1-2009

Assessing Student Learning and Perceptions in an Upper-level General Education Requirement Argumentation Course

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Keywords

Argumentation, General Education Requirements, Learners, Liberal education, SoTL, Teaching argument

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Framing the Question

"To take learning seriously, we need to take learners seriously," wrote Shulman (1999, p. 12). Yet, listening intently to students' perceptions and evaluation of their own learning experiences has been the exception not the norm, even in SoTL research. The need to listen to students' own perceptions of whether there is a learning disadvantage or unequal chances of success among classmates and whether and how that challenge is met by the course structure and instructor's approach seems especially critical in a situation where students likely have asymmetrical prior preparation in the host discipline. The particular situation I investigated is an upper-level argumentation course with no prerequisites other than junior or senior standing that is available to Communication majors but also fulfills a General Education Requirement (GER) for students with no prior background in Communication.

Argumentation courses are widely recognized as a good way for teaching many of the liberal education or GER skills valued by employers, the academy, and recent college graduates--skills that include critical thinking, communication skills, ethical reasoning, civic engagement--and present the opportunity to apply those skills to real-world issues using hands-on learning (see Association of American Colleges and Universities, 2005, 2007; Foster 2004; Ganer, 1985; Golden, 1979; Peter D. Hart Research Associates, Inc., 2006; Sanders, Wiseman, & Gass, 1994; Winkler & Cheshier, 2000). Beyond academic and

professional achievements, argumentation skills are essential and "humanizing" equipment for productive citizenship and consumption of burgeoning amounts of information (see Lasch, 1991; Sloane, 1989). "Teaching the willingness and the wit to argue both or for that matter *all* sides," Sloane argued, is one of rhetoric's noblest achievements and in part produces "an abhorrence of coercion though [sic] a liberalization of the mind" (p. 472). With respect to offering an argumentation course specifically for general students, Ganer remarked,

> The major rationale for teaching a course from the basic perspective is that it is the best means of developing critical reasoning skills for the average student. Free societies are dependent upon having large numbers of liberally-educated citizens and the skills attendant upon the mastery of argumentation lie at the core of any liberal arts education. (p. 865)

Unfortunately, in spite of such praise for the possible payoffs of successfully teaching argumentation in higher education, even the best rhetoricians, such as Wayne C. Booth (1963/1972), concede the difficulty and uncertainty involved in teaching students the liberalizing willingness and the wit at the heart of argumentation because it is "only partly amenable to systematic teaching" and requires cultivating in students a dynamic ability to constantly discover and maintain a rhetorical stance that balances the available arguments, the interests and peculiarities of the audience, and the voice or implied character of the arguer (pp. 219-220).

Ideally, an argumentation course with no prerequisites that also fulfills a GER requirement would be engineered intentionally to be self-contained, that is, to include all elements that students would need to succeed whether or not they had prior knowledge or experience in the discipline. But, a teacher's perception of whether that is so and what makes an argumentation class an effective learning experience may differ from the students' perceptions, and the existing scholarship either proceeds solely from the instructor's viewpoint (e.g., Ganer, 1985) or does not ask students to identify which course and instructor strategies they believe account for any improvements in their performance on the key skills (e.g., Sanders, Wiseman, & Gass, 1994). This study set out to answer two sets of questions, the latter of which is more intriguing in light of both the cross-curricular interest in teaching students to argue well and the lack of information on their perceptions of learning experiences in a general argumentation course.

- Learning Performances
  Do GER students and majors in mixed argumentation classes perform on the skills that qualify the course as a GER at different levels by the end of the course? Do performance-based assessments show that students (non-majors and majors) improve relatively on these GER skills by the end of the course? How do the instructor's evaluations of students' performances compare to their self-evaluations and perceptions of learning on these skills?

- Student Perceptions and Evaluations
  By the end of the course, do students perceive that they have improved on the skills that qualify the argumentation course as a GER (i.e., that they have learned on those aspects)? Why, or why not? If they perceived self-improvement, which course and instructor strategies do they believe helped them succeed in becoming better arguers and argument consumers?

Do GER students in mixed argumentation classes feel that they are at a learning disadvantage to the majors? Do majors feel that GER students in the mixed classes are at a learning disadvantage to them? Why, or why not?

The results will help determine whether students sense disparity within current course design and enrollment practices, whether performance-based evidence of their learning success aligns with their perceptions, and what course and instructor strategies they credit as helping them close any perceived gap and succeed in learning the material and argument skills, whether or not they have prior background in the host discipline. This study, then, addresses a nexus of questions best characterized in Hutchings' (2000) taxonomy of SoTL questions as "what is" and "what works" (p. 4). Such information should be valuable to others who teach argumentation specifically or advanced-level GER courses generally; this situation is especially salient to those in Communication and English as they not only teach argumentation courses but also many of their other courses, lower-level as well as upper-level ones, count toward college or university requirements outside the major.

The Context

Many of the University of Wisconsin - Milwaukee's (UWM's) GER courses can also count toward a student's major; in fact, the same student may count a single course toward both her major requirements and her GER requirements. Consequently, UWM's GER courses tend to enroll a mixture of majors in the featured discipline and students from outside that discipline who are seeking to sample its subject matter and methods and fulfill their GER requirements. Due to substantial pressures on teaching resources and the great number of courses that fulfill UWM's GER (more than 600)--which functionally distributes those students who choose to take their GER courses outside their major discipline across many departments and courses rather than concentrating them together in fewer classes—many, if not most, students in any given offering of a GER course section are actual or intended majors in the host discipline. This SoTL project's focus is the course Communication 362, "Theory and Practice of Argumentation and Debate," which fulfills UWM's College of Letters and Science Humanities GER.

To satisfy GER distribution requirements for the College of Letters and Science Humanities area, a UWM course must meet criterion a) and at least one other from the following list:

a) Approach its subject using humanistic means of inquiry, such as: the critical use of sources and evaluation of evidence, the exercise of judgment and expression of ideas, the organization, logical analysis, and creative use of substantial bodies of knowledge.

b) Increase the student's capacities for making informed and independent evaluation pertaining to the nature of knowledge, language, and representation, and concerning the formation of ethical or aesthetic concepts, or the ways in which values are manifested within diverse theoretical or conceptual frameworks.

c) Introduce the student to substantial and coherent bodies of historical, cultural, literary or philosophical knowledge, as a means of increasing an understanding of the complexities and varieties of human events.

d) Enhance and extend the student's response to literature and/or other arts by introducing the process of thoughtful and systematic analysis, or by fostering an

appreciation of distinctive cultures and traditions, or by increasing the student's sensitivity to language and its nuances.

e) Foster the application of humanistic perspective to other branches of knowledge or to issues of universal human concern.

My version of Communication 362 "Theory and Practice of Argumentation and Debate" has the following four course objectives, each identified with the GER criteria it is designed to meet. These course objectives and the full text of the matching GER requirements that each objective is intended to promote appear on the front page of the syllabus and are discussed in class:

1. Define "argument" and "argumentation" and understand their components, relationship, uses, objectives, and limitations (GER criteria a. and b.)

2. More effectively prepare, present, and defend arguments (GER criteria a., b., and e.)

3. Demonstrate an improved understanding of analysis, case building, and refutation (GER criteria a., b., and e.)

4. More effectively evaluate and criticize arguments, including your own (GER criteria a. and b.)

This SoTL project centered on students' performances (both their comparative self-evaluations and instructor evaluations on multiple dimensions of their anonymous work from the beginning to end of the semester) and their perceptions of what course and instructor strategies helped them develop the argumentation skills at the heart of a liberal education. It also probes the issue of whether students from outside the Communication discipline who enrolled in this particular GER course perceived that they were at a disadvantage to or that they could perform as successfully in the course as their classmates who major in that discipline and whether performance-based outcomes indicate that they performed relatively as successfully.

Gathering the Evidence

Students were asked to respond to an early-semester exercise (i.e., pre-test) and late-semester exercise (i.e., post-test) and reflective questionnaire posted on D2L. The exercises were completed outside of class. There was a window of opportunity when the exercises were available online to the students and a deadline after which answers could no longer be submitted, but there was no time limit for how long a student could work on each exercise. A small portion of a student's final grade (50 points of the possible 1000 points for the class) was based on completing either both parts of this two-part exercise or a single similar online task on a similar reading that would take approximately the same amount of effort and time to complete, but was not part of any research study, and that is described below. Students who completed the pre-test, but not the post-test earned none of the possible 50 points, and this policy was announced in advance and in numerous ways (e.g., syllabus, course site, emails alerting students when each exercise was available online). Of the 21 students in the class, 15 completed both the pre- and post-test and were in the study sample, 3 completed the pretest only so were excluded from the sample, 2 chose the

alternate assignment, and 1 student did nothing. After grade points were awarded, identifying information other than the student's major was stripped, and each student's pre-test exercise, post-test exercise, and reflective answers were kept together as an anonymous set. Well after the semester concluded, all anonymous sets were analyzed by the instructor with respect to students' longitudinal performance on the pre- and post-tests, testimony of their perceptions and self-evaluation, and performance in arguing for these claims on the reflective questionnaire.

The early-semester pre-test exercise required students to read a brief *Newsweek* opinion piece by Michael Levin and answer several open-ended questions about his argument, questions which reflected learning goals tied to specific GER criteria. Levin's 1982 essay is a passionate, even eloquently argued case for a policy change that became even more salient with Americans after 9/11 (i.e., the use of torture to preempt some evil), and it appeared in a well-known, reputable publication. Yet, based on what this course teaches about sound arguments, Levin's case is weak on many counts including the quality and configuration of the evidence he used (e.g., biased evidence sources, "statistics" based on a minuscule sample) and the failure to develop two key stock issues required to prove the indispensable core of a policy case (i.e., significance/ill and solvency/cure) instead spending too much of his allotted space on the least disputed stock issue in this case, inherency/blame. Because the essay was published in a respectable source and many students agree with the article's policy recommendation already quite apart from Levin's case for it, this reading and the open-ended questions that followed offered me the opportunity to reasonably objectively determine changes across the semester in students' familiarity with and ability to use such concepts as the stock issues, presumption, prima facie case, the burden of proof, general tests of evidence, tests for particular kinds of evidence (e.g., statistics, testimony), and reasoning problems. In the instructor evaluation of students' responses, I also looked for subtler, yet observable changes in how relatively well these students could present whatever arguments they were defending (regardless of how many of the weaknesses in Levin's argument the writer caught or missed) and whether that changed from the beginning to the end of the semester; thus, I analyzed evidence of and noted changes in students' abilities as argument practitioners as well as critical argument consumers. These standards for making a sound argument of any kind (i.e., fact, policy, or value) included such basics as presenting some sort of evidence for one's claim, the quality/verifiability of the evidence selected, the appropriateness of the match between the evidence and the claim, the completeness with which one makes the appropriate case for a particular kind of claim, the explicit recognition and address of any apparent weaknesses in one's position, and the ability to perceive and account for available counter-evidence to one's conclusion. These were the criteria used in the instructor evaluation of students' pre- and post-test argument abilities.

For the end of the course, I designed a two-part method for gathering data that included both student reflections on and additional performance evidence. In Part A of the late-semester instrument (i.e., post-test), I used the same exercise with the same Levin reading and set of questions as in the early semester exercise (i.e., pre-test). Students did not know in advance that the second exercise would involve the same reading and open-ended questions as the pre-test; they were asked not to refer to their first set of answers when responding the second time. While there was no way to enforce this request, my observation of the differences between their pre- and post-test analyses of the same article and the late-semester questionnaire's built-in requirement that students then analyze and justify the similarity or difference between their pre- and post-test analyses suggest that most, if not, all complied with the request. I then compared their performances on the pre-

and post-test exercise using the criteria described above. The first set of instructor-generated findings emerged from my evaluation of their performances of making and critiquing arguments on the pre- and post-test exercises to establish individual students' initial proficiency relative to these learning goals and comparative evidence of their learning at the end of the course.

In Part B of the late-semester instrument, I collected data based on student evaluations and perceptions of their comparative performance on the pre-test and post-test. I provided a new set of reflective questions on students' perceptions and evaluation of their individual learning and one question identifying their major(s). These answers provided not only student-generated data of perceptions and evaluations of their learning and the reasons for it but also created an additional set of performance data that I then examined independently using the above criteria to determine whether students' demonstrated ability to critically analyze arguments and to argue their claims effectively was consistent with their self-evaluations of relative competence. To recap, there were four steps to analyzing the data collected to learn more about students' experiences of learning argumentation skills: 1) instructor evaluation of anonymous sets of pre- and post-test results to judge relative performance on a fixed task related to the GER outcomes from the beginning to the end of the course; 2) thematic analysis of students' self-evaluations of and justifications for their comparative pre- and post-test performances; 3) instructor evaluation of the argument performance in those Part B self-evaluations and justifications as instances of developing and critically consuming arguments; and 4) thematic analysis of students' perceptions of which course and instructor strategies mattered most to any longitudinal change they perceived in their performance on the GER-related outcomes.

All potential participants had the opportunity to agree or decline to complete this pair of questionnaires. Students who declined had the opportunity to do a single alternative assignment (i.e., an evaluative essay) mid-semester worth the same number of points toward the final grade, requiring approximately the same amount of time and effort, and evaluating and responding to a different *Newsweek* opinion piece regarding the same controversial topic as the questionnaire reading (i.e., torture).

Emergent Findings and Broader Significance

Instructor Evaluation of Comparative Performance on Students' Pre- and Post-test Exercises

My comparison, using the above described criteria, of the students' pre-test and post-test exercise performance in which they analyzed the same *Newsweek* opinion piece at the beginning and end of the semester using the same series of open-ended questions indicated that they did indeed become more critically astute argument consumers and arguers over the course of the semester. In this part of my performance evaluation, I focused not only on what respondents thought of Levin's argument but on how well they were able to articulate, support, and defend whatever judgments they made. Based on my evaluation, there was no relative difference in performance improvement between Communication majors and non-majors. However, the more interesting SoTL results emerged from attending to the students' own analyses of whether *they* thought they had improved as arguers and argument consumers, their defenses of how they knew their self-evaluative judgments were sound (i.e., enacting their relative competence by making arguments to convince readers of their conclusions), their analysis of the role academic major played, and their reflective reports of which course and instructor strategies they felt were most

responsible for any perceived improvement during the semester. The importance of those results and the degree to which the students' actual comments serve as evidence for my claims of their improvement justifies spending the majority of this section featuring them.

Themes in Student Perceptions and Evaluations and Instructor Evaluation of Students' Demonstrated Ability to Argue Those Claims

Regardless of major, and not surprising given that they had just invested a semester's worth of work, at the end of the course virtually all respondents perceived that they were better argument consumers, and most, though not all, perceived that they were better arguers. Most respondents were able to defend and support their claims to improvement by analyzing their pre-test assessment answers in comparison with their post-test answers to those same questions. Thus, students proved through their answers to the self-judgment questions that they knew they needed a clear claim supported by appropriate evidence and analysis that made relative comparisons between even two good answers persuasive. For example, one respondent wrote,

> Yes, I believe that I am a better argument consumer than I was before taking this class. I know this because I am aware of stock issues and when I hear something dealing with these stock issues, I take interest in the topic. Evidence that supports this from my original assessment exercise shows that [initially] I just liked the stories.

Another commented,

> I am better and more level-headed. I know because I understand the course objectives and have put them to use in my final debate. Well, I can take an argument now and see the ills, blame and solvency [i.e., stock issues] and see how the arguer uses pathos, ethos and logos to present them. Before I only saw the argument and spoke through emotion or maybe [as] an audience member would, not as someone who understands the theory of an argument. As you can see from my first assessment, I only stated pathos, and thought that made a case; now I know through debating that doesn't complete the argument whether arguing the status quo or the affirmative side where you must prove significant changes.

A third respondent reported a similar experience:

> I am a better arguer now than when I entered the course. The reason that I believe this is because now I have a much better understanding of what is required for an argument to be successful. Whereas in the first assessment exercise I simply discussed certain paragraphs or exact quotations where Levin was weak or strong, in the second assessment I managed to really delve into the ideas of ethos, pathos, and logos and the importance of a balance between the three. In the second assessment I also knew to look for the ill, blame, cure and cost [i.e., stock issues] and to weigh each of these against the argument.

A student who noted improved skill as an arguer, not just an argument consumer, wrote:

> Wow, after looking back at my original answers, I was completely opposite of what I am now! I think that I am a better arguer now than I was in the beginning simply because I did not understand the logistics to an argument. The what-if situations that I originally didn't like are now turned into a positive to the argument. I feel as

though there are more important things to an argument than spitting out facts right and left, like actually looking at all sides of an issue (as he did), relating it to the audience (which he did) and bringing in some emotion to help strengthen his side. Other evidence that shows that I am a better arguer is that I can now pick out his claims and see the specifics of it; I can pick out when he recognizes an ill and I can recognize where he places blame, and where blame is placed on his case. I think before I just read it like a story and made up my own rules for debate.

Another noted that, upon re-reading Levin's *Newsweek* opinion piece during the post-test exercise, he or she

immediately began searching for reputable sources to justify the author's opinion. I didn't even need to look over my original thoughts on the article because I knew that there were things missing that would make me agree with the policy change right away.

And finally another stated:

Based on my answers to Exercise 1 and Exercise 2 I am showing a drastic improvement. In Exercise 1 I notice that I would explain myself with someone else's words. It is good to have supporting evidence and citing it, however it is bad when you find yourself unable to state your own feelings without crediting someone else. After completing Exercise 2 [and comparing these answers to my Exercise 1 work], I see that I am able to explain myself better in my words and still give credit to the source. I feel more comfortable with arguing or supporting than before.

Significantly, students who felt that comparison of their pre-test and post-test answers did not convincingly show improvement on its face were able to account for this disconfirming evidence, a mark of a sophisticated arguer, as they defended on other grounds that they really had improved. Thus, they were able to find and display through other means proof that their arguing skills had improved. For instance, one respondent wrote:

I feel that this class has taught me what to look for in a good argument, not just to read and take everything to heart, but to read between the lines and see what is missing from some of the arguments that people make. The assignment did not seem to support this because in both I discussed the lacking of evidence and items within the argument. However, with other arguments I feel that I can pick up more of what is missing from them and see what I would need to hear more of in order to agree with the speaker. The evidence that contradicts this is the assignment. Since I wrote about similar items in both in regards to Levin missing some arguments that would tend to say that I have not changed in this area, however I do not agree with that.

Another respondent supported the claim of self-improvement, in spite of the similarity in pre- and post-test answers, based on *compensatory evidence*, a rather advanced argument technique:

Some of the evidence that might contradict the fact that I am a better arguer would be that my answers do look rather similar to each other, showing that I might not have changed as much as I would have liked to. I think that my ability to really

argue my position in class shows that I have in fact grown as an arguer. I may not be able to write what I am thinking in an argument but I sure can defend it in a debate.

Yet another accounted for an apparent lack of improvement from pre-test to post-test answers on the basis of *decreased novelty* in the task rather than an unchanged skill level:

As related to parts 1 and 2 of this exercise, I think I actually stated my case better in Exercise 1 [i.e., the pre-test exercise]. I don't think this is because I am necessarily a worse arguer now. I think the main reason for this is that the first time I read the study, it piqued my interest more because it was new and so I thought about it more.

The important point is that, whether or not students' perceptions of improvement were accurate with respect to their comparisons of pre- and post-test answers, they demonstrated by their choices in defending those comparative perceptions that they knew how to use evidence and re-contextualize what needed to be shown, negotiating information that seemingly countered their conclusions in the process.

Additionally, students were asked to draw support for their self-evaluations of relative improvement from beyond their pre- and post-test answer comparisons. One reported experiencing a more balanced viewpoint and openness when judging others' arguments: "Other evidence is that in the final debate, regardless of which side I agreed with, I was able to acknowledge that certain sides made great points and it was something worth looking into and giving them an adequate chance to speak on to sway my opinion." Other students found supporting evidence outside our classroom.

Another piece of evidence is how I debate with people when I am outside of the class. I notice that when I talk to people about a topic that I disagree with, I tend to argue my point by using evidence and not just stating my own opinion. I listen more carefully to what they are saying and try to connect my argument with whom I am talking to. Basically, I pay more attention to the audience with whom I am talking to. I also feel I am a better arguer because I know the terms status quo and burden of proof. Before this class I never knew what they meant or how to interpret the meanings. When I explained the terms to peers, I realized that I understand them and I feel the two terms are a huge part to being able to debate. Understanding what the status quo is and how to come up with the best argument is essential when debating.

Another respondent offered this support:

When I listen to others outside of class, I try to understand more of their point. I try not to make a judgment right away until I know the credibility and the evidence they have to make their point. I examine an argument more than what I normally would before taking this class.

Yet another wrote, "I feel more rational now if I have debates with friends; I find myself feeling more organized and attacking topics not people." And finally,

I now pay better attention to specific points people bring up and then refer to what we learned in class to see if they coincide because if not, I point out their argument's

flaw. I have also learned, and try to implement, maintaining my composure and not rambling off erroneous facts that sound great but have little basis in reality. By doing this, by listening to the other individual, it makes me look and sound more mature and competent and thus a better arguer.

In summary, students displayed critical thinking that took into account multiple angles and provided reasons and support for their claims to have improved in their argument skills. Their justifications included observations of their: new ability to recognize where the burden of proof lies in a controversy, improved performance across the semester's debates, increased openmindness and more careful listening skills, improved ability to analyze (and recognition of the importance of analyzing) an audience, improved ability to examine primary and secondary source credibility, greater ability to recognize which indispensable parts of an argument are missing, ability to imagine productively the "what ifs" related to a particular position, ability to support one's claims with evidence beyond one's own experience and opinion, improved understanding of what is relevant and irrelevant to establishing a particular claim, improved organization of one's ideas, and a greater tendency to attack the argument not the person making it.

Beyond students' own testimony to their improvement in comparative self-evaluations of their pre- and post-test answers, as well as in their arguments grounded in their real-life activities outside the course, my independent comparative judgment of the pre- and post-test sets using the criteria for sound arguments explained in the "Gathering the Evidence" section above and my presentation of the extended quotations in this section show that students were able to marshal a range of good evidence to support their evaluative claims. Their answers overall demonstrated in practice--rather than just claiming--that they had mastered key argumentative skills such as critically judging what evidence was needed to secure a particular claim (i.e., understanding types of claims and where the burden of proof rested), presenting sound, appropriate, and ample evidence for their claims, developing an appreciation for viewing a situation from multiple angles, spotting the gaps or deficiencies in (their own) arguments, analyzing and framing arguments for their audience, separating simple statements of personal preference from complete arguments that might convince others, and accounting for or refuting apparently contradictory evidence to their claims.

Themes in Student Perceptions of Course and Instructor Strategies that Improved Their Argument Abilities

Respondents were very specific in Part B, the reflective portion of the late semester questionnaire, about which course and instructor strategies they saw as responsible for their perceived improvement. The answers generally credited both the new knowledge presented (specific concepts including the stock issues, status quo, refutation strategies, the components of an argument and their relationships to each other, locating presumption and the burden of proof, evidence standards, the multiple ways to approach any argument, situation, or audience) as well as course and instructor strategies to present and reinforce that material. Chief among the course and instructor strategies deemed effective were the chance to apply their knowledge "hands-on" with "real world" issues and situations through "repeated practice" with scaffolding assignments and support that progressively fell away as the semester elapsed; one student particularly mentioned the importance of looking at both good and bad arguments using our scaffolded approach. (See Appendix A for an example of progressively decreasing instructional scaffolding on the stock issues.) Four sample quotations illustrate these repeated themes from students' Part B answers:

I feel that practice of looking at arguments and picking them apart to find out what the speaker or writer was really trying to say was helpful in making me a better argument consumer and a better arguer because it showed what my own arguments were lacking and what could help them to better explain items to the audience and to better win over the audience. Just being able to see both good and bad arguments really helped me to become better at these things.

I am a better arguer and argument consumer because of the debates we had in class. Learning about stock issues improved the quality of my arguments, and then being able to practice them gave me real life experience.

The strategies that worked best for me were all of the intense argument analysis that we did in class. Breaking apart an argument and understanding the process that needs to go into making a proper argument helped me the most.

I think that the teaching styles that helped me was definitely the hands-on practice and the way that preparing for the debate was broken down. Almost every class we were able to participate and give examples and try things on our own. We frequently got into groups to discuss things and to give it a shot at what we know. We then discussed the right answers and usually had another opportunity to try again if we chose to. The way the process was broken down was great as well. First we had to do a little research to get our toes wet, then we decided on a topic. Then we did a little more research and then created general arguments for and against the topic just to get an idea of what we were doing. Then as we went things got more specific and then we were on our own for formulating our debate. Everything we did outside of class was talked about in class and an example was given to us to help guide us.

The other valuable aspect that one student noted was the flip-side of repeated in-class practice at applying the new knowledge: the opportunity to observe and learn from others' mistakes in a low-risk situation. This student wrote:

Being the second group was fantastic. I was able to watch their groups make mistakes over and over again. I was able to understand what and how certain things effect the judges in a debate. I learned to "tell them what I am going to tell them, tell them, and then tell them what I told them." I learned how important primary credibility and secondary credibility is in a debate where the debater isn't the expert. At the beginning of the class I had no idea how these concepts affect a judgment.

Majors and non-majors did not differ in their reports of which course and instructor strategies promoted their learning on the course objectives related to UWM's GER criteria a., b., and e. This conclusion suggests that these same strategies for teaching students to be better arguers are effective regardless of a student's previous course of study.

Figure 1. Summary of Course and Instructor Strategies

Short homework assignments that build on each other
Completed homework discussed in and related to class
Hands-on application of concepts to "real world" cases
In-class groups as part of scaffolding and practice
Participation and feedback in every class
Repeated practice and review
Developmental scaffolding assignments
Opportunities to try again
Examples of concepts and of applying concepts
Connection between out of class and in class
Low-risk chances to try and fail before stakes increased
Observe and learn from others' mistakes

One final observation was prompted by a reviewer's comment that it would be useful to know what course and instructor strategies used in class were not highlighted by students as promoting learning—in other words, what did not work well. I revisited the data in light of this comment, since students' were invited to comment on both what did or did not make them better arguers. In the whole set, only one student mentioned a course strategy that he or she did not find very helpful (i.e., the textbook), but argued that the multiple other ways that any aspect of content was covered (see the scaffolding illustration in Appendix A) meant that there were other ways that better suited him or her available to learn the material:

> I enjoyed going over the documents and dissecting them, showing what points are sound, what points are not and why. I learn from visual examples and that provided an excellent source of information. Also, by participating in an actual debate helped immensely as again, learning by example best suits me. I did not find the book very helpful, but again, only because I learn better by example and therefore the material covered in class and expanded upon helped quite a bit.

Further, all the course and instructor strategies discussed above were highlighted as valuable by multiple students, but no one student highlighted all the individual strategies as valuable, except perhaps the fourth student quoted at length in the block above, concluding "[e]verything we did outside of class was talked about in class and an example was given to us to help guide us." The implication, I believe, is that the whole is greater than the sum of its parts when it comes to scaffolding a learning experience. It also suggests the importance of providing a variety of strategies and modalities, whether scaffolded or not, on any given material to increase the possibility of successfully engaging a variety of learners with different needs and preferences.

Student Perceptions on Any Advantage to Being a Communication Major in This GER Argumentation Course

The overwhelming majority of respondents claimed that there was no built-in advantage toward success of being a Communication major in this course. Almost to a person, the non-Communication majors perceived no technical advantage based on prior study in the discipline to classmates who were Communication majors; in fact, several non-majors argued that their own experience in other disciplines, such as psychology or criminal justice, better prepared them for the course. A few (both Communication majors and non-Communication majors) wrote that they initially thought that Communication majors might have an advantage because of their presumed degree of prior preparation in oral presentation. But the Communication majors who speculated this outcome presented no supporting evidence that it turned out that way, and the non-Communication majors who speculated this way argued that in fact no such edge materialized. Some cited counter-examples of non-majors in the class who performed more impressively than Communication majors in the final debates. There also was one suggestion that some Communication majors actually showed themselves to be worse listeners than the non-majors when it came to attending to the opposition's arguments during the debates.

Ultimately, based on both students' own self-evaluations and on the instructor's independent comparative evaluation of their anonymous pre- and post-test work on the same task—and the convergence of those results--as well as students' demonstrated competence in argumentation skills as displayed in defense of their self-evaluations, these results indicate that it is possible to design an upper-level course that accommodates the learning and improved practice of both majors and non-major GER students sampling a discipline for the first time. According to the responses, success in meeting the learning needs of both types of students requires that a course make no assumption of prior disciplinary knowledge (i.e., that it is self-contained in that all the content and skills one needs to know are covered in the course itself) combined with hands-on, real life, repeated, and scaffolded practice at using and applying the concepts that are transparently designated in class as fostering liberal education with respect to specific GER goals.

Benefits of the Work and Lessons Learned

Beyond the significance of the above findings for designing courses that accommodate and equalize learning opportunities for majors and non-majors, this project yields four lessons. The first is the heuristic value of listening to students themselves tell about their perceived learning experiences as well as perform and defend their self-assessments and accounts of their learning. SoTL work, which already is attuned to the needs of learners not just teachers, often has researchers quoting students' comments as evidence for their (i.e., the researchers') arguments. This project indicates an additional richness to be gained by asking for, using intact, and seriously attending to students' own arguments evaluating and accounting for their perceived learning.

The second benefit of this particular project is for teachers of upper-level courses that simultaneously must serve both a disciplinary major and GER purposes. It provides evidence that those two different goals (i.e., increasing the depth of some advanced students' proficiency in their major area of study and introducing to a level of demonstrable competence students with no prior experience in the host discipline) can be served well by the same section of the same course and compiles student-generated reflections on which

specific course and instructor strategies make that sense of equal access to success possible.

Third, this study not only demonstrates that both non-major general education students and majors improved on liberal education skills through this course in argumentation but also identifies, from the students' perspectives, which content and course and instructor strategies were particularly valuable in improving the relevant argument skills. For content, the students regularly identified concepts including the burden of proof, presumption, the status quo, stock issues, evidence and source credibility tests, refutation strategies, critical listening skills, and logos, pathos, and ethos (a device that many of them used to remember Booth's (1963/1972) more sophisticated three parts that must be balanced in the rhetorical stance, i.e., the available arguments, the interests and peculiarities of the audience, the voice or character of the arguer). These are similar, though not identical, to items on the list that Ganer (1985) provides from an instructor's perspective and so provide additional support for those suggestions based on students' perspectives. This essay breaks new ground in asking both general education students and majors which course and teaching strategies most helped them incorporate, understand, and apply the content and argument skills in the classroom and beyond. Figure 1 provides a concise list of those strategies, many of which are applicable in a variety of courses not just argumentation or general education courses. Further, the data collected on strategies endorses and reinforces more national calls for a liberal education to prepare students by complementing theory or content with practice in real-world applications of knowledge and skills through hands-on learning (see Association of American Colleges and Universities, 2005, 2007; Peter D. Hart Research Associates, Inc., 2006).

Fourth, this study has implications for those charged with evaluating and restructuring GER education. For example, at UWM a committee has been convened to evaluate and revamp the General Education Requirements and establish a framework to determine whether all 600 courses that currently carry GER credit are serving that purpose adequately. This project illustrates a research approach that such a committee might use to test how well a course as currently taught contributes to specific, desired GER learning outcomes and offers twin means of assessment using instructor performance evaluation and student-based perceptions and evaluations. The model of collecting students' anonymous self-evaluations and perceptions of their learning experiences with respect to transparently GER-related course objectives, a demonstration or performance-based learning activity, and a pre- and post-test comparison of applying those skills in a way that can be assessed independently by the professor or other adjudicators illustrates that instructor perceptions and performance evaluations provide only partial understanding of students' experiences of learning.

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Appendix A

Sample Development Assignment Scaffolding for the Stock Issues

- Students read a textbook chapter explaining stock issue theory, illustrated with real-world examples and with a practicum for identifying stock issues in a specific policy case

- Lecture reviewing stock issue theory and illustrating the stock issues and their relationships with different and multiple real-world cases

- Practice as a class identifying the stock issues in several orally presented cases

- Check and discuss the practicum from the textbook

- Introduce homework with three cases in which the stock issues are broken out for students, but not identified; work the first case alone in class; check it with a partner; discuss it as a whole class; assign the other two cases as homework

- At the next class period, check those two homework cases with a partner, then discuss them and analyze likely errors as a whole class

- As a whole class, work through a policy case editorial from a newspaper to identify the stock issues, even though they are not separated from each other

- Assign as homework students to read and identify the stock issues in two other real-world examples of newspaper or magazine articles that present policy cases

- Check students' homework identifications in small groups, then as a whole class, one at the next class period and one at the following class period

- Students read a textbook chapter on principles of logical outlining and study examples of outlines that use the stock issues to formulate complete policy cases

- Students do two extended matching exercises fitting together prepared claims into two cogent logical outlines that conform to the principles

- In-class we analyze a real speech that uses the stock issues in a particularly well-organized way and abstract the logical outline of stock issue claims from it; we discuss how much more persuasive a case can be if the stock issues are laid out in a logical order rather than being jumbled together as in many of the real-world examples previously examined

- Assign as homework a practice quiz on the stock issues and logical outlining that includes reading a real editorial on a policy and identifying the stock issues in it

- Students take a graded quiz on the stock issues and logical outlining that includes identifying stock issues in short readings

- Students prepare their own outlines of their debate case claims based on the stock issues (or attacks on particular stock issues, if representing the negative side)

The series starts with small tasks on nearly finished or clearly articulated real-world examples, then proceeds through small steps, some pair and group work, and repeated practice until the students must not only recognize the stock issues in increasingly ambiguous circumstances and increasingly independently but also generate a complete inter-related, well-organized set of them for their own debates.