

The Board of Governors Forums

Contemporary Trends in General Education:
A Forum for Policymakers, Faculty and Students

Board of Governors for Higher Education
Department of Higher Education

The Carol Autorino Center for the Arts and Humanities
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Participants: Cathryn Addy, President, Tunxis Community College; Kenneth Decko, President, Connecticut Business and Industry Association; Norman Fainstein, President, Connecticut College; Merle Harris, Executive Director, Board for State Academic Awards; Marc S. Herzog, Chancellor, Community-Technical College System; Andrea Leskes, Vice President for Education and Quality Initiatives, Association of American Colleges and Universities; Valerie F. Lewis, Commissioner of Higher Education; Dimitrios Pachis, Vice President for Academic Affairs, Eastern Connecticut State University; John Petersen, Chancellor, University of Connecticut; Helen Regan, Dean of the Faculty, Connecticut College; Albert Vertefeuille, Chair, Board of Governors for Higher Education; Jonas Zdanys, Associate Commissioner for Academic Affairs.

Albert Vertefeuille
Chairman of the Board of Governors for Higher Education

On behalf of the Board of Governors for Higher Education, I am pleased to welcome you this morning to the Board's Forum on General Education. I am Albert Vertefeuille, Chairman of the Board. Our eleven members are appointed by the Governor and by the ranking members of the General Assembly's leadership. Our principal responsibility as the Board of Governors is to plan, establish and implement policies for the state's higher education system. Today marks the second forum in this year's Board's schedule. The first, in December, focused on the issue of transfer and articulation and was dedicated to assisting work in that

arena that had been mandated by our legislators. In that area, we look forward to reporting real progress thanks to the strong co-operation across Connecticut's public and independent institutions of higher education. Our focus today is on general education. It is in one sense a natural extension of the transfer and articulation efforts since we all concur that, taken as a whole, our core general education requirements must be aligned across our public system if barriers are to be removed from transfer within that system. It is also, however, a subject at the heart of our work to improve higher education in our state and to make such education valid over the lifetime of each of our students. We look forward to learning much from our guests and our audience today, and I am delighted that the Board is able to provide this opportunity for us to explore this essential issue together today and in the months to come. This forum has been given structure by the Commissioner of Higher Education, and I am pleased to present her this morning.

Valerie F. Lewis
Commissioner of Higher Education

Thank you, Mr. Vertefeuille. I am delighted to join Chairman Vertefeuille in welcoming you all here this morning and to thank you for joining the Board today at this second statewide conversation on issues important to all of us in the higher education world, especially because this matter of mutual concern brings together the Board of Governors, the Department of Higher Education, and so many of our academic partners from throughout the state in shared interest and discussion. I am especially pleased to welcome those of you who are here today from beyond the external constituencies with which we most often work. In fact, one of our panelists will be late in joining us today because he is involved with

encouraging the essential role our business enterprises must continue to play in our communities. His organization -- the Connecticut Business and Industry Association -- has been deeply involved in creating skills standards and has facilitated many fundamental conversations on that process with groups of industries across the state about their expectations for student outcomes, all of which has had a deep impact on expectations for general learning as well as specific focus in our colleges and universities. So that should be an interesting piece of a later dialogue.

I get a chance as Commissioner, as I know all of you who sit in positions in leadership across the Academy do as well, to consider a lot of interesting issues and ideas. Recently, I came across an exceptionally interesting and relevant article in *The Economist*. It was called "The Near Future" and was written by Peter Drucker, who has been something of a guru about the future for a long time. I was taken by his description of some of the changes that he foresees in the future, a principal one of which is the fact that the future of this nation and of any other wishing to move forward securely will depend on its abilities as a knowledge society and that, indeed, knowledge in all its forms will be central to the resources of any place, any organization, and any enterprise. He says that knowledge, though it is typically acquired in a formal setting, cannot only be *specialized* knowledge because such knowledge will go out of date quickly in a society that is changing as geometrically as ours is today. In the future, knowledge workers, many of whom will be knowledge technologists, will replace manufacturing workers. They will, in all likelihood, not have organizations to tie themselves to for a lifetime because as Drucker points out, and as we certainly continue to witness around us, organizations themselves shift and change and do not necessarily remain stable

over the course of a lifetime today. In addition, as shifts continue, knowledge workers will run the danger of being out of date both technically and in terms of their energies in a society that increasingly puts the pressure upon the individual for survival in the work place rather than on the organization to provide the framework for such survival. And, importantly, Drucker makes the point that education, both as a formal enterprise and as a process that is expected to continue throughout a lifetime, must provide tools not just for survival in the work place but also for the flexibility and adaptability that are central to survival in our society as it changes. It is this matter – the issue of how one can best secure such flexibility and adaptability – that I hope will be at the center of our discussion as we talk about general education today and what it means in different places and different educational settings.

I am extremely grateful to have very fine colleagues from across higher education in Connecticut to join us in that discussion. I am also delighted to have with us an individual who is a national resource on this topic scene. And in that respect, I would like to invite my colleague, Jonas Zdanys, our Associate Commissioner for Academic Affairs, to do a true introduction for our guest, Dr. Andrea Leskes.

Jonas Zdanys
Associate Commissioner for Academic Affairs

Thank you, Commissioner. It is a great pleasure and a privilege for me to join Chairman Vertefeuille and Commissioner Lewis in welcoming you all here this morning, to think and talk together about what it means to be generally educated. We in the Department have had a

particular interest in this question for a number of years and have thought collectively and, I believe, fairly creatively, about that may mean for our students, for our colleagues at our colleges and universities, and for our state as an economic structure and economic enterprise. Our interest in general education touches on a number of related issues that we believe help to define the value of a college or university education, immediately and for the long-term. That value lies, in part, in the capacity of our institutions of higher learning to deliver knowledge and technical skills that are important to the workforce and to the state's economic activity. Part of it also lies in the encouragement through general education of civic virtues, of strength of character, and various ethical standards essential to the sustenance of our well-being as an enlightened and fully functioning society. And part of it also lies in the development of the various critical perspectives that are essential to the flexibility to which the Commissioner referred, both of mind and of purpose. These are issues we hope will help inform our conversation this morning and provide us with some guideposts as to how we might best consider and reconsider what general education is now and what it might most appropriately become if we are to continue collectively preparing our students for productive and satisfying lives -- as responsible participants in our state's and our nation's economic activity, as individuals who can benefit from and enjoy all that our culture has to offer, and as members of families and other social groups fully engaged in the enhancement of the communities in which we live. To be generally educated, therefore, means more than completing a defined set of distributed courses as part of an undergraduate curriculum. It touches, in fact, on the very core of those qualities that move us forward as a nation and that enrich the very fabric of our lives as individuals and as citizens. It has to do with the idea and the ideal of "coherence," which is a term that Andrea and I discussed at

some length yesterday and which we both agree is key to any process of general education. These concepts are at the center of what all of us here today do, and I am delighted that our panel, and especially our distinguished guest, will help to provide us with enlightenment on this shared journey.

It is therefore a pleasure to introduce Dr. Andrea Leskes, who will begin our conversation this morning. Dr. Leskes serves as Vice President for Education and Quality Initiatives at the Association of American Colleges & Universities, based in Washington, DC, a position she has held since October 1999. In that position she has been leading the Association's "Greater Expectations" project, a national effort to raise students' levels of achievement in college. That project extends the important tradition of work begun with the Association's influential call for a new Integrity in the College Curriculum and it seeks to provide new clarity about essential educational goals as well as more powerful ways of supporting high achievement.

In addition to providing leadership for the "Greater Expectations" effort, Dr. Leskes leads the Asheville Institute on General Education, which seeks to help colleges and universities navigate the complexities of general education reform. The Institute is predicated on a firm commitment to the development and sustenance of a coherent, integrated general education, which connects to major and to pre-professional studies, and thereby strengthens undergraduate learning generally. Dr. Leskes serves also as a national spokeswoman for the Association's broad work on curricular and academic reform.

Trained in the biological sciences and in French, Dr. Leskes holds a B.A. degree in zoology from Vassar College, an M.A. in French from the University of Massachusetts, and a Ph.D. in life sciences from The Rockefeller University. Before joining the Association, she was vice president for academic affairs at The American University of Paris, where she helped the University reposition itself as a cosmopolitan campus offering American liberal arts education to international students from all over the globe. She also has held appointments at the University of Massachusetts at Amherst, Dartmouth College, Brandeis University, and Northeastern University. At each of these institutions, she distinguished herself as an educational leader skilled in gaining consensus for new directions. At Northeastern University, Dr. Leskes led a nationally admired effort to restructure the undergraduate learning programs within the university's seven colleges.

We are privileged to have Dr. Leskes here with us this morning, to begin and to help guide our conversation about the role of general education in undergraduate education in Connecticut, today and for the years to come. I know that we will learn much from her. It is my great pleasure to present Dr. Andrea Leskes.

Andrea Leskes
Vice President for Education and Quality Initiatives
Association of American Colleges & Universities

It is a pleasure to be here this morning, and I would like to thank the Board of Governors for the welcome invitation to join in your conversations here today. I've been asked to set the stage for your conversation about general education, and what I have decided to do is to give a broad overview, a kind of nuts and bolts of contemporary trends in general education, and

then hope that the subsequent conversation and discussion will raise questions that will help us pursue some of the various issues that have already been raised this morning. We are really in a time of activity on campuses throughout the country for the revision and the review of general education, so this conversation today is a very timely one.

Part of the issue under consideration is the nature of higher education reform, although this particular trend – reconsideration of what general education means -- has been going on for quite some time. I think part of it is also related to the acknowledgement that we are now serving different groups of students and that the external world itself is also very different. In a recent survey conducted in 2000, 57% of the responding campuses said that they were conducting some sort of formal general education review and this covered the range of all types of institutions. Forty-three percent said that year they would be undertaking some survey in the subsequent year. There is some overlap between those two groups, some of the ones who are doing it would be continuing in the next year. But this is really significant, especially because, traditionally, general education review and reform has been a real driver in institutional change and in curricular reform, given the fact that general education sits at the heart of American undergraduate education.

I want to take a minute at the beginning of my presentation to tell you a little bit about our Association, because we have been integrally involved in so much of this activity. The Association of American Colleges and Universities is an institutional membership organization and we have between 750 and 800 institutional members of all types from across the country. Our mission is to advance liberal learning and to extend its benefits to all

students, and we do this, among other ways, by providing professional development opportunities of all different sorts. To date, we involve more than 1,000 campuses in our projects and in our activities to reform general education. For example, 92 campuses worked with us to incorporate issues of diversity and democracy into general education and over 220 have attended the Asheville Institute, which Jonas has just described to you. We are quite lucky, and in a really privileged position, to see what's going on across the country.

Let me begin the more formal part of my presentation with a couple of definitions. I thought it would be important to start with a shared understanding of some of these terms are because they are often confused.

Liberal education is a philosophy of education that empowers individuals, liberates the mind from ignorance, and cultivates social responsibility, and it can occur at all types of colleges and universities and includes more than "general education."

Liberal arts refers to special disciplines (the humanities, social sciences, and the sciences).

Liberal arts colleges are particular institutional types -- often small, often residential -- that facilitate close interaction between faculty and students while grounding their curriculums in the liberal arts disciplines.

General education is a part of a liberal education, it is a curriculum that is shared by all students, it provides a broad exposure to multiple disciplines, and it forms the basis for developing important intellectual and civic capacities.

At AAC&U, in all of our work, we view general education not as a few required courses separate from the rest of the educational process but really as the keystone in an integrated and coherent educational arch of liberal education.

Let me address more broadly the role of general education, the role it can have in the curriculum and its purpose as a program, because this purpose has been changing and such change is one of the trends that we have been seeing nationally. Traditionally, general education has been thought of as that part of the undergraduate curriculum that provides breadth of knowledge while the undergraduate major has been seen as providing depth of knowledge. I will return to this distinction and suggest a more nuanced way of looking at the curriculum a little later on. General education has also been thought of as providing this breadth in a foundational way, as laying a groundwork of broad knowledge introducing a range of concepts and disciplines and ways of seeing and understanding the world. To fulfill its role, a campus would design a general education program so it is taken by students in the first two years of college and including in it mostly introductory or elementary courses. This has been a traditional model on many campuses. Such a foundational general education program can be based on the disciplines, it can be disciplinary. That's the way it's done at Columbia University, for example. Or, it can be done in an interdisciplinary way. That's the way it's done, for instance, at Colgate, where the general education curriculum includes

foundational interdisciplinary courses. Such foundational interdisciplinary courses can focus on the 19th century or early 20th century from a variety of perspectives, for example including a course on the cultures of African- or Asian-Americans and a course on scientific perspectives in the world. These are interdisciplinary but they are also introductory, taken at the beginning of a college education.

But there are also other ways of thinking about the programmatic role of general education, and we are beginning to see some really interesting examples at institutions across the country. So, instead of thinking of it as *foundational*, one can use general education to expose students to integrated learning, emphasizing the learning of different types of knowledge, different ways of understanding, and asking students through general education to develop this interpretive capacity. So, this way of looking at general education expands the curricular possibilities so that it no longer has to be limited to the beginning of a college education. We can see these kinds of programs taking place over a couple of years, even past the sophomore level, and the courses in them can be at the introductory level but they can also be at more advanced levels.

One model of general education as an integrated experience is through the development and delivery of a series of topics. A college like Farleigh Dickinson, for example, has four courses that students take over three years into the junior year -- which we normally think of as being more advanced -- and those courses move from the perspective of the individual starting with the individual and move out into society -- through American society, through cross cultural perspectives, and finally out into the world with an increasingly broad content

emphasis. Another approach is to see general education as a vehicle for integrating general education and the disciplinary model, and this is what's done at Northeastern University, where they have a set of learning goals that are accomplished through a plan that's designed by the student's major department: it builds on arts and sciences courses but also builds on disciplinary courses in the major. A third kind of integration could be, for instance, linking the theoretical and the practical. Oregon's Portland State University does this by linking the theoretical with societal problems, a curricular process that takes place over four years. That is not foundational, because it takes place over the four years; rather, it's integrative and students are asked to apply theoretical knowledge to societal problems. It has a senior capstone in general education where teams of students go out and address a real world problem drawn from the community, and this occurs at sophisticated levels.

This discussion about the curricular role of general education has moved us to taking a look at some other new directions that we are seeing in the country. This is in addition to the changes in the programmatic role of general education. I will touch briefly on three of the trends in general education curricular reform. The fourth category is the issue of process, and we may want to talk about process a little later one. But the three that I am going to talk about today are content, pedagogy or teaching methods, and architecture or curricular design.

In brief, this is what we are seeing in terms of content of general education courses, changes in trends in content courses, what's being taught: We are seeing greater emphasis on cultivating fundamental intellectual skills and rethinking their definitions. It is for this reason that we are seeing writing as being a way of thinking. People are looking at writing as a tool

for thinking, as a way to find a personal voice, and are understanding that it needs to be strengthened through repeated use in multiple circumstances. We are seeing a shift of focus from computer literacy to informational literacy. We are also seeing a renewed emphasis on arts and sciences subject matter extending into professional and pre-professional programs; strong presence of information technology; acknowledgement of the need for global preparedness; increased emphasis on democracy, democratic pluralism, and civic responsibility (in a recent survey, 62% of the respondents said that they have in place or are putting in place a diversity requirement); emphasis on engaging the diversity of human communities; rethinking what students should know about Western traditions; interest in the moral and ethical dilemmas of each field; and stress on science for an informed public. This is a fundamentally important set of expectations for the generally educated.

In regard to pedagogy or teaching methods, there is a strong focus on the *how* as well as the *what* of learning. There is a shift from teacher-centered to learning-centered education, to active student involvement in the educational process; a shift from discipline-based to problem-solving learning; an emphasis on practical implications of learning; and an increased emphasis on cooperative and collaborative learning.

In terms of architecture, this may be the area that we have seen the greatest changes occurring. It used to be that there were established models for general education: either a common core curriculum or a distribution model in which students would take one or two courses from column A and one or two courses from column B, from the sciences, the humanities, and so on. What we are seeing now is a real shift to a greater range of choices of

curricular designs. It is really more a situation where every campus is designing some program that really fits its mission and culture. There are a lot of new architectural elements that colleges and universities can draw on. Some of the elements that campuses are bringing are: greater attention to well-articulated learning goals as the basis for general education; the move to cultivate fundamental intellectual skills and capacities across four years and across the curriculum into a major; a return to requirements for all students, but not simply distributive requirements; tighter curricular structure; interest in comprehensive responses; interest in interdisciplinary education and in the integration of knowledge; more complex models and multi-faceted architectures; new elements such as service learning, learning communities, first-year course and senior capstone; and an increase in attention to assessment of student learning.

I want to stress other points about which I feel very strongly. Do you all remember the story of Alice in Wonderland? In it, Alice says something to the Cheshire Cat that is crucial to the story and, I believe, to our discussions this morning. Alice asks the Cat: "Would you tell me please which way I ought to go from here." The cat answers: "That depends on where you want to get to." Alice responds: "I don't much care where." And the Cat responds: "Then it doesn't much matter which way you go."

Why do I bring this dialogue between a child and a cat up? Because it emphasizes the importance of where you want to go, of where you want your students to go in their learning. So that the way of getting there makes sense, is appropriate and is not random. All of our reservations and work indicate that a strong general education program is based on a set of

collaboratively defined learning goals. How does a particular college or university want to characterize its graduates, graduates who will be living in the 21st century? This is a substantive query and demands a substantive answer more than just a list of required courses. It refers to the capacities each student should be developing, the facts that they should be able to transform into self knowledge. From our work with all of the campuses that we have involved in our programs, we have been able to distill the following as a list of contemporary outcomes for general education, and I believe that they should inform the work that the Board of Governors engages in as well in its consideration of this central issue. We have found, that to be successful, general education should:

- 1) Foster in students a set of intellectual skills and capacities, the more traditional of which are things like writing and quantitative reasoning but also oral expression, information retrieval, moral reasoning, negotiating differences among and between different people, team work, adaptability. These are ways of empowering students, and some of them are very important for the complex world that students will be moving into.
- 2) Inform students to help them understand multiple modes of inquiry and approaches to knowledge, to develop analytical capacities through studying a broad range of knowledge and a broad range of endeavors.
- 3) Inform students and make them responsible by developing societal, civic and global knowledge in them so that they would know something about societies and events remote in time to help them understand contemporary societies, to learn about other cultures, to appreciate cultural diversity. To help students gain self-knowledge and grounded values, which is also part of making them responsible so that they can define themselves, place themselves within a culture and cultures, and query their own beliefs.
- 4) Help students integrate knowledge.

The balance among these broad outcomes and the specific objectives that they would encourage lead a campus to determine how to give them life; and these vary from one institution to another. These outcomes, their balance, and the specific objectives provide the rationale and the reason for the curriculum and how it is taught.

These learning goals and learning objectives are important elements and are what I call the Learning Improvement Cycle. This is where you really see the interrelationship of goals and outcomes, objectives that derive from them, the kind of curriculum that is designed to lead students toward the goals and objectives that are set, and the pedagogy and type of teaching that occurs. Finally, it is assessment that actually asks if this all is working. Answers to that assessment feed back into the curriculum, into the pedagogical design. This process sets the stage for successful implementation since it develops buy-in and ownership, because it clarifies goals and enhances understanding of how it fits into this cycle. So that leads us then to the observation that a strong general education programs strives for educational coherence. Jonas and I both like this term. Coherence does not mean a prescription or a dictation of exactly how teaching occurs and how learning occurs in every course but rather, using Jim Radcliffe's phraseology, it implies a logical sequence of course work or educational experiences that foster culminative learning leading to long-lasting and useful intellectual skills and insights. We have traditionally not designed our curriculums in such a way so as to provide this kind of educational coherence. But we are now beginning to see more attention to bringing coherence to the architecture of general education so that it adds up for the student to more than the sum of its parts.

Another thing that we are beginning to observe in colleges and universities is the relationship of general education to the major. And again, we feel that this is a very important development. Students need the skills of general education to succeed well in their areas of concentration. We assume that all of our majors are able to retrieve information of all different sorts. This might be introduced in a freshman course or a core course, but by the time they are seniors, students should be expected to do so at a very high and sophisticated level. The major is the area, it provides the context and the content for the intellectual capacities and skills to be developed and to be demonstrated at this sophisticated level. The major relies on the core courses or the capacities introduced in introductory general education courses but it also really must build on them and must also provide the sophisticated context for them to really be demonstrated. The other way the major in general education interrelates is that we ask all of our students to develop mastery in a field at a certain level, at the level of a graduate from college. This process of developing mastery occurs through the major. It is a common experience for all of our students, it is a shared experience. We ask all of them to do it so that, in a sense, it becomes an element of this shared architecture. You can consider it an element of the shared general education architecture. And it is transferable skills. The process of developing mastery is a transferable skill that will serve students well when they shift from one area, from one field, from one profession to another, which we all know many of them will do.

The last point I wanted to make here is the relationship of general education to pre-professional programs. We have been working a lot with both regional and specialized accreditors over the past two years, and that work shows us a very promising synergy

between what we consider the outcomes of general education and the desires of practitioners prepared for the 21st century. We hear a great deal about the tension on campus between the professional programs and general education, the complaint that the professional programs have so many required courses that the students can't take general education courses. But actually, when you start looking into what the accreditation agencies are asking of the campuses and what they are expecting the graduates from these pre-professional programs to look like, you find there's tremendous overlap in terms of those learning goals.

The newsletter that I handed out to you really summarizes the work on this project on accreditation and assessment. It describes our expectations then introduces you to this work on accreditation and assessment. These shared goals have been really a very important discovery of ours over the last few years and, as we know, all of accreditation is moving toward more outcomes-based approach and stronger emphasis on assessment, so this overlap of goals is really going to serve all of us very well.

So, in the midst of all of this exciting activity, what still needs attention. There's a long list and I'm not going to go through that long list with you but I'm just going to pick out three particulars that I think are worth mentioning: 1) We really have a long way to go still in terms of assessing student learning. We are just at the beginning of this activity. It involves both learning in general education and general education in the major, and it includes an assessment not just within courses, where we may do a pretty good job, but also and principally assessment of courses over time and finding answers to how we assess that culminative learning that occurs over a student's undergraduate career. There are some good

examples, but not enough yet. 2) We really need to revive responsibility for the faculty as a whole for general education so that it's not shunted off to a subset of the faculty or to groups of adjunct faculty. It is in this way that the relationship between general education and the major can really be built on throughout the curriculum. 3) We have a long way to go in building a real quantitative literacy in our graduates. There has been some recent work at which is looking at this process, but much more must be done if we are to sustain our national capacity for progress in the future.

I am delighted to commend the Department of Higher Education and the Commissioner's Office for the leadership they are showing in facilitating these conversations about general education in Connecticut. It is very much in line with the work that we at the Association are beginning to see and to become involved with. In other states we have a project as part of Greater Expectations called "General Education and Transfer" And we are working predominantly with three states, Utah, Maryland and Georgia, as they discuss, on a statewide basis, general education in terms of student learning outcomes rather than based on the transferability of course credits. They are beginning to ask what students have learned, what they can do with their learning and how this has been assessed over time as a way to facilitate transfer. In Utah, it is led by the faculty. In Georgia, it is led by the central administration, and in Maryland it is a K-16 initiative project. But the basic idea is that there's a focus on student learning outcomes in those states and on communicating those goals broadly to students, to prospective students, to faculty and to advisors as part of the process of facilitating transfer in a real meaningful way based on student learning. I know that the Department of Higher Education is engaged in similar discussions with colleges and

universities in the state and that you are leading an enhanced transfer and articulation process that addresses issues of student outcomes as a way of facilitating the transfer process. That is reassuring news and you are on the right track.

In summary, we are seeing a great deal of activity on general education nationally. There are a variety of models – there is a real diversity of models and approaches representing the national diversity of educational institutions. We've seen complex designs of general education, greater clarity of learning goals, and deeper understanding of educational goals that are relevant for this point in time. We are seeing links between general education and the major and general education and professional programs; links between classroom-based learning and the external world and practice; new ways of teaching and changing content of the courses to reflect the reality of the early 21st century world. These are all positive and exciting steps forward, and I am delighted that Connecticut is making its own mark on these important efforts.

Valerie F. Lewis

Thank you, Dr. Leskes, for an insightful and truly informative overview of the issues at hand and of the steps that are unfolding on the national scene to address the kinds of concerns that we in Connecticut share for the role general education should rightly play in the educations of our students. Your excellent comments will certainly help to guide our continuing conversation, both here this morning and in the months to come, as the Board of Governors and the Department of Higher Education work with our colleagues throughout our colleges and universities to secure the responsive excellence of our general education programs and

seek to provide the educational coherence that we agree is essential for the future of our educational structures and our civic and economic enterprises.

I know that it is a very hard thing to ask colleagues of the kind we have sitting on the stage to talk to you for only five minute a piece. They know it and we know it. But what we are going to try to do today is to get a sampling of what's happening across our institutions with some comments about the substantive work that is going on our campuses today.

I would like to begin with John Petersen, Chancellor of the University of Connecticut.

John Peterson
Chancellor of the University of Connecticut

Thank you, Commissioner. It is certainly a pleasure to join in this conversation today. Clearly, our speaker hit all of the essential highlights. I would like to point out that there are three issues that make general education so difficult in higher education. First, historically, the institutional budget drives the curriculum. Each institution has to generate its own general education program as a way of generating resources from the central administration. Until we can reverse that and have the curriculum drive the budget, rather have the budget drive the curriculum, it is going to be difficult. Second, there are disciplines in our institutions whose accrediting agencies place such a demanding load -- in terms of the technical competencies required -- on our students that educational institutions have little room either to generate a broadly-based educational program for students or we are criticized or penalized in some way even if we can do that for students so that they have any measure

of flexibility in their schedules, in which they seek things that are of interest that go beyond their majors and that go beyond the expectations of institutional general education. And third, the demands of articulation agreements are such that it is not always easy to make sure that students don't pay a penalty as they move from one institution to another.

I inherited a group, when I came to the University in 2000, that had been working for a year – an effort, I might add, that began after colleagues attended the Asheville Institute -- on revamping the general education curriculum at the University of Connecticut. We will approve that revamped general education structure this spring, after what has been a labor of love and a struggle. We broke the University's general education framework into two formats: a competency grouping and a content area. We maintain the content area by requiring six credits in arts and humanities, six credits in social science, and six or seven credits in science and technology. The interesting segment is the competency segment. There are six areas we have chosen, and these competencies are linked not just to courses that are what you would consider general education courses but we also expect the departments and majors to develop these competencies. The first competency is writing; besides the fundamental English course there are also two courses that are designated as writing courses that students will be required to take. I should add that we assess students as they come in to determine the level of their current competency because we expect them to enter at a specific level and then exit at a different level. That different level is determined not just by the general education committee but by also the major. The second competency is quantitative skills; there are two core courses that students have to take, courses specifically approved by a central committee and assessed every couple of years in terms of

their outcomes, in terms of whether or not they built a quantitative skill needed for that student and that student's discipline. The third competency is foreign language. We still have probably one of the most extensive language requirements among all universities in the country. I am interested, too, in making sure that students are exposed as well to the cultural component of that language. The fourth competency is computer technology. There is a basic competency that we expect for students as they come in to the University and there is an exit competency which is very much linked to the major in the discipline. The fifth competency is information literacy. It is common for all of our students and it is handled through the disciplines. The sixth competency is multi-cultural diversity -- we require that two "D courses", diversity courses, be taken by students, one of which has to have an international component to it. I know this sounds like an awful lot of courses, but because some of those courses can also be part of the major, students have flexibility as they fulfill those requirements.

Valerie F. Lewis

Thank you, John. I would like to ask Dimitrios Pachis to follow up and provide an overview of general education issues, both at Eastern and in the Connecticut State University System more generally.

*Dimitrios Pachis
Vice President for Academic Affairs
Eastern Connecticut State University*

Thank you, Commissioner. It is a privilege to participate in this conversation this morning, and I am very pleased to have this opportunity to say a few things about Eastern's general

education program. The general education program is, of course, the core of the baccalaureate degree. The objective conditions of the complex and rapidly integrating technological world community dictate that fully functioning citizens and contributing member of society must be educated broadly and must have the capacity to understand change in the world as well as methods of change. The explosion of discoveries in every field of human endeavor has accelerated during the past hundred years and has involved not just a few people but the broad masses of democratic societies. Thus, democratic societies face the challenge of providing general education opportunities to an enormous numbers of people beyond the basic and secondary level of education. Providing general education opportunities at the third level of education is not simply for the purpose of rectifying the mistakes and the mission of pre-college education. Rather, general education must be recognized as the key element of the foundation of all higher education. Higher education can no longer be the place where the individuals can acquire expertise in some narrowly defined branch of human knowledge. Today, we have a better understanding that complex, scientific and social problems require the integration and application of knowledge from a variety of fields. To give one example, business management -- what many will call professional areas -- requires knowledge from an extensive area of disciplines in the sciences. In fact, Peter Drucker, the business management guru (to whom the Commissioner referred as well in her opening comments) defines management as the ultimate liberal arts discipline. If general education is to serve as the foundation of all higher education, we must ask ourselves if are we doing an effective job. The answer, of course, varies from institution to institution. However, there are shared difficulties facing all of higher education in addressing the need for a quality general education. Faculty and administrators are well aware of these

difficulties. One issue, perhaps a principal one, with regard to general education is that the higher education establishment moves very slowly to adjust to the needs of society and the time for making changes to our general education programs to reflect social needs could take a very long time. Some of our problems arise from the fact that our programs are organized along disciplinary lines and that more and more disciplinary approaches are being established. Our faculty are trained, evaluated, and awarded within the strict confines of their disciplines. Yet, on every college and university campus there is broad agreement on the need to prepare graduates as broadly as possible. Mandates from accrediting bodies have pushed institutions along in designing and implementing general education curriculums. Yet, to be successful and dynamic, the general education curriculum requires the same or even greater attention of the faculty and administration that the curriculum in the disciplines required. But who will shepherd the general education programs? Sadly, administrative structures in higher education do not reflect the stated goals and objectives regarding general education. Only a small fraction of total administrative support is dedicated to general education programs. Very few institutions have designated a position of Dean for General Education -- a dean who has the adequate resources and the authority to run a general education program. It is important that all higher education institutions with a commitment to general education are flexible, dynamic, effective in administrative structure to support the goals of higher education. I avoid going to the specifics about the content of general education programs and the definition of a general educated person partly because I personally favor a general education program that contributes to preparing liberal educated graduates. At Eastern in the last three years, we have changed our direction to become the state's public liberal arts university. We've looked at the number of innovations within the

general education programs. We've used multi-disciplinary approaches, we have a first year program, we have service learning, we have learning communities and the like, and we are totally dissatisfied with the whole approach because we have found that our program is not coherent, it lacks coherence. So this past summer, faculty sat down and we formed a committee called the Committee on Liberal Arts not only to design a new education program but also to come up with the definitions of what it means to be an educated graduate from Eastern. Our hope is that the new program, which has been submitted to the faculty, will be discussed and considered in the fall semester. We will have all those elements that provide for a coherent general education program. One that can be assessed effectively, not just every ten years but on an ongoing basis. I hope that in a couple of years from now, I will be able to report some very positive results.

Valerie F. Lewis

Thank you, Dimitrios. I note that we have with us today two representatives from the Community College System. Students in our Community Colleges are expected to complete 33% of their course work toward the Associate's degree in general education, typically within a two-year timeframe, and I am pleased to invite Chancellor Herzog to offer some perspectives on that process.

Marc Herzog
Chancellor of the Community-Technical Colleges

Thank you Commissioner. Chairman Vertefeuille, on behalf of the Community College System, we want to thank you and the members of the Board of Governors very much for being here and for the timeliness of this Forum.

A couple of years ago, the Community College System adopted a system-wide process that looked at student-centered and student-learning-focused goals as part of our review our academic standards and academic policies. In this last year we have actually undertaken the very serious exercise of looking at the System's general education core. Our goal is to develop a common general education core curriculum for the System. A lot of the motivation for this is actually driven by the relationship of community college students and their transition to other colleges and universities in the pursuit of baccalaureate degrees. The System itself at this point has collected information on every general education core within the system and, as the Commissioner mentioned with regard to the level of regulations, we are now engaged in a review of that core curriculum as it relates to the standards of our own board of trustees, the Board of Governors, and the New England Association of Schools and Colleges. We are now in the stage, based on the review we have done to date, of actually engaging in a very serious system-wide dialogue involving all twelve of our colleges and the faculty of those colleges. That discussion, we believe, will develop into a proposal for a common general education core that would be reviewed through the college governance structure at all twelve of our colleges. At the same time we do that, we are also very cognizant of the relationship of what we do in our general education core to the requirements for students to complete associate degree programs and to the relationship of our program requirements to those of other institutions to which our students transfer. We are now in the

midst of discussions with the University of Connecticut and the Connecticut State University, and more recently I have had a preliminary discussion with President Judith Greiman of the Connecticut Conference of Independent Colleges to talk about our continued relationship with the independent colleges in Connecticut.

There are many things driving the core curriculum for the general education core for the community colleges. It is clearly based on where we are heading in learning outcomes and clearly based on demonstrated student competencies, but we also recognize that a common general education core is the cornerstone of what we believe is going to be necessary for system-to-system transfer and articulation. With all this in mind as we work internally with what the general education core will ultimately be for the System, we also are diligently working with other institutions to make sure that articulation agreements will provide seamless pathways for our students as they proceed up the ladder of higher education.

Cathryn Addy
President, Tunxis Community College

I want to speak only briefly, to follow up on Marc's overview, about the importance of general education to the community college student and give something of a "broad brush" approach, because I believe that much of what I might say has already been covered by our wonderful initial presentation. General education is very important to community colleges. The non-traditional nature of the majority of the students we serve makes a general education more important than it might be otherwise be because our students come to us from such a wide diversity of backgrounds. That's one of the elements that makes it so interesting yet so complicated to work in the community colleges. Because of their diversified backgrounds

and ages – ranging from 18 to 80 – students come to us for a variety of reasons. Some of them are very undecided and are exploring what exactly they want to do when they grow up, even those 80-year-olds, and others are so career-oriented that they have narrowed their focus to a very dramatic degree. Our goal is to focus those who are unfocused and to broaden those who are too focused. It is because of that commitment that general education and the providing of a core experience to all is so critically important to us. As we look at the future, however, both from an internal community college perspective and looking at issues of transfer as well, we must consider how we approach this whole subject as an educational enterprise. First of all, it is critically important that we retain the breadth of definition of general education so that we can take the students from their many patterns of learning and behavior and life goals and fit them into the many patterns that are valid and assessed and measured and critically important at the institutional level. I wish that there continue to be more opportunities for our students who demonstrate what they have already grown into knowing. And this goes back to the non-traditional nature of our students. It is not always feasible to expect someone who is 18 and fresh out of high school to have the same level of understanding of life in its many facets as somebody who is 35 or 40 and is coming to school to gain skills or look at a new profession or go in a different personal direction. I wish we had more ways of recognizing what has been learned by that older student and incorporating that as a valid component of what we are trying to define as general education.

Another element that we need to continue to pay attention to is the impact of technology on not only how we deliver education and training but on how we in fact learn and how that is changing. Perhaps we should also look more closely at the learning patterns of the students

who come to us. This is another important aspect of general education we cannot ignore. We certainly cannot ignore and should not be ignoring the globalization of information and our desire that our students be able to function in a very complex environment dealing with people from diverse backgrounds every day and every moment of every day.

My last desire, I think, is to be a reminder to all of us who are leading institutions in one way or another that we now allow the administrative details of implementing new models for general education or concepts to be the excuse for maintaining the status quo. We have heard so many things this morning already and, I for one, am a little overwhelmed but excited at the same time. And for that reason I would like to remind us that it will take courage on our part not to allow ourselves to continue to be victims of what *is* at the expense of what *can be*.

Overall, what community colleges deal with for our students is allowing them choices. It's very sad when they come in to us and say that they didn't have a choice about x, y or z. But we want to make sure they are not leaving saying that they didn't know they had a choice. That's what general education affords us: the opportunity to let our students know that they have choices about how they create their futures. That is critically important to all of us and always will be

Valerie F. Lewis

I think it is particularly courageous that the community colleges are thinking about a core education across all twelve institutions. We know how every institution in the state values its autonomy, and yet that kind of cooperation and collaboration bodes well for our students.

This discussion transitions us well to our next speaker, Merle Harris, as we now begin to talk about non-traditional students and non-traditional delivery methodologies and processes.

Merle Harris
Executive Director, Board for State Academic Awards

Thank you, Val. We are going to follow the work of the community colleges very closely because many of our students actually come to us with their first 60 credits completed at a community college. However, those of you who know Charter Oak State College know that we have some very different problems to deal with when we look at general education. The way we have tried to solve those may be informative for all of us. The emphasis of Charter Oak is on the fact that learning can be acquired anywhere, anytime, and in many ways.

Many of our students come to us with more than 120 credits already completed. So we have the issue of having general education requirements that serve that kind of a population. Our requirements are based on a philosophy that says that we want all of our students to develop their full potential and, most importantly, to acquire the abilities to engage in lifelong learning. And that really is the center of our general education requirements: the ability to engage in lifelong learning. Our requirements actually changed dramatically in 1998.

Before that date, we had course requirements in mathematics, science and history. We found that that didn't really work very well for our population. But I also don't believe that such requirements work very well to prepare students to operate and to function and to contribute to a very complex society. After more than a year of study, we went to a competency-based system. We have ten competency areas that are required and then we have two overarching competencies that really needed to be integrated into the other ten. I'm not going to give you a list of the ten competencies but I'll share just two with you to give you a flavor of what we

are looking at. First, for example, we want to be sure that our students acquire the knowledge, understanding and appreciation of their relationships to groups and communities. This doesn't have to come through one particular course. There are many ways that students can demonstrate that they have that competency. There are a whole array of courses that could actually be used to meet that particular competency, and sometimes it is an exam that a student might take not a course that they have taken or other ways that they could demonstrate that knowledge. And second, we want to be sure that our students acquire knowledge, understanding and appreciation of the implications and responsibilities of living in a global society. Again, there are many ways to meet that particular competency. The overarching areas, obviously, are written communication (for which there are specific courses required but we also look at whether students gain and acquire research skills through many of those other requirements), and essential critical skills, in which we want students to be able to discover and formulate problems, synthesize solutions, and acquire the ability to think critically and reason logically. These are woven into those other ten areas.

The problem that we have in particular is making an evaluation of which areas students still need to acquire new knowledge in. We are able to do that through our registrars and through student counselors, all of whom spend a lot of time on that issue with students when they are enrolled. Our issue, and it is one I hope we get to today in greater depth, is the question of how we can assess that afterwards, how we can be sure that the student who holds a Charter Oak State College degree has those ten competencies and those broader competencies. We have relied to date on a system that really is a self report. We ask our students about a year after they graduate to measure themselves in many of those areas. We also ask employers

whether the student has those competencies and if there are additional things that should be seen in the workplace. We also ask graduate advisors that same question. However, we are not fully satisfied with this process. We know that we need to come up with other mechanisms and we have a committee that is now engaged in that very question. We are looking at things such as concept math, case studies, some type of a culminative experience that will allow you to look at that cumulative set of knowledge, especially since so much of it has occurred over a long period of time with our students. It is not something that they have acquired in four years; sometimes it goes back to ten years, twenty years, sometimes even longer than that students had those initial experiences. This is an area that we are looking at carefully. Our faculty has been very much engaged in that whole process and we looking to others to see if we can learn from what they are doing as well.

Valerie F. Lewis

Merle's comments remind me of what a revolution we have had in higher education. Among so many other issues, we are now thinking of trying to work with students who bring us experiences across lifetimes and in whom are invested any number of competencies yet to be described adequately. What a difference compared to the time when we thought we had a captured population for two years or four years at a particular stage of life. I am reminded, too, they we are still wheeling around in lots of issues but finding changes for the good.

We have with us today the new president of Connecticut College and his newly-named provost, both representing all of the independent colleges that enrich our landscape. I know that Connecticut College is one of those institutions that have thought seriously about how to

engage these issues in a liberal arts community, and perhaps their experience can provide some overview of the experience of other independent institutions in the state as well.

Norman Fainstein
President, Connecticut College

Thank you, Commissioner. There is nothing more complicated than the American terrain of higher education and I don't know whether I speak for those institutions that are at the heights of it or in the quiet back quarters of it or whether I speak for anybody but Connecticut College. Let me just make a few comments in what I see is the problem for us and then, as usual, the Dean of Faculty will tell how to solve this problem.

We are a highly selective residential liberal arts college, and I think there are several others of the same species as us in Connecticut and, obviously, elsewhere in the nation. I think that “highly selective” is important, “residential” is important, and “liberal arts” is important in positioning us in terms of this discussion. These are qualities very particular for us also because we do not have professional education. We have the luxury and the obligation of determining who our students are and, therefore, what the characteristics are of our residential and intellectual community. Within that context, we see ourselves as preparing leaders for every walk of life in a democratic society that is part of a changing and increasingly integrated world. So for us the first issue, from my point of view, on general education -- and I understand these wonderful distinctions and definitions and that I may be stepping on some cross categories here -- is to respond to the challenges that we face. These challenges, about which we have talked, are an increasingly multi-cultural American Society and an increasingly integrated world, one in which science and technology and, in particular,

information technology, have revolutionized many aspects of life. Part of this first issue for us is what should our student mix be. We strive to create a very heterogeneous student body within the limits of our resources in terms of social background, in terms of social class background of students, in terms of the racial composition of the student body, in terms of the range of interests in the student body, because we quite consciously see ourselves as creating a community which is going to go on to be the leaders of America and each part of that community benefits from the other parts of that same community.

This brings me to my first challenge, and that is where is general education located. Andrea has laid out extremely clearly a number of places where it is, and some of the issues are either particularly vexing or easy in certain ways for in the liberal arts colleges, where the majors themselves are part of general education. But not so obvious is that general education lies not solely in the curriculum but also in what one might broadly say is the co-curriculum. General education takes place on our athletic fields: 30% of our students are part of inter-collegiate athletic teams and much of what they learn about competition and cooperation does not take place in the classroom but takes place on the fields and on the courts. Second, Andrea has alluded to this and others have as well: we have a very strong component of service learning, and general education takes part in internships and working with community organizations outside of the classroom. General education takes part most uniquely in self-governance. The fact that we are a residential democratic society in which students control many aspects of their lives as well as aspects of college policy, means that in that part of the co-curriculum many, many lessons and skills are being learned about democratic society. Finally and perhaps not so apparent: general education lies and takes

place in travel. A very significant percent of our students study abroad in various modalities before they graduate. So for those of us in this part of the terrain of America in higher education, who are preparing the leaders of our society, travel abroad is part of general education and is not merely going on a holiday but as part of a structured educational experience.

I want to end -- and Helen will solve this problem, I'm hoping -- with what is the largest conundrum for us, and it is not in determining the skill sets that people should have. We all know that people should learn to speak and read and write and be able to do technology and a whole set of other kinds of interpersonal, intellectual skills, and we try to make sure our students get those skills. The real conundrum for us is in the content of common culture that students should leave with. What should be the common culture of American leaders in the next generation? In the nineteenth century, it was very evident and taken for granted, as it was through much of the 20th century, that educated people—and this was when that group was a very small collection of highly educated people, when it was a very tiny percentage of our population -- would all have a common body of experiences and of knowledge. Initially, it was assumed that they would all be able to read and to some extent speak Greek and Latin. In the 20th century, it was assumed they would all be able to have reference to Shakespearean plays, to knowledge about American and Western European history – in effect, to a whole range of content you might say that we had a consensus about. Now that consensus has broken down, and the challenge for us is how to rebuild that consensus, how not to dismiss the idea of a canon, that is, the idea that some forms of knowledge are better than other forms of knowledge, and how to agree on some content of our culture which

everyone should share. But, what should the content of the canon in an increasingly multi-cultural society and in an increasingly internationalized and globalized world be? That really is the challenge that I think is the most daunting for the elite liberal arts colleges and universities and, to some extent, to everyone else as well as they plan their general education programs.

Helen Regan
Dean of the Faculty, Connecticut College

I am, of course, happy to solve any academic problem.... I do think that, as a community of people, it is through conversation and dialogue that we begin to solve such problems. So I think what I would like to add to this conversation this morning is a brief description of the architecture, to use Andrea's word, of the general education program at Connecticut College, which is now under review. We go through cycles every so often, as Andrea mentioned, and we are in one of those now, when we are examining our general education programs. I'm thankful to Andrea for a concept that I think will be very useful to us -- and that is to think of general education as having an integrative purpose instead of a foundational purpose. An organic and not hyper-rational Connecticut College has been moving slowly in changes in its curriculum over the last five to eight years, to exactly that concept, but we hadn't named it yet. We have new nodes of interdisciplinary work in our centers of the College, and we know in an implicit way that these are all significant contributions to general education at the College, but we have yet to become explicit about that. And that's an outcome that I predict will form the review we are undertaking. I would further add that Connecticut College is a microcosm of the larger democratic society and the faculty at Connecticut College is nothing if not clear about its opinions about things (and we have 147 or so tenured faculty which

means we have 147 different opinions), so the act of trying to work through a new consensus about what our general education program is, for all of us who participate in it, including students, is, in fact, in itself, an educational process that will contribute to general education in the near term at the College.

At the moment, our principles for general education are essentially those that Andrea outlined for you earlier, with the exception of the principle of gaining self knowledge and some sense of grounding of value. We're not explicit about that, but otherwise our principles are about the same as those she articulated. We have tried to embody them in the following ways: 1) We had a set of tutorials for all freshmen which are led by freshmen advisees. They are intended to be a classroom in an intellectual experience where conversations take place, led by faculty, about what a liberal arts education is, what the purpose of such an education is, what students can expect from it. I think Andrea or Val said that we shouldn't necessarily expect students to understand the foundational principles of the kind of institution we are as we've tried to do, in a very explicit way, to carry on those conversations in tutorials led by advisors. We do, in fact, have a distribution requirement called "seven areas." We look at these as foundational courses, where the fundamental concepts of each discipline and the modes of the part of each discipline are embedded in those courses. We do have a foreign language requirement -- of which we are quite proud -- which requires some sort of intermediate proficiency in a foreign language of all graduates. Those foreign language courses include elements of cultural as well as actual language proficiency. We do have a writing requirement, which includes what we call "writing intensive" versus "writing enhanced" courses. They are spread across the curriculum and are not necessarily taken in

the freshman year. And the difference between “intensive” and “enhancement” is the amount of revision that is required in the actual volume of writing that is required in the course. All students must have at least one writing intensive course. We tried to embed a more formal general education program in our co-curriculum – for example, by designating a summer reading book that all freshmen and all faculty read. We have a major event at the College every fall. The book is chosen to embody a particular concept or theme of significance and perhaps relevance. We always look for a living author, and the conversations that ensue around that particular piece of common reading hopefully set the stage for the tutorials over the course of the year. And then we do have an expectation of information literacy, as we call it, and that is embodied in courses. We are about to embark on new program to design specific assignments within courses that embed information literacy and in a seamless way so that they are actually invisible to students. So these are the elements at the College right now through which we tried to embody our general education program. But as I noted, I think we will be reviewing some of these in a more explicit way, articulating things that happen from freshmen through senior year as elements of general education. I want to thank the panelists and the Board of Governors. As I was sitting here, I have been taking copious notes, for I am a learner as well, a person who is participating in learning with the rest of the audience. I am grateful for this opportunity.

Valerie F. Lewis

I am learning a lot today as well. Thank you for reminding us, Helen, of our dual roles as teachers and as learners. I think the transition here is to Ken -- in terms of your saying those lovely magic words about informational literacy – which, I believe, have been a hallmark of

some productive conversations among our business partners. But I want to stress the fact -- as I said earlier, Ken, in your absence -- that the Connecticut Business and Industry Association has done some of the first work in the nation in trying to describe the standards, competencies, and abilities that our business clusters across the state believe they would like to see in their employees at the time of their hiring.

Ken Decko
President, Connecticut Business and Industry Association

When Val first called and asked that I do this, I asked my self a question: “What is general education?” I wasn't sure and still am not quite sure. I'm not sure if it's a modern term for “general studies” or whether it refers to the period of time before someone chooses a specific major. I am not here to argue for either definition but rather to make a few comments that I hope will apply to the whole higher education experience and not only to general studies.

I want to talk briefly today about the effects of the combination of a global economy and technology and greater diversity, which together have turned the workforce on its head. It is totally different than it was ten or twenty years ago. We are clearly in the post-industrial age, and we need to recognize how much the workplace has changed. Obviously, the requirements employers pose have changed. Desperately needed are individuals who have critical thinking skills and analytical skills. They need to be able to work as teams because it's rare that you work by yourself in the business world today; you work with a group of people solving a common problem for the organization. You also need excellent writing skills as well as general communication skills to really succeed. So the attributes that come from a broad-based liberal arts education, and which used to be reserved to the vice

presidents and managers in the business, setting really apply to everyone in an organization today.

But employers tell us that while they are certainly willing and able -- and often want to bring someone in for technical aspects of their job -- it is problem--solving and analytical skills that are the most difficult to train employees in. That's what they need from higher education.

The three areas that I think need to be addressed are the following: 1) we need changes within the B.A. and B.S. degrees in terms of the core requirements. Generally speaking, in terms of the B.A. degree, graduates need some more technical skills. They need more math and a little more science. Anyone with a B.A. degree needs to be computer literate today. On the other side, in terms of the B.S. degree -- an engineer, for example, needs to know how to work as part of a team, needs to know how to communicate, needs to know how to write a memo that senior management can understand. And it goes beyond that. We have 105 people at CBIA, 8 of them are in the IT area. They have to write memos that I and others can understand. So that needs to be incorporated into the curriculum. You need to make all the curriculums a little more broadly-based in terms of what students are going to understand when they get out. 2) We need better opportunities for career exploration. Businesses tell us that, generally, graduates first out of college don't have a lot more knowledge or clues about what they want to do or what the world of business is like than do graduates first out of high schools. This is not to say that we want to turn our colleges and universities into factories. We don't at all. That defeats the purpose of what I'm trying to say in terms of the importance of a broadly-based liberal education. But we want our students to have an understanding what the world of work is going to offer them, through internships and job shadowing, for

example, and I would suggest perhaps that some aspects of such opportunities be written into requirements for graduation. Quite frankly, students who have some type of work-based experience on their résumé when they apply for a job are going to get a better look by a business or employer than those who don't have it. We now say students that that is a hurdle to jump over. 3) We need to have students better able to apply they knowledge gained during through their years of higher education. By that I mean, in college, you tend to learn how to write ten page papers, or twenty-five or fifty page papers; in college, sometimes you learn how to draw things out. But when you get out in the world of business, you have to do just the opposite. You have to take thoughts and reduce them. So just as a practical suggestion, I was thinking that there is a need for those ten page papers, but let me just suggest as a second part of a course grade – and what I think is a tougher task – is to reduce that ten page report to two pages, because if you really want to determine if a student has learned anything is to get him or her to reduce that ten page paper to a two page paper. Believe me, that's going to take a lot of thought. It is no different than the marketing campaign, when you are trying to do an ad for a company: you have to take all this information and boil it down to a few seconds. That's hard work. But I believe we need to do that.

Other examples in terms of “the real world” is a book we wrote for high school students. Some years ago we received a very large grant from the National Science Foundation to write math textbooks. A lot of people were surprised -- a business organization writing math textbooks. We were one of four organizations in the country that did this. We actually produced a textbook called "Math Connections." At first, these were “real work” connections, a kind of blurring of Algebra I and II, statistics, and geometry, which is kind of

what the world of work is like. In using real work examples my favorite was the "speeding train". I always got the answer right on tests but never knew what I was doing to get the answer right. Our textbook looked at real work examples of what the concept was, explained what the theory was, and you could come up with the answer. That sort of "connection" is what I'm suggesting.

Before I close this morning I would like to go back to my beginning comments, on how the world of work has changed. I was at a meeting in February and the figures I'm going to give you are directional, not precise, but they'll give you a sense of how that world has changed. An individual was talking about the manufacturing setting, perhaps ten fifteen years ago, at General Motors, when 90% of the cost of manufacturing a car was the actual production costs and 10% was "overhead." In another 5-10 years, it is estimated that 90% of the cost of producing that car will be what was used to be called overhead. A mere 10% will be the actual production. So when you look at those figures, you are now looking the types of jobs required in business, even in manufacturing settings: they are not the production jobs. There are some of those clearly, but it is the legal jobs the communication jobs, engineering jobs, IT jobs, managerial jobs that are increasingly more important. That's where the world of work is today.

Valerie F. Lewis

I asked Ken to be last on this panel because of his schedule today but also because I thought that his comments would bring us all the way around the equation to recognize that, when we talk about general education, we are talking about education at large, education that is in

every sense applicable at all stages of students' lives. It is also, at the same time, intensely personal in the sense of the development of the individual and the choices an individual makes over a lifetime. And their lives, as someone said earlier, incorporate large conundrums with respect to trying to find common experiences, coherent experiences, that really apply today to ever broader ranges of students.

I think it's time to test each other a bit on these subjects. It's interesting, is it not, that we are all administrators up on this stage and yet it is our faculties who are critical to the decision-making around our curriculum. They really are a very large part of the decision process. We haven't talked much about process yet this morning, so I would like to put a first question to Andrea and then invite you all to the fray: What does process have to do with all of this?

Andrea Leskes

We've actually redesigned the National Institute to stress more processes, because the process of curricular reform, and general education reform in particular, is absolutely crucial to implementing the end result. Very often, as a campus undertakes curricular reform, the focus is on what that curriculum is going to look like at the end, on how is it going to be organized, how it is going to differ from what is currently in place. But that process of engaging the full community, meaning faculty and administrators in meeting goals, is important as to where you end up. There can be many different architectural ways of getting to the results you want, but unless there is real ownership and real buy-in of what you end up with, nobody is going to implement it and it is going to be a curriculum that either sits in a cupboard that nobody does anything with or that never really gets enough life so it makes a real change.

Process is therefore crucially important. One major element of that process is communication, so that you constantly involve as many people as possible in every single stage of reform. Then when you get to the point of designing what it is going to look like and actually implementing it, people agree that this is really what they want it to do, that what is being put into place will lead them there. So communication, communication, communication -- in as many ways that you can do it.

Valerie F. Lewis

Are there ripples in that process?

Andrea Leskes

Yes, there are lots of ripples. You start out with one strategy, perhaps even a major strategy, and you might hit a brick wall. You don't try to go through it, you back up and figure out a way to go around it, or over it, or on the side of it. And you are constantly paying a lot of attention to process. There also has to be a lot of attention paid to the politics of the institution, the culture of the institution, its history, and you have to pay attention to what you can learn from other institutions -- how they have done it -- and then you have to interpret all of that through your own culture. For example, you might start with how to set up that first review or reform committee. Should the committee be appointed or elected? On some campuses, appointed is the only way to go and on other campuses it would never work. If you can appoint the committee, what voices do you include on it so that you have a range of different perspectives -- older faculty, younger faculty, those who have been through the curriculum, those who bring in new perspectives, those who are real leaders on campus and

those who may marginalize on campus. You really want to hear all of the different voices and bring them all in. So there are lots of ripples.

John Peterson

Clearly, one of the central issues in the whole process of curriculum development and reform is the faculty prerogative. I think the single thing that got our group most encouraged is that I said was going to set one ground rule and that is that there will be no economic advantage nor any economic disadvantage to departments participants as a result of those recommendations for change, so our faculty felt free to create anything they thought would be significant for our students.

Andrea Leskes

I think that raises the issue of developing a trusteeship approach to the curriculum, so that the committee is not representational. The people involved should not be representing their own departments or their own colleges, or their own units. Rather, they should be thinking broadly about education. One way to do that is to have them keep asking a simple question: "What of this is relevant for the majors in my area, and what in my area is relevant for everybody else." That tends to move you off the point of what's in it for me. Also important -- perhaps absolutely crucially important -- is the need for faculty development throughout the whole process. This means that if you are going to be asking faculty to do things differently or to think differently, then you must provide ways of thinking about the issue. It can be by sharing publications and discussing them, involving them in workshops, or

bringing external people to campus. Often, the external person can say exactly what you are saying internally, but he or she brings a different authority to the matter under discussion.

Valerie F. Lewis

I would like to invite questions or comments from our audience and, in particular, from the Board. The Board of Governors has charged the Department to look again at its standards for licensure and accreditation in light of all of the changes that are provoking and challenging higher education into new ways of doing things. So please let me know what you like to hear about from this panel today.

Janis M. Hadley
President, Housatonic Community College

It seems to me, as we find ourselves in Connecticut in the middle of a very intense legislative session, that a lot of the remarks we have heard today would be wonderful for our legislators to hear so that they can understand what is expected of educators within higher education. As we look at the area of general education, I heard a couple of you refer to “multi-cultural,” “diversity,” and so forth, as part of the general education course. I'm interested in hearing about the approaches you have found that show we are moving in the right direction in these areas.

John Peterson

We ended up with two diversity courses, one of which is international, at the University of Connecticut, in part because as I asked the Curriculum Committee to consider such a requirement. They understood that I was serious when I emphasized that we are going to

build a technologically-based, globally-competent, and diverse campus, and we are going to live that and not just say it. I think that they have taken it to heart and integrated that into the curriculum. And they have done that in a more serious way than our previous general education format had.

Dimitrios Pachis

At Eastern, we have had a history of faculty involvement and a really aggressive approach to introducing diversity within the curriculum, not only in general education but within courses beyond general education. So when the time came to propose a new general education curriculum we found that there already is recognition of the importance of multi-culturalism in our cultural and history programs, offerings in non-western history and non-Western cultures, but also awareness of aspects of the diversity of American society. So we did not have a problem in the past and we do not have a problem today with the new proposal.

Valerie F. Lewis

When we talk about diversity, we often think about it in the context of the diversity that exists in our own population. And, yet, I'm thinking -- as I think back to that article by Dr. Drucker -- and to many others that we have read recently, there is a suggestion that developed countries are going to need immigration in their futures in order to infuse young people and young ideas into the economic equation for long-term economic and social health. And in that respect, an institution like Housatonic, for instance, which is a gateway for immigrants, has a double opportunity in its curriculum, not just to attend to the diversity of our present population but of our new immigrants, who often bring with them very diverse

educational experiences. I wonder whether, or if, or how, you have investigated international education patterns on general education. Do they have any impact on your campus thinking. I looked recently, for instance, at the New Zealand experience with trying to do assessment and it ended up with a slash and burn outcome. Are you looking at all elsewhere?

Norman Fainstein

The answer to the second question is probably no, but the answer to the first question is decidedly yes. The question is, what's the engine for change here? I think the engine for change is in our underlying commitment to a diverse student body and a diverse faculty. And this is both the force that produces change and the force that produces conflict in our campuses. The difficulty for us is to channel that energy into a constructive direction -- and that's what is called leadership, I suppose. But leadership has to come from all parts of the institution. There is no question that a fire that has been lit under our departments and faculty. In our kind of institution, that fire has come from changing the composition of the student body, and the decision on changing the composition of the student body came from the top, in general, in these institutions. It came from a consensus among the administrative leadership, the trustees of these institutions, and a pretty small set of faculty twenty or thirty years ago, and that has had a profound influence on the dynamics within our colleges and universities.

And the second, and related, decision has been affirmative action and diversity objectives in faculty recruitment. The real place in which change has to take place, the real focus of

change, is in the departmental discussions and in the major itself. We have made tremendous progress here. In faculty-centered small liberal arts colleges and universities, you create the engine of change by influencing student admissions and the faculty recruitment process. And that has been why there has been such tremendous movement in our institutions, and also why we internalize many of the same conflicts as American society has writ at large.

Andrea Leskes

In terms of understanding that diversity is important, we have made really tremendous progress. Many, many institutions do have in place a diversity requirement. But I think the issue really goes deeper than that. It goes first the question "What is one trying to achieve?" You can try to achieve a lot of different things. Are you trying to achieve an understanding of people who are different from you, for all of your students? Are you trying to achieve something much deeper so that you question yourself, in your own existence, as you interact with people who are different from you? Are you trying to achieve communication among people who are different from you? What exactly is it you are trying to do?

The answer is not necessarily only some measure of "exposure." "Exposure" is sort of the lowest level, and yet that is what we always tend to end up with. Can "exposure" be achieved with what you put into place, and how do you know that you are achieving it? That's the question that most people haven't started asking about what they put in place for their diversity requirements. I would suggest that one "exposure" doesn't really get you very far, that one "exposure" is the beginning, and that somehow it has to be integrated, essentially, into the majors and across the curriculum in a way that builds to a much higher

level of what you are trying to achieve. I think that in terms of the diversity of world use, the best example that I've seen comes from the American University of Paris, which is an extremely international institution. It's very small, about 800 students. Within an 800 person student body, 100 countries are represented. Every program is international: they have international economics, international business, comparative literature, and European cultural studies. But what was so exciting is that we were working to take the diversity, these different world views that the students brought to the campus, and actually integrate them in a conscious way, in an intentional way, in terms of what was going on in the classroom.

Dorothea Brennan

Member of the Board of Governors for Higher Education

I am particularly struck by and interested in this discussion about diversity in the context of an institution of higher learning. I would say all of the issues we face as a Board, with responsibility for all of our post-secondary educational efforts, this is among the most pressing and most central. It is important to acknowledge and affirm our shared obligation to view diversity as not detrimental but as important to society, and I appreciate this discussion. I have a question that might take us in a somewhat different direction, in terms of the context of general education. We have heard some things about the role of the faculty. I wonder if you might comment on the role of tenure or of tenure without merit and how that might affect the foundations of this discussion.

Helen Regan

First of all, I would need to ask you what you mean by "tenure without merit." I would argue, as the person who oversees the tenure promotion process at our college, that we do not

give tenure without merit. At a small liberal arts college, there's actually an even exchange for a long term relationship between the institution and the faculty which sustains the interests of our students in the institution over the long term. For example, when you go to a reunion of your undergraduate institution, you don't go to see the president or the dean of the faculty, you go to see the person with whom you have long term relationship, perhaps the faculty member or members who have had a transforming impact on your life. That relationship makes a small liberal arts college what it is. The faculty that I deal with, because they have gone through an intensive review for tenure, are not uncreative. The faculty know that the health and well-being of the institution to which they have committed themselves for the long term is a function of their involvement in it. because the criteria are excellence in teaching, scholarship, and service. Service is the expression of citizenship in the institution, particularly in a democratic self-governance institution like Connecticut College. It is a full participation in the life of the place.

So issues of general education and curricular reform, in the hands of a tenured faculty, tenured because of merit, involves those who have a profound stake in the institution. The process requires and consists of extensive conversations. The outcome one gets from such a process is deep commitment on the part of a diverse group of people, who then make the institution live. The result will be a curriculum in which everyone has a vested interest and therefore is alive in the classroom and in the co-curricular process. Of course, because of tenure, different points of view can be expressed without any fear of reprisal in an institution like Connecticut College. When tenure works best, and when the process of conversation within the institution works best, you have a free expression of views which leads to the best

possible outcome. It really is a microcosm of what we want our democratic society to be, and it is linked to the positive benefits of tenure.

Dimitrios Pachis

I would like to make a comment about the relationship between members of the senior faculty and general education. Most general education programs, when they are designed and initially implemented, have incredible visions. The key issues are: can they be sustained, can they be staffed, can they be nurtured by the entire faculty. In many large institutions, it may be that the senior faculty members set the agenda, actually come up with a vision of a general education that everybody loves, but five years later maybe that involvement is much less than initially was expected. And this is why I thought that the balance between commitment to general education and commitment to the discipline, in most institutions, is really in favor of discipline. I have always argued that there ought to be ways of rewarding and encouraging senior faculty to take their part in the general education program. It is a major challenge for many institutions.

John Peterson

I think the issue is that, at the point at which we give tenure, we have certain expectations. I hope that we are rigorous on those expectations, that we make good hiring decisions and good tenure decisions. Career paths from the point of tenure to retirement diverge. Different people maintain different skills sets, they develop in some areas and they don't develop in others. The critical issues are how we engage each individual in terms of the respective strengths he or she brings, how we optimize those strengths for the benefit of the

institution, and how to we develop a reward structure that recognizes that everyone is different but expects each individual to demonstrate to colleagues that he or she is doing something significant for the institution. I think the underpinning of all of that is to make sure that you articulate institutional goals very clearly and consistently to everyone and that you have people who have the ability to pick and choose and work in ways through which they can contribute to those goals.

Andrea Leskes

Sometimes the problem is a misinterpretation of the context of academic freedom. Academic freedom doesn't mean that you have complete authority over everything that goes on in your classroom, even though that is sometimes the way it is interpreted and faculty sometimes say "I can teach anything I want in any I want and it doesn't have to relate to anything that the institution may think is important." That is not what it is all about. Academic freedom does not allow that kind of license.

Valerie F. Lewis

The issues of the preparation of faculty was part of our dialogue with legislators last year, as we discussed teacher shortages in our K-12 schools. There, we have prescribed so absolutely the criteria and the process in the certification of teachers in our K-12 schools. Our legislators very adroitly asked us the question: "And what about those faculty that you have in your colleges? How have you prepared them to take on all of these new responsibilities we ask you to consider."

Andrea Leskes

I would say that the answer to that is that each college or university must develop its mission statement and its goals and student outcomes. That is certainly the first thing to do, and as the architecture is being designed it is essential to make sure that it is not done in a closed room by a small committee, that, as the committee is thinking about it, it goes back out to the community and that the broader community shares in the thinking process. It is important to make sure that you get a lot of input as you are going along so that what you design is not a surprise to anybody, that everybody knows where you are heading and has been bought in as you proceed. I think this is really important and that could take a fair amount of time. You also have to be very astute politically as you go along and make sure that you consult and listen to the people that are going to cause you trouble even if you don't take their advice, but you did listen to them and you invited them into the conversation. Finally, when you get to the implementation stage, you might want to think about implementing in pieces and as pilots to make sure that things are really going to work before you put in place a major new program that might be very costly and very difficult for the institution. That is how the faculty are best prepared. That is where the strength of our teaching and scholarship originate.

Valerie F. Lewis

I deeply appreciate the serious and inventive ways in which our colleges are working on this centrally important issue. I am reassured, all the more, that we are listening to sound advice, both of the outside world and of the best in the Academy, about how to involve our faculties, how to involve our students, how to involve our entire community in finding that real core of

mission and then finding a way to express it in the curriculum. The conundrum left us is the E.B. White conundrum – which is connected to Dr. Fainstein’s comments about needing a common content, a common notion of future. I believe that White once said, "He'd liken the future to a mince pie, only the baking, never quite done." That might be general education and maybe we should hope for that.

Thank you all very much for coming and thank you especially to the panel for your helpful and insightful comments. This has been a wonderful conversation, and speaking on behalf of the Board of Governors, we are deeply indebted to you for your wisdom and for the guideposts you have put before us on our shared road to educational excellence and continuing responsiveness in service to the needs of our students, their families, and our communities. On behalf of the Board as well, I adjourn this session.