Aims of Education XIII 2005-2006 By Harry Hamilton, Ph.D. Interim Provost and Executive President

Foreword by James L. Doti President, Chapman University

First presented in 1993, the annual Aims of Education Address has become a cherished Chapman University tradition. The idea behind this speech is to spotlight the quest for knowledge and the search for truth through the perspectives of faculty members representing our wide range of disciplines. It is my pleasure each year to select a faculty member to deliver this address to new students and parents at our fall semester Opening Convocation.

For this 13th annual address, I invited Harry Hamilton, Chapman University's interim provost and executive vice president, to share his thoughts on education. Dr. Hamilton served as Chapman's first provost from 1990 to 2000, shepherding a decade in which the campus saw major growth. He then returned to the classroom to serve as a professor of physical sciences and to direct our environmental science program Dr. Hamilton received one of Chapman's highest faculty honors, the Excellence in Teaching Award.

It has been my honor and privilege to know and work beside this distinguished educator and scientist, and to experience the kind of wise and insightful thinking that you will enjoy in this year's address. To Dr. Hamilton, to all of us at Chapman, education does not occur in an ivory tower; it is a powerful ongoing process that happens in real life, in the real world, and it is the role of the university to assist our students as they progress through some of the most formative years of that process. The aims of education – to liberate us by freeing our minds, and to unite us by advancing the common cause of good – are powerfully illuminated in this erudite and engaging welcome to our new students.

-James L. Doti

The Aims of Education

Members of the class of 2009, parents and friends, faculty and other members of the Chapman community, I greet you in the name of education. You students are embarking on the most rapidly transforming period of your lives, and we who are already members of the Chapman community are delighted that you have selected us for this portion of your journey through life. We pledge to make it memorable and worth every challenge you face along the way.

I will share with you a story of some travelers of old, before there were cars, or trains, or planes, or spacecraft. Knowing that their journey was long and strenuous, the travelers packed their supplies carefully, taking as little as they could so they would not be unnecessarily burdened. At the end of the first day of travel, they stopped by a stream and began setting up camp for the night. Shortly thereafter a voice came from some unknown source: "Pick up stones form near the stream and put them in your pockets. Tomorrow you will be both glad and sorry."

The travelers could not detect the source of the voice. They decided to ignore it and get back to setting up camp because stones would serve no useful purpose and would clearly weigh them down as they continued their journey. Soon the voice came to them: "Pick up the stones and put them in your pockets, and tomorrow you will be both glad and sorry."

Again they sought the source in vain, and after some hesitancy, resumed their work without picking up any stones. As darkness was descending, the voice came yet again, this time very insistent: "Pick up the stones and put them in your pockets, and tomorrow you will be both glad and sorry." Now they were concerned, and though they could not find the source, they decided they didn't want to be bothered all night with these senseless commands. They realized that the voice had not told them how many stones to pick up, so after talking it over, they just put a few stones in their pockets, hoping they would silence the voice. They went to bed, and the voice did not resume.

When they awoke the next morning, ready to resume their journey, they reached into their pockets to get rid of the needless stones, and were stunned to find only diamonds. They were indeed glad and sorry: glad they had picked up some stones, and sorry that they had missed an opportunity to pick up more.

This is the story of education. We are glad for the education that we do get, and sorry that we do not get more. This will be your story, for I predict that you will become life-long learners, always delighting in the education you do acquire, and always longing for more.

But if this is the story of education, what is the purpose – what does education seek to accomplish? What indeed are the aims of education?

The fundamental aim of education is to liberate us from ignorance. This aim is the basis for the term liberal education, a concept that will shape your study at Chapman. A liberal education is an endeavor that seeks to liberate us from as much ignorance as possible. We are born ignorant, and we spend the rest of our lives either overcoming ignorance of one thing or another or having some aspect of our lives curtailed because of ignorance. Liberal education has nothing to do with politics; it has everything to do with removing the shackles of ignorance. I am not referring to learning how to keyboard, or learning how to give a massage, or even learning how to fly an airplane. Those are examples of training, not education. I am referring to information that will allow you to live a rich, rewarding life, secure in the knowledge that you have the ability to overcome each area of ignorance as it is exposed to you.

Let us now turn to some specific aims of education. One is to liberate us from being cut off from fellow human beings because we cannot get ideas out of our heads and into the heads of others. And so we learn to write well and to speak well. Unless we learn those skills, whatever is generated in our brain remains just neural firings without our being able to gain acknowledgement by another person of what we think. Other people will consider us ignorant if we cannot communicate to them our accomplishments, our questions, our fears, our joys, our sadness, our insights into their being.

Another aim is to liberate us from ignorance of the physical world in which we live. Our word "science" comes to us from the Latin root *scire*, meaning 'to know.'

We do not need to become scientists in order to become scientifically literate or knowledgeable about the scientific method. We live in an incredibly large, incredibly beautiful, incredibly complex universe. Education allows us to understand how we human beings gain knowledge about that universe, how we uncover facts, how we obtain evidence to support facts, how facts change when new evidence is discovered. Education allows us to separate science, obtained by a clearly prescribed method, from pseudoscience, obtained by anecdotal information. The assertion that our activities for the month are controlled by the position of both Mars and Jupiter in the same sign of the zodiac is pseudoscience; the assertion that three days from now Mars will be closer to Earth than it has been for thousands of years or will be again for thousands of years in science.

Education aims to liberate us from the confines of our own minds and experiences into the limitless possibilities of the human mind and experiences, as expressed in the arts. Music, paintings, sculptures, drama and dance all play a critical role in defining any society. The power of the arts is shown by the attempts of political dictators to control artistic expression, to limit what is seen or heard. Education frees us to experience the beauty, pathos, joy, sorrow, grandeur of the world as perceived and described by others, and thereby to expand our minds. The arts nourish the soul, they lift our spirits, they calm our nerves, they engage our attention – they liberate us from ourselves.

The human condition has been observed and described since time immemorial, first by storytellers, then by writers. Another aim of education is to liberate us from the confines of stories about our village to the freedom of stories about the world. Literature allows us to learn how our condition compares to the conditions of other human beings across town and around the world, those who are similar to us and those who are decidedly different from us, those who live in our times and those who lived in different times. By developing an understanding of literature and knowing how to access literature – from our homes, from the beaches, from the waiting rooms – we take ourselves outside of ourselves and into another world, gaining ideas that enable us to live our own lives more richly.

Education aims to help us accept and adapt to change. Ignorant people resist or reject change; educated people know that change is the only constant in the universe. Education does not seek to have us change for the sake of change, nor does it seek to have us accept all changes. But it does seek to enable us to accept changes that are likely to overtake us, while enabling us to resist change that we believe is not beneficial. Facts change, conditions change, politics change; woe to the person who becomes locked into the past by ignorant rejection of new conditions. For thousands of years the fact was that there are five planets orbiting the sun; now there are nine. Once sugar gave you energy; now it gives you diabetes. Once the Russians were our friends, then they were our enemy; now they are more or less our friends again.

But if an aim of education is to show us that facts change, it is also an aim of education to show is that the processes by which we use facts do not necessarily change. So while it is necessary to use today's facts to apply to today's opportunities, it is important to learn how to use the same approach to applying tomorrow's facts to tomorrow's opportunities. No one here knows the future. If the future is not

known, the challenges and opportunities of the future are unknown. By preparing a person to use certain processes, education prepares us for the unknown. We pick up stones and put them in our pockets, knowing they will be transformed into something valuable in the future.

Why is there air? Why is the sky blue? Why is the surface of water in a glass or pot flat? Why do children usually look quite like their parents? Why does Asian music sound different from Western music? How far away is a rainbow? Education aims to keep you asking questions. Maximum growth in knowledge occurs when questions are asked. How did you learn as a child? By asking enough questions to drive your parents to distraction. How would your parents or teachers know what information to help you obtain if you did not ask questions about what you did not know? Education seeks to have you control your life to the greatest extent possible by asking questions rather than merely accepting the information someone else want to supply to you.

In addition to helping us gain skills, education encourages a person to select and live by values. At Chapman University, we think that Albert Schweitzer had many good values, and we urge students to become familiar with them to decide whether to adopt them. While there can be much debate about our values, and clearly we can agree that some values worthy of consideration by us all.

Particularly at an institution of higher education, honesty and integrity are highly valued. Students and faculty alike are expected to claim ownership only of material they create, not material they have taken from someone else. Education aims to show that academic integrity is the bedrock of the pursuit of knowledge, and that without it, the very basis of what we learn is corrupted.

Closely related to honesty and integrity is truth. Education aims to show us that while there can be arguments over whether such a thing as absolute truth, there is little arguments over whether there is such a thing as absolute truth, there is little argument over whether seeking truth is a goal of education. Think of it: have you ever heard of someone arguing that we should strive to find and base our actions on untruths? The whole apparatus of higher education is established to seek the truth, to seek it even when there are sometimes forces which seek to hide or distort the truth. Perhaps the most eloquent statement of this aim of education was adopted by the regents of a university back in 1894: "Whatever may be the limitations which trammel inquiry elsewhere, we believe that the great state University of Wisconsin should ever encourage that continual and fearless sifting and winnowing by which alone the truth can be found." For those somewhat removed by time or distance from early agriculture, sifting and winnowing is what was originally done to separate the grain of wheat, which was wanted, from the chaff, which was discarded.

While not necessarily true in other societies, in the United States an aim of education is to present information that leads one to believe in the liberating condition of that form of government known as democracy. Individual freedom is a powerful concept that underlies democratic government. The nation was founded, though flawed, on this principle. It is through education that we learn that Abraham Lincoln believed that no person should control the life of another, and he put the government apparatus on course to end slavery. We learn that in the last century

this was the guiding principle that led to voting rights for women, and later, unfettered voting rights for Black Americans. In this century we see further efforts to extend true freedom to even more Americans. Encompassing two of the values I have mentioned, the masthead of a Wisconsin newspaper states, "Let the people have the truth, and the freedom to discuss it, and all will go well."

We often equate freedom rights to do whatever we want. But an aim of education is to show that with rights come responsibilities, and just as a song has immortalized for love and marriage and a horse and carriage, you can't have one without the other. There can be no enduring rights without the proper responsibility of exercising those rights. Responsibility is the glue that holds rights together. Rights without responsibility is anarchy.

A further aim of education is to show us how we relate to other human beings in our community. For now that community is Chapman University; later it will be something else. You will learn the ways that you are like all other members of your community. You will learn how in some other respects you are like only some other members of your community. And you will learn how in some respects you are unique, unlike anyone else in your community or anywhere else in the world. Sorting those things out is sometimes a challenge, but education should show you the value of the exercise, and this knowledge should be comforting as you take your place as a participating member of various communities.

As education helps you fully realize that you are not an island, alone in the sea of humanity; you will be able to reach out and join others in activities that promote the common good. You will recall that the first words of that mighty founding document of our nation are "We the People..." It is not "We the following individuals..." Though we value individual freedoms, it is by working together that we advance the common cause, and if everyone benefits, we as individuals benefit.

Thus, the liberating aims of education include learning about writing, the scientific method, the arts, literature, adapting to change, and asking questions; and valuing honesty and the truth, democracy, individual responsibility, and the common cause.

And so today you begin your formal introduction to the thrill of an education that you to a large degree control. All of you will have access to the same required courses, to the same electives, to the same extracurricular activities, to the same travel opportunities. When you graduate in 2009 (well, maybe a few of you in 2010) each of you will have had a different set of experiences, but hopefully your education will serve you well for the rest of your life, even as you seek more of it. To do well, you must know the past, you must participate in the present, and you must be prepared for the future. And when you leave these hallowed halls of learning, you will be able to go forth and do well, and do good.

Thanks you, and have a wonderful education!

About the Speaker Harry Hamilton, Ph.D.

Harry Hamilton, Ph.D. was appointed interim provost of Chapman University in 2005. He previously served as Chapman University's first provost, from 1990 until 2000, when he left administration and entered the Chapman classrooms as a professor of physical sciences. During his tenure as provost, he oversaw considerable growth in the academic life of the institution: student enrollment doubled, full-time faculty members increased by 150 percent, the physical therapy program was acquired from a location in Los Angeles and later became nationally accredited, the George L. Argyros School of Business and Economics became nationally accredited, the School of Law was created and gained American Bar Association accreditation, and the School of Film and Television (now called the Dodge College of Film and Media Arts) was created. During his five years as a Chapman University professor, he headed the environmental science program and received an Excellence in Teaching award.

Prior to coming to Chapman University, Dr. Hamilton had a long and distinguished career as a professor of atmospheric science and as an administrator at the State University of New York-Albany. He published scientific papers in forest micrometeorology and solar radiation and was awarded more than \$1 million in research grants. He developed a television course in introductory meteorology. He served as department chair and later as dean of undergraduate studies and associate vice president for academic affairs.

Dr. Hamilton, recently name Citizen of the Year by the Orange County NAACP, has also served as an advisor to several national agencies, including the National Science Foundation and the National Academy of Sciences, and is currently on the board of the Discovery Science Center in Santa Ana, among other organizations.

He earned his master's and Ph.D. degrees in meteorology form the University of Wisconsin and bachelor's degree in physics from Beloit College in Wisconsin.