

## Freshman Mentoring: Creating a Baseline for Faculty Involvement

David R. Haws  
Boise State University

### Abstract

Mentoring may have become a lost art in higher education. Even at its best, faculty mentoring was typically limited to the paternal protection of a promising young colleague. Occasionally, this involved a gifted undergraduate. Seldom was such benevolence exhibited toward those “at-risk” freshmen most in need of developing a connection with the university.

In more recent years the mentor function has been transferred to peers. While this may be less stressful “psychologically,” it is also a little like turning sex education over to contemporary practitioners (while there are certainly historic and psychological precedents, there might also be a pattern of misinformation). As more and more entering freshmen are under-prepared for higher education, the need for mentoring becomes much greater. While we can not properly “mentor” all of our students (and continue to fulfill our other faculty responsibilities), without some experience mentoring freshmen we will have little meaningful advice for peer mentors, and will have no way of anticipating outcomes for the mentoring that does occur.

Attempts at mentoring are often restricted by our willingness to make a significant investment in someone beyond our own family or circle. When this reluctance is overcome, the mentor accepts a new individual into her coterie, where the relationship becomes protected by an ethic of care [1]. From this point, the mentor’s decisions are focused on developing the individual and caring for the mentor relationship. While active mentoring may only last for a few weeks to a few months, the result is a long-term social bond (I can think of three teachers who invested sufficient mentoring on me to develop such a bond).

To establish a baseline for faculty involvement in the mentoring process, I took advantage of the fact that I have an entering, moderately under-prepared freshman son who wants to study engineering. Because I know this student very well, I am particularly cognizant of his needs. Because of the familial relationship, there are no restrictions on my willingness to help him succeed during his freshman year. Together these circumstances create a baseline for optimum mentor input. This paper will discuss mentoring activities engaged in during the first semester of study, time commitments on my part, and suggestions for how these “faculty” mentoring activities might be expanded to a larger number of students, either through extended faculty involvement or through the coordinated participation of peers.

### I. Introduction

How should we allocate time to mentor and coach our students? Perhaps we can approach this from the ethical perspective of rights, utility, virtue, justice or care.

- Rights: For some (maybe most of us), I'm sure the allocation of mentoring time is as simple as posting office hours. This is probably what Kant would have done (in fact, he probably would have assigned selected students a time to *report* for mentoring). However in its more typical manifestation, this seems at best a "squeaky wheel" approach to our obligations, and it might be difficult to characterize the typical student office visit as "mentoring." I suppose the key here is that Kant, like most of us, would probably feel that since faculty have no contractual "duty" to mentor, students have no corresponding "right" to be mentored. There doesn't appear to be much in the categorical imperative to compel faculty to mentor anyone, and since we can't mentor everyone, selective mentoring may even seem a little unfair.
- Utility: There are probably three options from a Utilitarian point of view. The first (and perhaps most common), is that the *greater* good would be served by faculty writing research grants (bringing in money for the university) and teaching only those students who manage to "get it" with some minimal combination of lecture and self-study. This might be consistent with the Act Utilitarianism of Mill, would optimize the use of *faculty* time and therefore produce the greatest good for the greatest number (with the least amount of *faculty* resources). Rule Utilitarianism (a more recent interpretation) would tend to be friendly toward mentoring (as a "rule," mentoring would tend to optimize long term utility). Therefore as a second approach, we might choose to mentor our most promising students—the idea being that they would be in a position to make the most of our mentoring effort (thereby maximizing good). A third alternate would be to mentor our most poorly prepared students. This would be consistent with Tom Gilbert's [2] idea of attacking large performance gaps first because they will show the most effect (also maximizing good).

While Rule Utilitarianism provides a modest amount of help, Kant and Mill (the twin pillars of western ethics) are no help at all. I suppose one *could* claim that Kant's second formulation of the categorical imperative (to treat people as ends, not merely as means) would require *some* form of extended faculty interaction. However, whether or not this might expand into something consistent with the concept of mentoring, seems problematic.

- Virtue: Virtue ethics doesn't really have much to say either. While the intent of mentoring is to instill *intellectual* virtue, the process of mentoring doesn't seem to fit into the more typical *moral* virtues (e.g. temperance, liberality, magnificence, prudence). Perhaps Aristotle would advise faculty to seek the "golden mean" between paternalism and contempt toward our students.

The problem is that these ethical theories (rights, utility, virtue) were developed to inform *individual* behavior, and mentoring is by definition a *social* activity. As such, mentoring might relate better to more recent ethical theories.

- Justice: For example, from the Rawlsian view of justice as fairness, we should either be mentoring students from the disadvantaged classes, or students whose later work will be of primary benefit to disadvantaged individuals. For Rawls, inequalities in primary goods (of which education is a prime example) are only justified if they improve the quality of life of the disadvantaged. He arrives at this conclusion through a constructivist thought experiment

where a society is formed by individuals who were to determine a just distribution of primary goods (in particular, the excess goods made possible by their collaboration into a society), without knowing what their particular place in the eventual society would be. They therefore find the only acceptable conception of justice to support the best possible outcomes for the most poorly disposed.

- Care: As a final example, the ethics of care, would lead us to selectively mentor those with whom we have the closest social relationships (members of our social group, or members of our own family). It is the relationship between individuals that is important and needs to be nourished and protected. While the ethics of care evolved as a feminist approach to ethics, it has become far more than this, and can be used to resolve dilemmas where other “rule-generalized” approaches are of little help, or might actually give different (and less personally satisfying) solutions. For example, in the hypothetical case of my daughter drowning beside a renowned physician, only one of whom I can rescue, the ethics of care would allow me to rescue my daughter. Kant would be of little help, while Rawls and Mill might even lead me toward letting my daughter drown in favor of saving someone who might contribute to the greater good, or the greater good of the disadvantaged.

## II. Background

I have mentored students in the past (and have students that I mentor today), but usually these are individuals who have self-selected. I have an open door policy, and some students have a greater need (or less fear) to make contact with faculty members. For these students, mentoring follows the typical pattern of illuminating standards and then encouraging them to meet or exceed the standard. I tutor, give pep talks, celebrate their successes, commiserate their failures, advise them on how to better organize their lives, help them to give their studies a more realistic priority, advise them on courses to take or how to interact with given professors, and provide counsel for their transition into the work force—but only when invited. My mentoring is more-or-less incidental and occurs sporadically—sort of “mentoring on demand.” In addition, I often sense that some students seek (and passively process) my advice for the purely ulterior motive of improving their grade in a specific class (following the principle that terrorists seldom kill the hostages they have come to know personally). This being the case, at least some of my mentoring efforts are misplaced.

I’ve often wondered: how might I behave differently if I were to take a more active role in mentoring, or if I tried to do it on a more or less continual basis? If I were mentoring under ideal circumstances, what specific activities would I engage in, and how much time would I devote? In the classroom, I see myself as more of a facilitator, so it doesn’t seem likely that I’d take a heavy handed approach (which is perhaps the classical mentoring that comes to mind, from earlier in the 20<sup>th</sup> Century). But I would probably be more thorough, in that I would initiate mentoring activities that I felt more important, even if they were unrequested.

Because my mentoring has been most extensive with older students, my existing “student-centered” approach is probably more appropriate. I have not seen many freshman engineering students, outside of the Fundamentals of Engineering class that I occasionally teach, or the infrequent assigned advisee. But because freshmen typically require more direction in the

classroom, it's only natural to assume that they would also require more direction in a mentoring situation. They are also more at risk, and from any ethical perspective other than Utilitarianism, any intentional mentoring effort should probably be focused on younger students.

There are probably two basic considerations that have kept me from adopting this approach in the past. First, I have a basic reluctance to impose myself on the autonomy of a student (even a freshman). As an adult learner, I prefer a more introverted approach to study and require less social interaction than many of my students. I also feel that self-regulation is critical to the learning process (for anything other than immediate learning objectives), and that students are already far too dependent on us as professors. Second, I have a fear that such active mentoring would consume more time than I can spare from my other activities (both within and outside the academy), and that closure on a mentoring relationship might be difficult to achieve. While these are real concerns, without becoming personally involved in a more extensive mentoring relationship, I can only make guesses concerning whether or not they are well founded. A solution appeared this past fall, as my second oldest son started college.

I would typify him as being moderately under-prepared. I have not pushed any of my children in school, and while he has an adequate understanding of high school academic topics, he had never advanced more than minimal efforts toward independent study or "homework." He had only asked for my advise/help two or three times with his high school courses, and although he did not struggle, he was never placed in a position of having to develop study habits (or finding enjoyment in such habits). Because of this, I am able to see him more as a proto-student, which in some ways enables my imposition on his autonomy. Also, because I love my son, I have an established history relative to his developing autonomy, and have no desire for closure in our relationship.

During his senior year of high school, he began to express an interest in computer engineering, mainly from the perspective of creating interactive graphics. While his interest might be slightly naïve, I was, of course, pleased to see him projecting into the future. However his lack of preparation may be a problem, initially. I foresaw his major problems in coming to college as being time management, selecting appropriate courses, analyzing his vocational options, and finding enough success to become self-motivated. On the plus side, his self-efficacy should benefit from vicarious experience, he is not given to compulsive decisions, and he has a highly creative approach to life.

Because Boise State is a "teaching" university, faculty members have limited lab space, but fairly large offices (large enough that I have two desks). Since my son had expressed an interest in engineering, and in order to enable mentoring him through his first year of college, I brought him into my office, made space for him on my bookshelves, and let him set up shop at one of my desks. Since my motivation to mentor him is consistent with an ethic of care, and because I have a close relationship with him anyway, I feel comfortable sharing this space with him, and initiating mentoring activities. Basically, these activities fall into one of four categories: orientation, tutoring, counseling, and bonding. After discussing the activities in each of these categories, I will conclude with comments on the reasonableness of such mentoring (in view of other faculty commitments), and a way that similar mentoring activity might be extended to other students—particularly other students that are at risk.

### III. Orientation

My son was working out of state and so was unable to register for classes in person (our current system doesn't support phone registration). Because he was registering late, his class choices were very limited. Since he registered as an engineering student, I consulted with him on class selection as his faculty advisor, much as for any other freshman. The difference is that I had a much better handle on his abilities. He had scored a 24 on the ACT math section, which he had taken "cold," and was probably a fairly accurate interpretation of his math skill level. Although he had taken trigonometry during his senior year, he had gotten a D in his last semester, which didn't appear to be from significant problems with trigonometry. His grammar and spelling are good, but his vocabulary is a little weak, and his writing sophomoric (not atypical of college freshmen).

Since the university administers its own placement test, I have taken this exam in both math and English, to get a better understanding of what might qualify a student for entering the math and English curricula at different levels. Based on this, I determined that my son's math skills were probably ok, but that to develop his study skills, he should start with a pre-calculus class rather than calculus (I also was familiar with the instructor for this particular course, and although it was closed to additional registration, I knew that they had closed registration at 20, that the room it was assigned would hold 40, and so the course could be added after the first day of class). This math course would be the focus of his study for the first semester, and would be his most difficult course. Consequently I helped him fill out the rest of his schedule with general education core requirements that would be less taxing on his time. Since he would not arrive back in state until the day before classes started, I picked up his books at the bookstore, and tracked down the location of all the classrooms he would be using.

Since he lives at home, we drive to work together. Arriving slightly early for the first day of class, I helped him to get organized in my office and walked him to his first class, pointing out the library, and the rooms where his other classes would be held. After his first day of classes, I took him to the registrar's office to add his math course and stood in line with him to make sure that he didn't encounter any problems (I was unsure that they would let him register for the math class without taking the placement exam himself, and would have taken him to the testing center, if this had been the case). In my office, I showed him how to access my computer and printer, the Internet, and how to get an outside phone line (he already knew how to get soft drinks out of my refrigerator). Over the first couple days, I tried to answer his questions (or anticipate his questions) about what his different instructors would expect. I reviewed his syllabi, helped him to plan out his study time, and this was about the extent of orientation activities.

I would normally expect to spend  $\frac{1}{2}$  to  $\frac{3}{4}$  of an hour advising a new freshman from high school. I would then not see her again for at least another year. My advisement in terms of class selection was about the same. However, to gain a similar understanding of the ability level of a freshman would probably take an hour or two of oral testing, or might be done in my absence (although perhaps less precisely) with a standardized exam. Since I have taken the standardized exam, I feel much more comfortable with the results it reports, and so this probably won't add to mentoring time. The orientation tour, showing him his classrooms, the library, bookstore and

other points of interest took about 30 minutes. Taking him to the registrar took about another 40 minutes.

The problem with the orientation tour is that while it would work well for one or two students (maybe even a half dozen), it would be difficult to accommodate more than this, given the time frame for class start-up. Even so, this is a much better approach than handing (or mailing) the students a campus map, and expecting them to be able to make sense of the alphabetic labeling (and mis-labeling) of buildings (I did give him a map, stapled to his schedule, but only after showing him concrete buildings and classrooms that related to the abstract representations on the map and class schedule). This seems like a minor, one-time enhancement and takes away some of the stress of being on a new campus. Of course, these orientation activities could be handled by peers, but the purpose of handling them by faculty mentor would be to begin the mentoring bond.

#### IV. Tutoring

I usually see my principal mentor function as being an available tutor. Having my son at a desk within 6 feet, I hoped that he would see me as an available source of information. This does happen occasionally, but not as often as I would have expected, and questions come from a broad range of topics. Luckily, his questions (relative to freshmen topics) are fairly easy to answer. Usually this interaction takes the form of a question from his reading. He will stop his reading, ask the question, which I either answer as best I can or point him to a reference, and when satisfied he returns to his reading. Sometimes needed references are not immediately available, and I have also taken my son to the library to show him how to access and use the research databases (in this particular case, the PsycLIT database).

Since we drive to school together, I take advantage of part of this time to keep current with activities in his various classes (which exams and assignments are coming due, and how is he progressing toward their completion). At school my questions about his courses are primarily Socratic, helping him to think about how he should organize his time. He doesn't seem reluctant to ask questions at work, but he is less focused (more distracted) at home. To help here, I sometimes take my "night" reading into his room when he is studying, to answer questions that may pop up there.

I think that I saw his writing as a major academic deficiency (my first undergraduate degree was in English, and I tend to be a little rigorous with my students' writing assignments). When he asked me to take a look at his first assignment, I stepped in to show him how I would edit it if it were my own work, and how editing might clarify my own thinking. When I finished he pointed out that while my editing was fine, the words were no longer his. While he's continued to show me his writing, I've limited my comments (trying to increase the salience of individual remarks, rather than overwhelming him with a shotgun approach). However, while he is in my office, prominent background activities include my own writing (including this article and two other papers that I am working on). Because I edit my own work extensively, I'm in a position to share this. Hopefully, somewhere along the line, this will start to make sense to him.

While he was in high school, he would occasionally ask me to drill him for exams. Although he still does a little of this, he prepares for exams primarily on his own. As his performance on

exams vary, I try to point out any visible correlation with his preparation activities. Hopefully he is seeing that additional hours in preparation pay-off in better test performance. Unfortunately, what he may also be seeing is that small improvements in test performance require substantial investments in preparation. To counteract this, I try to emphasize the value of learning (incorporating new ideas in a usable format), rather than “gorge-and-purge” for the sake of a letter grade.

Tutoring activities have not required an extensive amount of time. Cumulatively, they probably amount to no more than 20 or 30 minutes per day (only slightly more office time than is typically required by some of the students in my classes). I think the key point is availability. One of the reasons I maintain an open door policy is that I want my students to come in with their questions, and this is more likely to occur if they feel confident about finding me when the question comes to their mind. If I am encountered when a question occurs, the question is asked and answered. If I am not available, the question fades into the ether (unless something else triggers the same question). This “attention span” (being able to retain an unanswered question for longer periods of time) seems to improve with age, making freshmen particularly vulnerable. Similarly, at times, students appear to be controlled by an expanding radius that they are willing to traverse for the sake of answering a question (maybe 6 feet for a freshman, 20 feet for a sophomore or 50 feet for a junior). If this is the case, physical proximity is a key, particularly for younger students.

## V. Counseling

Counseling activities include typical advising, such as helping my son select his courses (discussed in the section on orientation), but also include things like analyzing his course load in terms of how much time he should commit to studying independently (outside the classroom). This was perhaps my biggest concern. While I am also concerned about the study habits of my other students (one of the reasons that I have them maintain a learning log for my classes), I don’t feel very effective. Students are just very different in the amount of time they require to master a given topic, and “rules-of-thumb” are misleading. Here in the mentoring relationship, I am able to advise my son in terms of time requirements and then follow up to determine whether or not those assumed time requirements are accurate.

He adapted fairly well, and has been spending a lot more time studying (both in my office, and at home) than he had ever done before, but was disappointed by scoring a 78 on his first math exam. I reviewed the exam with him, which had a liberal sprinkling of errors throughout, explained what his options were, in terms of his discussing the exam with his instructor, and tried to reaffirm the importance of the exam as a learning tool. Most of the problems that he had with the exam were mended by looking at a correct solution, and so my counseling activities were primarily helping him to gain (or regain) a belief in his own self-efficacy. While this included verbal persuasion (pep talks) and vicarious experience (talking about my own education), it was helped greatly when he received a 98 on an exam in a different course (enactive mastery).

As a mentor who happens to be an engineering professor, the objective is *not* to help my son receive an engineering education (this may be the *administrative* objective that would encourage mentoring at the college level), but to help him gain the tools he needs to be happy, reflective

and productive in life (this is the difference between *outputs* and *outcomes*). As might be expected, he really has no idea what he wants to do with the rest of his life, and the direction of his education is certainly subject to change. As his mentor, I feel an obligation to discuss different types of academic and career options, particularly as he finds things that he enjoys in his other classes. His (at least temporary) selection of engineering probably has as much to do with his older brother (who is finishing his undergraduate degree in mechanical engineering). However, my son's learning style (he is more abstract random than concrete sequential) may make engineering a difficult field. As his mentor, I need to be mindful that his academic progress and ultimate career may take him in different directions. This means that these areas shouldn't be neglected, and as his mentor, I need to have diverse interests. Consistent with this idea, when his theatre class was discussing Hamlet, we rented and watched a recent video release and discussed things such as the play's structure, the relative "depth" of various characters, and which aspects of the production were interpretations of Shakespeare, rather than concepts explicit in the text of the play.

A surprising amount of my other mentoring activities falls into this area of counseling, rather than tutoring. I don't know if this is particularly usual, but my students often seem absorbed in problems that are not academic (divorces, new babies, health problems, painful relationships, too many work hours, not enough work hours, doubts about their career goals, evolving career goals). I consider myself fairly broad (which might be gleaned from a perusal of my bio), and I don't see how I could be effective in these counseling activities without at least having the ability to think divergently. Since nearly all of our training as engineers (particularly engineering professors) is convergent, I am lead to question the typical effectiveness of faculty mentoring students. This brings up an interesting point: is our abdication of mentoring responsibility—turning those responsibilities over to peer mentors—an abdication of our humanism in favor of self-absorption in the technical aspects of our work? If true, is this what society has bargained for when they pay our salaries and send their young adults to us to be educated?

## VI. Bonding

Because we live together and share an office, my son and I are spending a lot of time together. We drive to school together (actually, I have him drive me, which is kind of nice since I don't have to fight the traffic). During this time we sometimes discuss school matters, but for the most part are talking about other things that are going on in our lives. We eat lunch together in my office, but our discussions regarding school are more organizational, if we're talking about school at all. He started to pick up the guitar during his senior year of high school, and so I was able to show him a few chops, and encourage him. And we have similar tastes in the kinds of television programs we watch, and will usually watch two or three programs together over the course of the week. I naturally feel closer to my son, but I *should* feel closer to anyone I mentor, and this probably needs to be taken into consideration.

Mentoring is a social bond between individuals who are unequal in a fundamental way. The reason that Kant and Mill (and Aristotle) have such little relevance to mentoring is because they deal primarily with the "contractual" relationship between equals. Even Rawls derives his theory from a position of original equality and has difficulty with the treatment of individuals whose inequality would position them as "outliers." The ethics of care, however, recognizes that many



relationships are unequal. This allows the ethics of care to focus concern on the relationship, which can only be sustained through the development of trust [3]. Trust requires bonding and commitment.

My mentoring activities toward other students have contained similar components. I attend student ASCE chapter meetings, socials, and have taken student groups to a variety of national and regional conferences. This is a strong bonding activity, which I would be reluctant to forego. Effective mentoring needs to include such bonding activities, which may be as simple as getting together to play volleyball, or eat popcorn and watch a couple videos. To think that mentoring is simply advising or tutoring or counseling is a mistake.

## VI. Conclusions

The time commitment has been surprisingly minimal. During the school day, I devote a cumulatively smaller block of time to my son, than I typically commit to other students who see me on a regular basis. Perhaps this is because our contact throughout the day is incidental. Other students that I mentor feel the need for a more extensive “interview” (thirty to forty-five minutes) to make contact and report (on a weekly or bi-weekly basis). The largest single block of time consumed in mentoring my son comes with activities that require us to leave my office (like going to the registrar, or reviewing research databases at the library). However these are activities that, while aided by a mentor, might be more efficiently completed in small groups. Other activities require one-on-one attention, but might be accomplished with a peer mentor. All of this has significant implications for how faculty might become better involved in freshman mentoring.

So how can I take what I’ve learned with my son, and become a successful mentor for other freshmen?

*First*, sharing office space was a good idea. Mentoring activities dovetailed into my other responsibilities and so created a minimal intrusion. Proximity maximized my ability to bond as well as supervise. However, there is a limit to how many students might fit in a faculty office (one in my office, none in most of the faculty offices I’ve seen). Never the less, academic spaces evolve to meet salient needs, and the concept of shared working space should be retained, if only as an ideal. If mentoring were seen as a sufficiently valuable activity (say, as important as research), space might be developed so that the mentoring faculty member would have a much larger office, perhaps the size of a small classroom or studio. This would allow the mentor to work with more than one student, and the workspace might be organized around the atelier principle. Each student should have her own desk, with other assigned space (bookcase, refrigerator, microwave), and perhaps a shared computer/printer. A faculty member and six students could be housed in an area approximately half the size of a small classroom. Mentoring would probably become ineffective if the group were to become larger than a dozen or so.

Proximity within the same enclosed space seems like a much better idea than having students assigned to study carrels which are close to the mentor’s office but remote enough to limit contact. While a remote location might work well for independent graduate students, it is inappropriate for “at-risk” freshmen. Questions arise during independent study, which must be

addressed in a timely manner. While older students are able to reference questions and hold them for a predetermined time, younger, less prepared students lack this discipline.

An even better idea might be shared housing. I felt that it was helpful to the mentoring process (maybe essential) to maintain contact away from the learning task. While this doesn't *require* shared housing, common space away from the university might facilitate the mentoring bond. This of course is a large commitment that few universities (or faculty) would be willing to make, but it should also be retained as a viable (if distal) ideal. Distance and asynchronous education have shown us the possibility of remote learning. However, there is no adequate corollary for remote mentoring.

*Second*, it makes no sense to limit freshman mentoring to engineering or engineering related topics. Most of a freshman's classes are not in engineering (many of them are not in the sciences). If we have chosen to mentor students who are at risk, we need to recognize that they are at risk *not* to become engineers, but to defer or curtail their formal education. We need to find common ground with them, and encourage their development in other topics. This requires *us* to be divergent and adaptive in our interests and abilities, and means that not all engineering faculty members are suited to mentor freshmen. It would be pointless to force faculty into an activity for which they are disinclined. This means that freshman mentoring will be done by a small subset of existing faculty, and must be appropriately rewarded in salary, promotion and tenure decisions. If the existing faculty is insufficient to adequately mentor selected members of the freshman class, the ability to mentor should certainly be considered during the retention and hiring process.

If mentoring faculty were given a studio space, such as is described above, freshmen might be selected by application or recommendation, based on ability, diversity and an estimation of risk. Perhaps a student stipend or scholarship could function as an additional incentive, with continuation tied to adequate performance, and perhaps justified by assistance in lower-level faculty responsibilities. Each atelier will develop its own personality, and care should be taken that new mentees are compatible with the faculty and other students being mentored, but that each individual is sufficiently different to make a unique contribution to the group.

*Finally*, the mentoring relationship will eventually become less active. If the mentoring takes place within a small group (such as in the atelier), then the group will be able to continue even in the absence of the faculty member. If the mentoring relationship is most intense during the freshman year, the freshmen that have worked together with the mentor in this way will be naturally prepared to proceed as a group through the remainder of their formal education. Each year, then, the mentor might continue a less formal relationship with existing students in the group, with more comprehensive mentoring delivered to a new group of freshmen.

While mentoring is not needed (or desired) by everyone, it is a way of reaching students who risk failure without it. As we move to a "jobless" society [4] education will be critical, and systematic inequalities in education will have the potential to tear the fabric of our society apart. The methods proposed would intensify the quality of faculty mentoring, as well as make it more purposeful. While the potential costs are substantial, in both financial and faculty resources, it may well be the only *ethical* response to the demands of distributive justice. Access to formal

education is a primary good, in the Rawlsian sense, and can not be justified in the absence of substantial efforts to include those who have been marginalized. To fail in this is to admit that our liberal democratic society is a lie—that all the high-sounding ideals of the founders are simply smokescreens intended (or exploited) to obscure continued oppression. To the extent that we fail to correct this problem, we abandon our liberal society for one that is hierarchical. Hierarchy in the academy is a distressing way of life—a relic of our medieval past. Hierarchy in society is an unacceptable denial of our potential.

### Bibliography

1. Gilligan, C. (1982). In a different voice: Psychological theory and women's development. Cambridge, Massachusetts: Harvard University Press.
2. Gilbert, T. F. (1996) Human competence: Engineering worthy performance 2<sup>nd</sup> Ed. Washington, D.C.: National Society for Performance and Instruction.
3. Baier, A. C. (1995). Moral prejudices: Essays on ethics. Cambridge, Massachusetts: Harvard University Press.
4. Rifkin, J. (1995). The end of work: The decline of the global labor force and the dawn of the post-market era. New York: J. P. Putnam's Sons.

### DAVID HAWS

David has received undergraduate degrees in English from the University of California at Berkeley, and in Civil Engineering from the University of Utah. He has completed master's and doctorate degrees in Civil Engineering at Brigham Young University, and has completed a master's degree in Instructional and Performance Technology at Boise State University. He is licensed as a Professional Engineer in the states of Idaho, Utah and Mississippi. His current "non-engineering" interests are in technical writing and applied ethics. His "engineering" interests are in teaching and structural response to permanent ground failure. He is an Assistant Professor of Civil Engineering at Boise State University