"The Ethics of Re-engineering"
Michael Davis, Editor, CSEP, Illinois Institute of Technology

What is re-engineering? Six months ago, when several members of the Center's outside advisory board suggested a subject for this issue, I knew only what everyone knows: “Re-engineering” is a business term—like "cutting out the fat". Any announcement that a corporation is going to re-engineer presages a substantial rise in the price of its stock.

Such an announcement also presages the loss of many jobs. IBM let go 63,000 employees as part of its re-engineering in 1993; Sears let go 50,000 the same year, Boeing, 28,000; Digital Equipment let go 20,000 employees as part of its 1994 re-engineering; Lockheed Martin, 15,000 in 1995. This January AT&T announced it would eliminate 40,000 positions as part of its reorganization. That's 216,000 jobs lost in just six companies in just three years. These lost jobs are, I should add, not mere "lay offs" of ordinary assembly-line workers owing to a temporary drop in demand. Neither demand nor production dropped. These are also not jobs that have gone overseas in search of cheap labor. Mostly "white collar" jobs, many well-paid managerial positions, they have just disappeared. How is that possible?

The official definition of "re-engineering" is "a radical reorganization of a productive process"—where "radical" means "increasing productivity by at least 100%". "Re-engineering" differs from "restructuring", "downsizing", and older terms for reorganizing precisely in this promise of radical improvement.

IBM Credit Corporation, which provides credit to IBM customers, is a classic example of re-engineering. Five years ago, specialists were responsible for each stage of the business. One department of skilled clerks and low-level managers logged in credit applications; another such department prepared special conditions for particular customers; a third department decided the interest rate; another gathered all information necessary for the "quote letter"; and so on. IBM Credit was a vast assembly line, taking several weeks to transform one set of forms into another.

Today a single clerk, a "deal structurer", can generally do the entire job in a few minutes. Only in rare cases must specialists still be called in. The old assembly line is now a software package inside the computer on each deal structurer's desk. Most of what the old system's clerks and managers knew is now digital code.

This, I suppose, is startling enough. But what is more startling is that productivity at IBM Credit rose not by 100 percent, but by 100 times that, by 10,000 percent. For each hundred clerks and managers who used to work at IBM Credit, there is now one deal structurer.

What interested those advisory board members who suggested the topic, executives or former executives of manufacturing companies, was, I think, the many employees re-engineering dumped onto the street, not just young workers with little seniority and plenty of opportunities, but old-timers who gave their career to a company, expecting knowledge, skill, and hard work to see them through to retirement.

Engineering and Re-engineering
That, however, was not what initially interested me. My interest was the "engineer" between "re-" and "ing". Engineers have long worked to improve efficiency. Taylorism's time-motion studies are only one example of engineering's continuing efforts to reorganize production to do more with less. Re-engineering was, I supposed, a new field of engineering. What seemed to distinguish it from older fields was the huge increases in efficiency and the huge numbers
of people put out of work. Here, it seemed to me, was an especially difficult example of conflict between the duty of engineers to hold paramount the public health, safety, and welfare and their duty to be a faithful agent and trustee of employer or client.

So, imagine my surprise when I began asking engineers about re-engineering. Re-engineering, they said with some heat, has nothing to do with engineering. "Re-engineering" is a "business buzz word", useful for advertisement but devoid of content.

Those few engineers who had more to say than that made it clear that among the many questions of business ethics they thought re-engineering raised is the justifiability of connecting "engineering" to an activity in which engineers are not in control-and often not even involved. What (they asked) did the term "engineer" add to older notions of "downsizing", "restructuring", and so on? They did not wait for my answer. Everyone (they said) expects what engineers do to succeed. Hammer and Champy invented the term "re-engineering" to poach on engineering's reputation. Re-engineering is business-school stuff, big ideas with no science, the few successes reported, the many failures forgotten.

But perhaps the separation between engineering and re-engineering is not so clean. Peter Meiksins, a sociologist who has done significant work in the history of engineering, argues that, though illegitimate, re-engineering is one of engineering's offsprings, the unwanted consequence of too close a connection with management.

The engineers nonetheless set me to re-thinking re-engineering. I soon concluded that what any discussion of re-engineering needs most is not the usual Success Story but life's ordinary mix of success and failure. In "Re-engineering: A Case Study," Fran Gaik describes her own work as a "re-engineer". She re-engineered (that is, radically restructured) the health division of an insurance company, an organization in which engineers are as rare as daffodils in December. Yet, her method has a family resemblance to engineering.

**Re-engineering in Business**

She began with a detailed knowledge of the company, developed measures of input and output for each process in the health division, qualitative as well as quantitative, and then re-organized each process to decrease input and increase both the quality and quantity of output. This re-organizing depended in part on computers, in part on simplifying paperwork, and in part simply on giving work to those who could do it best.

It did not, however, depend on letting employees go. Most of the employees her re-engineering displaced were re-trained for other jobs within the company. Gaik justifies the re-training without mention of ethics or compassion: if you want change to succeed (she says in effect), you have to get those who will have to make the change to "buy in". Employees will not buy in if they expect change to make them targets for "out-placement".

Gaik, like most engineers, was not in ultimate control of what happened. She answered to the president of the company. The president was interested in making money for shareholders, not in what happened to individual employees or even in what happened to Gaik's re-engineering once it had served its business purpose, selling the health division at a price substantially higher than otherwise possible.

But at least Gaik's president acted rationally, that is, in ways likely to make money for the stockholders. The new owners of the health division belong to another species of manager. Their "re-engineering", though brutal in a way Gaik's was not, seems to have ruined the health division. They gained nothing in efficiency by shedding large numbers of employees; instead they lost control of quality and left a remnant of employees too shocked, frightened, and embittered to be of much use.

**Ethics and Retraining**

When I began planning this issue of *Perspectives*, I asked the Center's librarian to do a bibliographic search. She found over 800 publications on "re-engineering". Of these, only one contained a discussion of the ethics of re-engineering. The author of that article was Peter French, a philosopher who has written widely and well on business ethics. His piece here argues that each business should bear the cost of retraining employees whom its re-engineering has displaced. The argument may, I think, be understood as resting on one (or both) of two foundations, one economic, the other moral.

The economic foundation is the steward's principle that all costs of production should be "internalized", that is, made to come out of any profits it
produces. A productive process that becomes unattractive once all costs are internalized uses more resources than it produces. Society is better off if no one engages in it. Internalizing costs, for example, by requiring a business to bear the cost of retraining those it lays off, discourages wasteful reorganizations.

The moral foundation of French's argument is the principle that anyone who injures another should do whatever is necessary to undo the injury, if possible, or at least to put him in as good a position as before. The point of this principle is not to internalize costs (though it does that). Its point is, instead, to respect moral agents. Morality requires us to try to avoid injuring one another. When we cannot, respect for the other requires us to do the next best thing, to undo the injury if we can.

French's piece asks business to think carefully about what it can do to reduce the destructive impact of what it treats as, on the whole, a socially useful development. Gaik's piece reminds us that the label "re-engineering" does not guarantee the social usefulness of an activity. Run by human beings, business is as capable of stupidity as any other human enterprise.

-M.D.

"CSEP Joins NIEE in Updating Resource Guide"
Ellen Fox, Research Librarian

The Center for the Study of Ethics in the Professions (CSEP) is working with the newly revitalized National Institute for Engineering Ethics (NIEE) to update our 1990 publication, Professional Ethics and Engineering: A Resource Guide. Originally compiled for NIEE by former CSEP librarian, Sohair Elbaz, the Resource Guide covers books, articles, films, and other materials which would be valuable both to academics teaching engineering ethics. There will again be a listing of Key Resource Professionals in Engineering Ethics, with up-to-date contact information. The Resource Guide will strive to cover a wide range of materials, including writings by engineers and engineering faculty as well as works by philosophers and ethicists. All the materials will be reviewed by the staff of CSEP to insure that it meets CSEP's and NIEE's criteria for inclusion. We hope that our interdisciplinary perspective will benefit everyone with a professional or personal interest in engineering ethics. The Resource Guide highlights the fact that there is a wealth of excellent material in the field; though engineering ethics does not generally get the intense public attention that biomedical ethics or legal ethics attracts, there is nevertheless much engaging and well-written work which deserves notice.

"Re-engineering and the Engineers"
Peter Meiksins, Cleveland State University

What's in a name? The term "re-engineering" has achieved popularity in the United States as an all-purpose synonym for virtually any kind of reorganization or change. It deploys the older term "engineering" as part of a conscious strategy to "sell" a set of ideas about corporate reorganization. Yet, these ideas were not generated by engineers. Indeed, in some ways, re-engineering appears to be a deliberate rejection of traditional engineering ideas about organization. So, what is "engineering" doing in this word?

Conjuring with Engineering
"Re-engineering" was originally intended to refer to an approach to corporate reorganization which promised-in its advocates' terms-to do more with less. Rejecting traditional approaches to efficiency, which emphasized simplification of jobs and specialization of workers (the assembly line) or replacement of workers by machines (automation), the "re-engineers" argued for the use of sophisticated electronic data processing and communication technology to reduce the size of work forces, simplify corporate hierarchies, and create flexible polyvalent workers who could respond to rapidly changing organizational needs. The "re-engineers" both rejected engineering (insofar as identified with automation and job simplification) and embraced it (insofar as identified with computerization and high technology).

This dual approach successfully reconciles two tendencies in American attitudes toward engineering. The call for polyvalent workers and a more flexible use of technology appeals to American suspicion of an "over-engineered" world in which
human agency is virtually extinguished, while defining "re-engineering" as more than simple cost-cutting and downsizing ties re-engineering to what Americans respect in engineering. Despite fear of technology and systematization, Americans have, at least since the days of scientific management, been attracted to the apparent rationality of engineering principles. Engineering is associated in the public mind with the prestige of both "design" and "science" (in part because engineers have labored to create this association). The appeal of the term "re-engineering" is its ability to conjure up images of a flexible, humane workplace developed through rational, scientific design.

**Engineering Skepticism**

Although re-engineering has become a buzz word in many circles, engineers have been much more common among those skeptical both of the neologism and of what it represents. One cause of their skepticism is easy to spot. Many of re-engineering's claims are questionable. All too often, re-engineering turns out to be little more than down-sizing--short-term payroll cutting without the promised increase in flexibility, skills, worker autonomy, or organizational change. The rational and scientific base of re-engineering (implicit in the use of "engineering") is shaky, to say the least. As experience with re-engineering grows, one hears more and more of organizations discovering that, in their zeal to "obliterate" jobs and achieve flexibility, they have lost crucial expertise which is difficult to replace and expensive to obtain on a contract basis.

Engineering skepticism may have a second cause. Engineers are themselves often the objects of re-engineering. Much re-engineering tries to reduce the number of middle managers, levels of corporate hierarchy, and corporate dependence on specialized experts. Such reductions can eliminate many engineering jobs. Some observers have concluded that re-engineering is likely to diminish the ability of engineers to obtain secure corporate employment, that more and more engineers will slide into the insecure world of consulting and contingent employment.

A third cause of engineers' skepticism about re-engineering may be engineering's own identity problem. Re-engineering is the invention of management consultants, not engineers. It borrows the term "engineer" without the consent or active participation of engineers themselves. Such borrowing has been unpopular with engineers since the early days of American engineering when engineers complained of being confused with locomotive drivers. The term "engineer" has been attached to a variety of adjectives (as in "sanitary engineer") in an attempt to lend dignity to occupations that lack it. Without a strong licensing requirement, or another form of professional closure, the title engineer may be adopted by virtually anyone, whether or not they possess professional engineering credentials or currently practice as an engineer.

**In Historical Perspective**

The freedom with which non-engineers can appropriate the term "engineer" is of more than semantic concern. Because engineers have not been able to control who is an engineer (through licensing, degree requirements, and the like), they have had trouble defending their occupational rights and privileges. Although engineering salaries have always been relatively good, American engineers have not, as a group, been able to achieve the professional and material privilege characteristic of doctors and lawyers, whose success rests on iron control of entry into the profession and the ability to define a professional jurisdiction over which they have exclusive control.

Perhaps more importantly, outsiders have long had--and continue to have--the ability to shape the definition of "engineering" and the uses to which engineering ideas are put. The history of scientific management (Taylorism) constitutes an early example. Although scientific management originated among engineers, and although it seems to have been designed to enhance their role within the emerging giant corporations of the early twentieth century, engineers quickly lost control. Management shaped both the scientific management craze and the actual application of scientific management within industry. This shaping removed those elements promoting the autonomy and influence of engineering. In historical perspective, re-engineering looks like just another in a long line of management's attempts to control and manipulate engineering.

Why this history? We cannot assume that an occupation will eventually develop effective control over its own jurisdiction. Developing such control is extremely difficult and, in fact, seldom accomplished. But, surely, at least part of what explains engineering's failure to develop such control is that many...
American engineers have explicitly refused to define engineering as a closed fraternity. They have argued that engineers cannot organize themselves like doctors and lawyers (because engineers must work within large organizations); that engineers should, instead, think of themselves as an extension of management. The division between those supporting a professional conception of engineering and those supporting the management conception has helped to frustrate attempts to develop demanding standards of ethics, a necessary part of any occupation's attempt to "professionalize".

Thus, the claim that management consultants acted unethically when they borrowed the term "engineering" to coin "re-engineering" rings hollow. If engineers had organized to differentiate themselves from management and to develop a distinct professional identity, they would now have good grounds for complaint. But not enough American engineers have been enthusiastic about professional organization. Those many engineers who accepted a management identity, deliberately keeping the definition of "engineer" imprecise, have exposed engineers to re-engineering without the consent of engineers and often to the disadvantage of individual engineers. Such re-engineering may be painful, but it can hardly be unethical, since it is a predictable result of engineers' own reluctance to define and enforce a clear professional identity and demanding standards of professional ethics.

"Re-engineering: A Case Study"
Fran Gaik, Cafran Enterprises

I developed and ran a successful business marketing and administering health insurance for twenty-five years. After I sold that business to a large insurance company, I worked under contract to the company for several years. Then I was asked to re-engineer its health division. The owners, hoping to eliminate the health division by private sale or public offering of stock, wanted more profits and a much larger volume of business, all within two years.

Having worked for the company, I knew a good deal about both the changes needed and what might block them. Re-engineering that company's health division would have been trouble on any schedule, but trying to do it in under two years meant at least double trouble.

The Plan
To re-engineer is to re-organize for a specific purpose. Re-engineering can be desirable for many reasons, including making better use of technology, treating the environment better, or increasing efficiency. Re-engineering the health division was part of a larger business strategy; it was undertaken to help get the division's owner out of health insurance. Re-engineering was not the only way to do that, of course. Among the alternatives was to sell the "book of business" alone (without any transfer of personnel, offices, or other assets). But all the alternatives seemed likely to return a smaller profit. A buyer would pay most for an efficient organization with good long-term prospects. So, ultimately, the purpose of the re-engineering was to make the division as profitable as possible within two years.

Re-engineering means radical change. Most of us, to one degree or another, don't like such change. But not all change is the same. Some changes are more painful than others. What is as critical as the changes themselves is how they are made, the means to the end. Good changes made the wrong way may not be worth the pain.

The first step in re-engineering is to evaluate the organization for strengths and weaknesses. Evaluation of the health division included product, sales, and service. The evaluation was both complex and full of uncertainties. Private health insurance may disappear over the next few years, or merely change in ways hard to predict. Many major companies are, or at least are considering, leaving the market. Others may come in.

Process is key to re-engineering. Eliminating redundant or unnecessary tasks can add substantially to profit. The crucial question is not whether a particular process is efficient but how it contributes (efficiently) to long-term profit. Computerization and standardization can eliminate tasks in a large-volume process. But just as important as such technical improvements is "selling" those improvements to the employees. Employees must see the necessity, "buy in", and then actively support them. An employee who has bought in can be an effective "Change Agent"-one who will help carry through the recommended changes.
Other employees accept the word of a Change Agent more readily than that of an outsider. Overlooking the power of knowledgeable employees to help change or defeat it can be disastrous.

**Doing It**

Re-engineering the health division required closing half of its regional sales offices immediately and transferring their sales and service activities to the remainder. Most of the offices closed had minimal sales. Some did not even have sales people! We kept firings to a minimum, primarily by re-training most of those displaced.

We also centralized marketing. We designed and distributed new marketing materials through direct-mail, telemarketing, and target advertising. We changed the process of accepting applications for insurance. We wrote a new underwriting manual and enforced it. No special favors were permitted.

Within a few months, we achieved both standardization of the application process and timely delivery of policy issuance. Customer service improved dramatically, for claims as well as for sales. New business was fifteen percent more profitable than before. Despite our tighter underwriting rules, sales were increasing.

Such changes within what had been a stagnating bureaucracy were both welcomed and suspect. Many employees had survived several earlier waves of cutbacks, wage-freezes, and executive re-shuffles. These "survivors" were fearful. They told my Change Agents, "You are being way too visible for your first year here. The way to survive is to lay low, make no waves, and **never** be responsible for a decision." The division needed re-engineering in part because other re-organizations had left its personnel feeling helpless.

About six months after we began, the re-organization was complete and the dust was beginning to settle. The employees generally understood the logic behind the changes and could see why the changes were good for the company. They were accepting the new methods.

**Aftermath**

Sales were, however, not increasing quite as fast as the company's president would have liked. He was already negotiating with a buyer for the division. He was sure that he could get a better price if sales were better. He therefore asked me to "open the gates", to accept what I felt were substandard risks in order to increase (short-term) revenue. Since (for a time) we would use the same low loss ratio for the substandard risk as for our standard risk, accepting substandard risk would make my long-term projections of profit higher. I refused.

The president nonetheless pushed ahead with his plan for quick sale of the division. Because of financial reporting requirements, he could not make a public offering. Quick sale meant selling to another company. Soon a large insurance company bought the division, merged it with its own health division, and re-organized the resulting entity to form one of the largest health insurance companies in the United States.

I was not among those asked to stay on for that re-organization; I was not even consulted. Soon those who had worked closely with me were leaving, explaining their departure as a response to manipulation, coercion, exploitation, and outright lies. Employees had, they said, been told in a mass meeting how valuable they were to the organization, that they were an integral part of the process. Minutes after the meeting, managers were asked how soon they could shut down operations. The same employees who were "integral to the process" were to be let go as quickly as possible. Some employees left later meetings to throw up in the restroom. Others developed hives or insomnia. Sales plummeted. The new company was soon accepting more and more substandard business in order to maintain revenue.

Eventually, the company was sold again and reorganized again. While most companies experience the earthquake of acquisition once or twice in a lifetime, the company my health division joined went through four in three years.

The company is now sicker than ever, probably terminally so. There is no focus within the company. Training has halted. Most employees with any self-respect left long ago. Those remaining have no incentive to do a good job, no sense of integrity, no trust in their leaders, no assurance that either they or their leaders will be there tomorrow. Since the project they work on today may be useless tomorrow, they are only there to survive. Many have done things to survive that they normally would not. Even their language has changed. Like civilians in a war zone, they now talk of "waiting to get shot", "ducking under the desk", and
"diving for cover". Watching one's back and trusting no one has become the rule. Everybody will lose in the long run, especially the customer.

Post Mortem
The difference between my re-engineering and what followed is hard to overstate. It is like the difference between, on the one hand, a surgeon's scalpel followed by physical therapy and, on the other, butchery by chainsaw. Extremely profitable subdivisions, such as the one I had helped to sell them, fell away as employees quit or were fired. I have never seen such waste or carnage in all my years in business, so little consideration for anyone or anything.

"The Compensatory Opportunities of Re-engineering"
Peter A. French, University of South Florida

American corporations have traditionally organized according to a model proposed by Adam Smith. The basic idea was that any productive work can be divided into small units. Jobs can be cut razor thin so that the training necessary to do them is minimal. The rule was: break down all complex productive processes into simple tasks. Division into simple tasks allows a relatively uneducated but closely supervised workforce--an assembly line--to produce even highly sophisticated products. Once the Smithian model proved itself in production, it was translated to white-collar jobs; management positions were defined in terms of fewer and fewer responsibilities for the overall operation. The modern business bureaucracy was born.

The Revolution of Re-engineering
The revolutionary innovation in recent thinking about corporate organization, re-engineering, rejects the Smithian thin-slicing approach. Re-engineers recommend combining many jobs into one, with a corresponding streamlining of productive and managerial processes. A re-engineered corporation is the antipode of an assembly line. Theoretically, re-engineering produces a compression not only on the horizontal plane of the corporate structure but on the vertical as well. Managerial positions and levels are lopped off as redundant, thereby shortening the distance between top executives and ordinary employees. Decision-making becomes part of every job, not something reserved for managers.

Corporate re-engineering along the lines recommended by such advocates as Michael Hammer and James Champy in their best-selling book Re-engineering the Corporation (New York, 1993) is ethically appealing insofar as it gives ordinary employees more voice in decision making than did traditional top-down management. Many proponents of the new organizational schemes seem convinced of another ethical advantage. Because managerial levels are compressed and corporate decision-making is dispersed, effective commitment to ethical considerations in corporate decision making will (they claim) percolate through the new decision structure. Why that should be remains a mystery to me, but it is not hard to see why a board of directors would find the new structure attractive. Who would not want to do business in a way promising both economic and ethical success?

The Dark Side
There is, however, a dark side to re-engineering: the large number of people who are now or will soon be unemployed because of it, people who will be unemployable unless corrective steps are taken. The criteria for hiring someone in a re-engineered corporation is radically different from the criteria in the traditional corporation. The Smithian prototype was founded on the assumption that workers need only know enough to be trained for one simple repetitive job. In the re-engineered corporations, according to the theory's proponents, employees will need complex decision-making skills (because the jobs will be multi-dimensional and require flexibility). Training in a single specific skill, no matter how good, will be inadequate. For multi-dimensional and changing jobs, companies don't need people to fill a slot, because the slot will be only roughly and provisionally defined. Re-engineered companies need people who can figure out what the problem of the moment requires for solution and do it, people not bound by pre-established slots on the organizational charts.

What re-engineering requires is an educated workforce. Yet, if America lacks anything, that is it. A sizable part of the workforce is functionally illiterate or nearly so. While such people probably could find work in a traditional corporation, they do not qualify for the re-engineered corporation's
empowered jobs.

The social price of empowering the employees in the re-engineered corporations may well be that many, if not most, of the workforce from the old division-of-labor-management-intensive companies will not qualify for employment. Not only the blue collars, but middle managers by the thousands have joined the unemployable queue. They heard the job training message loud and clear: "Division of labor. Do what you do well. Let your superiors worry about how it all works."

Then came a lack of international competitiveness, downturns in profitability, questions about productivity. Suddenly, those managers were out of work, their lives and their very identities in shambles.

Hammer and Champy tell corporate executives to forget about the past and begin by asking: "If I were recreating this company today, given what I know and given the current technology, what would it look like?" Fine, from the point of view of economics and management theory, but is it ethically permissible? We are caught in an historical trap. It is unethical to act as if the assembly line were only a bad dream from which we are awakening after two centuries. It wasn't a bad dream. It was a bad real-life organizational system, one that had, and continues to produce, innocent victims. Re-engineering, intended to correct both the ethical and economic failings of the old system, also leaves many innocent victims in its wake.

**An Ethical Problem?**

Because the basic principles of the traditional corporate structure conditioned disdain for persons rather than demanding respect for them, they were always ethically deficient. Economists tell us that they were also, at least in part, economically deficient. They were responsible for the loss of markets and profitability of American companies in the last two decades. Fixing what clearly is both ethically and economically broken is nonetheless having an ethnically unacceptable effect: large-scale unemployability.

Re-engineers might try to convince us that large-scale unemployment is not the intent of their re-engineering. Indeed, they write that way. But what bothers those who answer them in letters to the newspapers condemning re-engineering is that profitability for stockholders and the corporation's competitive edge is being given priority over human suffering, the suffering of loyal employees. The argument that one may need to do a little evil to produce a great good rings hollow here. The proponents of re-engineering need something ethically more responsive.

The proponents of re-engineering have maintained that the workforce will need education, not in specific tasks, but in how to think, how to evaluate, how to imagine, and so on. Fine. But where are they going to get that education? Who is going to foot the bill? Public education? Government unemployment programs?

One way for government to respond to re-engineering is to pass laws discouraging corporations from adopting new structures, even when they empower employees, unless their current employees are sufficiently educated to qualify for the jobs, though positions cannot be guaranteed, and they will be fewer in number, in the restructured system. Such a response, it might be argued, is no more than fair. Unless government responds in some such way as that, many of today's employees will be excluded from employment for reasons that are not only beyond their control but also the direct effect of the organizational conception being discarded. Today's employees could not have worked for yesterday's corporation without molding themselves in just the ways that now make them unemployable.

**An Ethical Response**

Whatever the initial attraction of this proposal, it is, I think, unfair to corporations struggling for survival in difficult times. They should have the freedom to pursue their economic interests and those of their stockholders. They should be free to restructure as they see fit. But they should also, it does seem to me, be held to this principle of compensation: If a company re-engineers (or otherwise downsizes) to improve its chances of market success, to make greater profits for its stockholders, or to achieve some other economic advantage, it must compensate loyal employees who cannot qualify for the new jobs or whom the new structure otherwise makes redundant. This principle of compensation derives from the well-worn moral (and legal) principle that someone who injures another and thereby gains advantage, must restore the injured person to a position no worse than he or she was in before the injury occurred. In the absence of compensation, the injurious action should be prohibited. Only if compensation is paid, may the
But what sort of compensation is appropriate? Cash settlements would probably appeal to lawyers, but I think something more radical is in order: the re-engineered companies themselves should get into the business of education. What I have in mind is a combination of something like a private GI Bill and major financial support for those institutions educating people for positions in the re-engineered businesses of the future. The members of the displaced workforce, whether blue or white collar, should be compensated by guaranteed tuition remission and living expenses for the college terms needed to complete a course of study putting them in position to compete for the jobs in the new businesses.

This is, of course, only one suggestion for how victims of re-engineering might be appropriately compensated. Whatever its merits, we need to develop and deliver a curriculum (from the earliest grades through graduate school) that anticipates the future business climate. The re-engineering (and downsizing) corporations have a moral obligation to provide the means necessary to accomplish that end.

**Ethics Bowl on the IIT campus in Chicago. Teams representing IIT, Loyola (Chicago), DePaul, Western Michigan University, and the United States Air Force Academy squared off in friendly, but intense competition. Ethics Bowl was inspired by TV's College Bowl, but with different rules to adapt the College Bowl format to the subject of ethics. A distinguished panel drawn from business, the professions, academia, and the arts rated the teams' answers in terms of the clarity, ethical relevance, focus, and judgment. The team from the United States Air Force Academy emerged victorious, but all the teams turned in performances that impressed the judges, audience, and representatives of the media who attended the event. The Second Intercollegiate Ethics Bowl received publicity before the event in the Chicago Sun Times and on WMAQ News Radio in Chicago.**

**Other Ethics Bowl Activities This Year**

There were two additional major activities related to the Ethics Bowl this year, one preceding the intercollegiate event, and the other following it. On February 3, an internal IIT Ethics Bowl took place to determine the team that would represent IIT at the Intercollegiate Ethics Bowl. The internal Ethics Bowl drew ten teams, who competed vigorously on one of the coldest Saturday afternoons in the history of Chicago. The twelve distinguished individuals who served as judges for the event, were either IIT Alumni, IIT graduate school faculty, or participants in past or present CSEP activities.

On March 1, the Friday following the Intercollegiate Ethics Bowl, CSEP Faculty Associate and Ethics Bowl organizer, Robert Ladenson, along with several IIT students, who had all participated in an Ethics Bowl at IIT, presented a demonstration of Ethics Bowl at the banquet of the annual meeting of the Association for Practical and Professional Ethics in St. Louis. Ladenson and the IIT students received many favorable comments, expressions of interest in participating, and suggestions to make the Ethics Bowl even more exciting and educationally valuable. CSEP has already begun planning for a substantially expanded Ethics Bowl in 1997.

**How Ethics Bowl is Played**

In Ethics Bowl, a moderator asks teams of three to five persons questions that pose ethical problems on topics such as the classroom (e.g. cheating or plagiarism); personal relationships (e.g. dating or friendship); professional ethics (e.g. engineering, architecture, business, the military, law, medicine, and so on); or social and political ethics (e.g. free speech, gun control, health care, and so on). A team gets one minute to confer after which it must state its answer to the question, including its reasons. The judges then have an opportunity to ask brief follow-up questions. After the team responds to the follow-up questions, the Moderator reads the "Moderator's Answer." This answer is not the standard of ethical correctness in the game but a device to model the element of discussion and dialogue in reasoning about ethical questions. For this reason, a team has three options upon hearing the Moderator's answer. First, the team may rest, in which

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"At the Center"
Robert F. Ladenson, CSEP, Illinois Institute of Technology

CSEP Hosts Second Intercollegiate Ethics Bowl
On February 24, 1996, CSEP hosted the Second Intercollegiate
case it accepts the Moderator's answer, and the judges then rate the team's answer. Each judge on the panel ranks the answer on a scale from one to ten, from the standpoint of the answer's clarity, ethical relevance, focus, and judgment. Second, the team may challenge the Moderator's answer, and third, it may accept the answer, but with qualifications. If a team elects either the second or third option, it receives another thirty seconds to confer, after which it states its reasons. The judges then make their evaluations. Before the Ethics Bowl, the student participants receive a set of twenty-five questions to study. The questions asked at the Ethics Bowl are taken from that set.

-Robert Ladenson
Faculty Associate

"Announcements"

Do ethics in the Rockies this July! The Association for Practical and Professional Ethics and the Mansfield Center will sponsor a conference, Ethics in the Professions and Practice, July 21-25, 1996, University of Montana. Each participant will take part in a four-day seminar focused on a topic of special relevance to teaching, research, or practical or professional ethics including: The Morality of Journalistic Actions (Deni Elliott); Narratives, Case Studies, and Theories of Ethics (John Arras); Autonomy and Coercion in Public Health (Bruce Jennings); Collegiality (Vivian Weil); Developing and Re-Developing Professional Codes: What, How, and Why (Michael Davis); Euthanasia (Tom Beauchamp); Religion and the Professions (David Smith); Ethics in Engineering (Mike Pritchard); Teaching Professional Ethics: What Do We Know About What Works? (Muriel Bebeau); and Ethical Issues in Scientific Research (Karen Muskavitch). Each day a plenary lecture will take up a topic of practical or professional ethics cutting across disciplines. Contact: Association for Practical and Professional Ethics, 410 North Park Avenue, Bloomington, IN 47405. Ph. (812) 855-6450. Fx. (812) 855-3315. E-Mail: APPE@INDIANA.EDU.

11th International Workshop- Conference on Teaching Philosophy will be held at Old Dominion University, Norfolk, Virginia, July 31-August 4, 1996. Contact: Nancy Slonneger, Executive Director, American Association for Philosophy Teaching, Transylvania University, 300 North Broadway, Lexington, Kentucky 40508.

European Bioethics Seminar: Health Care Issues in Pluralistic Societies, August 5-9, 1996, will be held in Nijmegen, the Netherlands. Organized by the International Program in Bioethics Education and Research and staffed by prominent bioethics scholars from several countries, the seminar will offer participants both a formal and practical understanding of contemporary bioethics issues. Special attention will be paid to European traditions in health care ethics. All lectures and plenary sessions will be in English. Contact: Mrs. J.C.M. Fete-de Haard, Catholic University of Nijmegen, 232 Dept. of Ethics, Philosophy, and History of Medicine, P. O. Box 9101, 6500 HB, Nijmegen, The Netherlands. Ph. [31] (0)24-3615320. Fx. [31] (0)24-3540254.

The 10th Annual Conference of the European Society for Philosophy of Medicine and Health Care, Philosophy of the Health Sciences: From Disease Prevention to Health Promotion, will be held in Vienna, Austria, August 14-17, 1996. All sessions will be in English. Contact: Prof. dr. Henk ten Have, secretariat ESPMH, Dept. of Ethics, Philosophy, and History of Medical Sciences, Faculty of Medical Sciences, Catholic University of Nijmegen, P.O. Box 9101, 6500 HB Nijmegen, The Netherlands. Fx. [31] (0) 24-3540254

CALL FOR PAPERS: Business Ethics Quarterly invites submissions for a special issue, "Business and Politics". Deadline: July 1, 1996. Contact: Professor Leonard Weber, editor for that issue, Ethics Institute, University of Detroit Mercy, 8200 West Outer Drive, Detroit, MI 48219.

International Society of Value Inquiry hopes to hold its annual meeting in Boston, August 1998, in conjunction with the 20th World Congress of Philosophy. Submit papers in any area of value inquiry, including ethics and aesthetics, value theory, and disciplinary, interdisciplinary, and metadisciplinary value inquiry. Deadline: September 1997. Contact: Professor John M. Abbarno, Secretary, International Society of Value Inquiry, Department of Philosophy, D'Youville College, Buffalo, NY 14201, USA. Ph. (716) 881-3200,
The Center for Biomedical Ethics, University of Minnesota, asks for papers on End-of-Life Care in Managed Health Care Organizations: State of the Art in Ethics and Quality of Care for a conference, November 1-2, 1996, designed to assist clinicians, policymakers, and health industry leaders improve end-of-life care in managed health care. Topics for papers include Ethical Analysis, Clinical Services, or Policymaking. One author of each accepted paper for plenary sessions will receive a $500 honorarium and up to $1000 to reimburse expenses; one author of each paper accepted for a breakout session will receive a $200 honorarium and remission of conference fees. Contact: Candace Holmbo, Center for Biomedical Ethics, Suite 110, 2221 University Avenue SE, Minneapolis, MN 55414. E-Mail: holmb006@maroon.tc.umn.edu.

FREE PUBLICATION From CSEP's Publications


Conflicts of Interest in Engineering, one of six titles in a Module Series in Applied Ethics published by CSEP through Kendall/Hunt, is now available from CSEP for $3.00, the cost of shipping and handling. The original cost was $7.75.

This monograph examines an ethical issue that arises for many professionals and business people. Conflicts of interest occur frequently in engineering, creating problems for engineers and their employers or clients. The engineering workplace offers a setting useful for clarifying the issue of conflict of interest, explaining what makes it morally compromising, and indicating appropriate responses that apply as well in other professions and in business. With three co-authors, this monograph provides the perspective of a practitioner and the perspectives of two philosophers. In addition to a thorough analysis of an actual episode, the Hydrolevel case, the monograph contains fourteen problems, the first four of which are discussed by the Board of Ethical Review of the National Society of Professional Engineers in official opinions and by the three authors. The remaining problems are left for analysis by the reader.

The Center for the Study of Ethics in the Professions (CSEP) was established in 1976 for the purpose of promoting education and the scholarship relating to ethical and policy issues of the professions. Perspectives on the Professions is one of the means the Center has of achieving that purpose.

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Opinions expressed in Perspectives on the Professions are those of the authors, and not necessarily those of CSEP or the Illinois Institute of Technology.