in communication and emphasize digital
- More clearly defined in the philosophy statement ← (Writing, Civic Engagement, Research Skills)

<u>Virtues</u>:
- Critical reading, writing, and thinking
- Metacognition- thinking about thinking
- Knowledge Transfer
- Collaboration/Agreement
- Upper and Lower Division

<u>Outside Classroom</u>
- Critical for many GE classes
- Back up Assignments
- Class activities/discussions
- Mostly Non-Majors → Broad issues/practice skills
- Bias → Research Embodies → Current Cultural Beliefs
- No time for basic skill remediation- i.e. writing
- Significant differences in student performance
- Conflict between critical and foundational in GE

WC Table 3- Tom Hallock
- Communication:
  - Writing in disciplinary courses
  - Writing intensive programs
  - Writing center awareness

- Virtues:
  - Audience awareness
  - Language awareness
  - Habit of inquiry/life-long learners
  - Questioning and probing without dismissing

- Has/Has not worked:
  - Hard to teach writing with large classes
  - Requiring professional standards has helped

What Should Gen Ed Do?
- Multidisciplinary, Active Engagement, Global Perspective (foreign languages), Grammar/Linguistics
  ** Verbal + Written + Visual + Creative Communication**

- Intellectual Virtues…
  - Confidence + Curiosity!
  - Visual Literacy
  - Thirst For: Competence in Research

- Successes and Failures
  - Understanding communication outside one's time and place
  - Resources in an age of increased online courses
  - Instilling student confidence and curiosity
  - Trusting one's ability and intuitions

Fine Arts Matter

- Yeah we're "Global" So…. Languages?

QUANTITATIVE LITERACY

QL Table 1- Ernie Gonzlez
@ Competency Matrix
@ Requirements: Meeting Days/Wks ≥ 2 standards
- College Algebra
- Statistics
- Formal Logic
- Microeconomics
- Macroeconomics

Extended Notes:
- What should GE do
  - Competency in #s
  - Independently interpret #s, graphs, stats (including statement)
  - Hierarchy of reasonableness strength and weakness
- Intellectual virtues:
  - Analytical ability
  - Enlist argument
  - No online GE courses
  - Add a civic scholar course
- What has/has not worked in GE courses

Meeting 2-3 days per week
Practice
Groups
C in Algebra Not GM or Calc
Add course Logic, econ, stats, calculus

the general competencies for quantitative literacy would be: competency in numbers, being able to independently interpret numerical information (numbers, graphs, statistics), and being able to evaluate arguments (free of emotion).

the competency matrix that we discussed addressed the notion of student learning outcomes for each of the courses within each " GE domain" such that regardless of course(s) taken -- students are ensured to gain minimum competence.

for suggestions we had:
no online GE courses,
require GE courses to meet at least 2 days per week,
that performance standards be integrated from GE to major courses such that if Algebra is required for Calculus then a "C" in Algebra better mean that student has minimum competence for Calculus,

and finally the group started to look at specific courses... add Logic, continue to include Economics, but perhaps remove Calculus

the overall consensus was that not only quantitative literacy -- but all of GE -- was too large and needed to be pared down to some reasonable number of courses say 50 courses.

QL Table 2- Erika Asano

- Promote By:
  - Promote the idea that a Gen. Ed education involves "interdisciplinary exposure." The different disciplines are <u>inter-related</u>.
  - Foster a more interdisciplinary approach and promote <u>communication</u> between departments. Shape curriculum with this in mind.
  - Define "Quantitative Literacy." Indentify in classes how students use these skills in school and in their everyday lives.

- Intellectual Virtues:
  - Curiosity is good.
  - Critical thinking skills are valuable in school <u>and life</u>.
  - Hard work is involved in an education.
  - Communication skills are required in school <u>and life</u>.
  - Integrity and honesty are not optional characteristics of a worthwhile education.