TO THE MEMBERS OF THE ACADEMIC COUNCIL
FORTY-FIFTH SENATE REPORT No. 3

Summary of Actions Taken by the Senate
November 8, 2012

The Senate heard a report on the Governance Board and SUES/C-USP recommendations.

Rex L. Jamison, MD
Academic Secretary to the University
Professor of Medicine, Emeritus
MINUTES OF THE FORTY-FIFTH SENATE
OF THE ACADEMIC COUNCIL
November 8, 2012

I. Call to Order
The Chair of the 45th Senate, Ray Levitt, called the third meeting of the 45th Senate to order at 3:15 PM. He reminded the Senate that later on, it would adjourn and reconvene in executive session. He added: “I have to admit I’m feeling rather downcast and blue today; it’s the first Senate meeting over which I’ve presided as chair in which I don’t have any Nobel awards for our faculty to announce.”

[ Laughter ]

In attendance were 33 members and 7 ex officio members and many guests.

II. Approval of Minutes – (SenD#6684)
The minutes of the October 25, 2012, meeting of Senate XLV were approved.

III. Action Calendar: There were no items on the Action Calendar.

IV. Standing Reports
A. Memorial Resolutions:
1. Chair Levitt invited Richard Hoppe, the Henry S. Kaplan-Harry Lebeson Professor of Cancer Biology, to present a brief memorial statement in honor of Malcolm Bagshaw, the Henry Kaplan-Harry Lebeson Professor of Cancer Biology, Emeritus. In attendance was Sarah Donaldson, the Catharine and Howard Avery Professor in the School of Medicine, member of the memorial resolution committee.

Malcolm Bagshaw (1925-2011) SenD#6692
Malcolm A. Bagshaw, MD, Emeritus Professor and Chairman of the Department of Radiation Oncology died September 18, 2011, at age 86. He joined the faculty in the Stanford School of Medicine in 1956, served as Chairman of the Department of Radiology and subsequently the Department of Radiation Oncology for 20 years, leading the department through an extraordinarily productive period of research, educational and technical advances in the field of Radiation Oncology. He retained an active presence in the department after his retirement in 1992, and continued his enthusiastic support of Stanford up to the time of his death.

Dr. Bagshaw’s career was marked by significant service to the University, the School of Medicine, and Stanford Hospital, as well as numerous national professional organizations. He was honored for his contributions by being awarded Gold Medals
from many of these organizations, including The American Society for Therapeutic Radiology and Oncology, the American College of Radiology, the Radiological Society of North America, The American Cancer Society, and the General Motors Charles F. Kettering Prize for Cancer Research.

Mr. Chairman, we have the honor, on behalf of a committee consisting of Sarah S. Donaldson and myself, to lay before the Senate of the Academic Council a resolution in the memory of the late Malcolm A. Bagshaw, Professor of Radiation Oncology in the School of Medicine.

At Chair Levitt’s invitation, everyone stood for a moment of silence in tribute.

Chair Levitt thanked Professors Hoppe and Donaldson.

Chair Levitt invited Gary Glover, Professor of Radiology, to present a brief memorial statement in honor of Mark Bednarski, Assistant Professor (Research) of Radiology.

Mark Bednarski (1958-2006) SenD#6688

On February 18, 2006, Dr. Mark Bednarski, Assistant Professor of Radiology in the Stanford University School of Medicine passed away at the age of 47 after a 14-year battle with colon cancer. Dr. Bednarski joined Stanford as a medical student in 1992 and the Stanford faculty in 2001. Dr. Bednarski was a pioneer in the field of molecular imaging and targeted therapy. His work has led to multiple inventions and high impact publications. He is survived by his mother, Ms. Dorothy Bednarski, his wife, Lynn Oehler and daughters, Lauren and Carly.

Mr. Chairman, I have the honor, on behalf of a committee consisting of Dr. King C. Li and myself, Dr. Gary H. Glover, to lay before the Senate of the Academic Council a resolution in the memory of the late Mark Bednarski, Professor of Radiology in the School of Medicine.

At Chair Levitt’s invitation, everyone stood for a moment of silence in tribute.

Chair Levitt thanked Drs. Glover and Li.

Chair Levitt invited Warren Hausman, Professor of Management Science and Engineering, to present a brief memorial statement in honor of Robert C. Carlson, Professor of Management Science and Engineering. In attendance were Ms. Judy Kincaid, Robert’s wife, and memorial resolution committee members Kathleen Eisenhardt, the Stanford W. Ascherman, M.D. Professor in the School of Engineering, and Margaret Brandeau, the Coleman F. Fung Professor in the School of Engineering.
Robert C. Carlson (1939-2011) SenD#6685

Robert C. Carlson, a professor in the School of Engineering for more than four decades, passed away on Sept. 6, 2011.

Bob came to Stanford in 1970, serving until 2011. His primary areas of interest in both teaching and research were production and capacity planning; new product development; manufacturing and operations strategy; and sustainable product design, development and manufacturing.

He was also a Professor by Courtesy in the Stanford Graduate School of Business. He held visiting faculty positions at the University of California-Berkeley, at the Amos Tuck Business School at Dartmouth College and at the International Management Institute in Geneva, Switzerland.

He was a recipient of the prestigious Stanford School of Engineering Tau Beta Pi Award for Excellence in Undergraduate Teaching and, by student and alumni vote, the Eugene L. Grant Teaching Award. He was also very accessible to both undergraduate and graduate students.

He authored some 60 articles and technical reports. He also created and conducted numerous executive seminars both at Stanford and in England, Germany, Switzerland, Puerto Rico, Japan, Spain and Canada. In his executive classes Bob was well known for his ability to stimulate class discussion, as well as his very lively sense of humor. He enjoyed leading class discussions with groups of executives and then guiding them to an often-surprising case conclusion.

Bob provided very valuable assistance when the Stanford Department of Industrial Engineering and Engineering Management reconfigured itself from a traditional industrial engineering department into a more broadly focused department that helped to redefine the field.

On the personal side, Bob had a great deal of joie de vivre. He particularly enjoyed fine wine and travel to France, and had an extensive wine cellar. He was a member of the Confrérie des Chevaliers du Tastevin, an exclusive club of Burgundy wine enthusiasts. He could often be found socializing after work at the Vin Vino Wine shop. He also appreciated classical music, enjoying string quartet performances at Stanford and beyond.

He is survived by his wife, Judith Kincaid of Palo Alto; sons Brian Carlson of Truckee, California, and Andy Carlson of Bellevue, Nebraska; his stepdaughter, Jennifer Warkentin, and her family of Chandler, Arizona; and his sisters Vicki Wiltgen of Minneapolis and Barbara Coffin of Los Angeles. He was preceded in death by his daughter, Christina Carlson Viotti.

Mr. Chairman, I have the honor, on behalf of a committee consisting of Jim Adams, Margaret Brandeau, Kathleen Eisenhardt and myself, Warren Hausman, to lay
before the Senate of the Academic Council a resolution in the memory of the late Robert C. Carlson, Professor of Management Science and Engineering, in the School of Engineering.

At Chair Levitt’s invitation, everyone stood for a moment of silence in tribute.

Chair Levitt thanked Professors Hausman, Adams, Brandeau and Eisenhardt.

B. Steering Committee
   “At our next meeting on December 6th, there will be another executive session.

   January 24th, on the first meeting of the winter quarter, Karen Cook, Vice Provost for Faculty Development and Diversity and the Ray Lyman Wilbur Professor, will report to the Senate on faculty gains and losses.”

C. Committee on Committees (CoC)
   There was no report.

D. President
   Chair Levitt asked President John Hennessy if he had a report or announcements.

   The President replied, “I don’t have a report, but the chair was so depressed I had to come up with something.”

   [ Laughter ]

   “Many of you know that Rick Levin, who received his undergraduate degree in History from Stanford, will be stepping down after 20 years as President of Yale. Today Yale announced that the new president will be Peter Salovey, who was also an undergraduate and Masters degree recipient at Stanford in Sociology, so we’ll continue to have a long-lasting relationship with our colleagues at Yale.”

   Provost
   The Provost was away.

V. Other Reports
B. Governance Board and Recommendations of the Study of Undergraduate Education at Stanford/Committee on Undergraduate Standards and Policy (SUES/C-USP)
   Chair Levitt introduced the report by reminding the Senate that last year the Senate heard the final report of the SUES committee. Many of its recommendations were forwarded to C-USP, and from there brought to the Senate. “Almost all of the recommendations, except the ones that require mandatory Freshman Seminars—which we’re still working on—were implemented. They are intended to be a comprehensive reworking of undergraduate education at Stanford. Today we’re fortunate to have Vice Provost for Undergraduate Education [VPUE], Harry Elam, to
give a short report on the post-SUES progress and the implementation of the C-USP and SUES recommendations.”

With the aid of slides, VPUE Elam began his report.

“First off I want to thank all the people at the VPUE office who worked on implementing SUES.

“I’m going to talk about post-SUES implementation and where we are in terms of strategies related to that. As you know, the SUES report was 120 pages long and had 55 recommendations, so the questions becomes: How do we do all of that? Or—can we do all of that, or should we do all of that?

“For me, looking at the Stanford journey that students take, I can narrow the SUES report down to three words: integrate, innovate, and inspire.

“**Integrate.** We want to integrate the majors with the general education requirement. That’s part of the reason behind the new breadth requirement. We also want to integrate what happens inside the classroom with what happens outside the classroom, and that’s critical in leveraging more residential learning outside the classroom. We also want to integrate fields of study and ways of thinking across the curriculum.

“**Innovate.** We want to innovate through new pedagogy and new experimentation inside the classroom. There are some wonderful things that faculty are doing already. We can fit some of the things that are happening in online learning, such as ‘flipped classrooms,’ within this as well. We want to innovate by implementing new curricula, [for example], in the freshman year. We want to innovate through engaged learning, community-engaged learning and product-based learning. All of those things are practical learning that engage in doing. Many departments do that already, but students are expressing more and more interest in such courses, that take advantage of actual involvement in communities and in questions of development.

“**Inspire.** We want to inspire students to make active choices and find their own Stanford. ‘One size does not fit all’ is the message from SUES. We want students to be empowered to think about making active choices and finding their path. We want to inspire students to make a difference in the world as global leaders. That message goes all the way back to Jane Stanford, that we want students to be active citizens and have personal and social responsibility as part of their mission. Finally, we want to inspire students to become adaptive thinkers and life-long learners.”

VPUE Elam reiterated these three key elements, in terms of Stanford’s charge.

“First, we want to reshape undergraduate education by rethinking how and where learning takes place. That involves faculty thinking differently about their students
and experimenting in terms of online [learning] or other ways inside and outside of the classroom, in the community, leveraging those experiences elsewhere.

“[Second], we want to deliver an education that’s vital and enduring in this contemporary age when students are so concerned about getting a job. How does this impact their thinking about the world, [and impart] the sense of vitality, the sense of relevance, and the sense of making what we do in the classroom have meaning? This is something we have to be concerned about in the Humanities and elsewhere. We want an education that makes them lifelong learners.

“[Third], we want students to come out of Stanford with the ability to lead, and to make a difference, whatever they do.

“Here’s what we’ve done so far.”

The Freshman Curriculum
“We noted that the freshman year was packed and we wanted unpack it. Students now have more choice. I will talk about what they’re doing with that choice, and what we’ve done to help guide them through that choice.

Thinking Matters
“The first major change is Thinking Matters, which offered 35 courses this year. Overall, 88% [of the students] got their first choice, and 96% got their first or second choice. 54% of the students coming in felt that they would take more than one Thinking Matters course. That’s great, but we’ll see whether that plays out or not, in terms of the year. [A total of] 35 is a good number right now, but eventually, we may want to reduce that number to 27 courses, so that we maximize how many are in each course.”

A slide showed the Thinking Matters courses that had over 200 first choice requests:

- Fall  - The Science of MythBusters
- Fall  - Breaking Codes, Finding Patterns
- Winter - Bioethical Challenges of New Technology
- Winter - How Does Your Brain Work?
- Winter - Rules of War
- Spring - Networks: Ecological, Revolutionary, Digital
- Spring - The Cancer Problem: Causes, Treatments, and Prevention
- Spring - Evil
- Spring - Media and Message
- ESF - Completely full, with at least two classes having double the applicants as capacity

“We have courses in disciplines across the university. Here are some of the most popular courses. The title, ESF is ‘Education as Self-Fashioning.’ That’s a course
taught by five professors. It’s an experimental pilot course that’s looking at the question of—why a liberal education?—from different disciplinary perspectives.”

Introductory Seminars

“[These seminars are not required]; nonetheless, according to an incoming student survey, 91% want to take Freshman Seminars. The 9% that didn’t [included many] athletes, who say they don’t have time within their schedule to [take these courses]. [Another part of the 9%] say they worry about the extra step of having to write a statement to get into the class. These are often students from under-resourced backgrounds. We have to work with both these groups, about the times when we’re doing seminars to allow more flexibility, and helping them to understand it’s not a hurdle to get into seminars to write the statement.

“Of 221 freshmen, 121 preferred to take these seminars in their first year; [this represents an increase from] 33% to 38%, so maybe having more room is allowing them to take more seminars. 39% of the Humanities courses are full, an incredible growth from 24% last year. We want to see if these trends continue during the year.

“Here are some of the more popular IntroSems.”

Bannerjee (ME 26N) Think Like a Designer – 234 apps / 20 spots
Dweck (PSYCH 12N) Self-theories – 189 apps / 18 spots
Fraser (BIO 4N) Personalized Genomic Medicine – 145 apps / 15 spots
Shoham (CS 21N) Can Machines Know? – 95 apps / 15 spots
Dimopoulos (PHYSICS 83N) Physics in the 21st Century – 86 apps / 29 spots

“Structured Liberal Education (SLE) has about 95 students. I was worried that if SLE were reduced in terms of the units it [was assigned], as a result of reducing what was required of freshmen, that that would impact it, but it didn’t, [because the students] know of its success and how effective it is. One of the things that [Professor] Carolyn Lougee Chappell did, in terms of marketing SLE was to say, ‘It’s an alternative. If you want something that’s more structured, in terms of Great Books approach, here’s an approach to SLE.’ It’s reinforced by the residential environment in [which the course is taught].

“At the behest also of the President, we wanted to invent SLE-like courses. These are called Integrated Learning Environments (ILEs). The first two should be ready to go in 2013. ‘World on Art,’ using the arts disciplines, is one and the other, ‘Science in the Making,’ is a history of science. Both will start out with about 45 students and should be situated in the Burbank dormitory in the Wilbur/Stern area.

“[Another of the] Freshman initiatives we’re working on are new introductory courses. [These include] Theater and Performance Studies, and Introduction to STS (Science, Technology and Society). The introductory course that is the most popular is Computer Science 106; it has 650 students.
“The final point group in new Freshman Initiatives is Stanford 101. It’s going to be a 1 unit course in the fall, dorm-based, and potentially based in the community centers. [Its purpose will be] to help students navigate Stanford. We did it last year as a pilot; we’ll do it again this year as a pilot. The intellectual environment and the other resources that are available at Stanford will constitute the first part of Stanford 101; the second part will be a reflections course. Students have the chance to work with an advisor to help them think about their values and ideals related to the choices they are making at Stanford, and how they reflect on choices they wanted to make after Stanford. [Last year’s] evaluations by the students taking the course were incredible. They really felt those meetings were valuable.

“Finally, the third part, ‘Designing Your Stanford,’ is a new d-school [Institute of Design] course that we’ll offer next year to sophomores, to give them a chance to think about the next three years using design thinking.

“I mentioned all the choice that students have; one of the ways that we invented to help them think through these choices was an online tool called Cardinal Compass. Essentially, Cardinal Compass helps them navigate their first year by saying, ‘Yes, you have choice, but we’d like to help you focus that choice in certain areas. And in particular, we want you to think about how your Thinking Matters potentially relates to your PWR [Program in Writing and Rhetoric] course, or relates to a potential seminar, an IntroSem.’ So in some ways this device works like Amazon, you know, ‘If you like these [books], try these.’ The Thinking Matters course is encoded in saying, ‘if you like this part, then maybe you’ll like a PWR course that does the same thing, and then [it] may take you to an IntroSem that does similar things. That’s the way the device works.

“This class had some 1768 students and close to 18,000 page hits; so there’s a real sense that this device has worked. What we want to add to it next year, again focusing on Freshmen, are those Intro courses to show how they may relate and that may help them develop a pathway through.”
Ways of Thinking, Ways of Doing
The Breadth Governance Board.

Chris Edwards (Chair), Mechanical Engineering
Sarah Billington, Civil & Environmental Engineering
Tim Bresnahan, Economics
Steve Cooper, Computer Science
Shelley Correll, Sociology
Stephen Hinton, Music
Susan Holmes, Statistics
Gavin Jones, English
Tony Kovscek, Energy Resources Engineering
Hari Manoharan, Physics
Sue McConnell, Biology
Rob Reich, Political Science
Janice Ross, Theater and Performance Studies/Dance
Jose David Saldivar, Comparative Literature

“Turning to Ways of Thinking, Ways of Doing, the new Breadth requirement, a lot of work has been done by the new Breadth Governance Board under the direction of Chris Edwards. A deadline of December 14th is there to say to departments, ‘Please help us with this process. You don’t need to have your syllabi then, but put in those courses that you think fit into a certain area so that way, we get a listing of courses and a sense of where there are missing areas, where there needs to be more courses.’

“In terms of capacity questions and needs] three areas come to mind. The first is engaging diversity. I think we may have the courses, but we need to see whether we actually do. The second is creative expression. We need capacity for it. There are certain courses that are full now—courses in creative writing, in music, in art, in particular. They are turning away 400 students each quarter. How do we expand in those areas of high demand? Hopefully, we’ll have an idea of how we can [also] grow the demand there, given the limitations that we have in terms of space. In terms of creative expression, we also need to think [about] how within those arts departments or elsewhere students [can] potentially leverage projects they’re working on that could become potentially creative expression. In terms of courses outside, we should be thinking about possible courses students want that take advantage of the skills we have here. A course in art or digital art would be wonderful, and if we can get to things like that, that would be exciting!

“In terms of ethical reasoning, we have to increase the number of courses, and think about how we can bring more courses, potentially, into the fold, for example, courses like environment and ethics, sports and ethics, and other courses with that requirement that will be exciting for students to take.”
Projects in Development for 2013-2124

Helix Courses. “The notion of helixes is courses that are related by theme. You can imagine one potentially on food. We have courses on the politics of food, the science of food, food in performance—imagine them hooking up in some way. Or sustainability, or in national development courses that are linked in terms of those themes; or an idea that you can take a play, like The Tempest, and do a production of the play but then someone like [Professor] Ramon Saldivar could teach the post-colonial literature and look at that play within that context.”

Capstones. VPUE Elam cited a quotation from the SUES report that capstone ‘…refers not just to the traditional senior honors projects, but to a broader category of experiences both inside and outside majors designed to foster reflection and creative synthesis of accumulated knowledge and skills…’ “I think this is a wonderful idea one that we want to reinforce. To that end [Professor] Martha Cyert in our department is [asking] department administrators to [let her know] about capstones or senior projects to get. To get inventory on what has already been done. Then what we want to offer through the VPUE is the possibility for interdisciplinary synthesis, for students to have the opportunity and funding to take a project that brings together their work in the Haas Center with their work in classes and with other projects. This is something that is uniquely Stanford, a signature Stanford idea that doesn’t yet have a name.”

Course Evaluations. “Course evaluations haven’t been looked at in about twenty years. And so it’s time. We want to find something that helps with the process of learning and to find something that helps the process of teaching.”

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Course Evaluation Revision

Russell Berman (Chair), Comparative Literature
Sarah Church, Physics
Tom Ehrlich, Education
Margot Gerritsen, Energy Resources Engineering
Pam Grossman, Education
Caroline Hoxby, Economics
Jon Krosnick, Communication
Sheri Sheppard, Mechanical Engineering
Tom Black, Registrar
Michele Marincovich, Center for Teaching and Learning
Robyn Dunbar, Center for Teaching and Learning
Corrie Potter, Institutional Research and Decision Support
“The course evaluation committee is one that we are confident will help us think this through and come up with something. We see it having a potentially profound impact, on how we evaluate teaching and the importance of teaching.”

Faculty College. “We will continue Faculty College. As you remember, it is a place where faculty can incubate an idea, a pedagogical idea, that they want to work on, to develop a course, or something in terms of the curriculum.”

VPUE Elam showed a slide listing course ideas that groups of faculty were working on.

“In Faculty College next year we want to have someone who wants to work on the helices. If that’s something that appeals to your department [this is the place to do it].

“Coming to you soon is a faculty survey on teaching, and it’s in coordination with the library, which will survey library resources. It shouldn’t take much of your time [to fill out]. That survey wants to look at questions like—what’s the relationship between your scholarship and your teaching? What impediments are there to undergraduate teaching? How do you think about undergraduate teaching?

“There’ll also be a place within it for you to talk about doing online teaching, so we’ll get data that will help us decide what can be used to incentivize the processes of thinking about general education. It will also be informative to departments and deans, so that it can be used to help you think about what happens in terms of your major and the major teaching within departments.

“We’re also developing Faculty Commons, an online, interactive place where faculty can come for help with questions [on] teaching. It’ll be an interactive place where you can, using clickers, access [what are considered] best practices of teaching. There will also be another place where you can find tools to use in teaching.

“In terms of the three areas of need—engaging difference, creative expression and ethical reasoning—we plan to create summer workshops. We will fund individual faculty who wish to work up a new course in these areas. If a faculty member wants to work with other faculty members, we will add additional funding for lunch, and funds for bringing in someone to speak with them, potentially, about the questions of ethics. This would enable them to form a ‘learning community,’ and we want to form learning communities among faculty. One of the most exciting ideas that’s come out of discussions about the new curriculum is having meetings where faculty members talk with other faculty about teaching.”

VPUE Elam concluded, “I want to return to those words that I mentioned at the beginning—to integrate, to innovate, and inspire—as the ideas that will undergird our work as we go forward. [This] is an exciting moment at Stanford [for us] to take advantage of, in terms of undergraduate opportunities and undergraduate education. We’ll be reaching out in many different ways to you, to students, and to other
constituencies, to find ways to make Ways of Thinking work, to evaluate it, and to find ways to keep Stanford at the vanguard of undergraduate education.”

“Thanks.”

[ Applause ]

Question and Answer Period
Chair Levitt thanked VPUE Elam and opened the floor for questions.

Professor David Palumbo-Liu was the first to ask a question. “There are a lot of very rich key words in [your presentation]; there was one that caught my attention: you said you wanted an education that was enduring, and I thought that was brilliant and powerful. What do you mean by ‘enduring?’ In what ways are you exploring that notion?”

VPUE Elam replied, “I meant [it in] the sense of creating life-long learners. The question becomes not [how we should be] teaching them to prepare for a job, but teaching them how to learn, and have that become a passion that they want to keep. How do we reinforce that within the courses that we do? And [this means looking at] the way that their education fits together.”

“Also related is the question of how you assess it, to see if it’s enduring. We’ll look at that question, and how we take our evaluation to our alumni, in terms of what they got from a Stanford education, to see what’s enduring.”

Professor Stephen Stedman commented, “In thinking about Freshman Seminars and the problem of athletes not being able to take them… I know a lot of sports teams bring in their freshmen in the summer before classes start and many athletes stay on the summer after their freshman year. Why not use the summer session to have three or four IntroSems that would give more of an opportunity for the athletes to take them? This seems like a perfect opportunity to try to offer something that athletes might be able to take.”

VPUE replied, “It’s an interesting idea, but it couldn’t be for athletes only because that is prohibited by the NCAA. We made some exceptions, in terms of one course for athletes. But because new-student orientation is important and we want athletes to start as new students, and everyone to start at that same time, we don’t allow students to take summer school before they enter Stanford. The other concern is financial. [Taking courses in summer raises] the question of financial aid. But why not look at it and see?”

“The key is—we’ve got to find alternative times. Tom [Registrar Tom Black] is going to present to you this spring a new class-day schedule, and if we can get people to teach in the early morning or around 5:00-5:30PM, which is not a bad time to teach,
hopefully we get out of that middle-of-the-day time, the time when everybody wants to teach.”

Professor Michele Elam added, “I want to comment on that [idea of alternative times]. I think it’s a really good idea, and it may be a message to send to directors of undergraduate studies, or the director of curriculum.”

VPUE Elam responded, “When Registrar Tom Black rolls out the new daily class schedule, [he plans to] talk to faculty, administrators and departments and engage them in a discussion about the best times for their courses, most particularly IntroSems. The timing of these courses, especially for student athletes, clearly impacts students’ ability to take them.”

Professor Carolyn Lougee Chappell weighed in. “Implicit in what you’re talking about is a set of aspirations for the students and things that we would like them to do. It strikes me that we say an awful lot to students as they come in, and I wonder—do we keep talking to students, or do we stop? Is there a possible initiative here, to figure out how to get messages, not just to advisors about particular courses, but to students as well [of] what our aspirations are for them over the course of four years?”

VPUE Elam agreed. “Yes, we need to find a way to do that because students are pummeled with stuff in new student orientation. They hear the President, they hear the Provost, they hear me, they hear a thousand faculty, and it’s overload [city]. So how do those messages get through? I’ve taken to writing to each class an email letter at the beginning of [the academic year] about what’s going on that year with their class, but that only gets a hit-rate of 40%. We need to find other ways of reaching students. We’re also talking about advising and what happens each year with pre-major advisors. Well, what else can we do with each class? I think it is a wonderful question to think about.”

Professor Andrea Goldsmith turned to another topic. “I wanted to touch upon the capstone, the senior project. We had a lot of discussion about that in our SUES subcommittee and didn’t reach a consensus on what it should look like. The capstones are important and they’re often required in majors by ABET [American Board of Engineering Technology] as well as by majors in general. They have broader [implications], if you think of them as the last experience the student will have. Maybe it ties into the helix or brings in project teams of students from different areas. I think it is a way to train them in a lot of things as they go out into the workforce. So What is the long-term vision of capstone and senior projects inside a major and across majors?”

VPUE Elam responded, “Exactly what you just said. I would love things to happen in dorms. Last year I visited SlavDom [a residential theme house]. There were four students who were writing their honors theses in disparate fields and didn’t know what each other was doing. They said, ‘Let’s create a seminar where we talk about our thesis to each other.’ What a wonderful thing [that was] and was a sort of capstone.”
Professor Gabriella Safran commented, “I really like this new way of thinking about education that is more capacity-based, and less content-based, and a new way of thinking about Breadth requirements that’s capacity-based, rather than content-based. But over the last few days I’ve gone to the lunches to discuss various Ways of Thinking, Ways of Doing, in each of them I was hearing an interesting kind of tension emerge between a kind of new language of capacity and an old adherence to content. Maybe there has to be some kind of balance. I wonder if you could talk about how you see the new system negotiating that tension between capacity and content.”

VPUE Elam acknowledged that she had hit upon a fundamental question. “[Resolving the tension between capacity and content] is going to take time. And it’s going to take adjustment and it may be something that faculty have to find their own way to do that. Part of that sense of creating learning communities is a place for faculty to talk together about teaching about [an issue like this]. The [view] is that within these classes, there are certain capacities that students need to have. The idea of thinking mathematically or having skills in mathematical computation—that’s a capacity we say students need to have. Or [with regard to] aesthetic inquiry, that’s a capacity, in terms of how to critically engage at work. That is what students need to have.

“Last year for the first time in my life, after 23 years of teaching here, I put course objectives on my syllabus for my grad class. That made me think differently about what I wanted them to get [out of the course]. Yes, I wanted them to learn content, in terms of the American plays they were reading, and in terms of the theories they were reading. But I also wanted them to think critically about the papers they were writing for the course. And it led to different assignments; it made me think differently about what I was doing in the course and it impacted my teaching. So I drank the Kool-aid [referring to a kind of hemlock] that not every faculty member is going to want to do at first, or potentially, at all.

“Some courses, particularly upper level courses that have prerequisites, don’t need to be listed as courses that fulfill the requirement. But, if you want your courses to be listed, then you need to think about learning outcomes and course objectives. Hopefully, determining learning outcomes and/or course objectives will have an impact on how a professor teaches, as well as undergraduate teaching more generally. So, the ramifications of the new ways requirements go further than just any one course.”

Chair Levitt asked if the Governance Board had developed specific criteria for courses listed under Ways of Thinking, Ways of Doing. Professor Chris Edwards, Chair of the Governance Board, replied that that information has been released, was sent to all department chairs and directors of undergraduate services, and is available on the VPUE website.

Julia Hartung, Director of Development for Undergraduate Education, and a guest of the Senate, spoke. “I want to respond to Carolyn Lougee Chappell's comment about
whether we keep talking to students after the initial new student orientation which can be such a fire hose. I think the Navigation and Reflections classes that Harry mentioned for freshmen as well as Designing Your Stanford for sophomores are partly in response to that recognized need. None of these will be required of all students. The hope is that these classes will help students to be more intentional as they're going through their Stanford journey.”

Professor Susan Holmes observed, “You mentioned ‘enduring’ education, I think it would be important when the evaluation committee meets that it takes into account the fact that currently students evaluate the courses when they finish taking the courses. So that’s like evaluating your dentist just when you walked out of the dentist’s chair.”

[ Laughter ]

“I think it would be much more productive if the [courses] were evaluated at the end of [students’] four years, at least at the exit when they leave, or when they graduate, or even five or six years down the road. I expect the courses that have been the most effective are the ones are enduring. And what is enduring?”

VPUE Elam responded, “Actually, we do take a senior survey about their experience. Also, in terms of the evaluations, maybe we can ask students, ‘For this class, did you bring in information from another class? If so, what?’ We want [to find out information in terms] of the alumni survey as well. For WASC [Western Association of Schools and Colleges] Stephanie Kalfayan, Vice Provost for Academic Affairs, did an amazing job of putting together the kind of information from those surveys of the class of ’12. One of the things that kept coming out was that Overseas Studies was a transformative Stanford experience.”

Professor Stephen Hinton observed, “One of the signature features of this reform is that the disciplines are not the focus; Ways of Thinking transcends the disciplines, but the Ways are going to be delivered in disciplines, by and large, so I’m wondering whether we’re going to be doing more in an interdisciplinary way.”

VPUE Elam acknowledged, “There will be some courses that actually are interdisciplinary, and we hope to encourage more of them, because the Ways of Thinking allow for that; they break disciplinary foundations. If you think Logic, for example, has to be a math course, it really doesn’t. We’re going to see other courses within that area. Creative expression has to be an art course but we’re going to include design in mechanical engineering as art. We will push those boundaries and hopefully we’ll get students thinking differently about them.”

Professor Hinton followed up: “I’m thinking in particular about team teaching, whether that’s something that’s going to be approached?”
VPUE Elam nodded, “Yes. I’m hoping that’s going to be a question in the faculty survey—about team teaching—because we do want that to happen, across disciplines. There was a course proposed to me that sounds exciting, Dance and Physics. I visited Yale recently and it was an incredibly popular course there.”

Professor Caroline Hoxby remarked, “I’m on the Evaluation Committee. We’ve been thinking hard about ways we can measure the long-term impact of courses, so it’s definitely on the radar screen.

“What I wanted to comment on was the freshman courses, and the way our freshmen find their way through the curriculum. I’m teaching with Richard Saller, Lanier Anderson, Daniel Edelstein, Blair Hoxby, and Ravi Vakil, a series of courses called Education as Self-Fashioning, which are offered to freshmen and integrated with the writing requirement. They are designed to help freshmen think about their education, so we spend a fair amount of time talking to them about how to think about what an education is, what is valuable, why you do breadth, why you do depth, and so forth. One thing that’s become clear in these conversations, both in the seminars and with individual students, is that there are two ways that students define courses: If they feel overwhelmed when they arrive by the array of choices offered to them or the flow of information that hits them about all of the things that they can do, they either go down the route of choosing obvious introductory courses that a lot of their other freshman friends are taking, or they take what I can only describe as very odd courses for freshmen to take.”

Professor Hoxby continued, “Not necessarily courses that aren’t good courses, but a course that I think would be taken by a senior who already has a pretty good sense of the landscape of the curriculum, as opposed to most of the freshmen who don’t. The latter don’t have a very good sense of the different fields because they’ve never taken courses in those fields. They would be much better off taking a course which had some breadth in it as opposed to a course that was specifically on some small topic that might not expose them to anything except that topic. And they appear to choose them idiosyncratically. We asked, ‘Why did you choose that course?’ And they said, ‘Well, it fit in our time, and it seemed like it would be kind of interesting, and I didn’t know until three weeks in that it was going to be about something that was completely different than I thought it was about, because I’d never really done anything in this area before.’

“It would be good to help freshmen think about that. A good course for a freshman is one that actually helps him or her explore an area that’s broad enough so that they could not just rule it out because, ‘I don’t want to learn this specific thing very much’. And I don’t think they’re getting that input.”

VPUE Elam replied emphatically, “I totally agree. I mentioned Cardinal Compass and that it was expanding to include intro courses where they do exactly what you’re talking about. It’s also about advising, to help with that.”
Professor Rosemary Knight was next. “I wanted to comment about Carolyn’s [Lougee Chappell] question about ensuring that students keep their perspective on their education from the moment that they enter to the end. I was on one committee in which we were discussing capstone courses, and the interesting idea came up of students starting their capstone experience at the beginning of their four years. That way, they start thinking about how to integrate [their courses] from the start, as opposed to waiting until the end and then looking back on everything and say, ‘How can I put together some kind of integrated package of learning?’ [If they start with a capstone course] they do that as they go through.”

VPUE Elam replied, “If you’re a student admitted to Princeton you know you’ve got to write an honors thesis. Many of its students begin thinking of that as they come in, thinking what they’re going to write. We hope that some Stanford students will be inspired to start having those thoughts.”

Professor Debra Satz had the last comment. “Picking up on what Caroline Hoxby said, I think a lot of departments got away from giving big intro courses like, ‘Here’s the geography of the [discipline or field]’ and we need to underscore those kinds of courses, which are great launching pads for students. One thing we’ve done in the Humanities is to put out a booklet of intro courses to be given to advisors. We’ve asked each of the eleven departments in the Humanities to come up with a couple of courses they think showcase [their field] like a big overview. I think doing a lot more of that with freshmen—and more of that, in general, really thinking about the various fields of knowledge—is a good thing.”

Chair Levitt concluded this vigorous discussion by saying, “We’re going to have to wrap up this discussion at this point. Thanks again to Harry for a thought-provoking discussion.”

[ Applause ]

VI. Unfinished Business
There was no unfinished business.

VII. New Business
There was no new business.

VIII. Adjournment
A motion to adjourn was seconded and passed unanimously. The Senate adjourned the meeting at 4:20 PM.

Respectfully submitted,

Rex L. Jamison, MD
Academic Secretary to the University
Professor of Medicine, Emeritus
November 8, 2012
Meeting of Senate XLV
RECORD OF ATTENDANCE

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Present on Invitation or by Request:
Stephen Shirreffs, Laura Remillard, Nick Jenkins, Julia Hartung, Scott Calvert, Michele Marincovich, Robyn Dunbar, Marvin Diogenes, Rob Urstein, Ellen Woods, Chris Edwards, Ramon Saldivar

Legend
P = Present
A = Absent
E = Excused absence

Present on Standing Invitation:
Stephanie Kalfayan, Greg Boardman, Tom Black, Alexander Fetter, Mike Antonucci, Shahab Fadavi, Michael Shaw, Robbie Zimbroff, Olivia Hu

Outside Press: