

Fostering Student Success

An Interview with Julie Phelps

Virginia B. Smith Innovative Leadership Award Recipient for 2010

By Joni E. Finney and Carol F. Stoel

Joni Finney is vice president of the National Center for Public Policy and Higher Education and a practice professor in the Graduate School of Education at the University of Pennsylvania. She chairs the Virginia B. Smith Innovative Leadership Award Committee. Carol Stoel is a program officer at the National Science Foundation and a member of the committee. Here they interview Phelps on her work.

Previous Winners

2009 – Freeman A. Hrabowski, III, President - University of Maryland, Baltimore County, innovator in educating minority scholars in math, science, and engineering.

2008 - Ralph Wolff, Executive Director - Accrediting Commission for Senior Colleges and Universities of the Western Association of Schools and Colleges (WASC), innovator in assessing student learning through accreditation.

2007 - David S. Spence, President - Southern Regional Education Board and leader in the development of California State University's Early Assessment Program.

2005 - George Kuh, Chancellor's Professor of Higher Education at Indiana University and founder of the National Survey of Student Engagement (NSSE).

2003 - Barbara Leigh Smith and Jean MacGregor, co-directors, National Learning Communities Project. Innovators in developing learning communities

2002 - Robert Olin, Dean of the College of Arts and Sciences at the University of Alabama, innovator in using technology in the classroom

2001 - Tim Riordan, professor at Alverno College, innovator in the assessment of student learning.

and Peter Ewell, Vice President of the National Center for Higher Education Management Systems (NCHEMS), innovator in developing institutional change and assessment strategies.

2000 - Susana Navarro, executive director of the El Paso Collaborative for Academic Excellence, innovator in community-based educational achievement strategies.

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The National Center for Public Policy and Higher Education and the Council for Adult and Experiential Learning are pleased to announce the winner of the 2010 Virginia B. Smith Innovative Leadership Award, Julie M. Phelps.

The Virginia B. Smith Innovative Leadership Award in Higher Education recognizes individuals whose leadership in higher education has resulted in better ways to educate people to participate in and improve an open and inclusive democratic society. Winners have demonstrated innovative leadership qualities, yet are at a stage in their careers when they will still make significant contributions in the future. The award is meant to encourage and support those seeking sustained improvements in higher education.

The award is named for and honors Virginia B. Smith, who has promoted innovative strategies to improve opportunity and excellence in higher education throughout her career as a college president, educator, foundation director, and public policy scholar. For information on the award, go to <highereducation.org>

A national leader among the project directors in Achieving the Dream (a multiyear national initiative to help more community college students succeed), Julie Phelps is a professor of mathematics at Valencia Community College who teaches and has studied and refined three types of pedagogical strategies: supplemental instruction, paired courses, and a student success course. She has developed and used data to inform decisions about closing student performance gaps in gateway courses (pre-algebra, beginning algebra, intermediate algebra, college algebra, US government, and composition). Among her other accolades

Julie has received the National Institute for Staff and Organizational Development Award of Excellence in Teaching and Learning and Valencia's Rheta Beaver Teaching Award.

Finney: Julie, the selection committee for the Virginia B. Smith Award was very impressed with the work you've done at Valencia Community College to help students meet the academic and social challenges of surviving in college. We want to learn more about the processes you went through to develop those innovative programs.

Phelps: I'm still in shock, I want you to know.

Finney: You really shouldn't be. After I read through the information that you provided for us to prepare for this interview, I knew that we had made the right choice.

Stoel: We're very interested in particular in learning more about why and how you focused on mathematics. So let's start with your work with college mathematics and supplemental instruction. But since this award is to recognize and encourage early leaders, we're also interested to learn more about how you assumed a very important leadership role on your campus and in the Achieving the Dream program.

Supplemental Instruction

Phelps: I jokingly say that the reason I went into math is because my mother's an English teacher. And I like the challenge. Achieving the Dream came along at the time that was right in my life, in that I was finishing my doctoral work. I chose to focus on supplemental instruction (SI) as the topic for my dissertation because I noticed how helpful it was for students to work in groups outside of class. And in particular, students of color were helped quite a bit.

While I was working on my doctoral degree, I kept reading about SI. Then I thought, I'm going to research this, and I'm going to do it in developmental math. And so I kept reading until I found Hunter Boylan's publication about what works in developmental education, and I saw mathematics listed there. I kept hunting, and I found another article written by Wright, Wright, and Lamb [Gary L. Wright, Robin Redmon Wright, and Charles E. Lamb]. They say that a one-size-fits-all approach doesn't work; you have to look at whatever the strategy is and make it fit the needs of your institution and what you're trying to do. And it struck me: I'm going to have to make it fit our needs.

Finney: Could you define supplemental instruction?

Phelps: Supplemental instruction is cooperative learning outside and inside a class. A student who has taken the class and been successful is asked to sit through the class, listen to the lectures, be part of the class discussion, take notes, take the tests, and then model how to study outside of class.

Stoel: Do the SI students walk around and talk to people individually?

Phelps: It just depends. All of those classes have a lab with them. So in the lab they go from group to group, work with them, and do the same activities and assignments they're doing. But in class they're just like another student. Some of the students are very competitive with the SL leader! Part of the benefit that they're getting is seeing somebody who knows how to go to school and how to behave in school. That's an important lesson—how to be a successful student. And anybody who is enrolled in that course has the opportunity to sit with the SI leader outside of class.

Stoel: How much do the SI leaders get paid to do all that?

Phelps: Some colleges pay \$1,000 a class, but at most places it's about \$10 an hour, which is what we pay. But we also cover their tuition because they are obviously good students, so we want them to model how to be successful as a student. And it works best if the professors choose their own SI leaders. Right now I have three, and two of them have been students of mine in the past.

Finney: How long have you been doing this?

Phelps: I've been doing it since 2000, but college-wide it started in 2006. I began to get involved in the planning process for Achieving the Dream as a developmental mathematics classroom professor. Then I discovered that I was not the only one doing supplemental instruction at Valencia—we had four other forms of it on our other three campuses, and I had no clue. All of a sudden I felt the isolation of not talking across the campuses about what we're doing to help students.

Finney: Or talking across the disciplines.

Phelps: Right. So it was one of those enlightening experiences for me while I was still working on my dissertation proposal. All of this came together at the right time for me. I kept thinking, I can't study my own supplemental instruction program; I have to study it on another campus. I decided to do a qualitative study—nobody expects a mathematician to do something qualitative. And I decided a phenomenological study was probably a good way to go, because then I could really hear about the experience through the words of the students.

That's what brought me closer to the initiative at Valencia. I was in my little silo for a while, then in 2003 to 2004 I found out other campuses were doing the same thing, and we've obviously come a long way since then.

Stoel: Do the SI leaders get college credit for the math class?

Phelps: No, they do not.

Stoel: How do students know to sign up for the SL class?

Phelps: They find out the first day. And some of them are starting to catch on: This isn't about targeting high-risk students; it's about targeting high-risk courses, ones with less than a 70 percent success rate. So when you put it that way to a student, then it is no longer, as one of my former students put it, "idiot math."

Achieving the Dream

Finney: Supplemental instruction in developmental math seems to have become a part of the institutional strategy at Valencia just when this Lumina initiative [Achieving the Dream] was being announced. How did all of that come together?

Phelps: We had a big meeting at Valencia that was led by our president, grant writers, and a couple of vice presidents. We talked about data. And we learned that seven of the 10 low-success courses were in mathematics and the other three had some math component to them. Since our students have to take quite a few mathematics courses, a lot of the high enrollment/low success courses were ours. We also learned that 75 percent of students who come to Valencia start in developmental coursework, most of them in developmental math.

I was studying supplemental instruction, and it was listed as one of the strategies the grantors wanted to see implemented. So out of that came supplemental learning, as we call it here. We also had learning communities, which we had been trying for years, and our student success class, which we've been doing since the mid to late '80s.

The next thing was getting the math faculty involved. I had been teaching developmental mathematics for eight years at Valencia, and I was really engaged in it. Then I went to graduation and realized that only three or four of the students that I had known were crossing the stage. Other faculty that I work with who teach only college-level courses are sitting there saying, “Oh, there’s another one of my students, there’s another one of my students.” But only 8 percent of the students who start in my pre-algebra class actually graduate. So I really felt at that point, if they’re going to put out a call for somebody to lead this, I’ve got to step up. At that time, I was defending my dissertation—I defended on June 22, 2005 and started leading Achieving the Dream on July 1.

Finney: How important was the external grant money, and being connected to Achieving the Dream, for the institution to really move forward on this agenda—on student achievement generally, in math and beyond?

Phelps: It wasn’t really the money, it was more about them helping us focus. It was about having someone like Byron McClenney as our coach. We also had a great data facilitator, Rick Voorhees, who was extremely helpful. But one of the reasons Achieving the Dream is able to sustain the effort is that the colleges are putting their own money into it too. In the end, about 90 percent of what came out of Achieving the Dream was paid for with our own college’s dollars.

Implementation

Finney: How important was it that you began with math?

Phelps: Extremely, because 67 percent of students who come to Valencia have to take some form of developmental math, whether that be pre-, beginning, or intermediate algebra. We knew that we needed to raise the success rates in all those classes so that more of those

students would make it to graduation.

Stoel: In Florida, to go to Valencia Community College do you have to have a high school diploma?

Phelps: Yes. We don't have adult basic education here. They have to have either the GED or a high-school diploma.

Stoel: So they had a GED or a high school diploma, but they still couldn't pass the math test?

Phelps: We're an open-door institution, so we have a placement exam [the Computerized Placement Test], and they were not placing at college level.

Stoel: So the students who are in the math classes hope to get their degree, or maybe go into nursing or other demanding fields.

Phelps: Right. It prepares them for whatever certificate or degree they're going to pursue. If they test below a certain score, they have to take reading in the first term at Valencia. That means they're taking reading, the student success class (a college-level course about goal setting and career planning), the math class, and writing—as well as figuring out what courses they need to take to make it to graduation.

Students seem to think they're coming to community college for two years, whereas we're talking about their completing developmental courses in two years, on average. Yes, we're an open-door institution, but that doesn't mean you're beginning with your freshman comp class, your college algebra class. It doesn't mean you're starting where you think you're going to be starting.

Stoel: Do these classes cost the same as the college-credit classes?

Phelps: They do. And for all of our classes we even have a “three-peat” policy, where students have to pay out-of-state tuition if they’re on their third attempt.

Finney: Are all the students in developmental math getting supplemental learning?

Phelps: Not all of them. It just keeps growing based upon the demand that we have. In 2004, we started with a total of 10 sections of supplemental instruction; now, on this campus alone, we’re up to 40 to 45 sections per semester. Currently there are over 360 sections a year utilizing supplemental instruction college wide.

Finney: Is supplemental instruction used in regular college-credit math classes as well as in the developmental math courses?

Phelps: Yes. In Achieving the Dream we used it in six different classes, but in the spring of 2006 we only used it in pre-algebra, beginning algebra, and intermediate algebra. Then we opened it up that fall to College Algebra, U.S. Government, and Composition I. The reason that we did it in those courses as well is because they are high enrollment.

Combining Strategies

Finney: There are two other major strategies you’ve mentioned that the institution used at the same time: the learning communities and the student success course. Could you talk a little bit about them?

Phelps: I spent a lot of time during the 2005-06 spring learning about learning communities (which we call LinC, for “Learning in Communities”) from other colleagues and folks who

had been out to Evergreen State College. So I read everything that they had, and we ended up saying that we've got to train our faculty to do LinC. We can't just throw them in the classroom and say that these courses are paired. We need them to come up with a combined syllabus, with integrated lessons.

Finney: Could you define the link?

Phelps: They're two courses that are back-to-back in the same classroom, with two different faculty members working with a success coach, who is an advisor or a counselor. So in our first fall term we paired a developmental math class with the student success class. The counselor was part of a team of three—three people working together on a shared course.

Finney: And both faculty members are in the classroom the whole time?

Phelps: Yes, most of the time we are in each other's classes. We are required to attend our LinC partner's class at least once a week.

Establishing community and letting the students know that it's a learning community on the first day is key. We don't teach that day; instead, we talk about all the supports on campus and getting to know the other students in class, trying to break down the "parking-lot syndrome" that students deal with on commuter campuses. We talk about how they're going to study outside of class and where they might meet, and we get them to know the campus a little bit. Then we get down to business.

Finney: You have these three different strategies. Are they trains on different tracks, or do they all interact to help students? How does the college get students to make use of all of them?

Phelps: Well we talk them all up at the same time at the student orientation. If they can take

a LinC class, then we look to see if they can take a class that has SL in it. Before they're supposed to pick their classes in the computer and when they have their scores right in front of them, we come in and say, "I see that you tested into beginning algebra. Do I have the class for you!"

One of the concerns that we had about the student success course is that folks would start looking at it as a developmental course. Not that that's a bad thing, but we wanted to make sure that our honor students were still able to take advantage of it.

[Chart 1 somewhere around here]

Results

Finney: Could you talk a bit about the results? I've read a lot of dismal statistics on retention from fall to spring and then from year to year. Could you summarize, for the math piece of this, what has happened as a result of supplemental instruction?

Phelps: If you look at the research study that we did, which was a match-paired sample, we saw a difference. Students did much better in the developmental courses that had SL leaders in them than in their counterpart courses without them.

[Chart 2 here]

Finney: For all of these strategies, the institution worked hard to do a cost-benefit analysis. Could you tell me what you learned from that analysis?

Phelps: We were lucky enough to have been selected by an independent researcher to be a part of "Making Opportunity Affordable," a cost-effectiveness study. The study

demonstrated Valencia's student success course to be cost-effective. And I can say the same about supplement instruction, from what I've read.

With Achieving the Dream, we've had the opportunity to talk about how people measure things. And this is the first chance we've had, I think, to compare ourselves against others in a way that makes sense. I think the Achieving the Dream database is probably the best way to do that, because we're all using the same benchmarks.

Closing the Gaps

Finney: Could you talk about the differential effects you found with different minority groups and your sense of what's behind that?

Phelps: It appears that SL didn't really have much of an effect on the Caucasian population, to be honest. But for the Hispanic population it was as much as a 7.6 percent increase in student performance in the SI classes. And for the African-American population, the results were an 8.5% increase in success -- the results are not statistically significant, but it was certainly a pretty big impact.

Finney: Would you say that SL has been institutionalized—that this is now embraced by faculty institution wide? If that's the case, how did that happen?

Phelps: Oh, we're there. I think faculty are begging for it. Now, not everybody has one—SL is not for everybody. But the demand keeps going up. We're bringing it to scale. Faculty love it.

Finney: What has the evaluation told you about the LinC courses?

Phelps: Again, it's had a bigger impact on students of color—which is interesting, because the Achieving the Dream grant was about closing the achievement gap. The Hispanic population seems to really love it, and the African-American population excels in this, too. Their success rates have really gone up.

[Chart 3 here]

Participation Rates

Finney: What's the proportion of students who are taking a LinC course?

Phelps: In fall 2009 it was 5 percent of our students, which is not much. But it costs us less money doing these strategies to keep students here than it would to start with new students, which costs a lot of money. We also want to get more students through the process, have them make it to graduation, and then see them be successful in our communities.

Finney: So supplemental instruction is much more broadly implemented at this point.

Phelps: Yes. And the student success course has the biggest numbers. In Fall 2009 it was 40 percent. I think it might be higher now.

Stoel: Is that the percentage of all starting students?

Phelps: About 47 percent of first-time-in-college students – the traditional 18-year-old students. Remember, we also have some veterans and other adults who are coming back, so we're not just talking about new students.

The Future

Stoel: So, are you now an administrator and a faculty member? Are you still officially a faculty member?

Phelps: I just moved this year from the project back to the faculty. I wanted to see if the project would keep going without me. I hoped it would, and I'm happy to see that it's strong and still growing.

Finney: What's the next step for Valencia in all of this?

Phelps: We are continuing with our developmental initiative. We have a brand-new director, and his background is in reading and writing. Since it's the "developmental education initiative" and we've done a lot of work on mathematics, we're bringing in a person who will help us focus more on reading and writing. But we're also finding other folks in mathematics.

Finney: This has been terrific, Julie. Thanks so much!

Phelps: This is such an honor.

I think maybe I'm going against the traditional ways people have been doing things, and most people are not really fans of change, I've noticed. It's a challenge. But I go for it!