Spring 5-26-1984

President Ames' 66th Commencement Address

Emeritus Oakes Ames
Members of the Class of 1984. We are going to miss you. But we also feel more optimistic about the future of the world seeing you enter it. Don't be pessimistic about its problems - the Middle East conflicts, acid rain, the spread of shopping malls and musak. You must keep that eagerness and openness of mind for which we named you freshmen four years ago.

I hope you move on from Connecticut College a little skeptical about the conventional solutions, opinions and compromises offered by the more experienced in the outside world. Accept them only after measured examination. My grandmother chided us when we were students, saying: "Don't believe it just because it's in the history books." At 78 she challenged a fact in J.F. Kennedy's Profiles in Courage, fired off a letter asking him to correct it in a second edition, and when he didn't, spent the next five years writing a book to set the record straight herself.

On occasion I have heard members of the classes of the 80's criticize their fellow students as apathetic. Perhaps your generation is compared with the campus activists and militants of the late 60's and early 70's. The relative isolation of campus life from public affairs may elicit this charge of apathy. But I am impressed by the seriousness and intensity with which so many of you pursued both academic and social life, varsity and intramural sports, student government, the VOICE, WCNI, and off-campus volunteer work in neighboring communities. Those activities should have been the focus of your college years.

But now that you are graduating from the hill, you can, indeed must be active as citizens in town and nation. By being informed and concerned, you can become involved in change. These qualities are the opposites of apathy.
So also is inquisitiveness. A word about that. A few years ago, a vice president of the Xerox Corporation gave a talk on the importance of the liberal arts. One of the five qualities his company seeks in a manager is inquisitiveness - what he called "an ability to separate oneself from the fad or trend of the moment and to explore new ground and take the less-travelled road." The inquisitive person asks: "Why do we do this in this particular way?"

"Healthy skepticism constantly probes and tests and questions to make sure... that we're not just doing things out of habit or inertia or based on old information or false assumptions."

The vice president spoke of three "invaluable questions": why?...why not?...what if?

In your studies at the College, you have learned facts and formulas, of trends and theories. But we all agree, I think, that central to the educational process is learning how to probe, to test, and to question. These are the liberal arts. This kind of thinking characterizes the humanities. It is also what the scientist does. And so both are foundations of the curriculum here.

The scientist tests theory with experiment. If the results of experiment do not agree with theoretical predictions, it may be that the theory is too simple and doesn't take into account enough properties of the system being studied. We can modify the theory, but sometimes further modification only makes it more cumbersome, less beautiful, and no better at describing nature. It is like too many layers pasted on a collage. Then we must discard it and start anew. Einstein did just that when he developed the theory of relativity.

The historian of science Thomas Kuhn wrote of this process in a famous book called The Structure of Scientific Revolutions. He wrote: "Each (scientific revolution) necessitated the community's rejection of one time-honored scientific theory in favor of another incompatible with it. Each produced a consequent shift in the problems available
for scientific scrutiny and in the standards by which the profession determined what should count as an admissible problem or as a legitimate problem - solution. And each transformed the scientific imagination in ways that we shall ultimately need to describe as a transformation of the world within which scientific work was done."

In other words, a scientific revolution forces us to adopt a new world-view. Think of the sweeping change of view that occurred when Copernican astronomy with the sun at the center of the solar system replaced Ptolemaic astronomy that had the earth at the center.

What of other examples of revolutions in the way men and women think? Consider the change in attitude towards our role on earth. Once our views were expressed by this section from the Book of Genesis: "And God blessed them, and God said to them, 'Be fruitful and multiply, and fill the earth and subdue it: and have dominion over the fish of the sea and over the birds of the air and over every living thing that moves upon the earth.'" Now we are discovering how subjugation and domination can harmfully alter the environment. We recognize now the need to protest unrestricted mining in wilderness areas, dumping in coastal salt marshes, lumbering or plowing without reforestation.

And think of those remarkable photographs of the earth from space. How they have made us understand our place here in a new way!

In the arts we remain astonished at the daring of a Braque or Hans Hoffman, of Stravinsky, and Arnold Schönberg.

In Asia in the 1860s, consider how a bold-thinking group of young Samurai rejected the customs and policies of the entrenched Shogunate and, within a generation, spun feudal Japan into the 19th century.

A much needed revolution in our attitudes about the elementary schools and high schools is reflected in several fine books this year, one by Theodore Sizer whom you will meet tomorrow. Several national reports also implore that teachers at all levels be paid what their work is worth, that their jobs have the prestige and they the respect they deserve.
Surely a revolution is needed in the prevailing mode of thinking about national security, the Soviet Union, and nuclear weapons. Many people are asking why?. why not?. what if? about these issues. Be among their number and increase it.

After 35 years of an arms race that is increasingly perilous, our appointed policy makers seem locked into stale, unproductive, dangerous channels of thinking. Why should we assume that new missiles will be bargaining chips and bring the Soviets to the negotiating table, when the empirical evidence shows they react instead by building more weapons to "catch up." When evidence and theory don't jibe, assumptions need to be challenged, courses changed.

William James, in his essay on pragmatism, observed that changes in our opinions and attitudes take place gradually as experience demonstrates inconsistencies between what we believe to be true and what, in fact, is the case. We are highly conservative by nature, holding to our former beliefs as long as possible, and allowing only as much modification as is absolutely necessary. Thus most sweeping changes in human thought take place over long periods of time. As philosophy students will know, James argues that an idea must prove its validity, its truth, by how well it works. In the area of arms control, we need fresh thinking quickly: the idea of a verifiable nuclear freeze on both sides as a first step may be just the new approach that will work.

Many people today eschew involvement in addressing such critical issues, fearful that these are too complicated for an ordinary citizen's judgment. So they vacillate between the views of others. That is a form of apathy - of irresponsibility. Don't let this happen to you. One of the goals of a liberal education is to prepare you to continue to meet the challenge of learning on your own, all your life. So be inquisitive, find the facts behind the headlines, risk a stand, then speak out so that policy makers will hear you.
Although my illustrations are on a large scale, we need to probe, test and question on all levels, in every dimension. Sometimes we need revolutions in how we think about the world immediately around us. We get used to thinking that our ways of doing things are the best way or the only way when in fact there are new possibilities for action that would make it far easier to reach our goals. We are sometimes like those Ptolemaic astronomers who tried to understand the heavens from the assumption that the earth was at the center of the solar system. And they just got tied in worse and worse knots.

So whether in your jobs or family life, in town halls or capital cities, I hope that by asking why?...why not?...what if? you will discover many fascinating paths to take, and that you will be able to make the world a better place. May the journeys of the Class of 1984 be ones of discovery and rewards.