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ARTS & SCIENCES COUNCIL
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Minutes of the Regular Meeting of the Arts & Sciences Council

Thursday March 6, 2013

Call to Order

Council Chair Professor Thomas Robisheaux (History): Let me call to order the March meeting of the Arts and Sciences Council. Welcome colleagues; thank you for turning out shortly before the spring break. I know you all have been grading constantly, and if you are like me, you have been thrown off balance by the snow days and have been trying to catch up with everything. In fact, that is the reason why we are having back-to-back council meetings. I choose to look at it in a positive light because we get more done in ten days than we would otherwise and we also get to see more of each other. We do have a lot of things on our agenda; the minutes from the February 27 meeting will only be available after the spring break, so I will alert you when those are ready. I know some of you are interested in some portions of those minutes, and I will get them worked into the final form and up on the website for all of us to look at after the spring break.

Announcements and Updates

I have a handful of announcements for us before we turn to the first item of business. Last week, we continued our discussion of the course credit proposal, and, if you recall in our discussion, there were a few places in the proposal document that created a bit of confusion in understanding. I understand that Suzanne Shanahan, the chair of the curriculum committee; Inge Walther; and others are looking at that language and there will be a modified clarification of the language available for our April 10 meeting. We will return to our discussion of this very important proposal at that time.

Let me remind you that you and your colleagues have an opportunity to comment on and discuss the course credit proposal as it is part of the faculty discussion forum that is being moderated by Chantal Reid and Jack Bookman. Jack and Chantal have agreed to keep the forum open past spring break, and I think many of us welcome this opportunity to catch up a little bit. They will bring it to a close on March 21, so remind your colleagues when you see them that there is still a chance to take part in the forum discussion. Also, let me remind you that it is not just about online courses, as our exploration has evolved over the years, and it has become quite clear that this is really about the nature of a liberal arts education at Duke and the best possible ways of supporting that. Please remind your colleagues that the deadline has been extended. Chantal, do you have any other comments or suggestions for your colleagues interested in the forum discussion?

Chantal Reid (Biology): The only thing I can tell you is that there was no activity this week. Hopefully they will take advantage of it over spring break.

Thomas Robisheaux (History): Finally, I have two very brief announcements. At the end of March, we will be holding elections to the council; we have 20 units that need to elect new representatives as terms are expiring. That is an election that is not run by your individual departments; it is run by the council. We organize the election, you will get an e-mail notification of it, and it is done electronically -- first through a nomination process and then through the election of the nominated candidates from the individual departments. The hope is to have new representatives elected in time for our April 10 meeting.

I know you are overloaded with other meetings and deadlines, but let me call attention to the fact that the council is meeting twice in April on the 10th and the 24th. We will return to the course credits proposal on April 10, continue our discussion, and see where we are with the matter. We will have one more meeting after that, so be sure that your calendars are marked.

Senior Lecturer Title

Let me turn to our first item of business. This is an item that has been bumped a couple of times, but our very patient and enduring Senior Associate for Faculty Affairs Dean Kevin Moore has been very patient with me as I have rearranged the agenda over the last couple of meetings. I have asked Kevin to come before the council to introduce and discuss with you a new academic title. He will explain the current state of it, but it does not require approval of the council.

It has been discussed on ECASC last fall with our support, and it is now before the Academic Council. Kevin will explain the new title that is available; it opens up some options for departments to use in their pallet of academic titles.

Kevin Moore (Senior Associate Dean for Faculty Affairs): Tom invited me here after I talked to ECASC about this in August in order to bring you up to date on where this stands.

First, let me give you a little bit of background. We have three categories of regular rank non-tenure track faculty members in Arts and Sciences at Duke. The most well-known are professors of practice, but there are also research professors and lecturers. We have roughly 30 lecturers across Arts and Sciences right now, and the proposal you have in your packet tells you that most of them are clustered in the language departments and biology, but there are one or two in lots of other departments across Arts and Sciences. Lecturer is currently the only regular rank faculty title at Duke without the possibility of promotion in rank, and it was that ceiling that led us to pursue a proposal that came from a former chair in Arts and Sciences which would allow us to promote lecturers to the rank of senior lecturer. This would give them the usual bump in salary that comes along with promotion, but also professional advancement through the ranks.

We thought we could just do this, but as you have discovered, the Byzantine nature of the language of the proposal that you have reflects the fact that the title does not exist in any of Duke's nomenclature, designations in the faculty handbook, or anywhere else. We had to write a proposal and get the Academic Programs Committee approval, which we received in October. They had some suggestions that we incorporated into a revised proposal, which they then approved. It will go before ECAC and the academic council in early April, and, assuming they approve it, it will go to the Board of Trustees for their stamp of approval. That will make this title available for use in the fall of 2014.

One of the provisions that APC asked us to include in the revised proposal was that lecturers at Duke would normally have to spend at least eight years in rank as a lecturer prior to being eligible for promotion to the rank of senior lecturer. I think the reason for that is that it roughly corresponds to the amount of time that assistant professors of the practice typically spend in rank before they come up for promotion to associate, and of course assistant professors come up for tenure. We incorporated that, along with one or two other minor revisions. Also, following up on something that Steffen brought up in ECASC, the fact that we are proposing this opportunity for promotion does not mean that we intend to hire more lecturers in Arts and Sciences. It really is nothing more than an opportunity for the 30 or so lecturers whom we currently have to have professional advancement. It is as simple as that.

Dean Laurie Patton: I think it is very important to underscore what Kevin just said. One thing that language people and science people really know since the time that I had come on as dean is that we really do want to support this group of people. If we are a place that provides superior pedagogy at a Research I university, then we should provide as many opportunities as we can for the people who are doing the superior pedagogy and really thinking through what that means; one way to do that is to provide opportunities for promotion.

Kevin Moore (Senior Associate Dean for Faculty Affairs): There are many departments in Arts and Sciences that do not have lecturers or professors of the practice. Once this is approved, it does not mean that departments would have to use the titles of lecturer or senior lecturer. It simply allows them to do so if they wish. For those departments that do have this title and wish to incorporate senior lecturers, you would probably have to revise your bylaws to specify what the criteria for promotion within your discipline would be, just as departments do now for professors of the practice. There are some suggested criteria in this draft proposal, but they are nothing more than guidelines.

Dean Lee Baker: What I like about this proposal is that it values our excellent regular rank instructors. In order to have a lecturer, you still have to have a national search and it is a regular rank faculty position, but for those folks that have committed to teaching pedagogy and research and being in this position, it provides a step in terms of professional growth and development. Just recognizing that is important, and it maps onto the growth and development we have in the other ranks. To me, it just fits and it recognizes that our lecturers are really valuable faculty members in Arts and Sciences.

Dean Angie O'Rand: Kevin, can you give us a distinction between lecturers and professors of the practice?

Kevin Moore (Senior Associate Dean for Faculty Affairs): There are no hard and fast differences in Arts and Sciences, but I got in trouble for saying this in APC. In Arts and Sciences, the general expectation is that assistant professors of the practice may spend no more than seven or eight years in rank as assistant before they have to come up for promotion to associate professor of the practice. Typically, that promotion, as well as promotion to full professor of the practice, requires a demonstration of national visibility in whatever the field of the practice is, and it varies widely across departments. Professors of the practice usually -- but again there are no hard and fast rules -- must have terminal degrees in their field by department bylaws in order to be appointed as a professor of the practice. That is not true of lecturers; many lecturers have a masters or ABD.

Steffen Bass (Physics): I have one follow-up question to that, which was triggered while I was looking in the faculty handbook. There was, for me at least, some confusing language about the duration or possible extension of appointments for lecturers. Is there something like a term limit, maximum number of years, or times that we can appoint a person as lecture or senior lecturer?

Kevin Moore (Senior Associate Dean for Faculty Affairs): No. There is a provision in the faculty handbook in appendix C called "Periodicity of Review" that says regular rank non-tenure track faculty have to be reviewed for re-appointment at least every five years, unless they are full professors of the practice who have been re-appointed at least once in rank, in which case they can have ten-year terms. There is no limit on the number of terms that professors of the practice or lecturers may serve. Generally speaking, we think of them as permanent members of the faculty, and generally speaking,

they are because they spend their careers in those ranks at Duke. For lecturers, the maximum length of a term is five years and that will also be the maximum for senior lecturers, but there is no limit on the number of terms they may serve.

Thomas Robisheaux (History): If a department wishes to make use of the senior lecturer title, will they need to amend their department bylaws to include it among the titles or ranks that are recognized within that department?

Kevin Moore (Senior Associate Dean for Faculty Affairs): Yes, just as they would if a department whose bylaws do not currently allow the appointment of say, a research professor, and they wish to start hiring research professors. They have to amend their bylaws, vote on it, and so forth.

Linda George (Sociology): I just have a question. If the senior lecturer title is approved, does that mean that they could be recruited from outside at that rank? Is it that everybody has to start as a lecturer at Duke, and then perhaps get promoted?

Kevin Moore (Senior Associate Dean for Faculty Affairs): We thought about that and, after the discussion with APC, we included a provision in the revised proposal that would allow that. If we were doing a national search for a lecturer, for example, in Chinese language instruction and we recruited someone who had served in a similar rank for several years from another institution, then this proposal would allow us to hire her as a senior lecturer.

Dean Inge Walther: Would it be possible for a lecturer who has become nationally recognized through their publications, scholarship, and activity in pedagogy to get promoted to a professor of the practice rank?

Kevin Moore (Senior Associate Dean for Faculty Affairs): Yes, and that has happened several times. For example, Charlie Thompson in cultural anthropology had a lecturer appointment; his primary appointment is in documentary studies, and he was recently promoted to full professor of the practice straight through.

José María Rodríguez-García (Romance Studies): I am in a language and literature department, and we are co-sponsors with the office of global education of a number of programs that are located abroad. As directors and supervisors of those programs, we hire faculty who have PhD degrees, so are these two titles -- senior lecturer and professor of the practice -- available to faculty hired in our programs abroad?

Kevin Moore (Senior Associate Dean for Faculty Affairs): I do not know, although this question has come up before and we have grappled with it.

Dean Lee Baker: I think it is up to the department; if the department appoints them as a lecturer, then obviously the senior lecturer title is available. The first part is hiring them as a lecturer, and if it is possible, then this title would be accessible. I cannot remember with the Duke in Madrid program if they are regular rank faculty.

Kevin Moore (Senior Associate Dean for Faculty Affairs): This is a problem that has come up before because some of these directors do not have formal Duke affiliations, and that has precluded us from appointing them in any faculty capacity for obvious reasons.

José María Rodríguez-García (Romance Studies): I was thinking of the person who is at the helm of the program in Madrid. Would an assistant professor of the practice title be a possibility for this person down the line?

Kevin Moore (Senior Associate Dean for Faculty Affairs): Duke policy requires national searches for all regular rank faculty positions. We try hard to adhere to that and make as few exceptions as possible; when we do make exceptions, it tends to be for exigent reasons, like spousal accommodations.

Dean Lee Baker: There is not a presumption that goes lecturer, senior lecturer, assistant professor of the practice...?

Kevin Moore (Senior Associate Dean for Faculty Affairs): No, it is unusual for faculty in the lecturer track to jump to the "of the practice" track. I do not need to get into the reasons for that, but they tend to be personal. It has happened two or three times; I mentioned one case, and there is another one that is pending this year. For the most part, lecturers remain lecturers, and the main impetus for this proposal is really to afford them the opportunity to earn a promotion within rank.

Bill Donahue (German Studies): I like the discussion earlier about the possibility of appointing colleagues abroad, but I think one snag there is the problem with the GEO contracts that limit the terms to six months beyond the current year depending on enrollment. I think there would be a conflict that would have to be resolved, but that would be worth discussing.

Carol Apollonio (Slavic and Eurasian Studies): I was wondering if there might be some budget consequences for instituting this parallel track. I really am enthusiastic about it and it is a wonderful proposal, but if a department wants to hire a professor of the practice, for example, might they not be able to get that for budgetary reasons? In other words, are we instituting a parallel track that is cheaper?

Kevin Moore (Senior Associate Dean for Faculty Affairs): We look at requests for hiring lecturers or professors of the practice from departments when we do our search planning process every year as part of a whole. Typically, departments are the ones who are making choices about where their priorities lie in terms of professor of the practice hires or tenure-track hires. Generally speaking, we do not think of these as trade-offs, but as complementary.

Dean Laurie Patton: I think one thing that is really important is something that, as you know, we have talked a lot about here and we need to continue to talk about, is this question of the casualization of labor. I want to state very clearly that there is no intent on our part to create more lecturers, as Kevin said before. In fact, we hope that this rank will actually allow some folks who are regularly on our budget and who may be below the line to no longer be casualized. It is exactly the reverse that we are trying to do with this, and Duke is a place that can afford to try to do that even when we have a constricted budget. One way we do it is through this creative problem solving, so that is what our commitment is.

Linda Franzoni (Pratt School of Engineering): I am curious; I have nothing against the proposal, but my question is: why is it a two-step tier where in the other ranks, it would be assistant, associate then full? This seems to be lecturer, senior lecturer, and then you are done. Is there any possibility...I notice you are a senior associate dean.

Kevin Moore (Senior Associate Dean for Faculty Affairs): As a representative for a school that does not have any regular rank lecturers, that is a good question. I do not have a good answer for that...it is baby steps.

Dean Laurie Patton: I do not think there would be an objection to adding an associate rank if need be.

Kevin Moore (Senior Associate Dean for Faculty Affairs): We are also following the convention of some of our peer institutions where senior lecturer is a widely used title. It comes from the English system, so I do not know of any institution that has an assistant, associate, and full lecturer.

Dean Laurie: Duke could be innovative in that way.

Innovation and Entrepreneurship Certificate Proposal

Thomas Robisheaux (History): Thank you, Kevin. Our next item on the agenda is an important one, and this will require debate, deliberation, and approval. If you remember, last spring the council entertained a proposal from the curriculum committee that created an entirely new type of certificate program. We created a new template for experiential learning, and over the course of this last year, a number of faculty members and others interested in a certificate program of this kind have been talking and working very intensively. Beginning last fall, a new proposal came forward that is our first to consider under this rubric. I would normally ask Suzanne Shanahan, who is the chair of the curriculum committee, to introduce this proposal, but she is out of the country right now, so I am going to turn, with your indulgence, to the ex officio member of the curriculum committee, Dean Lee Baker. He knows more about this certificate proposal than many of us might: the history of it, why it is coming forward, and the configuration.

I have two complete copies of the proposal; it is 61 pages long. I know you all read it, especially the footnotes, and are ready to ask questions about it. Just bear in mind that this is the first discussion, and as per the recent tradition of this council, we will not call the vote today; the earliest possibility would be April 10. We will have the executive committee's perspective on it after Lee Baker introduces this certificate proposal.

Dean Lee Baker: It is both my honor and pleasure to introduce the I&E certificate proposal to this august body. As you know, over the course of several years now, starting with a committee that Linda and I were working on, we were trying to grapple with how we could best think through some coherent pathways of innovation and entrepreneurship. This then prompted myself and others to think more broadly about a number of our engaged learning pathways, where students are doing a lot outside of the classroom as well as in the classroom, and aligning them together unofficially. Other times, they were not doing it with a lot of intention, coherence, or thought.

These two initiatives were developing simultaneously, and each actually informed the other in a really symbiotic and compelling way. Although Innovation and Entrepreneurship is the first experiential certificate that is coming to this floor, we have been in conversations with sustainability, civic engagement, ethics, and a number of other approaches to education that have real co-curricular components. One of the benefits, the rationale, and the motivations for doing these experiential certificates is to provide a mechanism for students to align their curricular with their co-curricular and give time for reflection. It is courses, experiences, and then a capstone. To us, this is a compelling way of organizing and providing coherence for the type of learning our students do anyway, but it provides a structure and a mechanism to do that. What we are not doing is giving credit for experiences, but we are recognizing experiences as an integral part of this particular learning pathway. It is a bit of a dance, if you will, but it is an important way of recognizing the role of trying to align these out-of-classroom experiences with classroom experiences.

That brings us to the way the folks in I&E put together the entrepreneurship certificate, which is innovative. I think the important component of this was that they rethought the gateway. If you read through it, it is on page twelve, so if you really want to cut to the chase, page twelve lists it out. In our classic majors or certificates, you have a common experience called the gateway that introduces you to the area of knowledge, and then usually you have smaller and more focused classes and a collective capstone.

I&E said that is a good approach, but let's re-think this. They actually have four different gateways on multi-media, documentary, engineering innovation, and social innovation that are different. The common experience is the keystone that is in the middle. To me, that was just an interesting and innovative approach that did not assume this paradigm of the shared experience on the front end, but sandwiched that shared experience in the middle. That then becomes integrated within the electives, experiences, and the capstone. I thought it was a brilliant, interesting, and innovative approach.

Recall that in all of these experiential certificates the staging and sequencing is important. Frankly, that is where the value lies. In our current certificates, staging is not a requirement; you could take the gateway and the capstone in the same year. It does not happen often, but there is nothing that would prohibit a student from taking all of the electives first, and then taking those two. This way, we are structuring it so that this sequencing is part of the learning process. The learning outcomes, if you have time [to read them], are really compelling and interesting. This was a very comprehensive proposal that went to the curriculum committee.

Probably all of us in this room know that the peer review process is a challenge and it does not feel good sometimes, but, at the end of the day, the product is better. The curriculum committee went through this proposal with a fine tooth comb, calling up questions, challenging it, asking for modification, and clarifying that indeed the I&E initiative is not some office of licensing ventures, but that it is an academic initiative. They carefully looked at where this aligns with markets and management, faculty interest, and things that are already being taught. We worked carefully, critically, and strategically in order to make sure that this certificate complements and does not usurp other departments or initiatives. That was ironed out with cooperation from the I&E team and a number of different issues were fully vetted. At the end of

the day, I was comfortable, not only with the cooperation from the I&E team, but also the cooperation with the curriculum committee in pulling this together. Indeed, the peer review process, like it always does, makes a stronger product that we can all be even more proud of.

At this point I will stop; we will have plenty of time for questions. Many of the I&E team members are here, we have students here that have been interested in it, and we have the director who has signed on to direct this certificate, so we have plenty of people and resources in this room to answer questions. We still need ECASC's perspective, but I will be here to facilitate the discussion shortly.

Thomas Robisheaux (History): Lee was just alluding to the peer review process. Part of that process involves a final step, which is that committee proposals come to the executive committee and that sets the agenda for the council. The executive committee looks at an even bigger picture. I thought it was important to ask David Malone to come and give some perspective on the proposal from the vantage point of the six colleagues who make up the executive committee.

David Malone (Education): As everyone has said, there is quite a review process here. When it came to the executive committee, we spent several meetings talking about this proposal, and we would like to share our perspectives with you. First of all, as Dean Baker said, we believe this provides a coherent educational pathway for students who are interested in this area, and it fits well with Duke's mission of knowledge in the service of society. I think we all recognize the extent to which Duke students are collectors of experience; they are doing things but having them integrate them with intentionality, a plan, and coherence is important.

We, in ECASC, think this certificate gives students an opportunity to have intentionality in their courses of study. It also conceives of innovation and entrepreneurship as involving the arts and sciences, which is important because this is the Arts and Sciences Council. This is not just an initiative that involves the arts; it also involves the sciences and the social sciences, so in that way it crosses all of our departments within Arts and Sciences. We believe this grew out of faculty interest and it is bottom-up, but it is also well aligned with an institutional priority; we think that is important. I think the operative word in this is "existing resources." This is a program that builds on existing resources and it does not require an extensive amount of new resources. To that end, I would like to make a motion: I move that the Arts and Sciences Council approve the innovation and entrepreneurship certificate proposal.

Bill Seaman (Art, Art History, and Visual Studies): I second.

Thomas Robisheaux (History): At this point, I would like to recognize Steffen Bass who would like to suggest a modification to this proposal.

Steffen Bass (Physics): This is a very important proposal and there is a lot to like about this. Let me briefly give you my thinking about an amendment that I am going to propose to this proposal. First of all, this is the first certificate that ends up on the transcript of a student that comes out of Duke's innovation and entrepreneurship initiative. As such, it will define how Duke sees innovation and entrepreneurship insofar as we educate our students in that they can take the certificate. Let me use this gizmo [cell phone] as an example of how I feel about innovation and entrepreneurship at Duke.

This is design and art; it is beautiful for some people. This has changed the way we communicate, and it has changed language. This has changed the way revolutions are acted out in large parts of the world; it is social sciences, but at the heart this is also computer science, physics, math, biology, and chemistry. It embodies the arts, the social sciences, the humanities, and the natural sciences, so when I read through the proposal, I liked a lot that was there. But I was also concerned because if you look at the slate of elective courses that are currently listed, there was unfortunately not a single course from the natural sciences listed. Eric Toone and his team have been very helpful in cooperating with me to craft an amendment that I feel will put us on the track to make sure that this proposal and this certificate are going to be as inclusive and all-encompassing as my example has demonstrated to you. Forgive me, but the rules mandate that I have to read all of this to you.

I propose an amendment to the Innovation and Entrepreneurship certificate. The I&E certificate aims at representing the full scope of Duke's vision for Innovation and Entrepreneurship and contains a framework that provides the opportunity to fulfill it over time. The goal for the first three years of the certificate operations is to achieve a balanced slate of elective courses reflecting the full breadth of Duke's offerings from Engineering, the Arts and Humanities, Social Sciences and the Natural Sciences. In order to facilitate the development of such a balanced slate of electives, funds have been set aside for the development of new courses (or modify existing ones) that provide a good fit for the I&E certificate. It is envisioned to have the certificate operate with a balanced slate of electives prior to its first review.

Thomas Robisheaux (History): The debate has not opened yet, so I want to turn to David Malone who has introduced the motion. Would you accept this modification to the language as a friendly amendment?

David Malone (Education): Yes

Thomas Robisheaux (History): The acceptance of the amendment does not require debate or a vote on the part of council. At this point, I would like to begin our discussion and debate on this proposal. Let me call your attention to a couple of things; I have two copies of the full proposal, so if anybody wants to have a copy, would you motion to me, let one of us at the front bring you a copy, or come down and get it yourself to look up a particular reference.

Also, at some point I want to recognize Eric Toone, who is the professor of chemistry and also the director of the Duke University initiative in innovation and entrepreneurship. Eric has some of his colleagues here who have been instrumental in putting together this proposal: Steve Craig, the chair of chemistry, and Kathie Amato, who is the author of the proposal. At some point we would love to hear from you, the curriculum committee, and Lee Baker. At this point, let me open the floor to discussion. We have a little more time to discuss today as there will not be a Dean's Corner, and we

can begin our final item of business later than the original agenda said. This is available on Sakai; Arts and Sciences Council representatives if you go to the Sakai site and look in the Arts and Sciences Council resources folder under means for the March 6 meeting there is a copy. There is also a copy in a folder marked proposals, so you can find a copy there if you want to refer to it.

Discussion

Charlotte Clark (Nicholas School of the Environment): As many of you know, we are working on a similar project for sustainability, so I would love to hear more about the assessment of learning from whoever would like to talk about that. As I look at the list of things, I see a number of direct and indirect measures. This looks like a lot of time per student for the faculty involved, so I am interested in your thoughts on the level of effort and whether there is staff support. Thirdly, the parts that are not specific to the student, but are about the class, such as the course syllabi, course materials, and interviews with faculty; I would love some more on that.

Thomas Robisheaux (History): One of the features of this certificate program is that it also involves our colleagues in the engineering school. Linda Franzoni from engineering and Joe Izatt, who is the chair of the engineering faculty council, are also here and they have an interest in it.

Linda Franzoni (Pratt School of Engineering): I have been designated as the answerer of this particular question. The vision about assessment was that largely we would put the onus on the student to prove they had achieved the learning outcomes through the use of the e-portfolio. We are asking that the student demonstrate that they have identified needs and that they have done a good job of evaluating their various options for the solution they came up with. We are using this e-portfolio and I am told that Duke is going to be moving in the direction of requiring e-portfolios, which may be something that is down the line. It is being explored that students will be keeping e-portfolios in general, so the evidence that the students have learned will be assembled by them in an e-portfolio.

The evaluation will be done by the faculty committee who will look for that evidence and evaluating it. There are some sample rubrics that were provided in the assessment piece, but essentially they ask: what is a good job? What is a bad job? What is an exceptional job? By using those rubrics, it does not have to be one person evaluating everything, because you have defined what good looks like. A variety of faculty could evaluate the material of different students and we are hoping that will work. What was the other part of your question?

Charlotte Clark (Nicholas School of the Environment): I am interested in the aspects that were not about the particular students, but seemed to be more general, such as evaluation of the course syllabi, materials, and interviews of the faculty. What are you imagining about faculty interviews?

Linda Franzoni (Pratt School of Engineering): We have a faculty committee that has about five faculty members. Martin is the director for this program, and we imagine that the faculty [members] that are in this advisory committee will be evaluating the students and their work, and will also look at the program over time to assess whether it is accomplishing the goals that we set out to do.

Kathie Amato (Innovation and Entrepreneurship Initiative): The last point about whether or not the overall program is effective is key for us, because we understand that we are the very first of these coming forward. It is very important that we develop a strong understanding: do these experiential certificates accomplish the goals that we have put forward? We also have another goal, which seems like it is very complex and might be burdensome, but we want to know if you truly can be effective teaching in the area of innovation and entrepreneurship. A lot of the work with the faculty and a lot of the conversations around that are to get to that point. Are we able to accomplish the goals that we have in place?

Charlotte Clark (School of the Environment): I would love to see that paragraph amended, because it is all one sentence and it looks like the interviews with faculty are to evaluate specific students. It sounds like now you are telling me it is to evaluate the program, so separating the part about evaluating students and evaluating the program would be helpful.

Steve Craig (Chemistry): I wanted to come and make a comment. I should clarify, in case it was not clear, that I am not part of the team that wrote this proposal, but I am happy to be here in support of it. I understood from Tom and Steffen that there were some concerns about the natural sciences' involvement, so I wanted to repeat in person what I communicated to Eric Toone when he first brought up the idea of this certificate to me. Chemistry's inability to commit a course at the outset of this program should in no way be taken as an indication of a lack of interest in doing so; it is really just a fundamental limitation of what we are able to do at this time. I think Steffen's amendment speaks to the vision that we share for the natural sciences', and in particular chemistry's, involvement in this. I just wanted to communicate that in person.

Lawrence Carin (Electrical and Computer Engineering): We ran a class last semester on entrepreneurship that was offered to students in Pratt as well as in Arts and Sciences and we made a point of trying to have both Arts and Sciences and Pratt students, so it was about 50/50. It was basically a pilot class that was taught by Jeff Glass; some of you may know him. He has a lot of experience in entrepreneurship, and we thought it would be exciting for students to take such a class. We were heartened that the class was completely full and the students had a tremendous time. It was a very good experience.

As a consequence of that, we decided that we were going to start an entrepreneurial focus within the Pratt school. We were all excited to do this, but I was afraid of the work involved, so I talked to Linda and my dean, and then I met Eric Toone. I realized that they had already put together exactly what we were hoping to do. I want to say that I strongly endorse this. We have run the pilot class with Jeff Glass, who is part of the program, and it was a huge success. As I said, we

purposefully had Arts and Sciences and engineering together and I would encourage that because it was a nice mix. I think it will be a really successful program.

Why we think it is important is that we are going to have a new gateway class that we are running next fall. We are going ahead under the assumption that this program is going to be approved, so we strongly hope that it is. We have a gateway class that is already on the books for fall and we are going to modify one of our capstone classes to be an entrepreneurial class, which will be part of the program. We will have our own gateway and capstone for I&E, so the reason we really want this to be approved is because we want our students to take electives from this program and many of them will be in Arts and Sciences. The buffet of classes that this program is going to put together is critical for the success of this program. I should also say that I am speaking on behalf of electrical and computer engineering, but it is a Pratt thing; the class that we are thinking about will ultimately include all of Pratt. I am a guest and my voice has a limited impact here, but I wanted to say that we very strongly support this, and our experience is that the students will like this.

Dean Lee Baker: I would like to underscore some things. While there is a subtext that the natural science side of things needs to be ramped up, what is a positive is that it is very robust in the arts and social sciences. I do not know if Scott Lindroth or Wesley Hogan would like to speak about how documentary studies and the arts intersect with this I&E certificate so we have a more representative view. The science folks have been talking, but we want to underscore that this is a benefit and a positive and, while we want the natural sciences to be incorporated, some of the real strengths are in the social sciences, humanities, and the arts.

Thomas Robisheaux (History): I know this was noted in ECASC in particular that this certificate proposal incorporates the humanities and the arts in a very robust way. I know Scott and other colleagues in the humanities and theatre studies have played a very prominent role in pulling this together.

Vice Provost Scott Lindroth (Music): Since I have become vice provost six or seven years ago, I have more students coming to me seeking ways to make the arts a part of their professional lives after graduation. It does not necessarily mean that they would be professional artists, but they are trying to connect the arts to other areas of academic inquiry and their experience at Duke. Frequently, I have music students who want to combine it with medicine and healthcare, connect dance and healthcare, or combine documentary studies with social advocacy, or other ways of combining public policy with the arts.

I am seeing this time and time again; certainly the arts and technology have been popular with our students. It occurred to me that we did not have an infrastructure that would allow students to make these connections on campus, so I was very excited about the I&E initiative. The way I think about it is to take our arts-interested students seriously by giving them the tools to think about how they would be able to combine these various areas of academic inquiry with the arts and carry that into their professional lives after graduation. This is something that my colleagues in the arts departments have been very excited about and they see wonderful opportunities for their own programs.

This year, we are offering three different arts and entrepreneurship courses; right now, we have one offered in the music department that combines music and social entrepreneurship working with the Kidznotes music education program in downtown Durham. These students are coming up with their own projects that will begin to combine music with social entrepreneurship while doing good with outreach in downtown Durham. We have another arts and entrepreneurship course taught by John Supko and Jon Fjeld in music and Fuqua respectively. This has been tremendous; it is mainly bringing the arts and technology together. Students had to enroll in this class as pre-formed teams and we had workshops through the fall semester that would allow the teams to be able to get together, find and develop ideas for their entrepreneurship project, and then come into class ready to hit the ground running. It has been very exciting to see the enthusiasm by the faculty and the students for this program and I think there is a lot for us to gain, so I am very supportive of this.

Wesley Hogan (Documentary Studies): We are excited for a couple of reasons, so I will just give two examples. We have a document in the environment class that has been successful in the past two years where students are able to create new ways of scientific storytelling through the use of documentary photography, video, and writing, and what we are calling “new media,” which is using web applications and other kinds of interactive documentary forms. There is even something called documentary games, which is the new stepping-off point to try to involve interactivity with the viewers and multiple perspectives. We are really excited about the ways students are teaching us on the documentary front about ways that they can continue to expand our cross-pollination of discipline and ideas of how to tell a story.

We also have some engineering students who are doing some interesting work in the way that they are approaching story telling as a part of what they are doing with their own scientific work. I would add to what Dean Patton said before about the ways that this is changing the way we tell stories in the arts and humanities. I also want to thank Kathie for all of the work that you and your team have done to put this together and make this exciting. This could allow students to do some exciting work answer. I would be happy to answer questions with Scott, but we see a lot of potential here and we are looking forward to how it unfolds.

Thomas Robisheaux (History): We have Eric Toone who is the director of the Innovation and Entrepreneurship Initiative, so Eric may have something to say about this. Eric, I know that you have brought some students and I know the faculty always loves to hear from them.

Eric Toone (Innovation and Entrepreneurship Initiative): Thanks for having us here today. I appreciate all of the work that the committee has done in reviewing this proposal, and I have to thank Kathie Amato, who is the one who put the hard work into making this a reality. I think the certificate program is a great example of how we envision the Innovation and

Entrepreneurship Initiative and the whole idea of taking the ideas that grow at the university and turning them into real things and actions that make a difference in people's lives.

We were in California for an event last week and President Brodhead spoke at a dinner the night before, and I think he hit the nail on the head when he said that the goal of the certificate program, and a lot of the other things we are doing, is to take the students who are at Duke and teach them how to do things with an idea. At some point in their lives, when they have an idea, they will have some experience and preparation with taking that idea and doing something with it. That is the way that we have crafted the whole initiative, and I think it shows well in the proposal.

This is not just technology-based or what we call west coast style entrepreneurship, this is something that offers an opportunity for everyone at the university regardless of what they work in or of their stage. We are interested in working with faculty, students, alumni, and the whole Duke family. I am delighted that this certificate proposal is one of the first public-facing things that a lot of people at the university have seen because it exemplifies the way that we wanted to build on the program. The education component of the initiative, besides the certificate, includes a number of other programs. We have summer programs, the Duke in Silicon Valley program, and we have a number of co-curriculars. We also have students here, and it would be great to briefly hear about their experiences.

Ashley Qian (Student): I have a dual major in visual arts and computer science and I also have a minor in women's studies. I lead a few things on campus; I am the main organizer for Hack Duke and last semester it brought a lot of RCS and Pratt students together in CIEMAS to build real world projects. This semester, we are working with non-profits in Durham so they (we?) can help these non-profits and inspire many people to pursue social entrepreneurship and innovation. I also lead DIDA, which is the Duke Innovative Design Agency as well as the Cube, which is the entrepreneurship SLG. I am also a Wilson Doug entrepreneur during the summer.

As you can see, if I could have my hands dipped in this certificate, I would have definitely done it in a heartbeat, especially in my freshman year, mostly because it aligns with what I want to do. I want to pursue the intersection between technology, social innovation, and social good. Currently, I have been picking my courses to align with what I want to do in the future, and that has turned out to not be one major, and one major had not met all of my needs and interests. I really had to diversify and pick and choose the classes I wanted that would help me pursue what I wanted to do.

Davis Gosage (Student): I am a double major in electrical and computer engineering and computer science. I have taken a few classes related to entrepreneurship; right now, I am taking arts and entrepreneurship. For the most part, it has been hard to get a sense of progression when taking these classes, so I think the certificate is helpful in providing a framework of classes to take.

John Bowman (Student): I am a junior double majoring in environmental science and policy and economics. One of the hats I wear at Duke is that I am the undergraduate co-chair of the Duke Student Initiative on Social Entrepreneurship, which is a group of undergraduate and graduate students who work to enhance the social entrepreneur's experience outside of the classroom. One of the things that we have done recently is convened a group of undergraduate students to help understand what they feel is missing in their social entrepreneurship education, and I know that is something that is important to you as you consider this proposal moving forward. One of the things that they voiced was that they did not feel like there were opportunities to take what they were learning into the classroom or take the theoretical and translate that into an experience outside of the classroom. I think the certificate that is on the table does a good job of making that possible, so in my experience I think there is student interest in the things this certificate is offering.

Carol Apollonio (Slavic and Eurasian Studies): I think this is a very exciting proposal. Looking at the initial part of the description, it is all-encompassing, and it is not about areas of knowledge. The question I had was: is this an alternative to a markets and management track? I have looked at the courses, so I think I am caught up now, but what I think would be wonderful in a program like this would be to have the ability to receive new courses. I think all of us teach courses that we feel could be brought into the public realm, so for me, this program would be great but not just for this particular set of courses. I think the way that it is defined could accommodate a productive model where you could have any number of people provide their courses in a coherent sense.

Eric Toone (Innovation and Entrepreneurship Initiative): I could not agree with you more, and the program is defined in exactly that way. We specifically arranged things to imagine that the group of courses that would qualify as electives will be fluid and will change on an almost semester-by-semester basis. We did not throw the kitchen sink in here and copy the bulletin into the list of elective courses because we intend to go through the process that you are talking about on a semester-by-semester basis.

John Supko (Music): I am teaching the arts and entrepreneurship class along with Jon Fjeld this semester, so I am here to answer any questions about the working of the class, what the students are doing, or any questions you might have of a practical nature about this course.

Thomas Robisheaux (History): We have time for one more comment and we will be continuing the discussion of this proposal on April 10.

David Malone (Education): I want to say that I am very supportive of this proposal, and I appreciate the students' remarks about connecting their in-class experiences to their out-of-class experiences. I teach an education course, and I asked my students what they thought the Duke difference was and how a Duke education is different. They said that at Duke, the learning extends beyond the classroom walls and they brainstormed all of the ways in which that is occurring. It seemed like a list of 30 or 40 organized coherent programs that are connecting these things. I think this program is an exemplar of that effort to connect inside and outside of the classroom learning experiences. One question that I have is that, in terms of

looking forward, this program is coming out of an initiative and we have programs coming out of institutes and these are changing the landscape of the way that we are organizing ourselves as a university. Perhaps Dean Baker could speak to how this program will be situated within Arts and Sciences.

Dean Lee Baker: As you know, Arts and Sciences is all about adaptation, innovation, and integration. We see institutes and initiatives as partners in resources for our students' education. That said, with this particular certificate, we used the model we did with neuroscience with regard to structuring the governance, the directorship, and the relationship to Arts and Sciences. People may or may not know that the 19 certificates that we do have all flow through the curriculum committee and are part of the Trinity College of Arts and Sciences curriculum. I think engineering has two (?), which is a different process but that means we reach to the institutes, Bass connections, and all of the wonderful resources of the university.

It is important to work closely and collaboratively with the extant committee and faculty. We devised it, we used the same model, and the language is in here with the steering committee made up of people from Arts and Sciences as well as Pratt, and it is modeled more like the relationship we have with the Duke Institute for Brain Sciences in the neuroscience major. The institute does it on behalf of Arts and Sciences, but that is an important clarification and structural minutia thing, and I think an important symbolic anchor since it is anchored in Arts and Sciences as we partner with these other initiatives and institutes. With that said, we have not heard from Martin Ruef who has signed on and has been willing to lead the certificate. Martin, if you want to say anything, you have been a great part of this team.

Martin Ruef (Sociology): I have a few words in terms of the division of labor with markets and management studies and the I&E certificate. Initially, especially on the curriculum committee, there were a lot of concerns about the division of labor between MMS and the I&E certificate, and once you have gone through the weeds of the certificate, you will realize that this is a very different kind of creature. Nevertheless, for the undergraduates we will have a period of education and intensive advising to suggest what that division of labor is. Part of that divisions lies in the fact that this is a track that is oriented towards innovation, products, and services, not necessarily the management of enterprise.

MMS is very directed toward the management of enterprise, businesses, nonprofits, and market analysis. This is different because you may not want to start your own business. Primarily, this is interested in innovation for its own sake, so it draws in a broader set of students than we can serve in MMS right now. We have heard from folks in engineering, natural sciences, and the arts who are not currently being served by MMS; moreover, that certificate is at full scale capacity. It has over 600 folks in it, so it is the largest certificate in Arts and Sciences. It is hard to scale beyond that, so we need a new certificate to address this constituency.

Thomas Robisheaux (History): I have let the discussion run longer than planned in the agenda, because this is an entirely new idea for us. It is a new academic program that blends the rigor of academic courses, reflection, and putting together an e-portfolio with experiential learning. It puts a great deal of responsibility on the students and faculty who are involved in this. We will have more time to discuss this at the April 10 meeting. I think, given the time, we will end the discussion and we will not have a vote today. I am wondering, after hearing Eric talk about the west coast model of entrepreneurship and innovation, whether we are now witnessing the birth of an east coast model innovation and entrepreneurship. Let's take the whole east coast before anybody else claims it.

Colleagues, since we only have ten minutes left, that is not enough time to start the other item on our agenda. Some of you might be relieved to not have yet more work to do before you begin your spring break. Let me remind you of how important this is; we have 18 to 20 council reports from representatives and there may be a couple more that come in. They are available on our Arts and Sciences Sakai site in their own folder. Please take a moment to review them.

Starting after spring break, when the executive committee and the council reconvene again in April, we will begin to draw together this year of exploration of online learning and its place in a Duke liberal arts curriculum. We have had forums in the fall that looked at a variety of different issues and questions. We have your departmental discussions; I know many units have had dedicated discussions and even retreats on this question. You will see that reflected in the thoughtfulness with which these reports are written. Finally, we will continue with our faculty discussion board, which is open and available. ECASC wanted to embrace the idea of the discussion board in order to give every single faculty member a chance to voice their opinion. This is about faculty governance, and if you feel that you have already been heard, there is no need to take part, but if you feel that your voice has not been expressed, please take advantage of that opportunity. Let me ask Dean Patton if she wants to end the meeting with a couple of comments.

Dean Laurie Patton: I will say a few words next time about the I&E certificate; that is the tradition now and people have already said what they need to, so I do not want to take any more time from the faculty on that score, so I will wait until next time. I think the change in Arts and Sciences status from seven days ago to now is fairly minimal, so there is not much more for me to add in a Dean's corner. I know I try to work fast, but there are not many more updates to give you unless you want some budget numbers that are small line items that we have changed.

I did want to say a word about a gift that we have been working on with the new initiative of I&E, which has come in the last couple of months. This speaks to the student's concerns because it is half of one million dollars to integrate social entrepreneurship into Arts and Sciences curriculum as faculty see fit. It is very much faculty-driven and we are going to be working on a call for proposals with Matt Nash in the Center for Social Entrepreneurship that is housed with I&E, and we are very excited about it. We are working with Tony Brown, who is a very popular teacher in public policy, and we are working with English, history, and some other cool humanities departments, as well as social science and science departments around thinking about this. We are just very excited about it and we should get a CFP out in the next month. We want it to be very much faculty-driven around what social entrepreneurship looks like; that could include an

archaeology dig in classics that involves local knowledge of visitors to something that is integrating thinking with 5th graders in chemistry and how they might put chemistry knowledge to use in the Durham schools. There are a number of ways we can do this, and I have been extraordinarily impressed with the creativity so far in some of the pilots across the different divisions in the humanities, arts, social sciences, and sciences. I just thought I would let people know that is a new gift, and we are really excited about it.

Thomas Robisheaux (History): There is one important thing that has happened since last Thursday. We have a new provost. I know you have been buried in your papers, colleagues, and there are a lot of other things going on in your departments, but the appointment of Sally Kornbluth as the new provost is important. Laurie, can I ask you to say a word or two about that?

Dean Laurie Patton: You all know that my motto is to promise less and deliver more, so I said it would be within two weeks, but you got the announcement in two days. Sally is from the medical school, so if I were a faculty member in Arts and Sciences who did not know Sally I would wonder if this was going to be the domination of the medical school. Is the firewall going to be even less? Let me name that, address it immediately, and then tell you a little bit about Sally.

Sally has an undergraduate degree from Williams College in political science. That is the first thing you need to know about her. She is also deeply committed to music and musical engagement, and she is a basic scientist. I have known her since I came here because we work together on a number of different medical school and Arts and Sciences collaborations, and one of the first things that Sally said to me as we began to talk about her interest in this position was that, "I do not really feel like I fit in the medical school, because I am not an MD. I am a basic scientist and I have always felt that the reason why I do cell biology is because I am interested in social networks. I see the ways in which cells interact as a form of social networks." I thought that was a really interesting way to think about these questions. She sees the work of scientists as very much in line with the work of the humanities and social sciences more broadly. That was the first thing I needed to say.

The second thing I would say is that Sally is hungry to move from the medical school. It is one of the reasons why she applied for this job. She has a lot of experience university-wide in funding research and in thinking through research initiatives. She is extremely informal in her style and she is also very engaged in a non-hierarchical person. She is interested in administrative problem solving and in the larger intellectual work of the university. I have had three or four emergency engagements with Sally around difficult issues with labs. She is always hands on and thinking through questions. I had the privilege of talking with her at length about Arts and Sciences in a confidential manner as she was going through the final stages of this process, and in her interview process she repeated verbatim the major priorities of Arts and Sciences that I had mentioned to her. I do not think we could get a better partner; she is interested in listening, learning, and thinking through what our priorities are and she is going to let us lead on that. That is what I am most excited about.

Thomas Robisheaux (History): Colleagues, you have been patient and have worked very hard. I think you deserve a rest; if you are traveling be safe and I look forward to seeing you after the break.

Meeting Adjourned