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PROBLEM-BASED COMPOSITION:

THE PRACTICAL SIDE

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For several years now, a number of us instructors at the University of Cincinnati have experimented with the concept of problem-based learning (PBL) in our composition courses. The concept, rooted as it is in Socratic method and the hands-on problem-solving advocated by John Dewey, is not new, and though some of its applications may call for adjustments in how instructors conduct classrooms and make assignments, the versatility of the approach can make it effective in even the most traditional of settings.

In this informal article, four of us hope to provide a practical overview of how PBL approaches can work to involve students in "everyday" composition classrooms.

The Concept—Ron Hundemer

Most sources trace the origin of PBL to the medical program at McMaster University in Canada in the mid-1960s. In response to student complaints about traditional lectures that required an overwhelming amount of memorization, administrators sought to make the program more problem- (and student-) centered (Camp). According to Ellen Lynch's University of Cincinnati web site, problem-based learning results when "students work cooperatively in groups to solve 'real world' problems."

There are various definitions of PBL. Generally, according to Bransford and Stein, it is a comprehensive instructional approach to engage students in sustained, cooperative investigation. Finkle and Torp expand this definition by explaining that PBL is an "instructional system that simultaneously develops both problem solving strategies and disciplinary knowledge bases and skills by placing students in the active role of problem solvers confronted with an ill-structured problem that mirrors real-world problems" (1). Practically speaking, that is, PBL

places students at the center of the course/assignment, so that instead of the instructor setting the specifics of a problem to be solved the student must do so; instead of suggesting solutions, the instructor challenges the students to find them.

Tweaking a traditional classroom to make it more in line with the PBL approach then, might simply call for a change in how we couch our assignments. A traditional teacher-centered assignment might begin with a lecture, call for memorization and understanding of principles, then ask a structured question (or pose a problem) for which a particular response is expected, that response to be evaluated according to specific, predictable outcomes measured against predetermined criteria. A student-centered assignment, however, might pose a real-life situation, ask students to characterize the context and details to determine a problem to be solved and to find ways to solve it, and finally require reflection on the process. This approach would not preclude some lecture or discussion and certainly can require (in composition especially) that mechanics and good writing principles be met.

At its core, PBL features a "driving question" centered on a "real world problem": Why does young Goodman Brown live an unhappy life when he returns from the forest and why should we care? What's the best way to convince our university president to institute a particular program? And so on—questions are raised, ideally, by the student and answered, preferably, by some collaboration and certainly by personal engagement.

To be sure, PBL is not without its own problems. Students adept in traditional solitary ways of studying and learning may feel uncomfortable when asked to collaborate; memorizers may feel threatened by open-ended assignments and lack of externally imposed structure. Students may complain about not knowing "what we want"—at least until they realize that in large part they help to decide just that.

Studies generally show that both students and teachers may need as much as a year to become accustomed to the approach in its purest form. For instructors, the approach is time and energy intensive. The results aren't always easily evaluated as are some traditionally focused results. Most of us teach on quarter or semester systems that don't allow for a McMaster model. The versatility of the approach, though, makes it adjustable to our needs.

Inexperienced PBL instructors might be tempted to provide too much guidance, even with a modified approach, tending to oversimplify the problem or to supply too much information. PBL requires we shift the type of control we exercise in the classroom. We need to become coaches (sometimes referees!) and resource people without becoming template-makers. Despite such problems, many of us have found that PBL makes our composition classes more student-centered and more connected to real writing situations, emphasizing as it does critical thinking, problem solving, and process as much as product.

Practically, then, what adjustments can we instructors make to our traditional approaches to benefit from PBL? Let us suggest a few we have tried.

The Argumentative Problem—Lisa Beckelhimer

Argument is perhaps the mode of English composition most suited for problem-based learning. Consider various modes of argumentative essay assignments: a position asks students to examine a problem from their own perspectives; a proposal asks students to solve a problem; a rhetorical analysis asks students to evaluate and identify problems in another writer's work.

Arguments, by nature, are problems. Consider John Barell's comments in *Developing More Curious Minds:* some teachers, he claims, "seem more interested in helping students perform a procedure or practice a set of discrete skills. Thus, a problem-based approach may be one of the best ways to come to a deeper understanding of the subject's fundamental concepts and problem-solving processes"(136). PBL allows us to teach the "fundamental concepts" of argument such as thesis, audience, tone, evidence, and counterargument. But it also allows

students to see the value of writing in the "real world."

A successful problem-based argument depends on a strong problem. According to Barell, "Problem-based learning seeks to engage students in thinking through ill-structured realistic problematic situations found within the curriculum. A 'problem' is anything that involves doubt, uncertainty, or difficulty" (133).

I was inspired to examine a particular problem in one of my classes in which students write and research about health-related issues when my own son, then in fifth grade, graduated from the DARE (drug abuse resistance education) program. I began reading up on DARE and found that many critics feel it is ineffective because drug education is not carried through middle and high school years when students are most likely to experiment with drugs. The next day, I showed my college freshmen several ads from the government's anti-drug campaign; the most famous is the "brain on drugs" ad that uses a scrambled egg as an analogy for the brain. Half the class remembered the ads from their formative years and credited them in part for helping keep them off drugs. The other half laughed. Bingo — we have a problem.

My essay prompt read as follows:

You watch TV a few times a week and, like everyone else, have noticed an onslaught of advertising campaigns and public service announcements urging teens to stay away from drugs. The ads started a few years ago with the now-famous egg commercials showing 'your brain on drugs' and have continued with ads showing 10-year-olds how to say no to drugs and campaigns against specific drugs such as marijuana and cocaine. Now a local newspaper is gathering a 'forum' of high school and college students to examine how effective these campaigns are. The newspaper offers you $20 cash and a Starbucks gift card to participate. You enthusiastically accept the invitation to attend the forum but you want to go in prepared. Write a positional argument aimed at your fellow students that clearly supports anti-drug advertising or clearly opposes its use. Or write a proposal that clearly poses an alternative solution to replace anti-drug ads.

As my experience shows, there are numerous ways to find or devise problems suitable for argumentative writing. For example:

- Scan local newspapers for current topics.
- Incorporate the problem finding into the curriculum by asking students to search for appropriate problems and pitch them to the class.
- Use a service that produces problems. One of the best is the University of Delaware's Problem-Based Learning Clearinghouse (https://chico.nss.udel.edu/Pbl/), "a collection of problems and articles to assist educators in using problem-based learning" (PBL Clearinghouse). The problems are peer reviewed for disciplinary content areas. Access is limited to educators but registration is free.
- Check with your college's library or faculty in math and science disciplines. Our college's library maintains instructional resources and actual problems for faculty use. Because PBL began in medicine and quickly moved into math and the sciences, many professors in those areas are better equipped at writing problems for assignments.

Using PBL in teaching argument has many advantages. Some of the most powerful, according to the PBL Initiative, are:

- PBL helps move composition away from a "formula" based class in which students write various essays, sometimes with little or no connection to the content about which they're writing. PBL gives them a "stake."
- PBL improves their critical thinking and problem-solving skills, which lead to improved writing skills.

- PBL encourages group work in a course in which students are often working alone.
- PBL helps students see composition as a real-world value rather than an introductory class they must complete to move on in college or simply a "grammar" class ([Barrows]( ).

The Research Problem—Judy Sharp

Another mainstay of the traditional composition program, of course, is the research paper with all its trappings of citation—and its increasingly disturbing tendency toward internet plagiarism. Some of us have seen that a mixture of old and new approaches can keep a focus on PBL here as well.

Working with PBL concepts, students and instructors continuously find new ways to solve old problems. PBL is versatile. Instructors can define the parameters by using as many or as few of the concepts as are necessary to achieve the goals of an assignment.

As with the examples regarding topics for argument papers, many students approach our required research paper in a like manner. For most students, the subjects they select tend to be broad, global in scope and, often, pedestrian. I've wrestled with this assignment, trying many approaches. Even as library searches have been vastly improved by electronic databases, students, with frequency, still rely on past methods by turning toward Wikipedia and Google sites to cut and paste, anything to fill their page requirement and Works Cited page.

During a conversation I had with a colleague about applying PBL to the research paper requirement in our program, he mentioned the success he has had in using the I-Search method. I remembered the concepts of that approach from Ken Macrorie's *The I-Search Paper, Revised Edition of Searching Writing.* In his Preface, Macrorie says of his book that:

it is to my mind not a textbook, but the first "contextbook" ever written. Unlike a textbook, it doesn't have a hidden author. As you read it, you'll have no doubt that it's written by an individual—me, who often uses the word "I." . . . The contextbook invites readers to take the initiative in their learning, to reach out to satisfy their curiosity as they did when they were carrying out the most complex act of learning in their lives, learning their native tongue in interaction with their mother and other human beings on screen or in the flesh.

How appealing: curiosity, writers taking the initiative in their learning and voice—these are precisely the elements I was looking for. And this self-directed approach focuses on the problem-solving nature of all serious research as it allows for dead-ends and failures, as well as achievements, to be actively narrated; its conclusion can fit the writer's experience.

Armed with enthusiasm, I approached my reluctant students. In my written instructions for the assignment, I have only one requirement about the topic they choose: It absolutely must be one that they are genuinely interested in, one that they actually are curious to know more about.

To aid them in their search, I scheduled two sessions at our library with its excellent instructional staff, one early in the term that introduced students to the electronic resources that our library subscribes to. Students learned how to maneuver through the hundreds of databases to find sources appropriate to their topic. The second session later in the term was personalized: the librarian helped students overcome whatever roadblocks that were still keeping them from needed material.

Regarding research, Macrorie talks a great deal about the act of discovery in areas as diverse as planning a vacation to deciding a college major. To guide my students in their discovery, I provided seven research

prompts that are the crux of Macrorie's method. They were due weekly. Successfully completely, these prompts were the basis for their papers. Four of the prompts ask students to address the specific aspects of the paper that will serve as headings in their final draft as Macrorie suggests: What I Know; Why I Am Writing This Paper; The Search; and What I Learned (64). The remaining three prompts deal with interviews, a working bibliography and an outline of a brief presentation to be given to their classmates on the day the final drafts are due. While the prompts insinuate me into their process, I believe that this modification to PBL stresses its broad range of application to difficult assignments.

I act as coach and cheerleader through their struggles and their triumphs. After turning in and reworking two or three of their research prompts, they finally trust me. It is then that they begin to enjoy their search. They find that the proactive approach to their own learning produces results that they can be proud of. Their papers are being written as they read, interview and search. There is almost no chance of plagiarism, their self esteem grows and, at the end of the term, I read fascinating journeys of discovery.

The Literary Problem—Bill Zipfel

Because PBL is versatile, literature-based composition situations can also employ it to advantage. Traditional composition courses ask students to respond to literature by writing essays that are lecture- or teacher-focused: "In a four-page essay discuss how X's poem reflects three principles of realism," or some such assignment geared to eliciting a particular response. That assignment may reinforce analysis, and review information, but it doesn't allow the student to self-focus a problem or to find ways to solve it. The critical context—and much of the work—is done largely by the teacher. There is a place for such directed assignments—particularly in content and concept testing—but students who write only upon request to answer predetermined questions seldom practice the kind of writing—aside from filling out forms—that most of us across the disciplines are required to do. They don't determine the problem to be solved, or really struggle over a thesis, and as a result they don't have much of an intellectual stake in the writing—key components in courses that purport to develop critical thinking and problem-solving.

My freshman students would much prefer that I assign the topic for them to write about; they are accustomed to being told what to do and how to do it, trained to be passive learners, blank fillers—to follow the pattern rather than to establish it. Instead of supplying the form, we need to help students develop their own context for research and discussion, to engage intellectually. PBL speaks to our needs and theirs in simple ways we can all incorporate—and perhaps already do to an extent. We can ask students to determine a critical problem in a piece of fiction—one pertinent to their own lives in some fashion. A problem can even concern the rhetorical difficulties the student has in producing an essay about literature: "How can I go about writing a productive essay about Raymond Carver's "Cathedral?" though it will more likely concern some question that emerges from the reading: "Why is the speaker so down on the blind man?" or "What does the cathedral metaphor have to do with anything?" These aren't unusual problem areas in literature/composition; what makes them PBL-based is that students come up with them, that they try to find a question that has not yet been answered and ways to answer it. Papers so generated are less generic, more student-centered, and less prone to development by plagiarism. As instructors we understand the principle; we need to get students to practice following it.

Though essays about poems or novels don't necessarily seem "real world"—say to "just the facts" architects, for example—issues of audience, communication, hard data, collaboration, oral presentation, point of view, and form, function, analysis and synthesis do make sense to most students. Every discipline must deal with problems and solutions. And we all have problems! Once students focus a problem, they can make it their own by discussing how and why it is a problem, by asking what they have to gain by solving it, by trying to discover some "truth" the solution reveals in their own experience.

The PBL approach emerges naturally from "reader response" theory. An architecture student who may bring a healthy distrust of literature as a nebulous and arbitrary way of seeing the world may well realize, for example,

that Raymond Carver's "Cathedral" can speak volumes about constructs and spaces—internal and external, personal and public—and such a skeptical student can both reach a personal epiphany and write a pretty good essay by asking some PBL questions.

Southern Methodist University's Altschuler Learning Enhancement Center points out simply and clearly that there are differences in what is expected of high school students and of college students, not the least of which includes ". . . the ability to apply what [students learn] to new situations or to solve new kinds of problems" (4). Sometimes, like our students, we composition teachers need to be reminded of those differences, not only so we can point them out to our students but also so we can adopt the approaches that reinforce what college-level writing courses should emphasize.

PBL—in whatever its modification—can help us to do both.

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