Activities for the Professional Communication Class:
Teaching in Light of Activity Theory

Doug Brent, University of Calgary, dabrent@ucalgary.ca; Oct. 23, 2006

In this paper I will discuss one local solution to the question, "What sorts of activities should students be doing in a Professional and Technical Communication class?" In discussing the decisions reached at the University of Calgary, I hope to suggest wider implications for pedagogy and a wider reinterpretation of theory, particularly Activity Theory and its implications for pedagogical practice.

The University of Calgary, like most Canadian universities, is publicly funded and caters to students from a wide variety of socio-economic levels. It serves about 28,000 students in a broad range of programs from undergraduate liberal arts and sciences to professional programs, including medical and doctoral programs. It conspicuously brands itself as a "research university" in order to set itself apart from the two-year colleges and technical institutes which whom it shares recruiting territory.

The course I wish to discuss is called Communications Studies 363: Professional and Technical Communication. It is not a part of a full-blown professional and technical writing program, Rather, like many such courses in North American institutions (Reave, 2004), it is a relatively isolated "service" course. In this course, over 1200 students per year from a variety of disciplines, including Engineering, Business, Geography, Computer Science, and Chemistry, are "taught to write" in ways that are, or are imagined to be, appropriate to the workplaces in which they will practice their professions. This type of class presents special problems because students typically do not see themselves as "writers," professional or otherwise. Therefore they do not necessarily identify professionally with the central activity of the course. Rather, they see it, with some justification, as a sort of bolt-on activity that may help them be successful in some other field such as Engineering or Business. In such a course it becomes a particular challenge to provide classroom activities that are and are perceived to be relevant to a wide range of professional contexts.

The course could, in principle, be divided into smaller discipline-specific sections. However, the mandate of the faculty in which it is housed, Communication and Culture, is specifically to offer interdisciplinary programs. Moreover, administrators in other faculties report that they value the opportunity to have their students work outside their disciplinary box and mingle with students from other disciplines. Finally, the heterogeneous audience provides a pedagogical opportunity. Recognising that in the workplace as well as in the academy work gets done by

teams from a wide variety of disciplinary perspectives, instructors typically stage-manage collaborative groups so that they represent as wide a range of disciplinary perspectives as possible, In fact, one of the leitmotifs of the course is the Challenger disaster, a disaster that can be directly traced to the inability of managers and engineers to share the same communicative universe (Dombrowski, 1992). However, as I will discuss later in more detail, this diversity also magnifies the challenge of assigning authentic activities.

A major reconstruction of the course beginning in 2003 offered the opportunity to rethink the curriculum of the course and move it from the parade-of-genres mode in which it had previously been cast, toward a more rhetorically-grounded and inquiry-based course that gave both primary and secondary research activities a place at the centre rather than at the margins of the curriculum. The redevelopment was initiated by Calgary and Calgary in 2003, and further fine-tuned over several succeeding iterations of the course by Calgary, Calgary, and myself. In the following discussion, the pronoun "we" refers to this shifting team of course developers as we successively developed and refined the details of the course and rearticulated the epistemological assumptions on which these activities were based. As we attempted to refurbish the assignments that we expected students to complete – that is, the fundamental activities of the course – we found ourselves forced to rearticulate our understanding of the activity system in which the course is embedded, and thus to confront some of the implications of Activity Theory itself.

PROFESSIONAL WRITING CONTEXTS

When we ask the question, "What should students be doing in a Professional and Technical Communication class," it seems intuitive to answer by referring to what "really" happens in the workplace. For instance, Green and Nolan (1984) begin with the seemingly common-sense statement, "A successful technical communication program should prepare students to perform competently upon entering the profession" (p.10). Reave (2004) begins her survey of technical communication programs with a literature review that outlines "the gap between workplace demands and graduate skills" (p. 453). She notes an earlier survey (Salazar, Suleski, & Coleman, 2002) which found that only 30% of employers were satisfied with their employees' initial preparation in writing skills. Pinelli, Barclay, Keene, Kennedy and Hecht (1994) report a similar survey of professionals and students and conclude that there is "a disconnect between the academic preparation of engineers and the world of work that they enter on graduation" (p. 501). In short, this "Closing the Gap" literature assumes, often as something virtually self-evident, that post-secondary education should prepare students with skills that translate easily and quickly into the workplace. The result is the familiar, highly generalized list of professional genres that underlies many traditional courses in Professional and Technical Communication.

This assumption, so sensible as to seem self-evident, has recently come under heavy fire from researchers who take a more complex notion of what an "activity" is. Drawing on activity theory, situated cognition and genre theory, researchers such as Russell (1997), Winsor (1999), and Dannels (2003) provide rich ethnographically based examinations of specific classroom and professional contexts. This work focuses not on typical formats (the memo, the letter, the report) nor on rhetorical strategies as such (identifying the audience, discovering material), but on systems of activity that transcend these specific actions. The actions are given meaning by the situated activity systems in which they are embedded and the purposes that drive those systems.

These authors, like those who write the "Closing the Gap" literature, note a difference between academic and workplace writing. However, they do not leap from identifying a difference to assuming that this difference is a gap that must be (or can be) bridged. For most of the authors in the activity theory literature, the actions of professionals cannot easily be stripped of context and imported into the classroom – perhaps not at all.

WORLDS APART AS A PARADIGM CASE

Rather than rehearse the countless variants on this argument, I will illustrate this line of reasoning by concentrating on one source that, in my view, takes activity theory and its close cousins such as situated learning to their logical extreme in arguing for the difference between the academy and the workplace. This source is Dias, Freedman, Medway and Paré's rich, broad-ranging and in many ways deeply disturbing book, *Worlds Apart: Acting and Writing in Academic and Workplace Contexts* (1999). Dias, Freedman, Medway and Paré argue that writing and learning to write is an intensely situated, context-dependent activity. Like any constellation of knowledge that has passed beyond the purely theoretical, it can be said to truly exist only within communities of practice. It is learned not by observing models or by internalising explicit precepts – although these can be important learning activities in the proper context. Rather, it is learned by absorbing through apprenticeship the forms, activities, purposes, and most important, embedded assumptions that comprise rhetorical genres in the complex sense first articulated by Carolyn Miller (1984).

Activity theory informs this work by making important distinctions between activities, actions and operations. Activities such as "writing a report" are oriented toward some large-order, long-term goal, such as improving profits for a large corporation. The activity can also be analysed as the goal of a number of short-range actions such as circulating a draft, consulting with colleagues, and reading other reports. In turn these actions are realized by a vast number of small-order operations such as keyboarding, dialling a telephone, operating a photocopier, and so on. At the other end of the continuum, activities are organized into far-reaching activity

systems – for instance, the activity system of a large corporation which brings together a wide range of activities under a master motivation of making profits for shareholders.

An important result is that the "gap" between academic and workplace writing begins to look very different. Indeed, it can be shown that at least some of the actions performed are very similar. Academic and workplace writers, for instance, must both match their vocabulary with the audience and review and interpret others' rough drafts. But just as the action of "taking a bus" can take on a completely different meaning as part of the activity "picking up the kids at daycare" rather than "going downtown to see a movie," so the actions of writing, though made up of similar operations, can be said to be utterly different when performed as part of the activity system of producing a report in the writing class as opposed to producing a report in XYZ inc.

A natural corollary is that school genres are so different from workplace genres that the two are simply incommensurate. Dias, Freedman, Medway and Paré find that

> In Activity Theory terms, writing at work and writing in school constitute two very different *activities*, one primarily epistemic and oriented toward accomplishing the work of schooling, and the other primarily an instrumental and often economic activity, and oriented accordingly toward accomplishing the work of an organization. In that light, one activity, writing in school, is not necessarily preparation for successfully undertaking the other activity, writing at work. In such light also, we can argue that both activities can function effectively in their respective systems without necessarily bridging their two worlds. (p. 223)

The authors also use activity theory to argue strongly against "the myth of transcendence" (p, 223), that is, the belief that there are communication skills sufficiently context-independent to be at least somewhat portable across activity systems, ie. from school to work. In activity system terms, not even the familiar simulation exercise or case study can truly replicate workplace writing because the complex web of context and purpose must simply be imagined, and must be superimposed on a real purpose that keeps showing through. Drawing heavily on an earlier study by Freedman, Adam and Smart (1994), the *Worlds Apart* authors cite examples of classroom simulations that reveal this flaw:

> The real goal of the writing was neither action nor policy, but rather the demonstration that the students knew the appropriate arguments to make . . . . Both students and instructors knew that this demonstration of learning was the goal of the writing. (p. 189)

For educators developing a Professional and Technical Communication course, then, activity theory as presented by Dias, Freedman, Medway and Paré seems to suggest a highly disturbing double-bind. It argues convincingly against walking students through a parade of professional genres. However, it does not appear to offer much help in deciding what to replace them with.

Activity theory, then, raises a challenge that absolutely needs answering. Is there any way we can teach professional and technical communication within the activity system of the academy, or should we concentrate on providing content knowledge and wait for students to enter the workplace, either as internship students or full-fledged inhabitants of the workplace world, before we can hope that they will learn the appropriate patterns of doing and knowing? Simply put: is there any point in teaching Professional and Technical Communication in the academy at all?

TRANSFORMATION, NOT TRANSFER: LIGHT IN THE TUNNEL?

For us as course developers, our answer to this challenge was not to abandon activity theory but to attend to activity-based studies that articulate ways in which classroom-based activities may be useful in ways other than preparing students directly for "the world." Smart and Brown (2002) make some tantalizing suggestions about how this might be accomplished. Observing fourteen internship students in the final stages of a professional writing program, they note many key differences between writing in the workplace and writing in school. The most striking of these differences is workplace writers' greater reliance on other texts, including department guides, user documentation, files and other "mediating artefacts" rather than explicit guidance from either co-workers or superiors. After an initial period of disorientation, the interns took their new environment in stride and, despite a deep immersion in a community of practice, developed means of finding their way that were surprisingly independent. Smart and Brown do not take these differences to indicate a radical rupture between the workplace and the academy. They reject simplistic models of learning transfer "where school-acquired knowledge and skills are commodity-like entities acquired by an individual, carried into a new environment, and then applied independently by the individual" (p. 117). However, they also embrace a model in which the skills learned in the academy and those applied in the workplace are related:

> Our findings suggest that what occurred might best be characterized, not as the *transfer of learning*, but rather as a *transformation of learning* that made possible the *reinvention of expert practices*. The interns, having previously developed the expert writing practices needed to perform well in academic activity systems . . . , were able to resituate and extend – or reinvent – these practices in their new worksites in simultaneous acts of performance and learning. (p. 122)

Smart and Brown do not presuppose that these students do, or even should, already know how to perform in the workplace. However, they credit the instruction that the students have received with inculcating some large-order skills such as the ability to "read" rhetorical environments and the ability to do research as "an essential part of invention" (p. 131). They also report that, subsequent to their field observations, they refined their own teaching practices to foreground these skills even more, and to help students learn how to use mediating artefacts more readily to make sense of new rhetorical environments.

A DISCIPLINE-BASED MODEL

Smart and Brown do not vigorously pursue the pedagogical implications of their insight that learning may be transformed even if not transferred. Atemeva, Logie and St-Martin (1999) show us more details of how this might be done in a course closely tied to a specific discipline. They agree with Smart and Brown that it is futile to try to import workplace genres wholesale into the academic world. At the same time, they take up the argument (with Dias, Freedman, Medway and Paré) that the academic world forms a different but equally valid network of discourse communities. Their solution to the need for authenticity in learning is to make maximum use of the discourse community in which their students are *currently* immersed. They describe a communication course that is tightly coupled with the engineering courses that students are taking in their discipline. Their assignments – a formal business letter, proposal, progress report, and completion report – superficially resemble the parade-of-genres curriculum that has rightly fallen from favour. There is a key difference, however. The tight coupling of the course with disciplinary activities situates these genres in the real discourse community that students will inhabit for at least four years: "the discourse community of first- and second-year engineering students at Carleton University" (p. 310). The assignments take their materials from projects that students are undertaking concurrently in Engineering courses. Intensive teamwork is introduced to replicate the communal knowledge-building that marks much workplace writing.

Atemeva, Logie and St-Martin assert that these assignments, growing out of the activity system of the academy rather than that of the workplace, will eventually translate to the workplace even if they do not transfer wholesale:

> By introducing these assignments, we are attempting to equip students with skills and strategies that can be applied to their other engineering courses and that will facilitate their transition to the workplace. (p. 313)

This assertion might be taken to be a bit faith-based when seen from a strict activity theory viewpoint. However, I argue that work such as that of Artemeva, Logie and St-Martin suggests

that if we treat the academic world as a valid epistemic universe in its own right, we can equip students with general habits of mind that may serve them in the professional as well as in the academic world.

This perspective frees us as educators from having to decide between simulating workplace genres and choosing activities that have meaning only in the academy – to put it bluntly, between being fake and being irrelevant. Rather than simulating workplace genres more or less exactly, we can design activities that are authentic now (in the academic activity system) which we hope or students can transform into useful skills later (in the workplace activity system). In doing so, we need not reject the findings of activity theory. Rather, we embrace them but reconceptualize their implications for pedagogical practice by basing our teaching around the academic activity system rather than attempting to simulate the activity systems of various workplaces.

For our purposes in developing a multidisciplinary course, however, we still had a problem. In order to develop activities that students perceive as being meaningful, do we have to follow Artemeva, Logie and St-Martin in tying instruction closely to a single discipline? Or is there an activity system that transcends disciplinary boundaries, even if only loosely, that could be referred to as the activity system of the academy. In order to develop an effective multidisciplinary service course, this question is clearly crucial.

A MULTIDISCIPLINARY MODEL

For the purposes of grounding Communications Studies 363 in a coherent vision of this activity system, we chose not to be daunted by a vision of the academic world as a network of worlds characterized by largely incommensurate disciplinary discourses. Rather, we referred to literature that considers the epistemological mission of the university from a higher-order perspective in which these highly varied discourse practices are held together by a common vision of "the research university." In this view, the varied activities of disciplines are part of a larger activity system dedicated to the making of knowledge. Taking this approach makes sense only in an institution that characterizes itself as a research university, and may be less relevant to professional and technical writing situated in liberal-arts colleges, two-year colleges, technical institutes, and other types of post-secondary institutions. However, it is appropriate to the context I am discussing here.

This view of the university is perhaps most persuasively argued by the Boyer Report (1998), which claims that research should be the paradigm activity for graduate and undergraduate students alike:

> Undergraduates need to become an active part of the audience for research. In a setting in which inquiry is prized, every course in an undergraduate curriculum should provide an opportunity for a student to succeed through discovery-based methods. . . . Even though advanced research occurs at advanced levels, undergraduates beginning in the freshman year can learn through research. (p. 17)

While the jury is still out on whether these practices can be generalized across research communities, the lofty ideals of the Boyer Report provide a philosophical point of reference for an interdisciplinary course that must address the needs of students from across the campus.

Consequently, we decided that it would be foolish even to attempt to simulate closely the precise research practices of a half-dozen disciplines and professional orientations. However, research practices, like all activities, must be situated in some community of practice in order to be meaningful. As practitioners in the field of Rhetoric and Communication, we chose to position students as legitimate peripheral participants (Lave and Wenger, 1991) in the professional discourse of Rhetoric itself. The two research activities that we selected as fundamental to this discourse community were ethnographically based rhetorical research and rhetorical analysis. The course took shape around two major assignments that foregrounded these activities, though these two assignments were in fact drawn out into a variety of cumulative activities including proposals, oral presentations of results and an array of other activities including reading responses, freewrites, peer responses and other supplementary activities. (The assignments and other course details may be viewed at http://www.ucalgary.ca/coms363. This site is no longer active; it has been preserved as an archive to provide a snapshot of the course as described in this paper.)

The first assignment was deceptively simple looking: in pairs, interview a professional in any field who uses communication as part of his or her daily life and write up the results. This activity, of course, conceals a vast array of tasks, some quite new to the students in the course. They had to develop useful questions and link them explicitly to some of the concepts that had been explored in some of the readings covered to date in the course (that is, learn how to use secondary research to guide primary research). Then they had to conduct the interview, transcribe the data, organize the data thematically so that some coherent general themes emerged from the fine-grained details, develop a thesis based on those themes, and argue the conclusion convincingly based on the data. By the time they wound up the project by making brief oral presentations of their results, the students had spent a considerable length of time as legitimate peripheral participants in a light-duty version of ethnographically based rhetorical research.

The second assignment was designed to build on the first. On its face it was a fairly familiar assignment: find a publicly available document of some kind – an instruction sheet, a brochure, an annual report – and produce a fully featured technical report explaining what could be done to improve the document. Again, the details of the assignment were constructed to embed a variety of other activities important to research culture. Students had to call on their interview skills again in order to track down representatives of the organization that had produced the document and discover what purpose it served in the textual life of the organization. Thus students had to wrestle yet again with the complex concept of organizational culture and the role of various texts that produced it and were produced by it.

They also had to do a formal rhetorical analysis of the document itself to discover, not what was wrong with it, but how it functioned rhetorically: how it evoked its audience, how it presented the ethos of the organization that produced it, what persuasive appeals it used, and why the information was presented a certain way and not others. Students did secondary research in the journals to find out how to describe various aspects of document construction and what the literature recommended as effective ways of presenting information in various contexts. In short, they had to learn, in the context of this one complex assignment, many of the details of document design that we had hitherto tried to teach them in a more explicit but often less satisfactory way. In the process they also had to begin finding their way through the complex discourse community represented by journal articles in the field of professional communication.

COURSE EVALUATION

As noted above, one of the assumptions built into the development of the course was that, in Smart and Brown's apt turn of phrase, students will eventually be able to transform (not transfer) the knowledge developed in Communications Studies 363 when they arrive in one workplace or another. To evaluate the course's success in meeting this goal, however, we would need to follow our students in a multi-year longitudinal study. We have not yet had the opportunity to undertake such an ambitious project. However, there are two more modest goals that we have been able to begin evaluating. Because the course is founded on the assumption that there is an overarching "activity system of the academy" we were interested in students' perceptions of the degree to which the activities of the course connect to larger activity systems in which the students are involved. Second, because we used interdisciplinary groupings as an important way to bring students in contact with a larger perspective and get them out of their disciplinary silos, we were interested in whether they thought that these groupings were useful. Both these questions are parts of a more over-arching question: is is possible to design authentic assignments without attaching them to students particular disciplines?

A brief qualitative research project was designed around these questions. Once the course was completed, we e-mailed the entire class to solicit volunteers willing to be interviewed for a half-hour on these questions. Nine students followed through with interviews. (For a complete interview protocol see Appendix.)

The sample was not stratified in any way, although by chance the students represented a range of disciplines, including Engineering, Business, Geography and Communications Studies. We are well aware that a small self-selected sample will likely have built-in biases. In particular, students who were sufficiently engaged to be willing to come back for an interview in the spring after their studies for the year were complete would very likely be those who were predisposed favourably toward the experience. Moreover, we were able to collect only students' perceptions; there was no opportunity for the detailed observations of *in situ* behaviour such as those that mark some of the best ethnographically-based activity theory studies. Nonetheless, we believe that these detailed and often somewhat personal narratives give us some useful, though highly preliminary, information on what students thought of our experiment in connecting instruction to a research-intensive activity system.

Question 1: Did students perceive the research activities represented by the assignments to be in any way representative of activity systems in their home disciplines?

Of the nine students, seven agreed that they could recognize significant connections between the activities of Communications Studies 363 and those that they might be expected to perform in their home disciplines.

Tazim was a student just entering the third year of a joint degree in Business and Political Science, and was taking a suite of courses from the areas of Accounting, Management Studies, Politics and the Middle East, and International Business. He had written a number of research papers in other courses, primarily in his Political Science courses, each of which involved a term paper of about ten pages. He didn't really perceive Communications Studies 363 as primarily a "research course":

> I found this to be more of a technical writing course than a research course, personally. I've done a lot of research projects already in terms of political science. In each Poli Sci course you have a paper to write, about ten pages long, some twenty pages long, so if you're taking Political Science you already know a fair bit about research, how to quote. But I found this to be very helpful in terms of technical writing.

Upon probing, it seemed that what Tazim meant by "technical writing" was an understanding of the mechanics of sentence structure. Because he already felt fairly comfortable with "research"

in the Political Science context, he did not seem to have paid much attention to the research aspects of Communications Studies 363. But a later remark is telling. Pressed some more on the subject of transferable skills, he said this:

> I had four papers to write that same semester and I could honestly say I had a lot easier time writing them because of this course. I guess the very simple formula I learned is you say something, you give a quote, and you present some research behind it to back it up. Very simple formula. I always knew it existed, but I didn't exactly master how to do that until this course came along, and I had [the TA's] help.

This "very simple formula" is arguably one of the most difficult aspects of the research culture for students to learn. It is a "formula" that mature writers of scholarly prose know tacitly but seldom verbalize explicitly, and one that separates students whose papers read like the work of mature researchers from those whose papers don't (Brent, 1992, 2005). It's interesting that Tazim didn't explicitly think of this as a "research" skill. It's not clear why he thought learned it from Communications Studies 363 rather than from writing the many Political Science papers that presumably call for it. One possible reason is the fact that the process of doing and writing research is explicitly thematized in Communications Studies 363 in ways that it seldom is in other discipline-specific courses. Regardless, his perception that skills learned in Communications Studies 363 "work" in Political Science suggests that at for him, interdisciplinary transfer was possible.

Alisha shared a version of the same experience. She was a fourth year Communications Studies major who took Communications Studies 363 as an option course. She reported having a very dysfunctional project group in Communications Studies 363. Despite this handicap, she also reported having come to a greater realization that part of the research process is taking part in a larger conversation based on other texts. In fact, she would have liked even more emphasis on the process of creating a literature review. For her, this would have helped reinforce

> the axiom that we stand on the shoulders of other people, that we're not doing anything new really, we're building on other people's work. And the importance of kind of framing your own research and other peoples' research, and then using that as a springboard for yours, either by distancing yourself from it by saying that you don't agree with one particular point.

Here we see evidence that the explicit thematizing of the research process in Communications Studies 363 has helped a student to understand the social view of knowledge that underpins the entire academic enterprise of the university.

Interestingly, Alisha saw a direct connection between Communications Studies 363 and core research-oriented courses aimed at Communications Studies majors. She had already taken the research methods course and the senior seminar which features a major research project. Her only regret was that she hadn't taken Communications Studies 363 earlier so that it would have had closer proximity to these other two courses:

> You know, I wish I had taken that 451 [methodology] class and then this class kind of right after, and I think it would've been a direct extension. But the way that I feel about having done this class is sort of looking back. Like the senior seminar for me was really the pivotal point in university where, you know, where this class really repeated. But, of course, you're not supposed to do it in that order. And I sort of wish that this class had been a bridge between those two and it would have been a fantastic bridge between the two of them.

Even though she encountered a minor curricular tangle, Alisha's remarks suggest that for her, Communications Studies 363 was successful in locating professional and technical communication within rather than outside the discourse community that characterised her major.

Not surprisingly, students were more likely to report that they felt part of a "research culture" the further along in their studies they were. James, a student who had just completed his second year in Geography, felt that he had learned some analytical thinking skills that were interesting on their own, but had a lot of difficulty seeing applications in Geography. In fact, when asked about the research culture of Geography, he had trouble understanding the question. His answers suggested that he interpreted the term to mean an affiliation to the department and the people in it rather than a particular way of thinking. Daniel, on the other hand, had just finished his last course in his undergraduate degree and was preparing to enter graduate school in the same field the following year. He described himself as being already very "research oriented," and his only complaint about the course – echoing Alisha's Calgary was that he had waited too long to take it. Discussing the major research assignment, he said that

> that type of thing is very useful. And if I I had taken that course before I had taken a number of my other senior level courses, it might've helped a little bit more.

Aside from their obvious implications for our own efforts to sequence students' curricula, remarks like these suggest that students do indeed see correspondences between the activities of Communications Studies 363 and those of their own discipline, even if some of the details are very different. Daniel, for instance, specialized in Global Information Systems and spent much of his time collecting and analyzing satellite data. Conducting personal interviews was not

really part of his framework. Yet he seems to have found the metarhetorical aspects of the course quite enlightening:

> I like the idea of researching how people write and seeing –- and like honestly, I never really thought about it too much before, and so when you actually look at how engineers write, for instance, it was neat to just kind of take a step back and look at it from Calgary you know, quite often we just write a paper, read it over, hand it in, and you don't really take a step back and see how where you were influences how you write. And after taking this course, looking at what I've written, I can see how my experience in my faculty dictates how I write. So I took that as a new view on how I write. I definitely took that from the course.

Not all students felt that they had taken much away from the course. Nick, a Business student, found the emphasis on careful and complete explanation too far from the concise, "nitty-gritty" style he was used to in Business:

> The comments that were made on our report would have drawn it out even longer than it was, and it would've have just – it wouldn't have been concise. And so I guess that's where the discrepancy that I have is – what was asked or the comments that were made was like, draw it out, explain more, whereas in Business it's, I don't have time to read a five-page document, just tell me quickly what you need me to know.

In fact, Nick didn't feel that he had done much research at all in any of his Business courses. It is important to note, however, that he had spent his first two years at a two-year community college before transferring to the University of Calgary, and had not yet officially transferred into the Business school. It is perhaps not surprising that he had a fairly instrumental rather than epistemic view of business writing, in contrast to some of the other students who had been in a research-intensive institution longer.

To sum up the answer to the first question then: most students articulated varying degrees of correspondence between the activities they had undertaken in Communications Studies 363 and those they had undertaken in their disciplines. Even when they saw considerable overlap, they generally saw this overlap as reinforcing rather than redundant. This suggests that casting the course as a research-driven activity system rather than as an instrumental introduction to workplace genres was a step in the right direction.

Question 2: Did the students find the multidisciplinary groupings a hindrance or a help in promoting their own learning?

Eight of the nine students reacted favourably – sometimes passionately so – to the multidisciplinary groups. The students' stories of interaction with their groups were peppered with the usual tales of disagreements, misunderstandings, difficulties in getting together outside of class, and occasionally of members not pulling their weight. Yet when asked whether, in retrospect, they would have preferred to trade the multi-disciplinary groups for the greater focus on discipline-specific activities that could have been provided in a course with a narrower audience, most said "no." Only one – Nick again – said that he didn't get much out of the multidisciplinary nature of the group. He appreciated the different skills that the group members brought to bear on the project, but saw these more as personal skills rather than disciplinary approaches to knowledge.

> Interviewer: Did you learn certain things that you would not have learned in a group of four management students?
>
> Respondant: In this case I can't think so. Other than the fact that one of the group participants was a sociology major so she had done lots of research and written lots of papers, and so she was the one who volunteered to say, I will do the secondary research.

It is significant that of the nine students interviewed, Nick appeared to have the least engagement both with the course and his own discipline. This, rather than the structure of the course itself, may explain why he saw little advantage in working with a multi-disciplinary group.

All of the other students insisted, with varying degrees of intensity, that the experience of working with students from other disciplines was a worthwhile trade-off against a more discipline-specific focus. Aaron, a Communications Studies major whose ambition was to be a technical writer by profession, happened to be in one of the most diverse groups, including students from Communications, Business, Science and Geography. He initially said that he would have preferred a majors-only course, but then retracted it after clarifying the question:

> Respondant: Do you mean like only Communications Studies students take it?
>
> Interviewer: Yes, if only Communications Studies students were allowed to take that class, do you think it would have been more useful to you than to have been mixed in with all the Business students and the Engineering students and so forth?

Respondant: I take it back, no. Because in the workforce you're not going to be just dealing with Communications Studies students or people who are in communications, especially because the communications field is just probably the small part of a bigger industry. So I think you have to know how to work with people who think differently. And that's an awesome thing because you can pick up different skills from them and make yourself even better. So I think that was really important.

Jennifer, a Business student who had been grouped with another Business student and two Engineers, agreed even more strongly:

The most golden experience that I got from this course is having to work with different fields because if we made our own groups we probably would have stuck to other Business people because you think along the same trains of thought and things like that. But it was much more of an advantage to work with people that are in almost the opposite field.

In short, then, despite the argument from activity theory and situated learning that each discipline has its own way of thinking and writing, the students in this sample perceived enough in common to allow significant connections across disciplinary activity systems. This in turn suggests that the focus of the course on the academic research environment, the larger activity system that students shared, made a productive learning environment.

CONCLUSIONS AND IMPLICATIONS FOR FURTHER RESEARCH

The experience of Communications Studies 363 suggests that it is possible to find a way forward out of the apparent dilemma that activity theory articulates. Activity theory provides a compelling argument that there is little point in designing a course around an activity system in which the student is not yet immersed. Since career-oriented professional communication courses are often designed in precisely that way, those who teach such courses can be forgiven for finding this body of research depressing. On the other hand, the positive contribution of activity theory is to direct pedagogy toward students' present activity systems. In contrast to literature that demands that we "close the gap" between the world of university and the world of work, it suggests that curriculum should be designed around the activity systems of the research university in order to take advantage of the context in which students are currently immersed.

This study also suggests an alternative to highly discipline-specific research activities. While studies like that of Atemeva, Logie and St-Martin articulate significant advantages to coupling

professional communication courses tightly to specific professional disciplines, students perceive compensating advantages in learning to function in multi-disciplinary groups. They see the advantages predominantly in terms of preparation for a career in which they may have to work with people outside their immediate community of practice. Aside from direct career preparation – a motive that we abandoned in the development of Communications Studies 363 – it is also possible to see the activity of communicating across disciplines as part of the larger but less focussed activity of learning larger-order skills such as how to "read" a new audience in a rhetorically complex manner. If the key to a successful transition from the academy to the workplace is a broadly conceived set of adaptive skills – an understanding of how to "transform learning" (Smart & Brown, 2002) rather have simply transferring it – then multi-disciplinary groupings may provide an important context for developing this adaptive intelligence.

This study raises many more questions than it answers, of course. It represents a small sample of students from a single experimental course. The question of how the activity system or systems of the university vary across disciplines demands much broader ethnographic study. More specifically, we know very little about how students can best be prepared for the transition to the workplace if we reject the notion of providing them with specifically transferable skill sets. Internship studies provide a particularly promising avenue of investigation if they can be focussed on what abilities the interns' academic preparation *does* provide them, as well as revealing the startling and disturbing extent to which they must re-learn how to function in their new discourse community.

The widest ranging conclusion of this paper is that activity theory does not have to be taken to imply that teaching Professional and Technical Communication in a school setting is futile. If we as teachers can relax our grip on the notion that we must teach skills that are immediately portable to the workplace, we can begin to refocus our attention from our students' futures to their present. Professional and Technical Communication can be part of the research-based epistemic system in which our students are involved today. Rather than looking forward, we must look sideways at what our students do when they leave our classes and enter those of our colleagues in a variety of disciplines. By thus shifting our attention, we can support our students in the experience of being students. If some of the habits of mind that we teach then today can be usefully reconceived in the workplace tomorrow, that must be seen as a bonus.

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Appendix

Attitudes to Research in a Professional Writing Course: Interview Protocol for Students

1. What faculty and year are you in? What courses are you taking?

2. I want to compare your ideas about research with those of some of the faculty members in your home discipline. Can you give me the names of some of the other people you are taking courses from? I will be very careful not to identify you to them or reveal any of the specific information that you will be sharing with me in this interview.

3. Why did you take Communications Studies 363?

4. Communications Studies 363 required you to do two research assignments: an interview report and a document redesign proposal. What specific skills, if any, do you think you learned from these projects? (If the student gives a very general answer, prompt for what the student learned from the primary research, the secondary research, the group experience, the writing, etc.)

5. How much do you find that these skills are like those required in your other courses? (Probe for specifics)

6. Do you think that other courses you are likely to take will help you develop these kinds of skills further/ Why or why not?

7. Can you picture using the skills you learned in these projects in a workplace? How, exactly?

8. Did you find that you learned anything in particular from working in a multidisciplinary group?

9. Is there anything else you can tell me about your experience of doing research at the University of Calgary?