Getting Here
Welcoming Students to the Research University
Douglas Brent

Recruitment materials display proudly
the world-famous professors, the splendid facilities
and the ground-breaking research that goes on within them,
but thousands of students graduate without ever seeing
the world-famous professors or tasting genuine research.

The Boyer Report

I had absolutely no idea how little first year students know!

Seasoned academic commenting on his
first experience teaching a first-year seminar

Engaging Academic Culture

Large universities often style themselves as “research universities” to distinguish themselves from polytechnics,
four-year colleges, and other institutions whose mission
is not to inculcate a culture of research. But this “research
culture” that research universities are so proud of does not
always trickle down to undergraduates. We generally comfort ourselves with the generally accepted (by academics) belief that good researchers make the best teachers. However, many students and members of the public think the opposite, assuming that research is what faculty members do when they are not teaching, and that it takes up time that faculty members could otherwise be spending on their students. In my darker moments I sometimes think the second view is closer to the truth. But regardless of which of these competing but largely untested assumptions is correct, I very much doubt that the benefits of being taught by a practicing researcher are automatic.

I believe that we have a collective responsibility to take a much more active role in making the benefits of being taught at a “research university” clear to our students, particularly at the undergraduate and most particularly at the first-year level. It is not enough just to tell them that these benefits exist. We must show them that they exist by creating a space for them to become “legitimate peripheral participants” (Lave and Wenger 1991) in the activities of the research community. Those of us who teach in larger research institutions must find ways of improving students' undergraduate experiences or we will lose them to institutions that offer better class size, a homier atmosphere, and other perks available at smaller institutions. In order to hold our students' interest, we need help them experience first-hand the one thing we can offer them that other institutions can't – the academic culture of the university.

Engaging students is sometimes presented as a means of reducing attrition. In fact, I am more concerned about students who do not drop out, at least not physically, but persist for four years or so stockpiling knowledge without being particularly changed by it or developing the inquiring, critically aware minds that we like to advertise a degree as providing.
Likewise, engaging students is not the same as amusing them. Rather, it is a matter of helping them become members, however junior, of the knowledge-making enterprise to which the university — and ourselves — owe our existence. We are fond of lamenting the fact that so many students seem to expect to be fed knowledge rather than thinking for themselves. But perhaps they have this attitude simply because they have not had an opportunity to learn that they are they are capable of academic inquiry, and that it can actually be exciting to engage in it.

In my interviews with students while studying their research experiences, I often found that they looked back on their high school assignments with an air of faint surprise at how impoverished those experiences they looked when regarded from the vantage point of even a novice university student:

The majority of the papers I wrote [in high school] were Social Studies papers where you take a stance, and they give you a question and you just start writing and defend it. And so there wasn't really any hard evidence or research that you had to do, so I wasn't used to the idea of researching, going out and getting all these books and magazines and pulling it all together.

This impoverished background may not be as symptomatic of bad teaching as it is of the fact that students of high school age may simply not be ready for the complex engagement with ideas that university work demands. Certainly such would be claimed by cognitive psychologists such as William Perry, who argues that university students progress through stages of cognitive and intellectual development from a highly dualistic and authority-seeking stage to more and more complex
understandings of how to handle competing ideas (Perry 1970; 1981). Students’ progress through these stages is driven, Perry argues, by exposure to debate about increasingly complex ideas – the sort of debate that characterizes a genuine research culture.

Kenneth Burke provides a controlling image for the research process in his famous metaphor of the unending conversation:

Imagine that you enter a parlor. You come late. When you arrive, others have long preceded you, and they are engaged in a heated discussion, a discussion too heated for them to pause and tell you exactly what it is about. In fact, the discussion had already begun long before any of them got there, so that no one present is qualified to retrace for you all the steps that had gone before. You listen for a while, until you decide that you have caught the tenor of the argument; then you put in your oar. Someone answers; you answer him; another comes to your defense; another aligns himself against you, to either the embarrassment or gratification of your opponent, depending upon the quality of your ally’s assistance. However, the discussion is interminable. The hour grows late, you must depart. And you do depart, with the discussion still vigorously in progress. (Burke 1941, pp. 110-111)

Although we are all aware of how much we owe to our participation in our own particular part of this conversation, it is easy to forget how long it took us to catch “the tenor of the argument.” We must imagine our students as having just walked into the parlour. Before they have even hung up their coats, they are bewildered by the conversation into which they have walked, and have no idea where the ideas being paraded...
come from, or in what context they are uttered. They have no means of separating well-reasoned arguments from self-important puff, much less of joining in with any confidence. And it doesn't help that everyone is speaking a dialect that sounds superficially like English, but which seems less familiar the longer our students listen to it.

Burke suggests that they could catch the tenor of the conversation if they listened for a while. Doubtless they might, if they listened long enough, and if at least some of the guests had the courtesy to talk to them rather than over or around them. But how much more welcome might they feel if a few of the guests took them aside and introduced them to a few other guests who might allow them to steer the subject, if only briefly, to areas in which they had some interest and even a few scraps of prior knowledge? How much better still if someone took the trouble to explain to them some of the rules of the game, the conversational conventions that would allow them to step in without stepping on toes or looking like fools?

There is an ongoing conversation on the rules of this research conversation, and how little many students know about them, in journals dedicated to research and to academic librarianship. This literature sometimes uses the term “bibliographic instruction,” but has increasingly come to use the more inclusive term “academic literacy.” This term contextualizes the task, not just as learning how to retrieve information, but rather as learning how the entire system of academic knowledge works (see Lea and Street, 1998). For instance, Leckie (1996) reports a huge gulf between the information-seeking strategies of the expert researcher and the somewhat naive strategies of the average undergraduate student:
Do undergraduates have a good understanding of how scholarly sources are produced, and for what purpose? Do they understand why a textbook may not be considered an appropriate source for a research paper? Are they aware of where all those encyclopedia articles come from, and when one might best use them? Do they realize that the person who writes in Newsweek and one who writes in The Annals of the Association of American Geographers are two very different types of authors, writing for different audiences and purposes? Evidence is mounting that undergraduates have, at best, only a vague awareness of the answers to these questions, and have great difficulty judging the difference between types of sources, particularly early in their university education. (p. 204)

In mining this literature, I am stuck by an undercurrent of anxiety and sometimes near despair among people whose lives are dedicated to making information not just accessible but also meaningful to students. Usually isolated from the classroom itself, librarians receive our students — if they are lucky enough to get a chance to speak to them at all — sent over to them from our classrooms with a smudged set of specifications for a “research assignment” and little else. In fact, when presenting at a First Year Experience conference recently, I characterized academic librarians as “despairing and desperate people,” and received an unexpected ripple of applause from a group of librarians at the back of the room.

Overwhelmed by the nature of the ill-defined task and unused to the notion of a scholarly network, undergraduates tend to develop strategies that can be characterized as merely coping strategies rather than true knowledge-seeking strategies. Several years ago I conducted a qualitative study on first-year
seminars to discover what the process of research felt like to students, and to compare their experiences in the seminars with their experiences in other courses (Brent, 2005; Brent 2006). I found many of the darkest fears, and those of the librarians I had been reading, confirmed. For instance, when I asked a student about how she went about researching Oedipus Rex for a Greek and Roman Studies course, she reported a low-investment strategy that she had imported from previous research papers at high school. Her thesis was that Oedipus has caused his own downfall. “I had come to that conclusion before I found my sources. Then when I went through the sources I found points that supported what I had already thought was true.” In other words, she started with a thesis and then set out to find citations that proved it. Seasoned researchers are sometimes guilty of the same, but few of us would think of this as the right order of operations. However, relatively few undergraduate students have a good sense of what it means to plunge into an ocean of literature with many questions and swim about for a while before deciding on some answers.

I also discovered that students seldom follow citation trails. Only one of the nineteen students I interview reported having followed up even one citation. They began each phase of research as if from a standing start, turning to bibliographic materials to find altogether new sources without following up on the ones they had already found.

I believe that this is closely related to their attitude to their own citations. They are painfully, even brutally aware of the university's almost pathological attitude to plagiarism, and diligently cite in order to avoid being accused of it. However, none seemed even remotely aware that a reader might appreciate an accurate citation that would help him or her go to the library.
and read more in the referenced material. This may explain many students’ chaotic citation styles — if they don’t see their citations as being useful, even in theory, to a reader who might be genuinely interested in following them up, then why obsess over accuracy? But it also reflects their lack of awareness that readings connect — that scholars “talk” back and forth to one another in the Burkean parlour of the academic project.

If we want to welcome our students into academic culture, we need, first, to remember how long it took us to get where we are, and not to expect to be able to make high school students into accomplished junior scholars overnight. We can expect a slow, incremental process as more senior courses build on skills and insights laid down in more junior ones. However, there are a few things we can do to get the process under way.

The ideal environment for introducing research culture is a first-year seminar in which students explore a topic partly for the sake of learning about the topic, but much more for the sake of learning how to learn about a topic. For those of us fortunate enough to teach one, such seminars furnish a small island of calm in which one can truly concentrate on creating an atmosphere of inquiry, work with students one-on-one periodically, and concentrate on facilitating a process rather than trying to “cover” a vast body of material. Few of us are this fortunate, but my research into, and personal experience of, first year seminars and how they facilitate students’ acculturation has yielded a number of insights which, in somewhat more modest form, can inform teaching in almost any environment.
1. Welcome library staff as equal partners in the enterprise.

Why not invite a librarian into the class, when students have begun to form at least tentative ideas of their topics and have some concrete questions that they can be helped with? Better yet, why not invite the students over to the library, especially if the library is blessed with a good teaching lab space, where students can wrestle with their information searches while you and a library subject specialist circulate? And consider doing so more than once during the course, as students' topics mature and their information searches begin to fan out.

If nothing else, this will give students and opportunity to put a name and face to the librarian who might otherwise seem a strange and somehow intimidating creature. It might help students feel more comfortable approaching library staff for assistance, and even to formulate questions that are more answerable than "Where can I find something about biodiversity?" If this seems as though it is expecting too much of overstressed staff, let me assure you that I have found librarians to be hungry for direct contact with students and extremely grateful to be included in the discourse of research that we create in our classrooms.

2. Take complex research tasks a step at a time.

One of the most important features of the first year seminars at the University of Calgary is that fact that students work on a single large research project, in many stages, over a three month period. One of my interviewees commented:

The whole class was about that one paper and about research and [the professor] was always saying, "Okay well this is
how you research this, and this is how you research this.” I mean we did a library orientation day, she’d have a day where we’d talk about drawing information from media sources, like films and stuff like that. And she did a whole thing on Internet-based research and everything like that. Whereas the other teachers, it was sort of just like, “Well this paper, we’re only going to spend like a week talking about this paper.” So it was all sort of like, “This is where you can get your sources, go to the library and that’s it.”

In a content-oriented course, there is less time for this amount of detail on the research process. However, there can still be time to break the process into stages, starting perhaps with some brief summaries of individual readings, then more complex explorations of the state of the literature punctuated by assignments requiring students to follow up citations. Only at the end of the process should they be asked to formulate a defensible thesis.

As an added bonus, walking students through the research process one step at a time reduces both the incentive and the opportunity for plagiarism. The student who copies or buys a paper frequently does so because he or she is simply not invested in the process and sees it only as a product that must be obtained somehow and handed in. A student who has been led step by step into the scholarly conversation on the subject will face the final task of pulling together a paper armed with an array of resources in which he or she has already invested time and energy.
3. **Start a research task by giving students an opportunity to do some exploratory writing.**

Exploratory writing can mean a lot of things. Students can explore what they already know about a topic before they begin researching it actively. They can explore their own interests related to the topic, an important first step toward focussing the topic into something manageable. They can explore their responses to specific articles, or to other students' writing. The important thing, again, is that exploratory writing be used not just for its own sake but as a way of getting students thinking actively about a topic that they will be moving into more deeply and more formally as the course progresses.

You don't necessarily have to grade exploratory writing. You don't even have to read it – you can just check it off as being done, and/or let other students read it. The pressure to read every single word our students produce can be paralyzing, as it can prevent us from assigning topics in stages just because the prospect of reading the output is so daunting. One of the wisest remarks on assigning writing has come to me from Joyce Leff, an expert on writing across the curriculum: “If you are reading everything your students write, they clearly aren't writing enough.”

4. **If you can, make time to discuss the project personally with students early in the process.**

Typically, only a relatively small number of students make the effort to talk to their professors in person, and usually these are either the keeners (who arguably are the least in need of personal guidance) or the complainers who want to talk to us about a grade that has been already assigned. The bulk in the middle
are too busy, too shy, or simply too overconfident to come to us early in the process when our intervention can help them get it right rather than merely explain why they got it wrong. Others simply can't schedule an appointment during our posted hours, which are generally brief and therefore guaranteed to conflict with the schedules of many students.

The ideal remedy is to take a week or so of expanded office hours, require specific students to drop by at specific times, work with them to find times when they can do so, and most important, provide an item for discussion – a proposal, a draft of a brief assignment, a study question, anything that is still in process as opposed to a final assignment that has been graded, returned, and thereby closed. If you have a number of small cumulative assignments, this can be spread over the assignments, so that even if you can't see every student about every assignment, you can at least see every student at least once about something – or, if you have a large class and are blessed with teaching assistants, those assistants can.

For more ideas on how to make the research process more engaging and less alien, I can't recommend a better source than John Bean’s *Engaging Ideas: The Professor’s Guide to Integrating Writing, Critical Thinking, and Active Learning in the Classroom*. While not strictly a guide to helping students master research, the book has sections on helping students read difficult texts and assigning research assignments that foster real engagement.

All of this obviously takes time away from simple coverage of material. A common reaction to setting an inquiry-based agenda is “But I have so much to cover, so much to tell them. How can I take time away from an already crowded curriculum to cover even a fraction of what they need to know about the research process itself?” This is the reaction that I like to call “anxiety of coverage.” We know so much about our fields
of study that we can despair of imparting enough of it to our students in the few short hours we have with them.

It is important to remember that this despair arises precisely because all fields of knowledge are packed with more information than can be mastered in a lifetime, and that this information is continually expanding. Of course we need to give students a solid grip on the most central concepts of our discipline: new knowledge must be mounted on a secure platform of old knowledge. But instead of hoping to cram everything our students need to know into a set of lectures, we are doing them a better service if we give them tools to find out more of what they need to know by themselves.

Teaching a research-intensive first year course — one that is truly research intensive, in which you create many opportunities for talk about the research process and interactions with students as they are doing it, rather than simply handing them an assignment and sending them off to our despairing colleagues in the library — is a revelation that no faculty member should miss. Some parts of the experience border on the tragic-comic, such as the student whose cell phone rang during group discussion time and who not only answered it but began a long conversation, and was genuinely surprised when I said, “You’re in class. Tell them you’ll call back.”

Other experiences can make us aware of things that we might otherwise not even suspect, such as the fact that many students have no idea that they can contribute to others’ learning. In an early exercise I often divide students into groups of five, settle on a topic, and ask each student to find a source that bears on the topic and to bring back five copies, which they share and discuss. The first time I did this, many students brought only one copy. I leaned back in my chair and said, “Gee, now what are we going to do? The other members of
the group don't have any materials to work from for the rest of the class." Sheepish looks were exchanged, pockets were dug in for change, and some students left and came back a few minutes later with five copies. I take this, not as a sign that students don't always follow instructions, but as evidence that they start with such an impoverished sense of their ability to contribute meaningfully to others that and instruction to bring copies to share is so counterintuitive that they simply can't hear it.

Rather than dwell on what students don't know at the beginning, I'd rather spend more time on what they know by the end of even three months of engagement with research. One student turned in his first assignment, a brief literature review, toward the end of September. He had misunderstood the task itself and misunderstood what he was reading so hopelessly that his review bore almost no resemblance to the document he was supposed to be reviewing. I traced his confusion back to a lack of a felt sense that a literature review is supposed to give an overview of the existing state of the conversation on a subject for the benefit of a reader who had not necessarily read the original works. He treated it as merely a school exercise designed to prove only that he had read the material. Likely because he didn't know what he was supposed to be doing, his organization, his sentence structure, and even his punctuation was also horrible. I could not in conscience give it anything but an F.

Usually I assume that a student will be gone as soon as they receive an F, but this student dutifully came to my office and listened to my explanation of what he needed to do. Perhaps because this initial assignment was so low-stakes (5%), he stuck with the course. His next assignment was also an F, but it was a much more high-functioning F, and again he came to
discuss what has gone right with it as well as where he should go with it. This pattern continued, but he stuck it out, with each assignment suggesting a bit more understanding of what I was asking him to do. By the end of the course, he knew enough about how to research a subject that I was able to give him a genuinely earned B-. In the process, not only did he learn about research, but I learned, in more detail than I had ever suspected, how easy it is for a student to get things wrong when they treat assignments (naturally enough) only as ways to measure them rather than as ways for them to model scholarly behaviour. (I saw this student again several years later when he applied for the Honours program.)

From time to time, we can see student engagement run so deeply that it becomes life changing. One student’s grandparents had survived the Ukrainian Famine in the thirties. She researched the period exhaustively, first from a historical point of view and then, by interviewing family members, from a personal one. She even tried (unsuccessfully) to access the archive of the Institute of Ukrainian Studies in Toronto – evidently they did not think that an undergraduate had sufficient status to be admitted. She described the experience as meaning far more to her than the average school project:

I had a lot of personal emotion issues though because what I was dealing with was really horrendous. I really don’t deal well with atrocities. But when I got my grandmother’s accounts there were so many things I didn’t know, and when it happened to someone you know I had a lot of personal issues. I’d start working at it, and I couldn’t work on it because I was just too angry. I did not expect that at all. In the end while I had learned a lot and for me as a person it was important.
When a student can't sleep at night because of her engagement with research, the experience reminds us of why we are here. Research isn't just an abstraction. It can be a lived experience of finding out more about what is personally important. It is this experience, not just the knowledge that we have stored in our heads, that can be our greatest gift to students.
References


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Contributors' Biographies

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Dalmy Baez graduated from the University of Calgary in 2009 with a degree in Political Science and a minor in Communications Studies. There she served as President of the Students' Union in the 2008-2009 academic year. She currently works at the YMCA where she mentors immigrant high school students, supporting their transition into Canadian culture and exposing them to post-secondary opportunities.

Doug Brent teaches rhetoric and writing in the Department of Communication and Culture. His main professional interest is writing: how people, especially students, write and how they learn to write, both in the academy and in the workplace. He has published Reading as Rhetorical Invention: Knowledge, Persuasion and the Teaching of Research-Based Writing and numerous articles on writing studies and on electronic texts.

James Butler is originally from Newfoundland and Labrador, but has been on the road for over forty-years. After completing an undergraduate degree at age fifty-five, he immersed himself in graduate school where he began researching identity construction, attaining a Master of Philosophy in Humanities at Memorial University in St. John's. He is currently working towards a PhD in Culture and Society at the University of Calgary. His dissertation is an interdisciplinary exploration of the Mi'kmaq in his home province.

19 Alan Harrison, "What is Happening at the University of Calgary?, talk to the Emeritus Association, 14 October, 2009

20 For instance, the various iterations of "Report to the Community". The October 2009 version had as a continuing theme the slogan "A strong idea" with such banal offerings as "The Idea: Students do better when they are engaged in their learning". A welcome contrast to this cheerleading was the reported statement of a UK vice-chancellor that "student experience at his own institution was unsatisfactory". "I just think it is important for us to face up to the fact that higher education in the UK is under immense cost pressures, and that we have had decades of being asked to do more for less." He admitted the student experience at his own institution was unsatisfactory, although efforts were being made to improve it. "I am not satisfied with the quality of undergraduate education in the university," he said." Manchester University vice-chancellor Alan Gilbert from BBC News Saturday, 15 August 2009. http://news.bbc.co.uk/2/hi/uk_news/education/8198318.stm