THE DYNAMICS OF STUDENT RESEARCH: "VOYAGING THROUGH STRANGE SEAS OF THOUGHT"

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The marble index of a mind for ever voyaging through strange seas of thought, alone.
—Wordsworth's description of Newton's statue, from *The Prelude* 3:58-63

Is there a skill—other than specific skills connected with a student's major—that most faculty members agree is the most important one taught at a university? From all directions the answer comes back clear: critical thinking, or the ability to effectively evaluate the validity of alternative explanations or proposals.

Shakespeare's *Hamlet* dramatizes the bad things that happen when people fail to think critically. Tragic consequences follow when the characters base their judgments and actions on such standards as unbridled passion (lust, anger, thirst for power or position) or unexamined, perfunctory loyalty (even loyalty to husband, father, or king, we learn, can be mistaken). Hamlet distinguishes himself from the others in refusing to blindly follow passions or traditional loyalties to make decisions; rather, he weighs his options using methods of critical inquiry. He considers the ability to reason to be a divinely sanctioned capacity we are obliged to use:

> What is a man,
> If his chief good and market of his time
> Be but to sleep and feed? A beast, no more.
> Sure He that made us with such large discourse,
> Looking before and after, gave us not
> That capability of godlike reason
> To fust in us unused. (Act IV, Scene 4: 33-39)

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Hamlet fears the unreliability of apparent evidence, that acting on it could lead to shedding innocent blood and to his own damnation. This aspect of his temperament, for many, is the central enigma of the play. Why doesn't he just get the job done? Why all this ponderous deliberation?

As in all his plays, Shakespeare plays subtly with the audience: he seems to know we will get irritated by Hamlet's hesitation and gives us a chance to see ourselves preferring bold action over reasoned critical inquiry. Seeing ourselves this way, we can recognize that unreasoned actions may have a frightening relation to the kind of bloodletting that occurs in *Hamlet* as well as our own society.

Poignant dramatizations of the urgent need for critical thinking recur throughout the Book of Mormon, beginning with one family's

challenges. Lehi's foray into the wilderness and his visions describe the consequences of yielding to the wrong voices: "And after they did enter into that building they did point the finger of scorn at me and those that were partaking of the fruit also; but we heeded them not. . . . For as many as heeded them, had fallen away." Nephi warns those in future generations of the various persuasions and twisted logic they will confront: "We have got a Bible, and there cannot be any more Bible;" "Eat, drink, and be merry . . . for tomorrow we die;" "I am no devil, for there is none." And Jacob battles both anti-christs and wayward saints as he tells his people they have based their most important decisions on false concepts of education, wealth, and marriage: "When they are learned, they think they are wise;" "Because some of you have obtained more abundantly . . . ye suppose that ye are better;" "They seek to excuse themselves . . . because of the things that were written concerning David, and Solomon" (see 2 Nephi 8, 9, 28, 29; Jacob 2).

As Hamlet's society and Nephi's suffered for their failure to think critically, so do we. Few are born with critical thinking skills; perhaps the most powerful unifying issue on our university campus is the need to educate our young charges to become critical thinkers. Nowhere is there more to be done; nowhere are the stakes higher; and nowhere is the need greater.

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If we define critical thinking as the ability to effectively evaluate the validity of alternative explanations or proposals, then the obstacles to critical thinking come from two sources: 1) our own passions, prejudices, and ignorance, or 2) attempts by others to manipulate and deceive us. Therefore, critical thinking skills include an awareness of

- the inherent difficulties of viewing alternatives to our first impressions, personal perspectives, or ingrained biases and prejudices,
- the study and effort that is sometimes demanded as we search for verification and validity,
- the various methods used to manipulate us and gain our sympathy and how to discern and evaluate these methods,
- our own vulnerability to various methods of distortion and deception, and
- the idea that the path to verification often leads to new ideas and perspectives.

It is easy to see how such skills (either the presence or lack of them) can have a profound effect on the quality of the most fundamental aspects of a person's life: whether choosing a health and exercise program or discerning and articulating a new discovery in one's field; whether deciding on the best discipline for a willful child or voting for candidates in an election; whether judging the credibility of a boyfriend's or girlfriend's arguments

about the proper place of intimacy in a relationship, or responding to the constant media barrage about the nature of femininity, masculinity, and marriage.

I would like to build upon these notions of critical thinking to suggest and briefly pursue the following connections:

- The most important task of a university education is the achievement of greater critical thinking.
- The most effective way of exercising and achieving greater critical thinking at a university is through the writing process, and the most thorough writing assignment is the research paper.
- The two most important rhetorical goals in the achievement of an effective research paper are also the goals most difficult to achieve in the current environment of advanced writing classes.
- The most effective and immediate way universities can improve the advanced research paper assignment (and advanced writing classes in general) in order to best achieve all of its most important goals and to overcome the chief obstacles to those goals, is to have the research paper taught in the students' respective departments by professors of the students' respective disciplines.

I. The most effective way of exercising and achieving greater critical thinking at a university is through the writing process

Writing—the ability to verbally articulate thoughts—is a wonderful tool. We are all aware of how reading opens up worlds to us, but are we as appreciative of the potential worlds opened through writing? The ancients may have something to teach us in this regard, especially through a concept that has become somewhat vague today: *rhetoric.*

The meaning of rhetoric survives only as a blur to us, somewhat like an ancient Cathedral, ravished over the centuries and then rebuilt according to updated styles, whims, and technologies. And just as art historians attempt to restore an idea of what that ancient Cathedral looked like, teachers and philosophers of language feel compelled to reconstruct the original concept of rhetoric.

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I think these various attempts to reconstruct the meaning of rhetoric can be divided into two groups: 1) those who see rhetoric as a personal tool to discover, organize, and present ideas through discourse; and 2) those who see rhetoric as a public tool to effectively use discourse in order to persuade and / or manipulate others. The misuses of this second kind of rhetoric (employed notoriously by politicians and advertisers) have reduced rhetoric to mere "sophistry" or linguistic adroitness and style divorced from a concern for truth, ethics, or justice. However, effective *ethical* practitioners of discourse to persuade others—taken from just

one era—include Abraham Lincoln, Frederick Douglass, and Harriet Beacher Stowe. In other words, rhetoric, like other tools, can be seen as ethically neutral, available as well to saints and hucksters.

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My own attempt at a definition blends these personal and public spheres: rhetoric is "a means of discovering, evaluating, and receiving conviction of truths, through the process of attempting to verbally articulate some nascent idea." Usually, these personal benefits of the rhetorical process occur as the rhetor (i.e., speaker or writer) tries to persuade someone else. I think rhetoric in this sense is a tool of self discovery—almost a "magical" tool—that has the power to take us down paths and (invoking Wordsworth's encomium to Newton) upon voyages "through strange seas of thought" often leading to previously inconceivable worlds. Carrying Wordsworth's metaphor further, rhetoric is the vessel that takes us on such voyages, and language (or, more particularly, verbal articulation) is the wind in our sails. I think Elder Marion G. Romney expressed well this notion of rhetorical discovery when he said "I know when I am speaking by the spirit because I learn so much." My paraphrase of Elder Romney's insight becomes "I know when I am benefiting from the rhetorical process because as I try to verbally articulate some nascent idea, I am able to discover, evaluate, and receive conviction of truths." (In a moment I will show how Alma the Younger describes in step-by-step detail this kind of rhetorical process.)

I would suggest another important consequence of the rhetorical process: the attempt to articulate and evaluate an idea also inculcates in the rhetor the *power to act* on that knowledge. We are all aware of the many ways rhetoric is employed by speakers and writers to impel action in others. But through the process of rhetoric the speaker or writer herself may be the greatest beneficiary of motivational power. How? Primarily because the process of personal discovery and substantiation of a truth simultaneously creates within us a *conviction* of that truth, which conviction increases our capacity to act on the truth. I think Francis Bacon understood this potential power of rhetoric when he defined rhetoric as "the application of reason to imagination for the better moving of the will." Though Bacon focuses primarily on motivating action in others, I think the effects of rhetoric he describes apply well to the writer herself.

What do we learn about writing from the ancient concept of rhetoric? Something we should have known all along, but often lose sight of: that writing offers an unparalleled opportunity for exploration, discovery, rigorous testing and evaluation of premises, open-mindedness, intellectual growth, and conviction; in other words, for accomplishing the most important goal of a university: increasing critical thinking skills.

And it would be hard to imagine a more effective and thorough writing assignment for teaching these critical thinking skills than the research

paper. Why? Because students are so immersed in the entire critical thinking process: they are required to search and investigate a suitable topic or argument, weigh the evidence on all sides carefully, restrain both their own prejudices and the manipulative attempts of others, present a fair and convincing rebuttal of alternatives, and use ethical, emotional, and logical resources as persuasive appeals to an audience.

II. The two most important rhetorical goals for developing an effective research paper are also the goals most difficult to achieve in the current environment of advanced writing classes.

So what does it take to effectively engage students in the critical thinking process through research writing? Perhaps the two most important rhetorical goals for the success of any writing assignment are: 1) having something worthwhile to say and therefore caring about what you write, and 2) having a real audience who cares about and can benefit from your ideas. These two goals are intertwined: the relevance of a message determines its potential benefit to a real audience. Likewise, considering potential benefits to real audiences affects the kinds of issues we will care enough to vigorously research and evaluate. Unfortunately, in the current environment of advanced writing classes taught in universities these two rhetorical goals are the most difficult to achieve: usually, the students write a paper about a subject they are not particularly interested or invested in, to an audience who by necessity receives their work as a grammatical and structural exercise rather than as a specific contribution to the student's chosen field. As Schwegler and Shamoon have suggested in an issue of *College English* devoted to situating and evaluating how the research paper is taught in composition classes, most students view the research paper as simply another test and view the teacher as an artificial audience who "is testing the student's knowledge and information-gathering ability" (819). Therefore, students "view the research paper as a close-ended, informative, skills-oriented exercise" rather than an "act of discovery" (820). A more graphic and discouraging metaphor sometimes used to describe typical composition class research writing refers to the process as "carting dead bones from one graveyard to another." That is, devoid of the two most vital rhetorical motivations, much that proceeds under the name of research throughout universities becomes "scissor and pasting" of sources.

I think another unfortunate consequence follows from universities' attempts to teach the advanced research paper in the current environment. Often, English teachers find themselves unwittingly in the role of "aiders and abettors" of plagiarism because we, by necessity, ask students to design, prepare, research, and write an essay dealing with a substantive and controversial issue in their major fields, and ask them to do so in

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a matter of weeks. Because we remain largely unversed in the primary and secondary research strategies as well as the specific, current issues in the fields, we often cannot properly guide the students to the narrow, focused, and relevant topics that would engage them and be suitable for a semester project.

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Further, because we, as English teachers attempt to teach a divergent group of majors, the students know that we are incapable of being up-to-date on all of these fields or on the articles they may access. And finally, because the students often aren't very interested or invested in the topic, and lack an audience who could tangibly benefit from their efforts, they may see their efforts as filling in the right number of pages with the right number of references rather than meeting a meaningful rhetorical goal. Is there anything universities can do to help students research and write in such a way that we accomplish the goals of such assignments and present fewer provocations for them to turn to plagiarism?

III. The most effective and immediate way universities can improve the research paper assignment (and advanced writing classes in general) in order to best achieve all of its most important goals, and to overcome the chief obstacles to those goals, is to have the research paper taught in the students' departments by professors in the students' disciplines.

I fully recognize the excellent teaching in advanced writing classes all over the country conducted by English teachers. It is not my intent to undermine or disregard such efforts, but instead simply suggest other options that may prove more effective in teaching critical thinking skills to our students. Who is in a stronger position in an advanced research writing class to

- teach the research methods and standards, especially the widely divergent methods of primary research (so dependent on a particular field)?
- help evaluate and formulate adequate research questions for real audiences?
- give the needed professional and technical guidance in framing, developing, and researching such questions?
- place all such research in the context of specific ethical standards of the particular field?
- both detect plagiarism (because of their familiarity with the specific issues) and decrease the temptation to plagiarize (because students would know the professors have expertise and a wider exposure in these fields)?

Questioning Tradition for Tradition's Sake

Richard Larson has been a tireless proponent of having the research paper taught in the disciplines and has argued that "the generic 'research paper' as a concept, and as a form of writing taught in a department of English, is not defensible" (812). Rather, the research paper and the concomitant skills should be taught in individual departments because "research in different academic disciplines works from distinctive assumptions and follows distinctive patterns of inquiry" (815-16).

English professor Greg Clark, while giving a recent seminar to the BYU-Idaho faculty on improving the teaching behind research papers, voiced similar concerns. He mentioned the severe constraints under which we as English teachers work in trying to successfully teach the research. "We don't do a very good job teaching empirical research," he said. "And I'm not sure we're preparing them for anything they're actually going to do." As far as the kinds of research methodologies students use in their various majors, Dr. Clark again voices an English teacher's handicap: "We don't know that. We can't know that."

How about those various skills under the category of Rhetorical Appeals—in many ways the "meat and potatoes" of persuasive and argumentative writing? Surely this is an area where an English teacher's training would be required, since rhetoric is what we are all about: "Rhetoric 'Я' Us." Consider that rhetorical appeals are divided into three categories: ethical, pathetic, and logical. Ethical appeals are shown through the writer's clear demonstration of competence, fairness, and overall trustworthiness. And who can teach students better how to demonstrate for their future profession's readers such things than someone who has worked and taught and been an active part of both the profession and the audience of such appeals? And pathetic appeals? They are based on demonstrating that you as a writer best meet the most fundamental and specific values and needs of your audience. Who would be most aware and capable of understanding and teaching what those needs are?

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And certainly the professors in the student's specific discipline would be best equipped to teach logical appeals (based on effective use of empirical facts, figures, as well as carefully presented inductive and deductive analysis—all of which, of course, are customized according to the needs of specific professions). Who can better determine what kinds of numbers, graphs, tables, statistical relations, and fundamental assumptions experts—or audiences—in that field would judge as fair, powerful, credible, and effective? Who learns and practices deductive or inductive reasoning skills, and logical analysis better than historians, mathematicians, building contractors, economists, chemists, psychologists, nurses, and accountants?

It is relevant to ask how English teachers have become the designated experts in teaching composition. Most English professors don't enter graduate school with the specific focus on teaching composition; their interest is literature. And most of their coursework centers on the study of literature. The path an English professor follows is no more focused on composition or writing than that followed by a History, Political Science, or Anthropology professor. If anything, these other disciplines may prepare the professor more adequately for teaching composition—since their focus has been on the same kind of material taught in composition classes: prose writing (as opposed to the poetry, drama, and fiction of an English professor's background). But for various reasons, over the centuries belletristic or aesthetic writing has been reified as the highest rung on the ladder of all writing, and therefore students or professors of literature have been crowned as the leading experts of writing in general. As one consequence (or symptom) of such a contrived hierarchy, nearly all universities turn most of the composition classes over to English graduate students so that the tenured English professors can focus on their true interest and training: literature courses.

I would suggest that the skills English composition teachers teach best are most effectively employed in the freshman or first-year composition course: basic writing skills such as conceiving, organizing, revising, and polishing essays based on the fundamental rhetorical modes of personal reflection, narration, description, exposition, instruction, persuasion, and argumentation. During this course, teachers also introduce the basics of research writing, such as locating, evaluating, assimilating, citing, and properly documenting sources. I think, however, that in many universities where English departments also teach an advanced writing class these kinds of fundamental, generic skills are in large measure repeated in this later course, with an attempt at customizing them for a narrower clientele. The success of these attempts at customization, of course, varies as the teacher gains more awareness of the specific needs of her particular clientele, whether they are groups of social scientists, educators, engineers, business managers, or biologists. But in too many cases throughout universities, the English teacher must play a game of catch-up, moonlighting as a student in some new major in an effort to credibly offer these students the relevant skills needed to prepare them for their future academic and career lives. And certainly, these English teachers have heroically demonstrated their protean capacities to adapt and respond to such exigencies.

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A recent articulation by our own English department of goals and expected course outcomes for advanced writing classes also points to the advantage of having these classes taught by professors in the disciplines. Note that of the six outcomes, four explicitly focus on discipline-related

writing, one (number 3) implicitly does, and one (number 2) involves simply refining the skills taught in English 111:

1. Recognize the function of writing within *discipline-specific* contexts
2. Refine the writing proficiencies introduced in English 111
3. Develop critical thinking skills that involve the analysis of complex texts—scrutinizing claims, evidence, logic, assumptions, world view, style
4. Produce *professional documents* that demonstrate principles of effective writing—design, rhetorical stance, focus, development, coherence, style, and *adherence to discipline-specific documentation and editing standards.*
5. Understand the particular research methodologies, resources, and world views *that inform specific disciplines.*
6. Write a documented argument, 2500-3000 words in length that considers a *discipline-specific issue,* synthesizes 8-10 credible sources, and reflects original thought.

Redefining the University—in the Advanced Writing Classes

Shouldn't universities at some point posit the possibility that students may be better served in their advanced research writing classes if the professor who walks in to teach them has spent years of focus, preparation, research, and writing, eagerly pursuing the same subject the students hope to make their careers? Do we really believe that *all* of these professors in the non-English disciplines have such deficits in their writing backgrounds or capacities as to exclude them from entering that classroom? We are not asking that the entire faculties of each department excel in their abilities to teach writing and research—only a few. Wouldn't parceling such courses out to select teachers in each department increase the likelihood that the most appropriate advanced writing and research teachers teach advanced writing and research?

The best argument for having advanced writing taught in the disciplines follows from the performances of the many successful classes already superbly taught there. Here at BYU-Idaho, for example, the History department exclusively teaches Advanced Writing classes to their majors. These History professors spent a week-long intensive seminar in Provo learning some pedagogical skills to assist them with the rhetorical aspects of the class, and making sure that the goal of teaching writing is not subsumed or undercut by the disciplinary goals. When I interviewed some of the History department professors, they noted the increased opportunities given their students to learn and apply the specific research and writing skills not only in class but also in regional conferences

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dedicated to student research projects in History. They assured me that most of what now happens in their classes would be impossible to imagine if English teachers taught the class. For example, Dr. Hals has his students perform a local oral history, which is transcribed and archived in our library. A typical research assignment for his advanced writing students might involve describing the settlement of Madison County from 1880-1910, in which the students apply various primary historical research methodologies, including a search of local government census records and archives.

I talked with a member of the Elementary Education faculty who plans to have his students in a research methodology class conduct ethnographies of the educational experiences of non-English speaking students at BYU-Idaho. He says that his students must concomitantly learn specific disciplinary and ethical skills about performing primary research, conducting interviews and surveys, and reporting such research within the discipline's standards. Wouldn't those students benefit immensely by moving to an advanced writing class taught by an education professor who could build on the earlier research and stoke the flames of the students' initial critical thinking experiences.

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At BYU in Provo currently, eleven departments teach the advanced writing classes to their own students, including Chemistry, German, Art History, Psychology, Political Science, Business, Recreation Management, and Nursing; Geology, Physics, and other departments have proposals in the works. The students in these departments receive "double credit" for the class—three credits for their majors and three for general education. These professors eagerly enumerate the overwhelming advantages of such a shift. Professor Dave Dearden notes that over ninety percent of the Chemistry students do undergraduate research projects, and the advanced writing class allows teachers to guide and focus these projects, with the goal of eventually publishing these papers. Professor Jean Francoise Van Huele suggests that the advanced writing class taught by Physics professors could serve as the nucleus for the mandatory senior thesis. The Dean of the College of Nursing, Dr. Elaine Marshall, suggests that such a shift presents increased opportunity to teach specific critical thinking skills to her students, skills they will apply in their professions. Professor Marshall feels confident in the writing and pedagogical abilities of the nursing professors chosen to teach these classes. In fact, she says, these professors are "highly motivated; they are all dressed up and ready to teach" these classes. And, she said, they are able to teach their students by personal example and experience the value of writing in the profession. German professor Robert McFarland describes himself as a "huge, huge advocate" of teaching his own students advanced writing. Meaningful research topics, and "discipline specific writing" would not be possible otherwise, he says.

He also feels confident in the ability of his department's professors to teach writing skills. "As professors," he says, "we are all writers," and he appreciates the chance to learn even more about writing as he teaches.

In each case, once the shift is made, there is no turning back—these departments and teachers invariably realize both: 1) the essential importance of teaching their own students the specific skills of research and critical thinking related to their disciplines, and 2) their own capacities to teach both the general rhetorical and specific discipline-related skills well.

I have sometimes heard concerns that such a shift would result in the University becoming "overspecialized." But if we are concerned with overspecialization, shouldn't we question the idea of making the English teachers the sole specialists for teaching, conducting, and reporting research in every field on campus through the advanced research writing class? And likewise, shouldn't we do our best to ensure that professors in other fields gain experience and facility in guiding their students in using their disciplines' tools in conducting and reporting research?

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Just as we don't want to become overspecialized, we also don't want to limit the educational opportunities of the students by artificially trying to impose skills on them (and us) that we don't have. What would it take for English teachers to become sufficiently acquainted with each field to adequately and effectively guide students in an appropriate research paper based on their majors? This really isn't so much a writing problem as a problem of understanding the specific debates in each field, the research standards of each field, the ethical standards around which questions are posed, etc. For example, the most significant assignment in an advanced writing class for Business majors is a Business Plan, including research into marketing and management structures, revenue and expense projections, accounting options, legal and ethical constraints. Who is in a better position to conduct such a course? Or for teaching business correspondence, analysis, and empirical methods of research and reporting?

I think a BYU-Idaho Mathematics professor expresses the kind of trust we should place in professors in various disciplines to teach research writing. In a *Perspective* article published twelve years ago, Kent Bessey shares his experience with learning writing from a professor in his field. Dr. Bessey writes that his English classes never ignited passion in him for writing:

> It wasn't until I took a graduate course in mathematics from Paul Yearout that I developed an interest in using language effectively. Dr. Yearout may not have taught me a litany of grammar rules, but he piqued my curiosity. His remarkable fluency with language and his nimbleness of thought made a permanent impression on me. In his lectures, he alluded to ideas like: "The awkward use of language engenders muddled thinking," and "Your mind is of little value if it cannot express itself." He even had the audacity to deduct

> points from our math proofs for poor grammar and bad spelling. The fact that a professor in my field had a good mastery of the language and was eager to help me improve *my* own writing meant more to me than a thousand sermons on the subject.

There are many related advantages to such a shift in how we teach advanced writing. For example, the senior level "capstone" experience or classes could build on the research experience and paper begun in a junior (or even second-semester sophomore) level advanced writing class. Because these research projects were begun in consultation with and guidance by a professor in the student's specific discipline, this student/professor relationship could continue into the culminating capstone class and perhaps a published article. I am not suggesting that each student receive personal mentoring by a professor, but rather that some mentoring would naturally follow, and would help accomplish the highest missions of a university. Perhaps a university-wide journal could be established as a forum for these projects initiated in the advanced research writing classes and polished during subsequent semesters, often under the tutelage of a professor. This would be quite different from other journals now available at BYU-Idaho and would add an exciting sense of contribution to one's field and also of entering the academic discussion on relevant issues. These kinds of discipline-specific research experiences would also make the student more prepared and marketable for future careers and graduate education.

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I also think having the specific professors teaching the advanced research writing classes is a better option for the students than some proposed alternatives. Some universities consider having a full year of freshman English, with the second semester focusing on the research paper. This idea does recognize the importance of the research writing process, as well as the intense focus, time, and effort demanded for quality research writing. However, the problems with this idea outweigh its advantages, including the fact that: 1) the students need to be further along in their fields before they can pose and frame an adequate research question, and 2) the students still need the guidance of professors in their specific fields.

Another ineffective attempt at a solution was implemented while I was attending Stony Brook University in New York. The students were required to submit some paper from any class in their majors designated as "writing intensive" as evidence that they could write within the discipline. Such a program does help to focus professors in the disciplines on the importance of writing, and also provokes them to include more writing assignments in their courses. But student research writing remains unfocused and unstructured. The skills students need to thoroughly understand and apply (including the specific ethical issues, primary

and secondary research metrologies, and various critical thinking skills) demand the kind of consistent structure and content unavailable through such a program. These kinds of reservations were also expressed by several professors at BYU whom I interviewed, who tried such classes in their disciplines before initiating a full-fledged advanced writing program. At Stony Brook, such papers simply became another hoop for the students rather than an intense critical thinking exercise. In any case, the kind of advanced writing class I have been proposing would serve as a foundation and provocation for more professors in the disciplines to include effective writing assignments in their upper division classes—since they know their students will have a foundation in disciplinary research and writing.

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Finally, I think my proposal is a better solution than having the advanced research writing classes team taught by English professors and professors in the specific disciplines. Such a solution sounds good on paper. Why not have the English professors teach students during the first block, and have the field professor teach the second block? And then, the papers could be team-graded, with the English and field professors grading the form and content respectively. I see several problems with such an approach: most of the time of the course—certainly more than a block—needs to focus on the research writing experience, and so the field professor's time would be disproportionately taxed if she had only a block. Likewise, some aspects of the research writing (such as the initial proposal, an annotated bibliography, and some primary research) need to begin early in the semester. Another argument against such a structure: after a couple of semesters I am confident the field professors would feel comfortable grading papers for form as well as content. However, perhaps some initial team-grading or teaching would help some departments transition more smoothly. In any case, an intensive summer seminar taught by English professors (such as the History professors attended) would help allay insecurities and generate confidence.

Caveats and Qualifications

The kinds of changes I am proposing, of course, couldn't be implemented overnight. It would take more time for some universities and departments than others to build a core of instructors prepared to teach these advanced writing classes. In the short term, perhaps only a few pilot courses from a few departments could be implemented to "test the waters." But even after turning over some of the teaching of advanced writing to the disciplines, I think the English Departments should maintain a supervisory and training role. Perhaps summer seminars to train professors in composition pedagogy (like the one the History department professors attended in Provo) could be implemented.

I have been discussing so far how universities in general may benefit from such a shift. Of course, the situation at BYU-Idaho is in many ways unique among universities. I don't think I am being chauvinistic when I say that there may not be an English department anywhere with a stronger tradition, capability, and commitment to teaching advanced writing courses than here. I think, however, that even in such an exceptional environment, students can benefit from having more of the advanced writing classes taught by professors in the students' disciplines. Though no matter how many departments developed their own classes, many advanced writing classes would always remain in the English department for students needing a less-discipline specific critical writing class (English 311), or for English students with a professional writing emphasis (a version of English 316).

The main obstacle to such a shift in how universities teach advanced writing, I think, may come from the reticence departments or professors in the disciplines naturally have for taking on such a challenge. Likewise, I am afraid that some professors may balk at such a prospect because of some of the negative attitudes that may have trickled down to them from the experiences of either students or teachers in these classes: "Let's just let the English department keep this tedious task of teaching and grading research papers." It is primarily those professors I would now invite to turn with me to the book of Alma, who I think best describes the kinds of sublime teaching experiences you can enjoy as you help your students embark on their "voyages through strange seas of thought."

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Alma's Advanced Writing Seminar: "Tast[ing] the Light"

Alma's analogy of planting and nurturing "the word" like "unto a seed" demonstrates how desire and faith can blossom into knowledge and conviction. This analogy describes well the kind of invigorating "rhetorical" experiences that could be available to student researchers at a university. Many of the same mechanisms Alma describes to explore, test, and confirm spiritual knowledge apply as well to how we may explore, test, and confirm secular knowledge—and our salvation depends upon making correct choices in each realm.

Step 1: Recognize that coming to a knowledge of the truth will take some determined effort on your part—you can't just stand around and wait for a "sign from heaven." "It shall be unto every man according to his work" (Alma 32:17, 20). And one of the most effective "works" involves research and writing, or "nurturing the word."

Step 2: Start off with an imperfect knowledge of something—just an inclination, an interesting idea, a problem that you are mildly confident of finding a unique and viable solution to, one which you can't yet see, or

clearly articulate, but which you have some reason, feeling, or confidence ("hope") of eventually finding. (Alma 32:21).

Step 3: Be convinced that even *you* (men, women, and children, and certainly students) can have significant ideas, and that you can find the solution to a vexing problem in your field that has so far confounded "the wise and learned." (Alma 32: 23).

Step 4: Recognize that the path to knowledge begins with an attitude and effort that can best be called exercising "faith," a desire and a willingness to be active in the pursuit of knowledge. Don't expect to have the solution ("perfect knowledge") immediately, or the paper written automatically, but be willing to "experiment' as you "awake and arouse your faculties" (Alma 32: 26, 27).

Step 5: Be open-minded to the possibilities of both new knowledge and new avenues or sources of knowledge. Get past unexamined biases, personal prejudices, or "unbelief" so that you can "give place for a portion of" a new perspective or truth (Alma 32:27, 28).

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Step 6: If after some initial research, you find some success (things fall into place, initial hopes or hypotheses are confirmed by evidence), this may lead to a helpful refinement of the original idea (this idea "enlarge[s] my soul," "enlighten[s] my understanding," "begins to be delicious to me") (Alma 32:28). Those teachers and students who have articulated some new idea or solved some vexing problem in their fields know this feeling of discovery.

Step 7: Then, as the idea begins to grow ("it swelleth and sprouteth"), you follow its path and pursue its potentials. You must be open and flexible to possibilities that were not part of your original research questions (Alma 32:30).

Step 8: One of the most exhilarating results of all of your research and writing efforts now occurs: "your mind doth begin to expand," and your "soul swelleth" That is, you gain new knowledge, perspectives widen, and barriers disappear (Alma 32:34).

Step 9: Something is happening that can only be called wonderful and exciting: you are clearly discerning and are able to articulate important discoveries and new knowledge. What was once a nascent and ethereal concept or notion has now materialized into a clear and substantiated insight; i.e., it follows from the evidence, confirms hypotheses, and makes other things more visible (Alma 32:35).

Step 10: These initial discoveries can be the foundation and energy for further research that can take place over subsequent semesters. Perhaps you have found a niche in your field, a direction for your career. You are now confident in your abilities to contribute, and have the desire and commitment to keep going, exercising great care, diligence, and patience, keeping your long-term goals in mind (Alma 32: 41, 42).

I am convinced that a favorable climate for such experiences will more likely prevail when more of the advanced writing classes are taught in the students' disciplines.

Surely, the prospect of providing students with such experiences first nudged each of us down that path to becoming "a teacher," and more than anything else defines the profession of "teaching." Such "critical thinking" voyages of discovery and insight as Alma describes can be the usual experience for our advanced writing students here at BYU-Idaho. I am convinced that a favorable climate for such experiences will more likely prevail when more of the advanced writing classes are taught in the students' disciplines.

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