

Active Learning, Critical Thinking, and Personal Responsibility in a Multicultural, Self-Organizing Course on International Relations

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Abstract

Twelve years ago I began the process of reconstructing my classroom environment with the aim of improving the quality of my students' learning environment. Three benefits were anticipated: class size would increase, learning would increase qualitatively, and my personal workload would remain constant and/or decrease. None of these benefits were aimed at. Instead, the critical focus was on reducing the gap between (1) students' natural ability and their curiosity about the subject matter (international relations), and (2) the material to be learned (embodied by the texts, syllabus, and assignments). The general pedagogical approach was that promoted by W. Edwards Deming and his associate, David Langford. So far, the results have been, my class size has roughly tripled, students do exceptionally well on objective tests, and my traditional workload has actually gone down. An unanticipated result was the introduction of an intergenerational learning process that takes place among students across my classes over time, which results in spontaneous improvement in class structure by the students themselves. Also unanticipated was the difficulty I have had in keeping up with them--a most happy result!

Keywords

Systems approach, multicultural environment, class size, internet, simulation, continuous improvement

Preface

In this essay I am taking an anecdotal approach, for one simple reason. I recently read David Gergen's *Eyewitness to Power*¹ and decided to use it in a class I was teaching for the first time. His anecdotal approach to analyzing the strengths and weakness of the five US presidents under whom he served enabled me, and now I hope my students, to acquire knowledge at an emotion-educating level that isn't normally reached by other methods. An anecdotal approach is particularly appropriate, I believe, to convey my experience to scholars who might possibly wish to undertake this paradigm shift in their own pedagogy. I was interested in improving the quality of education acquired by my students, while holding down costs in terms of my time and university facilities. By describing my experience anecdotally, I hope to facilitate these purposes.

Introduction

This essay is about a change in my pedagogical paradigm, which I have undergone over the past decade of teaching. Prior to the change, I had taught courses for twenty years at the undergraduate and graduate levels. I was not looking for a major change in my thinking about pedagogy, nor was I advised to. I was comfortable. I was made uncomfortable by what I learned about teaching from two people, W. Edwards Deming and David Langford.

The essence of the change is this.

- Before, I viewed the classroom and courses in general, as opportunities for students to learn subject matter I had learned and was prepared to communicate through my

lectures, assigned readings, and related exercises. Assessment was in the form of exams and essays.

- After, I viewed the classroom and courses as a place and processes that *encouraged* students to learn a subject matter *collectively* through a variety of exercises and regular feedback about their progress.
- Assessment continued to be in the form of exams and essays, but now also included self-assessment, peer assessments, evaluations by teaching interns, and external evaluators.
- Before, I viewed my responsibilities thus:
 - to be a knowledgeable and well-organized lecturer,
 - an honest and fair evaluator, and
 - a helpful advisor and writer of recommendations.
- After, although I continued to perform the above tasks, I viewed my primary responsibility differently. I was now to be an organizer of processes implemented by students on a quest for education in a particular subject matter, with the core problem of identifying and eliminating significant barriers to attaining that educational aim.

This paradigm shift started with a change in my thinking about means and ends, causes and effects; and it led to the introduction of myriad changes in how I restructured class time--again, with the purpose of removing barriers to education.

The details about the changes I undertook are of course important, but not in the way one might anticipate as a set of activities to emulate. The changes, in their individuality and in their collectivity, are useful only to illustrate the process. Every teacher's situation is unique. How I tackled the general problem will be unique to me, my circumstances, and my particular human frailties. What I think should *not* be unique is the mission of identifying and removing barriers to education with the aim of increasing average learning and reducing average variation in learning.² Some of my efforts seemed to work and some failed from the start, but that is less important than the process of seeking out barriers to education and applying one's creativity and ingenuity to removing them by restructuring classroom activities and assignments. It is the dynamic in the dialog, not the details, which I hope to convey through the details. It is the focus on students, not method, which is critical.

For instance, I stopped giving 50-minute lectures interspersed with question and answer dialogs. I substitute 10-15 minute lecturettes; I organize students into groups, and ask them to discuss what I taught and raise questions for me to discuss. What is important here is not how I restructured my lecture material, the amount of time given over to discussion, and so on; but rather what the reason for the restructuring was and whether its aim was accomplished. Too often the "profound theory of knowledge" (Deming's somewhat grandiloquent phrase) I adopted has been imitated at the level of specific techniques. Applied out of their theoretical context, they may or may not be useful, but generally are unlikely to produce the anticipated results with reliability.³ To return to the example, it may be that for some teachers with a very different lecture style, the 50-minute lecture is not an issue, not a barrier to education. In my case it was a significant issue because I was more concerned with what I was saying than I was whether students were absorbing it. One simply needs to be observant and sensitive to results, outcomes such as the average grade on quizzes related to lectures, to get the point. The general idea is to test everything you are doing, over time of course, with the aim of improving the mean and reducing the variation in student learning outcomes. The problem is, why would you want to if you were comfortable with what you are doing?

So, this essay begins with what caused me to make the shift. It ends with a discussion of some failures that soon will be obvious (my failure to assess results carefully and objectively). But it doesn't quite end there since each of these failures also has some obvious solutions, which are easily implemented given time and some modest resources.

There is another thread or facet to the unfolding of this essay. Multicultural diversity has been a common feature of our student body at the University of Hawaii. Hawaii, of all the 50 states, comes closest to what it means to be "globalized." Besides being the smallest in population, it is also by far the most diverse state ethnically, linguistically, religiously, politically and racially. Its economy is profoundly dependent on a stable global political economy, tourism and military spending being the primary economic engines. How do you provide a classroom atmosphere that is conducive to addressing the political and social issues concomitant to this cultural diversity emanating from the globalization phenomena? The varieties of religious experience, political history, and ideology, the great linguistic diversity, and the great differences in social status or "class," are enormous. If you want all your students to benefit from a course on international relations, how do you remove the barriers to education that arise from this diversity?

In the sections that follow I have focused in on several facets or models for organizing thought and action which I employ, devoting sections to (1) the paradigm shift itself, (2) active learning, (3) critical thinking, (4) personal responsibility, and (5) self-organizing and self-improving systems within the classroom. Each of these represents facets of innovation particularly important to education in a multicultural society with competing norms and sociopolitical structures. Classes about politics and international relations are natural lightning rods for issues and belief systems surrounding the distribution of values in a globalizing world. I conclude with a discussion of assessment standards and measuring change over time, something that I am only now undertaking systematically.

I. Pedagogical Paradigm Shift

Change is difficult and often arrives in surprising ways. In 1991, a graduate student of mine, a decade my senior, a businessman running his own technology assessment service for inventors, urged me to take W. Edwards Deming's seminars, one four day seminar for business and government, and one, one day seminar for educators. He convinced Deming, whom he had known personally for several decades, to scholarship me since I couldn't afford the \$1,500 fee, and I managed the airline ticket and lodging on my own. I was not very interested in his seminar for educators; rather, I was intensely curious as to how Deming, a former professor of physics and statistical consultant could have contributed so significantly to Japanese industrial transformation after World War II. His writing was deceptively clear--you thought you understood it until you tried to draw inferences from it--and simultaneously frustratingly atheoretical. Thus it seemed to me that the only way I would stop "missing the forest for the trees" as it were, was by experiencing Deming's seminar myself. I had read his *Out of the Crisis*⁴ prior to the seminar and a number of his protégés' works. All I acquired, however, were some normative do's and don'ts and a general awareness that his idea of "system" did not seem to conform to common usage, at least among my academic circles. I hoped he would be a better communicator face to face than he was in his writing. He was.

I.A. Concept of a System

A system, for Deming, differs from the usual definition as a set of interrelated variables. One could add feedback to the usual definition to represent a cybernetic system, but Deming added something more. Paraphrasing, a system is an organization of people's relations with one another *designed to enable their collective pursuit of a common purpose*. It was neither the specification of people's relations nor the idea of feedback (which relates to cybernetic controls), but rather the active, intentional element of *common purpose* that in my view sets it apart from what I had previously understood.⁵ But what this implied for me, for politics, and for the teaching of politics as a political scientist, was not at all clear.

About this same time, the term "assessment" was gaining currency on our campus, and pressure was beginning to be felt for a sea change in academe. Most of us I dare say saw this pressure as an administrative intrusion into our sacred space, the classroom. Epithets such as "cookie cutter" and "assembly line" lurking in the background, the Internet was just getting off the ground and many I recall laughed at the idea that the next big change in the Internet would be businesses doing business and seek customers! The idea that it could serve as something more than a conduit for data among researchers was just this side of ludicrous. Changes that are paradigmatic in scope always seem to sneak up on us, catching us where and when we are most vulnerable, least aware, and highly uncomfortable.

The Deming seminars jolted me into superconsciousness (the "aha!" experience). What excited me was simply the idea--paraphrasing Deming again--that we all live in systems, which *determine* our *average* behavior and *average variability* in that behavior--not all of it, but most of it.⁶ Further, these systems are also inherently unstable and therefore need constant attention. Thus successful effort at continuous improvement must be the norm if the systems in which we live are in the long run to help rather than hinder attainment of the purposes for which they are intended.

I.B. Application

Apply these ideas to the classroom. An academic course constitutes a system with a purpose. What is that purpose? Students' behavior, however measured, adapts to the purposes they perceive that system aims at. Key assessment measures, typically grades on tests, essays, oral presentations and so on, have means and variation. Improvement in the system implies improvement in those assessments, for instance higher grade averages and lower variation (no student left behind as it were). Who is responsible for organizing the course and reorganizing it for constant improvement to that aim? The instructor!

Let me be specific. *Who is responsible for students' average grades and average variation in those grades?* I used to think it was the students themselves and a function of their natural ability, training, curiosity about the subject matter, and their environmental opportunity (place to study, travel time, interference by jobs, duties...). The instructor's job was to organize the subject matter, present it in a reasonably logical manner, and test whether students had assimilated it. Deming's paradigm doesn't so much contradict this causal model as it adds an alternative set of variables, a multidimensional source of variation in assessment measures, clustered around a purposeful, goal oriented effort by the instructor to remove barriers to education inherent in the traditional organization of a course. And it goes beyond that, to view each higher-level system in the same manner, a department, a college, a university, a regional system, and a national educational system.

I.C. Contrast with the Standard Paradigm

This was not at all the way I thought about teaching. I had been teaching in universities for twenty years, starting as a teaching assistant at Northwestern, an assistant professor at Illinois Institute of Technology, a lecturer assisting Karl Deutsch at Yale, then settling into a teaching and research career at the University of Hawaii while still being a peripatetic researcher almost as an avocation. I knew teaching. My courses weren't particularly remarkable in terms of student evaluations or grades, no special accolades or awards and none sought. I was frequently a bit lower than average on my evaluations, but high enough not to raise any eyebrows; my departures from statistical norms were often statistically significant but, as they say, not substantively important. And I enjoyed enough positive support from those students I connected with to make my career very rewarding at a personal level.

But what were my goals? Until Deming's seminars, I hadn't really thought about it much. Upon reflection, after the Deming seminars, I concluded I was driven by three goals: (1) to be an excellent lecturer, by which I understood being knowledgeable, organized, and clear in my presentations; (2) to be a very fair grader of students' work with clear expectations, willing to admit and correct my own errors along the way, and to help students understand theirs; and (3) help my students get jobs or go on to graduate school.

Deming's paradigm puts students' education centerstage, not my intrinsic objectives. Consider for a moment the traditional lecture format. Instructors tend to rely on the lecture format, which effectively puts the instructor's own self-evaluation first. Their goal is to know their subject matter, lay it out in a logical, comprehensive fashion, and squeeze it into 50-minute lectures ("cover the material"). But what is the impact on students? Normally, lectures tend to become boring--at least mine do, at least to me--and to the average student after about 10-15 minutes into a 50-minute hour. After 10-15 minutes the tendency is for students to move into automatic writing mode in response to information overload. Students who manage to prevail do so because of sheer persistence and determination to succeed, or because of prior knowledge, or sheer brilliance.⁷ For the average student, the lecture becomes an obstacle to cope with, to hurdle. Pedagogical value drops to nil. Similarly, grading fairly can seem to be more a pedantic exercise in meeting a need for control or judgment than an assessment of mastery of the subject matter. And career goals for most students in a classroom are distant motivators at best.

It is axiomatic in Deming's framework that students will generally learn in any educational system; because they desire, as do we all, to cooperate in social group contexts, especially ones in which intangible and tangible benefits are promised and available (education, grades). It is also axiomatic that the primary reasons for average levels of performance and variation in performance among students are intrinsic to the structure of the education process itself. This includes the substantive subject matter of the course, expectations for the course based on an instructor's specific description (syllabus and so on), classroom procedures and dynamics, and the institutional context in which the course exists (major requirements, general education requirements, and so on).

To sum up, the critical focus in Deming's pedagogy as I understand it, is on reducing the barriers between (1) students' natural ability and curiosity about the subject matter (in my case, international relations), and (2) the material to be learned (embodied by the texts, syllabus, and assignments). Being inquisitive about the existence of those barriers, diligent in ferreting out and understanding the causes of those barriers, and attentive to reducing them without compounding the problem, should produce real and valuable changes.

I.D. Anticipated Results

No undertaking of a major change in pedagogy would be without anticipated results. I anticipated a number of benefits would follow from adapting to Deming's pedagogy.

- (1) Class size would increase through "word of mouth" because students would be more satisfied with their educational outcomes, and let others know;
- (2) Learning would increase qualitatively as barriers to education were removed; and
- (3) My personal workload would remain constant and/or decrease because there would be less wasted effort.

In sum, *if Deming's systems pedagogy yielded a more efficient education delivery system, more students should be better educated with less wasted effort.*⁸ Yet none of these benefits should be aimed at directly. What is aimed at is barrier reduction. The anticipated benefits should be used as measures of whether barrier reduction is actually taking place. To use an analogy to Deming's business philosophy, recall that while the measures of success may be overall profitability, staying in business, and providing jobs, the focus of effort should be on working cooperatively, for instance driving out fear, encouraging pride in workmanship, and eliminating waste. My aim had become to removing barriers that waste students' time and decrease students' education, and to reduce such barriers at a reasonable price in terms of my time and resources. It is constant, cooperative, skilled, and theoretically informed effort at improving the quality of educational outcomes at reasonable costs that I hoped would drive my day-to-day operations.⁹

Let us now turn to a number of practical facets of this adventure in paradigm shifting that I actually undertook.

II. Active Learning

So often in a panic students cram for exams, burn the midnight oil writing their final essay, trying simultaneously to do their research, write their results, and decide along the way what their purpose is. Part of the reason for this is an educational system that relies on final exams and essays to grade students, and that focuses on the grade rather than on the education one has acquired. By having "final exams" and "term papers" at the end of a quarter or semester, the students tend to be distracted and forego preparations until just weeks before a class comes to an end, a behavior commonly termed *reactive learning*. Reactive learning takes place in response to a lecture or a problem such as preparing for an exam or writing a term paper. By contrast, consider students interacting with one another to further their understanding of a subject matter, actively helping one another to achieve that common aim. This may be in discussion groups, group dialogs with the teacher, in either common research projects or projects in which they can get each others' feedback for improvement. In such a situation, education is continuous and cooperative, usually referred to as *proactive learning*.¹⁰

II.A. Proactive Learning through Role Playing and Simulation

I've implemented proactive learning in the following ways:

- (1) Students are assigned national governments to role play foreign policy decision making in teams of 6-7. They are assigned key positions in their governing body (equivalent to President, Secretary of State, CIA Director, and so on). One is assigned the role of opposition. All must research their country's policies, type of government, economy and so on.

- (2) Students share this information both within and between teams in a variety of ways. They post what they've found on the Internet as pages on information sources (hyperlinks), history, and current policies. This way all class members can use the information gathered while at the same time earning credit for their own work.
- (3) As we focus on contemporary global political issues and trends during lectures, during simulation time, they grapple with the same issues and trends. The simulation becomes a kind of "parallel universe" in which they can try out ideas, solutions and perspectives.

It is the human motivation through interaction that takes hold after a month or so of study and preparation, which brings them to an understanding they simply do not get in the lecture format for this material. It is education of emotions as well as intellect that takes place.¹¹

II.B. Proactive Learning through Group Participation

In other contexts getting students to be proactive is more difficult. I am currently teaching a class on political leadership. The class is about half the size of my international relations class and I have no teaching interns to help keep it organized so I have had to adapt. To encourage proactive behavior I randomly assign students to groups repeatedly so they meet a wide variety of students in the class. One is selected to be "number 1"--the organizer of the discussion, and the others are numbered off (2,3,4,5,6). I give them a question or two to discuss about the chapter in a book they are reading. They introduce themselves and are quiet for a few minutes to individually think about their response to the question(s). "Number one" then asks each to give a summary sentence or two of their reactions. Then it's open discussion time in the group for about 10 minutes. I stop the discussion and ask each number one to speak on behalf of the group in response to the question(s) posed. Then we have some general discussion and I give a lecturette, usually focusing on some facet of leadership theory. Afterwards, all the "ones" form one group, all the twos a second and so on. The process repeats usually twice in a 75-minute period. Every now and then they seem to appreciate a longer lecture, but I have found that to be pretty unusual.¹²

III. Reflective Thinking and Critical Thinking

Many of us were fortunate enough to have teachers who introduced us to the thinking of great scholars. Among these was one whose idea of reflective and critical thinking still persists, John Dewey. "Active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusion to which it tends."¹³ When I first started teaching classes on my own almost forty years ago at IIT, I must admit to being panic stricken, not with fear of public speaking or from depression. It dawned on me that most of my "education" was "just book learning." What did I actually know in the sense of being able to "prove" it? Worse, what kind of system did I live in that permitted, even encouraged, me to select books and put my near-peers on a reactive reinforcement schedule (assignments, tests, grades)? I felt like I was an unprepared mind in a clueless system, earning a living through studied redundancy and repetition from the past. Coming to grips with a subject matter for the first time in an active rather than passive orientation brings you toe to toe with your subject matter; whether you are convinced of its value or not, you are engaging it and promoting it or critically appraising it.

In the simulation situation mentioned above, students experience something similar because they must use it in their dealings with one another. They begin by being encouraged to reflect on the roots of each others' cultural beliefs and identities, and how such identities

affect national policies and perceptions of "national interest." Similarly, in the leadership course I am now teaching, they are asked three levels of questions. First, what were the successes and failures of policy and of character, of the national leader studied this week? Second, what is the author's viewpoint and how does it affect his rendering of the leaders' profiles? Third, transcending both, what assumptions are you bringing to the reading, how are they affecting your reactions to the reading, and what theories are you now learning that affect these appraisals?

I have not yet as fully integrated as I would like the critical thinking and reflective thinking modes of inquiry into the written assignments.

IV. Personal Responsibility

Perhaps one of the most difficult topics to address, at least for me, is that of student responsibility. Active learning implies self-direction, self-leadership. The standard classroom, seat facing the instructor, presumes that they are ready, willing and able to sit there for 50-minutes or more and assimilate a prepared lecture. The instructor is responsible for logically structuring the information and presenting it knowledgeably. The instructor plays leader and the students play followers. For the student this process is other-directed, not self-directed. Yet much of what needs to be learned to appreciate politics and political behavior requires an empathetic sense, a "put yourself in my shoes" approach, because much of politics is about making decisions, about being self-directed as well as other-directed. Thus, the teaching of leadership skills and practicing leadership should be an integral part of teaching politics.

To assist me to do this, for the last decade I have asked a friend of mine, Leo Bogee, to give a two session series of lectures and exercises on leadership. He teaches leadership seminars professionally in business, academic, and, for the last ten years, religious settings.¹⁴ Student reactions are typically strongly positive. Bogee focuses on distinguishing self-esteem from self-worth, leadership as ability to align people's activities around a common purpose, identifying your own and others leadership styles, and acquiring a skill bank to improve listening, observing, and other skills essential to social interaction.

A closely related problem faced today by students, as in my generation, is their lack of training for autonomy. Like David Riesman's "lonely crowd," students seem to be "other directed" led by their grades, dangled in front of them by well-meaning but largely ineffectual educational systems.¹⁵ It is to Deming's great credit that he saw the psychological errors in this system. Consider some of his dicta: "Drive out fear." "Cease dependence on inspection to achieve quality." "Restore pride in workmanship." "Eliminate work standards.... Substitute leadership."¹⁶ His call is clearly for a much greater distribution of autonomy throughout organizations, including classrooms.

Now, Bogee conceptualizes self-esteem as what you think others think of you, and self-worth as what you think of yourself. In the student-teacher relationship, one's sense of self-worth has a profound effect. To act and react from motivation rooted in self-esteem (given the above definition) is to be regularly other-directed. To interact from self-worth is to interact autonomously. So, I began to see my problem as reorganizing the classroom experience to increase activities that promoted autonomous learning, minimizing the barriers to self-worth, and reducing the significance and frequency of those activities that depressed the senses of self-worth and self-esteem.¹⁷

I made two major changes. I reduced the weight given to quizzes and exams, and I increased the weight given to student self-directed research. I still give exams and quizzes, but not primarily to "test" and "judge" the students, but rather to let them know how much or little they have assimilated of the texts and lectures. I give 12 quizzes and 4 exams. Much of the quiz material is in the exams (altered to prevent rote memorization and so on), so the quizzes are used more to identify those areas where students should study more. But their contribution to the students' grade is minimal, less than 10% of their final grade. Despite the reduced relevance to the overall grade, what I've observed is more students getting As and very few getting Fs (90% is an A etc). And they do far better on the exams as well.

On the other side, I've given far more weight to the autonomy building exercises. I had them conduct simulations of international relations, and divided them into national foreign policy decisionmaking teams, then told them to perform the following exercises:

- (1) Individually scan the Web for information about the role you will simulate. Find 10 sources, put them on a webpage of your making and place that page on a publicly accessible site.
- (2) Cull from those same sources the facts (beliefs, values, policies, as well as demographic and geopolitical information) you find most relevant to the role you will play. Write a review or a "brief" organizing and presenting this information. Feel free to use the sources other students have found as well.
- (3) Write a short "white paper" outlining your current policies, motivations, and hopes, as related to the position you will simulate. Place this on your webpage or link to it.
- (4) Set some priorities for a mix of new and old policies you intend to pursue with your team, using other students' webpage materials, especially those countries with whom you expect to interact.
- (5) Write a short self-reflective essay on your experience up to this point. Turn it in to me personally.
- (6) Simulate diplomacy, decisionmaking, and actions you (your country or whomever you work with) could conceivably take in the real world. The only restriction is that it be physically possible. Do this for about a month.
- (7) At the end of the simulation, engage in a debriefing presentation outlining your teams' aims and efforts, successes and failures, and critical evaluation of the interplay.
- (8) Write a report on what you personally gained from the experience, your successes and failures, and suggestions for making improvements in this exercise for the next generation of students that follow you.

This set of activities and products (webpages, dialogs, and essays) is valued at about 60% of their total grade. Contrary to my wishes, my teaching interns insisted on giving students points for quality in addition to points for completeness. My idea was to give points strictly for completeness and honest participation—this because writing quality was not one of my objectives to improve, but engagement with the substance of international relations was. It was, and remains, my hypothesis that this highly complex and lifelike participation, albeit simulated, enables students to learn more and retain more than they do by giving them evaluative feedback judging the quality of their work. But the teaching interns thought otherwise and I respected their judgment, at least to the point of allowing them to make a 10% adjustment for quality.

V. Multi-cultural Diversity

Since I teach international relations at the University of Hawaii, my classroom is filled with students with widely divergent beliefs, attitudes and values stemming from their cultural and immediate social backgrounds. This diversity, especially in an international relations class,

should not only be recognized but built upon as a pedagogical opportunity. Several routes could be taken, and are of course. One route is that of the postmodernist, following Riesman, to discuss the shift from traditional to inner-directed values, then from inner-directed to other-directed value frames of reference, and perhaps to autonomy as a value, moving students gradually to a relativist or constructionist worldview. Call me old fashioned and a product of a bygone era, but I do not think incorporating “diversity” in this manner does justice to existing social science theory, the study of actual political practices in global politics now or in the foreseeable future, and does more to cripple than to strengthen students’ ability to learn or to gain useable knowledge.¹⁸

Let me illustrate this with an example from Arthur Goodfriend’s published dissertation. Like Gergen, he uses an anecdotal style to encapsulate the raw data and reflective thinking of his own experience.¹⁹ One of his chapters deals with his life in China just before Mao’s success in overcoming Chiang Kai Shek’s forces. In evaluating American foreign policy failure he itemizes a series of mistakes, which when taken in their totality, teach a lesson that is unrelated to the traditionalist-modernist-postmodernist dimension yet could easily be assimilated by all three.²⁰

“We saw supplies sent to feed, clothe, and cure them. They saw American goods in black markets at prices only the rich could pay.

“We saw guns to defend them. They saw guns in the hands of oppressive soldiers and police.

“We saw money to lay economic foundations under progress. They saw our dollars disappear in the pockets of corrupt politicians.

“We saw output raised by tractors, trawlers, other modern machines. They saw complicated contraptions they could neither manage, repair, nor afford to fuel.”²¹

What Goodfriend does is to exemplify foreign policy failures through misperception, and by inference, misperceptions based on a state of mind that echoes Lederer’s *The Ugly American*²² and J. William Fulbright’s *The Arrogance of Power*²³. This is not a plea for cultural relativism but rather for cultural knowledge and for theories of perception and misperception that explain how and why such biases exist. For instance, listen to Erickson again, here talking about the “golden rule” as an international relations norm honored only in the breach:

Thus, what the Golden Rule at its highest has attempted to make all-inclusive, tribes and nations, castes and classes, moralities and ideologies have consistently make exclusive again—proudly, superstitiously, and viciously denying the status of reciprocal ethics to those “outside.”²⁴

The nature and varieties of bias have long been scrutinized; see for instance Francis Bacon’s explication in postulating his idols of the tribe, cave, market place and theatre (*Novum Organum*, 1620). In modern times, and as assigned reading in my course, one of the best analyses of the consequences of misperception and its causes that I have found, is John Stoessinger’s views on *Why Nations Go to War*.²⁵ Stoessinger deals, so far as I can tell, fairly and even-handedly with the politicians who foment war. He is also very judgmental about them and makes no secret of how and why he feels that way. Yet his very openness leaves the reader able to disagree because, opinionated as he is, he leaves you with the impression that his views are tentative, founded on facts (about which he may be and sometimes is wrong), and open to reevaluation. In this sense he represents the American bias towards democratic faith, and western science, but not European *angst*.²⁶

VI. Self-organizing

In the section on pedagogical paradigm shift, I drew attention to *common purpose* as a key component to educational systems. I am not a student of educational methodology or pedagogy, and cannot say that Deming originated either the application of his form of systems theory to education or specifically the idea of common purpose. But I do know that I myself had not previously run across it or paid it much attention.²⁷ What that came to mean to me is that my responsibility was not just to remove obstructions to learning, but also that the students and I constituted a team whose secondary purpose was to organize processes aimed at achieving this goal. What this implied was that *some portion of students' time would be spent in improvement of the class as a learning system*, effectively helping me ferret out and eliminate some of those barriers to learning.

To do this I began using teaching interns, students who take a course on "teaching political science," and whose primary work is interning. In my case this means that the interns become responsible as "coaches" or "consultants" for one or more groups of students in my international relations class. They also help me design, administer, and grade quizzes and exams, read essays, coach the students on how to do their Web-based work and in general share the common purpose of getting better educated about international relations. They also make presentations, and they make recommendations for how to improve the class structure. As part of the latter function, they write a "dear teaching intern" essay to the next generation of teaching interns for my next class. The next generation of interns is drawn from the students who have taken the international relations class. As a result, over time, the interns educate the class better and the class educates the interns better. I take an increasingly distant role in the process, more or less functioning to maintain the system than to "educate" the students in the traditional sense (although I still do some lecturing, perhaps half the time in toto). I spend proportionately more time reorganizing the class structure from semester to semester, trying to keep up with all the good advice I'm getting!

Conclusion: Results

So far, the results have been, my class size has roughly tripled, students do exceptionally well on objective tests, and my traditional workload has actually gone down. An unanticipated result was the introduction of an intergenerational learning process that takes place among students across my classes over time, which results in spontaneous improvement in class structure by the students themselves. Also unanticipated was the difficulty I have had in keeping up with them--a most happy result!

Appendix

Year	Semester	enrollment	maximum	Tis			
1986	Spring	32	35		prior to Deming		
1986	Fall						
1987	Spring	48	55				
1987	Fall	34	37				
1988	Spring	45	55				
1988	Fall	31	33				
1989	Spring	31	35			sabbatical	
1989	Fall						
1990	Spring						
1990	Fall	24	33				
1991	Spring	21	20				
1991	Fall	26	35				
1992	Spring	42	40		Experiment with enlarging class size		
1992	Fall	47	70				
1993	Spring	59	90	1	auditorium style classrooms with Internet capability, campus wide enrollment declines		
1993	Fall	76	110				
1994	Spring	85	110	11			
1994	Fall	93	110	12			
1995	Spring	80	110	9			
1995	Fall	63	110	4			
1996	Spring	58	110	4			
1996	Fall	66	110	5			
1997	Spring				sabbatical		
1997	Fall				Teaching other classes		
1998	Spring						
1998	Fall	25	50	0	increasing number of teaching interns to coach students in simulation		
1999	Spring	33	60	4			
1999	Fall	50	56	4			
2000	Spring	42	70	5			
2000	Fall	58	60	8			
2001	Spring	38	70	8			
2001	Fall	64	70	12			
2002	Spring	59	80	12		moveable chairs plus Internet plus good acoustics	
2002	Fall	80	80	12			
2003	Spring	77	80	10			
2003	Fall	84	80	13			
2004	Spring	78	80	11			

¹ David Gergen, *Eyewitness to Power: the Essence of Leadership*. 2001: Touchstone, New York.

² All too often, the idea of reducing variation in learning is interpreted with an easy analogy to assembly lines and standardized products. Very misleading analogies have either political motives or come from fundamental misunderstandings. A group of students all of whom earn A's or A+'s have not learned exactly the same thing, nor given what they have learned the same meaning in their lives. Increasing the mean level of attainment and reducing variation implies that proportionately more students earn A's, not through change in standards but through actual learning. For example, two students earning A+'s on essays could have picked exactly the same topic yet come to diametrically opposed conclusions.

³ Cf. Mike Parker and Jane Slaughter's article, "Beware! TQM Is Coming to Your Campus," *Thought & Action*, X, 1 (1994), 5-30. The authors detail what happens when one manipulates Deming's language and system of profound knowledge the way a propagandist would to serve any cause but the one Deming himself pursued.

⁴ W. Edwards Deming, *Out of the Crisis*. 1986: Massachusetts Institute of Technology, Center for Advanced Engineering Study, Cambridge, Mass.

⁵ One will not find Deming using these precise words. In his book, *Out of the Crisis*, except for one brief reference and an ostensive definition on p. 317, he does not provide a coherent concept of "system." In the workbook he supplied us in 1991--a draft of what became *The New Economics*--he defined a "system" as "a network of functions or activities (sub-processes, stages--hereafter components) within an organization that work together for the aim of the organization" (Ch. 4, p. 5 of the workbook). Listen to how he went on to describe a system of schools: "A system of schools (public schools, ...universities...) is not merely pupils, teachers, school boards, board of regents, parents. It should be, instead, a system of education in which pupils from toddlers on up take joy in learning, free from fear of grades and gold stars, and in which teachers take joy in their work, free from fear in ranking. It would be a system that recognizes differences between pupils and differences between teachers." Further he goes on to say, "The components need not all be clearly defined and documented: people may merely do what needs to be done." The human quality, even compassionate quality, of Deming's perspective on organizations and systems clearly comes through. Thus I interpret "aim of the organization" as "common purpose." For educators, that common purpose is of course, education.

⁶ Such system-caused phenomena he referred to as having "common causes." Variation not due to the system was attributed to "special causes," i.e., factors outside the system. For instance, factors such as length of time spent lecturing, audibility in the classroom, quiet time to digest some information and so on, would be common causes; on the other hand, differences in students' natural abilities, past training, interest in the subject matter and external environmental conditions would be considered special causes.

⁷ Stating this brings up old examples from my student days in calculus classes. We had one teacher from whom students received D's for their average grade. He would saunter into the classroom, keep his back to the class, and proceed to lay out proofs--probably brilliantly; he used no notes--of various theorems or corollaries we were to master. No sooner than he'd fill a chalkboard (while we were about a third of the way through copying his writing), he'd erase the whole board and continue. My roommate's girlfriend was in the class and we were stunned that she got the only A. She did it she said, by utterly ignoring him in class and used the classroom as a study hall to read the book. She had a degree of composure most of us just could not duplicate. This is only one of many examples I can recall of "how it used to be."

⁸ "Wasted effort" calls for an illustration. One day when I was cleaning my office, I filled up a wastebasket with essays students had not bothered to retrieve, some 10 years old! It occurred to me that marking them up was a complete waste of time. I should have asked them to give me a stamped, self addressed envelope and a request for comments before I bothered to do more than a casual read for a grade. I suspect that most of them had been written to satisfy a requirement, not actually to get engaged with the subject matter about which they wrote.

⁹ I must add at the point that willingness of administrators to let faculty innovate in the classroom is the *sine qua non* of this strategy. Most teachers in primary and secondary schools do not have the authority to innovate much if at all, in the traditional administrative paradigm. University faculty in this regard are very privileged, if not diligent in using that privilege. Cf. Clyde W. Barrow, "The New Economy and Restructuring Higher Education," *Thought & Action*, XVI,2 (Fall, 2000), 65-81.

¹⁰ An event early in my life over which I had puzzled over for decades prepared me for this--yet one more!--"aha!" experience. In the Chicago Public School curriculum in the 1950s, an experiment in educational enrichment took place in which I was tapped to participate. Several summer classes were organized throughout the city to try an accelerated math program. My group met at Lakeview High School and consisted of students who had already demonstrated some motivation and aptitude for mathematics, and who volunteered for the experiment. About 15-20 of us from all over Chicago's north side showed up the first day to confront a desk at the front of the room piled high with books, behind which our instructor sat while we settled ourselves. As I recall (paraphrasing) he introduced himself and the class thus:

"Good morning. I'm John Leifel, your teacher. These (pointing) are textbooks for all the courses you can complete in this class: algebra, geometry, trigonometry, probability, solid geometry, spherical trigonometry, and analytic geometry and calculus. Obviously I can't teach all this in two months. So, organize yourselves into groups that would like to study each subject together. When you're ready, you can take the final exam. The exam result will be your grade for that class. If there is time you can go on to form other groups to study another subject. You can take as many of these classes as you wish."

He then sat down and waited for us to respond. One of us asked him if he would teach any of them. He said he would answer questions put to him by each group individually but would not be lecturing since it was impossible to cover the subject matter that way. Someone asked if we could leave the classroom to talk to each other.

"Sure, he said, the cafeteria opens at 10 and closes at 2. The class starts at nine and ends at 3, so you only need to be in the classroom two hours, and could spend the rest of your time in the cafeteria." After a few days of chatting with each other, mostly in the cafeteria, and bringing games like chess to school to play for fun, we self-organized into study groups.

At the end of the summer session everyone had passed at least two courses and one of us had passed four. Not only that; we bonded. For three years after we held reunions at Mr. Leifel's home. During these reunions, we learned that we were unique. No other class at the same time, nor subsequent classes he taught, self-educated as well. We ruminated over that oddity. We could not understand that outcome; we did not see ourselves as unique or for the most part especially gifted (some were self-admittedly "geniuses"), and certainly not in the area of socializing or participating in groups. Many of us were "loners."

The instructor took on the role of consultant, and let us know that while he could guide us over problems we encountered, he could not be responsible for our education, only for evaluating our progress. We had to take on that responsibility and suggest to him when and why he was needed. He provided a social environment and physical setting that enabled students to interact comfortably with one another, and to seek out those with common or complementary interests. The essence of it was he conveyed his belief in us, our natural ability and our curiosity and motivation, and trusted us to act responsibly, monitoring us only to the extent necessitated by the administrative requirements of the course (which were minimal). And he himself was prepared to adapt to our needs. He enabled us to self-consciously develop a self-organizing system for education that was free of most of the environmental and procedural impediments to education that one encounters in the typical classroom setting.

So, why then, if this explanation is valid, was he unable to reproduce the result? To this day, the only explanation that makes sense to me is that in fact he did not repeat some key component of the situation he launched that first day, perhaps because his understanding, his frame of reference was not consistent with Deming's, that something was neglected.

¹¹ "...it is the joint development of cognitive and emotional powers paired with appropriate social learning which enable the individual to realize the potentialities of a stage" of growth. Erik Erikson, *Insight and Responsibility* (1964: Norton, New York), p. 225. Because we are in Hawaii and our number two source of state income in military spending, we get students who outside the university are working in the intelligence community. One of these came up to me at the end of the semester and said (paraphrasing from recollection), "you know, I'm Jewish and an Israeli. When you assigned me to the Palestine team, you didn't know who I was or what I did in the real world. When I talked to my mother about the class and what I was assigned to study, she almost called the university president's office to complain about your bias. But I persuaded her that you were not trying to convert me but to help us all get educated. I want you to know that I would never, ever, have learned in my whole life what I learned about Palestine in this class."

¹² There may be a down side to this process. After about a month, I've noticed about 5-6 of the 35 students in the class start coming in late. I surmise (without actual knowledge) that they do not participate much or participate ineffectively. Perhaps they are among those who do not learn well in group settings like that; I don't really know. I haven't actually tracked this number over time to ascertain just why this happens.

¹³ John Dewey, *How we think: A restatement of the relation of reflective thinking to the educative process*. 1911 (c1933): Regnery, Chicago.

¹⁴ Some of his educational materials are posted on my webpages for my students. The "portal" URL for his work is <http://www.hawaii.edu/intlrel/LTPA/ltpa.htm>.

¹⁵ For a very short introduction to Riesman's work, see James S. Atherton, "Education and Culture (Riesman Model)," 2003. Availability: <http://www.doceo.co.uk/background/riesman.htm>. Last accessed: 10 February 2005. Cf. David Riesman with Nathan Glazer and Reuel Denny, *The lonely crowd; a study of the changing American*. 1961: Yale University Press, 1961.

¹⁶ "Principles for Transformation," Ch. 2, in Deming, *op. cit.*, pp. 18-96 *passim*.

¹⁷ These principles, all of which when implemented reduce the pressure that depresses self-esteem. I wish I could say this lesson was driven home from personal experience; but personal experience is never enough. Example: while raising our son, I had pressured him mercilessly to do his homework. One day he said to me with a force of intellect and bravura that took me aback: "Dad, I'm going to study *despite* you're telling me to,

and I'm going to succeed *even though* you want me to!" That brought to mind another experience I recalled having as a child with my younger brother. We were in the middle of a knock down, drag out fight when he picked up my piggy bank full of pennies and threw it as hard as he could straight at my face. I didn't move quite fast enough and it grazed my forehead as it flew into and broke a window, continued across to the wall of the next-door tenement, crashed and scattered a few thousand pennies down below. I swore the bluest streak I could imagine. He looked stunned, dumbfounded, and frightened all at once, but then burst out: "I don't care *what* you call me Dickie, as long as you give me a title!" We looked at each other and suddenly started laughing ourselves silly. We could never fight again without a twinkle in our eyes. These are two examples of spontaneous creativity aimed at driving out fear. But for all these decades, until Deming I had no theory of system, no "theory of profound knowledge," to adequately interpret these experiences. Without theory, I could puzzle over them but not intuit their implications, except somehow, now and then, employ them as analogies. As Deming himself said, without theory you learn nothing from experience.

¹⁸ It is a matter of some irony to me that Deming's approach can easily be characterized as postmodernist. See for example, "What is Postmodern?" by David M. Boje and Leonel Prieto, available at <http://www.horsesenseatwork.com/psl/pages/postmoderndefined.html>. Their checklist of the "postmodern" organization is quite consistent with many of Deming's dicta.

¹⁹ Arthur Goodfriend, *The Education of a Survivor*. 1989: University of Hawaii Press, Honolulu.

²⁰ Cf. Atherton, *op. cit.*

²¹ Goodfriend, *op. cit.*, p. 100.

²² William Lederer, *The Ugly American*. 1958: Norton, N.Y.

²³ J. William Fulbright, *The Arrogance of Power*. 1966: Random House, N.Y.

²⁴ Erickson, *op. cit.*, p. 226.

²⁵ John Stoessinger, *Why Nations Go to War*. 2005: Thompson Wadsworth, N.Y.

²⁶ There is an excellent article—the introductory chapter to a book actually—on the web on the uniqueness of American democratic faith and western science, by Deneen, "Democratic Faith," 2005. Available at http://www.princeton.edu/~pdeneen/deneen_faithintro.pdf

²⁷ Ruminating about this issue brings to mind Norbert Wiener's *Cybernetics* and *The Human Use of Human Beings* and B.F. Skinner's *Beyond Freedom and Dignity* and *Walden II*. We have long understood that system structure matters, as these authors illustrate, yet in universities for the most part we focus on the learning characteristics of the individual to explain performance rather than the norms put in place in the educational setting.