Webinar: Programs of Study: The Omaha Public Schools Experience  
December 2, 2009

Panelists:
- James R. Stone III, Director, NRCCTE
- Ivan Charner, AED, Director, NRCCTE Technical Assistance Academy on Green-Focused POS
- Kim Green, Executive Director, NASDCTEc
- Corinne Alfeld, AED, Principal Investigator, Mature Programs of Study: A Longitudinal Analysis
- Kirsten Sundell, NRCCTE, co-Principal Investigator, Rigorous Tests of Student Outcomes in CTE Programs of Study

OPS participants:
- Ken Spellman, Career Education Coordinator, OPS
- Karen Spencer-May, Human Services & Resources/Family & Consumer Sciences, OPS
- DeLayne Havlovic, Communication & Information Systems, OPS
- Laura Beavers, Construction Academy, Career Center
- Stacia Weaver, Health Occupations, Career Center

Kirsten Sundell: ...And we have a number of other special guests with us. That's Ivan Charner who is the executive director of the National Institute for Work and Learning at the Academy for Educational Development. Ivan, I hope I got that right [laughter].

Ivan Charner: It's pretty close. That's good.

Kirsten Sundell: He's also the director of the National Research Center's Technical Assistance Academy, which this year is focusing on green Programs of Study. Kim Green with the State Directors’ Career and Technical Education Consortium will be joining us in a few minutes. She's at another event.

We also have Corinne Alfeld, who is the principal investigator of one of the Center's research projects, “Mature Programs of Study: A Longitudinal Analysis.” I'm also here, I have my own study on Programs of Study.

We have several participants with us today from Omaha Public Schools (OPS) who hosted us as we filmed this video about their experiences with Programs of Study. So we have Ken Spellman who's the Career Education Coordinator with OPS with us, Karen Spencer-May who coordinates the Human Services and Resources/Family and Consumer Sciences for OPS and DeLayne Havlovic, Communication and Information Systems coordinator for OPS.

I'm going to pass this now to Jim Stone, Center Director, who is going to give a brief introduction to Programs of Study, and he’s going to take over.

Jim Stone: Good afternoon everyone. Happy to be here and part of this conversation. My comments are strictly introductory. The panelists, both those in Omaha who are doing this, as well as our associates in research and technical assistance activities, are much more knowledgeable about this. But I thought I would begin by just talking a little bit about the basic legislation. Programs of Study, a new
term that was introduced with Perkins IV, has particular definitional components that I think are useful, indeed important, to pay attention to. If we look at what the law says, Programs of Study are really about trying to better connect young people who start programs that are career-focused in high schools, with postsecondary education activities.

And the law says that they have to have certain things at a minimum, and I want to emphasize minimum because as the other panelists will begin to discuss, we've looked at and they have looked at the other kinds of activities that are necessary to make these minimal elements successful.

So there has to be rigorous and coherent curriculum that aligns with challenging academic standards and obviously with relevant career and technical content. And also important is that the Program of Study has to provide to students with non-duplicative progression of courses that are part of this alignment. And then we also have to, at the secondary level, make sure the students are prepared to move onto the postsecondary.

One of the tools that is suggested is the use of dual or concurrent enrollment programs, and our folks at Omaha will talk about this, I know. But one of the more interesting components of this law, which is somewhat new and really distinguishes this in my judgment from Tech Prep, is the emphasis on these programs leading to industry-recognized credentials of some sort. They may be certificates, they may be associate or baccalaureate degrees but something that industry recognizes as a signal, if you will, that this student is ready to move into that career area and is successfully prepared to do so.

Now the enhanced Programs of Study, as we begin to talk about what those comments are, I'm just talking about some of them, showing them here very briefly, but these are going to be addressed in much more detail. This comes from the work of Ivan Charner and his group as well as input from State Directors and others.

So these are some of these elements that are thought to be necessary to make the minimal elements described in the law function. This is a graphic that has been produced that tries to display how partnerships and legalization and evaluations and accountability all support what goes on inside that box, if you will. And again, this will be discussed in greater detail by our colleagues.

I'll point you to the one thing that's readily available now on our Web site. And that is an initial report on the research that was available at the time that allowed us to look at Programs of Study, at least the key elements, and try to understand what might work, what research shows work, as well as raise questions about some of the issues that might be confronting those attempting to implement Programs of Study.

As Kirsten mentioned, the center has three studies concurrently on Programs of Study that are taking a look at those Programs of Study from different perspectives. All of them are multi-year in nature and will be yielding results - early results will be coming this year and then in the subsequent years of the Center.

Corinna Alfeld, Dr. Alfeld is with us and she's looking at mature Programs of Study. She'll talk a little bit about that. Dr. Sundell and Dr. Castellano actually are conducting a random assignment controlled study of Programs of Study. For those you who are familiar with the career academies studies done by MDRC a few years
ago, this parallels the methodology. We’re following cohorts in school districts across the country.

We're looking at, state-wide in South Carolina, at a study that is following their EEDA legislation and looking at the effect of legislation that requires all schools to do things that look a lot like Programs of Study. We're tracking cohorts of sixth, ninth and twelfth graders in that state. And again looking at how these kinds of programs affect student outcome.

Kirsten Sundell: We’re going to move to Ken Spellman of Omaha Public Schools.

Ken Spellman: OK. I have some special guests with me that I'd like to first start with, who were also featured in the video. Stacia Weaver is our health teacher. We've got Michelle Romano, she's the assistant program director. Kim Huffman, program director at the Career Center. We've got Maybell Galusha, she's the culinary teacher featured on the video. We've got Laura Beavers and she is the math construction person at the Career Center and then we've got Jack Taff and he is our automotive instructor as well. They came to join us and are going to sit in with us today.

And also I've got Karen Spencer-May and she's in charge of Family & Consumer Sciences and Human Services and Resources division and then Mr. DeLayne Havlovic, he supervises the communication and information systems programs for Omaha Public Schools.

First of all what I'm going to talk a little bit about are the Programs of Study that we have here in Omaha Public Schools. Several years ago - I guess this was two years ago - when got together as a group and decided to really examine and look at what we offer in our school system. We've go over 47 - 48,000 students. We work with seven high schools and 11 middle schools. And we have a whole host of courses and programs out there. We just really needed to get a handle on what we were currently offering in our district.

We have over 15,000 students that participate in our career education programs at the secondary level. We spent some time really examining what we currently offer and we were trying to align with Perkins IV, which stipulates that in order for funding we have to have Programs of Study, two or more courses in a sequence and preferably one, two, three, four type of courses.

What we found out is we had courses all over the map. We had a lot of quarter courses. We had a lot of semester courses. And we had a lot of courses that really led nowhere, not to high-wage, high-demand jobs. So that was kind of the first process is we really started examining how we could better align our courses.

And that's kind of the diagram up over that you see on the PowerPoint right now. Those were all the courses that we identified and then the Programs of Study. So, we have a whole lot of work to do in consolidation.

Once we kind of consolidated our list of courses and met with our principals, our Director of Secondary Education, our Assistant Superintendent, we were all on board in support of this effort, we put our Programs of Study that we identified into drawing boards.
And I'll tell you, the counselors, the parents, and the students really love this document. We kind of call it a road map for success where we’ve identified our freshman courses, sophomore, junior and senior courses. So, that way, students have a map of what they want to take, and sometimes what schools offer these particular courses because that might make a difference upon where they attend high school.

We've met with our counseling staff, which is an important piece of what we've done, and really discussed this. Our middle schools are discussing these with students and parents and passing these out. I believe that we've identified over 30 of these drawing boards, that's how many Programs of Study that we have in Omaha public schools.

And this is an example of one and so forth.

Next let me introduce Dr. Karen Spencer-May. She's our supervisor for Family and Consumer Sciences.

**Karen Spencer-May:** We wanted to talk just a minute about dual enrollment opportunities. One of the things that we found is that a lot of the classes that we offered were also being offered at the community college. So that if we took our objectives, our standards and then we tweaked them a little bit, we could allow our students to also have college credit while they're still in high school. And what a wonderful opportunity for our students.

Currently we have about 11 or 12 district-wide classes. But we are working on more of them all the time in multiple areas. I'll just give you an example. In our culinary area, the last two years that our students are together, they can actually go in and get 12 hours through taking classes at our Career Center.

The culinary programs, we wanted to talk about alignment a little bit. How is it that you go in and actually figure out how to put one of these programs together? The first thing that we did, that was very beneficial, is that we brought everybody together. We said to them, what is it most important for us to learn? And those people that we brought together were the teachers that would actually teach the classes, industry partners, meaning our friends that are chefs and in the restaurant business, and also community college instructors. And this was the most wonderful day that we spent together, trying to figure out what it is that we needed to teach. It also was good because our teachers were trained as home economics, Family/Consumer Science type people. They weren't trained to actually work in industry. So, to hear people talk about what are the skills that you need in the industry was really an important thing to do.

So that was the first thing we did. Then we started to develop standards from the concepts that were considered most important. And we also looked at industry standards and educational standards.

Along with that, we found that it was very important to train the teachers. And that is not just something that you do once. It's something that you continually go back and work on. You train teachers. You retrain teachers. You get new teachers. You retrain from the beginning again. It's just something that has to keep happening again and again and again.
Another part of it was that we needed to develop assessments. At first we would say to the teachers, "Make sure that you go in and teach your students how to use knives." Knife skills are one of the most important things in the culinary industry. What we found was that we trained the teachers. They weren't really great at it and so, they tended not to do it.

So, now we're stepping back and saying, "OK. This is what you need to do. This is a rubric to measure what you need to do and I want to see the results of it." Because until we do that, then we're not consistently getting the standards that we need at each level.

Student organizations are also very important at this point in time. We have ProStart, which is affiliated with the National Restaurant Association, and SkillsUSA. We work very closely with these organizations and send our students to their competitions.

DeLayne Havlovic: I'm DeLayne Havlovic. I supervise and work with the health science and information technology and communication information systems curriculum areas. I wanted to talk a little bit about industry standards and industry certifications. We currently offer certain certifications in a range of our courses. CNA, Certified Nursing Assistant programs, we have some of our students actually will sit for that certification. A couple of our technology-focused schools or schools that have a focus on technology have Cisco training and certification as well, ACF through the Culinary Federation as well as NATEF for the automotive certification, as well.

We also have some national program models that we incorporate into our curriculum. Five of our seven high schools currently have an Academy of Finance through the NAP program. One of our high schools is a current academy of information technology and we're constantly exploring what programs will fit well into our schools as we move forward that are national models.

The national models, we found that the industry standards and certifications and pieces that come with that are a very strong benefit for our students as well as when they get into the postsecondary arena.

We also have a school that's a Project Lead the Way school. One of the first in our state actually in the area of engineering. They're also beginning a program in biotechnology currently. The Project Lead the Way program exists as well as a national program.

We also have a lot of professional connections and that helps us connect with industry as well. We have a very strong career education advisory board that oversees our entire career education area. We have members from the community representing all 16 career fields and six career clusters that we work with on a regular basis. We meet with them about three times a year and they provide us continual feedback. We also ask them to provide us input when needed whether it's speakers for a career day, whether it happens to be just assistance on technology standards or whatever we happen to be working on at any certain point in time.

About three times a year, we have what we call curriculum days, where our teachers basically meet together in curricular areas. At a recent curriculum day in October, we brought information technology professionals in to actually sit with our teachers for an afternoon to talk about industry standards.
They found that was very helpful. The professional community found that it was very beneficial as well to make that connection to education. Now they've actually taken it a step further. Some of those companies are inviting our teachers back in to attend training with them, to do Webinars and sessions and so forth.

We also have a variety of our professionals who are involved in education associations, and they make a professional connection there as well. We have several career education teachers and administrators currently on our state ACTE board. I'm the current President this year. Ken Spellman is past president. We have many others that have been involved in those roles as well. Other national and regional organizations, as well: The National Business Education Association, the Technology Association as well for industrial technology. We have representatives on those boards, among many others in our state, region and nation.

Finally, many of our teachers, administrators, educators are working on standards writing and development, both locally - our own district content, standards and curriculum – and at the state level, our state career education department is looking at ways of improving our standards and revising those. And they have and will be asking for more feedback from teachers in our district on those standards.

And then nationally as well, when, for example, the National Business Education Association revises their standards in the next year. They're asking for feedback on different levels from our teachers and administrators.

Finally, for my part, we also connect professionally into industry through our career student organizations. You can see the logos down at the bottom of the screen here. We have DECA chapters, FBLA, FCCLA, FFA and SkillsUSA throughout our entire district. We have students that compete in state level and the national level each and every year. We have some very involved chapters that have brought a lot of success to our students.

We have students that are internships as well. Basically, every year we recognize about 400 students who are involved in internships during our annual internship banquet. And that's brought a great amount of success and possible job opportunities for our students beyond high school as well.

Ken Spellman: I guess I'm kind of moving in to the spot of the presentation ... These are some things that we are looking for in the future. We've got a pretty solid handle on our Programs of Study. We really worked hard as curriculum supervisors, our specialists at the schools, and our teachers and principals to eliminate those courses that don't lead to high-wage, high-demand jobs, that don't have a sequence of courses involved. And so we're feeling pretty comfortable, especially at the Career Center where you folks were at last spring, really comfortable there. We have a nice sequence of courses that they're all relevant to internships, capstone experiences, all those great things. The next thing that we are looking at is a lot of schools around the country call these academy programs. Academy programs mean several different things within Omaha Public Schools.

So we're sticking more with the Perkins language and we're looking at career specialization programs versus Programs of Study. That's the slide that's up there right now. So what we're doing is we're just kind of expanding upon our Programs of Study that we currently have and creating four-year sequence programs.
And those are some of the things that are keeping us really busy right now and into the next five or six years. Those programs, and as you see on the PowerPoint there, a Program of Study is four courses and one credit per discipline.

A career specialization program takes it to the next level, where we would have freshman, sophomores, juniors and seniors involved in the course, a minimum of 100 students. And then it would involve a capstone project in their senior year. And that capstone project might look like a senior project. Obviously, some type of dual enrollment, service-learning project - the district is really closely at that - an apprenticeship, some type of licensing and certification.

So the senior year would really be the capstone event of this three- or four-year program. So, we are working hard on that right now, working with schools and more so than just the Career Center. We're working with our seven high schools out there. And so that's been an exciting piece of it.

And I'll show you the next slide. And it's kind of small, but you can see, these are some of our proposed career specialization themes in high school. And we also have magnet schools in our district. And so it's kind of a kind of juggling act on making sure we don't step on toes here and there with magnets and things like that. So we all want to work together on this effort.

Benson High school is focused on the AVID academic program, and their magnet theme is academic research and innovation. Bryan High School, their career specialization theme is the transportation, distribution and logistics. And that's a big thing for Nebraska, sitting smack dab center in the nation. We have a lot of large warehousing. We've got Union Pacific is the largest depot and largest train area in the nation. And so it's a big thing for us here in Nebraska as far as freight and moving and transportation.

Burke High School has been kind of an exciting adventure also. We have a partnership with the NASA Space Foundation. And they were looking to expand and develop a partnership with a school in Nebraska. So we're looking a space aviation institute or a career specialization program there where kids could possibly get a pilot license. They have a planetarium that's underutilized over there and so we're really looking to beef that up. And so we're excited about that one, and that's kind of in progress right now.

Central High School is also looking at putting in an international baccalaureate program. And that kind of diverted or grabbed their attention a little bit. So that one's not quite as far as long as we'd like. But we are looking at the hospitality and tourism industry. And that one's kind of exciting also. We have a lot of growth in Omaha and especially downtown and that's where some of the high schools are located. We have a new Qwest facility, and there are new hotels and restaurants. And everything's popping up really, really fast around that area. So we're excited about that one.

North High School has a magnet program, and they've been a magnet for several years so we're just kind of expanding upon their engineering, biotech, science and mathematics themes. And as DeLayne indicated earlier, we have a Project Lead the Way program there that's very successful.

Northwest High School is looking at accelerated learning, and then we started a law, public safety and government program there. We have five or six courses, and four
of those courses are dual enrolled with our local community college. Things such as criminal justice, pre-law, introduction to police, those types of courses. And we're positioned on them becoming a new magnet for our district, really looking at expanding and developing more programs. I know that they were looking at a 911 certification and a pre-fire or something, that type of a course is going in.

Then South High School has been a magnet for quite some time in our district. And their focus is the visual/performing arts and information technology. They're really excited that we're putting in a gaming technology course or specialization program there. And we're hoping, too, that the gaming technology will attract more females and non-traditional students into the area of information technology.

One of the questions on service learning is to provide an example of service learning. We incorporate service learning into our current curriculum. For example, we work with our postsecondary institution, the University of Nebraska at Omaha, and they have seven days of service learning ... or three days’ service learning project, and we will go out and work with them. Just to help and we'll use our construction class and our engineering classes and go out into the community. Help renovate, remodel, paint different non-profit organizations.

So that's an extension of the classroom, but there's been some discussion in our district that it would be a requirement for our students to be involved in a service-learning project. We really want to take that service-learning project and do more with that because right now it's kind of an extension. We really want to do some things that would tie back more closely to the curriculum, rather than just painting and remodeling. That the kids would really understand the true meaning of service learning, and so we’re looking at some curriculum. It would probably be underneath the career education area if not the social studies area. We’ve worked in combination or in partnership with those folks.

It's been a great experience, just the three or four days a year that we have these projects. But we really want to enhance it and tie it closer to the curriculum.

This is a Nebraska model that our Nebraska career education folks at the Nebraska Department of Education put together, and it's been a great model for us. This model allows us to work with all curriculum areas. As I mentioned we work with the Law, Public Safety and Social Studies. Before this model was created five years ago, we weren't probably allowed to do that given the technical terms for Perkins and all those things.

But now we find ourselves, if it leads to careers, if it's career-invested and interested, we're going to help support those types of programs and get those programs up and running.

We've got our six fields and 16 clusters, you kind of see the model there. All the careers are identified within those six fields and 16 clusters. This really helps us work with our math folks, our social studies, our science and English people, and they can see relevancy in this. It’s a nice model to form partnerships, obviously.

In the middle of this is foundation, knowledge and skills. We had some concerns about career specialization programs and Programs of Study. “Well, what happens if my student's a junior and we're going down our CNA pathway, for example. Our Health Occupations 1 course at the Career Center, and we find out we don't like it. My child finds out that they’re not interested in the health thing.” And we always tell
them, “That's fine, that's great. That's one of the reasons why we have these exploratory courses. For one thing it doesn't cost you $30,000 at a university or college like it does me when my kids decide to change career pathways.”

And another thing with the foundation, knowledge and skills, they can transfer. They can go to the health area, to the environmental and ag systems. They have their foundation, a strong foundation. We can take those skills and transfer those to career areas of their interest.

Then the last slide that we have is this is just a brochure. This has done a lot of wonders for us, too. I encourage those who are watching this slide to promote your programs, to market them. And give them to our middle schools, our counselors and anybody else that will take one of these things. Just let to them know what type of programs you have.

I'm responding to a question. How do we decide where various programs would be offered? We take a lot of things into consideration at our high schools and our Career Centers. The Career Center is an easy one. We have programs at the Career Center that are too expensive to replicate at our high schools. We don't have the staff or the resources to put six culinary labs at our high schools. We can't find staff members to teach seven automotive courses at our high schools. So that one is pretty easy. If the program is expensive, and it's hard to find staff for instructional resources, then we put it at the Career Center.

At our high schools, it kind of depends on the facility, it depends on the student population, it depends on the teachers and their strengths at that particular school, and the parents to some extent.

We have a large district, I think it's almost 20 miles across. So we have different pockets of industry. We have different pockets of healthcare and so we tried to align our programs with those pockets of businesses and industries. For example, Bryan High School, the transportation and distribution logistics was a perfect fit at Bryan High School. They're located close to our Strategic Air Museum, we've got freight companies in that particular area. It just works there.

The last thing that we do is, we have our kids take a career interest survey and try to match their interest surveys with our courses. [pause]

Kirsten Sundell: Ken, I'd like do something now. We have a lot of questions waiting in the queue. I'd like to move on quickly to Ivan.

Ivan Charner: Thanks everybody, and I'm glad to be here. The one thing I wanted to start with is I'm always glad to hear about a district in a state that still uses the term career education. I came to Washington 30 some-odd years ago and worked in the National Institute of Education, in the career education group. So I'm glad to see that it's still around.

What I quickly want to do is to talk about where we’re moving, we being the Office of Vocational and Adult Education and the National Research Center for Career and Technical Education and a large group around Programs of Study. As Jim showed on that, awhile back for those of who've been with us for the past 35 minutes or so, on the blue graphic, the operational definition used for Program of Study and the framework that is being constantly worked on is a Program of Study is a structured
sequence of academic and career and technical education courses that lead to a postsecondary-level credential.

And when we did that, we were very conscious of using the term postsecondary-level credential. It doesn't mean that a student couldn't complete a program in high school and go on to work. But that program should have a sequence that is structured, that could lead eventually to a credential at the postsecondary level.

We started with the four elements again, that Jim talked about, that come right out of the legislation. And I'm not going to read that to everybody, and we begin by trying to unpack those elements. It's very simple to say that a Program of Study as the legislation says incorporates and aligns secondary and postsecondary elements.

Well you can have those two almost separate, and we still have those in a lot of places. So we began to unpack that. As we were doing that and sharing that with others, it was decided that we would convene and MPR Associates did the convening for OVAE of what we call an expert panel, and I'm putting quotes around “expert.” We had representatives from the State Directors, state career and technical education directors, people from all of the major associations, researchers who were working on Programs to Study.

We had a large group of individuals that really began to look at the unpacking and the different definitions. And, we've been working on this for a couple of months. Where we are now with the framework is, in addition to those four core elements, is to really think about the supporting components, and there are ten of them. What I would like to do is just quickly, because I know we're pressed for time, go through what those 10 elements are and give you an example of one or two things that would fit under each one of those.

So, under legislation and policies, which are one of the elements, what we're really talking about is the state legislation or administrative policies that promote the Programs of Study development and implementation among collaborating agencies. So there, the examples would be establishing formalized procedures for legislation or policy that requires secondary students to develop an individual graduation or career plan.

The second element, second component of partnerships among education, business and other community stakeholders, I was really glad to hear in the Omaha presentation that they have developed a lot of their work using partners, representatives from education, community colleges, business and others. And again, the examples there would be having written memoranda of understanding and together conducting the analyses of economic and workforce trends that are so important as we begin to think about Programs of Study.

The third element is around sustainable leadership and shared planning. We're really talking about collaboration among educators within and across, I want to really stress those two, within and across secondary and postsecondary education sectors. A Program of Study can't just be either secondary or postsecondary. It really needs to involve the leadership from both of those sectors. We need to have joint statements, which would be an example, from the organizations that lay out common visions and goals. There need to be those that need to be translated within institutions, within secondary, and then within postsecondary. And then also
interagency effort to support Program of Study design, as we're beginning to design and work on those.

The fourth element, the fourth component that we talked about were rigorous academic and technical standards with curriculum assessments. And again, I could point to what Omaha talked about in their standards at the local, state and national level. I won't go into it into much more detail, except to say that we really do need examples of state-recognized academic standards and technical standards, as well as industry-based technical skills assessments and standards. And Omaha gave us some examples of those in their presentation.

The fifth component is to align secondary and postsecondary educational elements. The key here is to have that seamless connection between secondary schools and postsecondary institutions that allow and support students’ easy transition across the sectors so they don't have to duplicate classes or need remedial course work. The examples here would be to ensure that standards, curriculum and instruction and assessments are aligned horizontally and vertically. And if you think about what Omaha talked about: their 9, 10, 11 and 12 is at the secondary level, a seamless connection. And what we're talking about here is adding to that a seamless connection between secondary and postsecondary in order to have a Program of Study.

The sixth component would be credit transfer agreements. This we have found to be one of the biggest challenges, where secondary students have opportunities to be awarded transcripted postsecondary credit. Again, Omaha gave us examples, and I think they said they have 12 to 14 different courses that get transcripted postsecondary credit, and that's terrific. We have to make that work better across our institutions for our students.

The seventh component is around accountability and evaluation. And we really need to have put together the process and outcome measures for the design and development of Programs of Study and strategies to collect appropriate student-level data. We need to put into place a system that tracks program outcomes. And one that we suggested are the 10 essential elements that have been identified through the Data Quality Campaign through OVAE. And if you need more information on that, we can give you the references to that.

The eighth component is guidance counseling and advisement. The critical element here is really career guidance, academic counseling and student advisement, that support students in making informed decisions. Again, as Omaha talked about, students should be able to change and not lose anything. And we think that the other important thing here is it's not only guidance and counseling that you think about at the secondary level, but student advisement which is more of a postsecondary-level strategy. All three of those need to be put together in order to help students move through a Program of Study.

The ninth component is professional development, and this is a set of activities to support program administrators, teachers and faculty, in developing and implementing their Programs of Study. Again, we had examples from Omaha, of the kind of training and professional development that they have been providing for their teachers. This kind of professional development needs to support a line of curriculum from grade to grade, and from secondary to postsecondary. And also to support the
development of academic, the integration of academics and career and technical curriculum.

And then finally, the tenth element that we have is innovative teaching and learning strategies. And, it's really, this is to confirm and affirm the application of new and creative instructional approaches that encourage academic and technical teachers and faculty to collaborate in the design of how content can be integrated and delivered to engage students. Employing some strategies as work-based, project-based and problem-based learning. And again, we have some examples from the Omaha presentation of such strategies. Also, including and incorporating team building, critical thinking, problem solving and the other SCANS [Secretary's Commission on Achieving Necessary Skills] skills that are so important for students to have.

Just briefly, on the benefits of a Program of Study as we've been talking about it. The first is relevance. I won't read these to you. Clearly alignment, alignment of curriculum and assessments, and the non-duplicate coursework for students, and enhanced transitions. Programs of Study we believe will lead from secondary to postsecondary, from postsecondary to employment in high-skill, high-wage, high-demand occupations. And that's really around career preparation and the options and coursework that students need, in order to move forward in their education and career planning. So that's where we've been moving on it with the Office of Vocational and Adult Education. They should be presenting this to the field, either the end of this month or early next month. We'll continue this as a work in progress and thank you very much. And I'll pass it on to Corinne.

**Corinne Alfeld:** Thank you, Ivan. Actually the OVAE representative did present some of this framework at ACTE last week, or the week before Thanksgiving, so that was really exciting that they were presenting it to the field for the first time and getting some feedback from practitioners. I was very fortunate to be involved in the expert panel that Jim mentioned earlier, that happened this summer at OVAE, talking about some of the elements and working on this unpacked framework because of my experience doing some research in the field, and I'm going to tell you about that now.

I'm not going to go into details on the sample and design. I'm just going to go quickly since we are running out of time. But this is mainly a qualitative exploratory study where we're going to several sites around the country and asking questions of teachers and administrators, and also of students about the Programs of Study.

I've been asked to go to my preliminary findings and show you those. We are just seeing some early observations across the sites of things that we think are important in Programs of Study.

We think that construction of the Programs of Study really need to be done by a dedicated staff, at either the college or the district level, and mainly we've seen it at the college level, where the colleges are investing in the staff member or members in an office of high school relations, whose main job is to work with area high schools in developing Programs of Study that start in the high school and follow a progression into the college. And without the dedicated staff it doesn't seem to happen, because if it's not part of someone's other duties as assigned, it just doesn't get done. So, that investment is important.
We've also seen that successful Programs of Study have active advisory committees with representation from high schools, colleges and local businesses, and Omaha Public Schools definitely has spoken about their advisory committee. It's very important to have members from all of those sectors. We have heard a lot about the challenges of dual credit, and how they have been overcome creatively and collaboratively in each community. And there's often a give and take between the high schools and colleges. Everybody needs to sacrifice something when there's dual credit: logistics such as bussing, or who pays for books.

Our next finding was that we believe that dual or concurrent credit really should be transcripted automatically by the college. Because we've seen students who obtain credits in high school and are not able to have them show up on their college transcripts because either they forget that they had it, or they don't apply for it. If it's automatic that helps a lot. And also if it's transferable to more than one college, and ideally to all the colleges in the state, that really is helpful and valuable for students. And I know some states are working towards that.

Omaha Public Schools talked about this as well. High school guidance counselors need more information about Programs of Study to pass on to parents and students. Because unless the counselors are on board, they're not going to be able to pass on that information about the opportunity. Because many of the places that we visited, the counselors weren't really sure what Programs of Study were. It was kind of in the CTE area. It wasn't their concern. So, that's important.

And finally, even though there could be a strong Programs of Study in place that stands on a secondary and postsecondary level that does not necessarily guarantee that students will make that transition. Students do have minds of their own and also change their minds, as Ken also talked about earlier with students doing that exploratory course and finding out that's not what they're interested in. So, that is all for my preliminary findings, and you can contact me if you have any more questions.

Kim Green: I’m sorry I missed the very beginning of this. Hopefully my comments won’t be repetitive of what others have shared. I gather from the earlier speakers, most of what they provided you are really very practical information and specific examples related to Programs of Study. My remarks are going to be a little bit more global. And I’m coming to this as the organization that has been leading the work around career clusters and also serving as a partner with the Technical Assistance Academy around green Programs of Study. So that really influences my perspective of Programs of Study.

And succinctly I would state to me Programs of Study are really central to what the future of CTE and Perkins or what ever other federal legislation is that we have that supports career-technical education.

I think that they provide, and I think it was really illustrated well by the Omaha example, a comprehensive framework to implement efforts and initiatives that we’ve been trying to implement in a piecemeal way for a long time - things like articulation, integration and systems alignment.

So I think that the work that we're doing is difficult but that this new framework, particularly that that was defined by Ivan, and I think Jim earlier mentioned it, those ten components, using that framework really does provide a nice vehicle for us to
move a big step forward in a lot of things that we've been trying to do for a long time.

However, I would say that's my perspective. And I'm not sure that everybody that uses the term "Programs of Study" has the same definition of what it means. A meeting that I'm actually at right now, we were in a room with about 35 different people, and when somebody asked the question of "what is a Program of Study," I can venture to say that there was practically a different definition for every person that was in the room.

So the ten components that Ivan shared, to me, are really important for us to think thoughtfully about and adopt systemically across the nation and within states, as defining a framework for what is a Program of Study. And what the expectations of a Program of Study are and are not.

It's really important for us to make sure that Programs of Study aren't just a way to repackage what we're already doing. That isn't to say we shouldn't honor or build on what we've done in the past, but simply putting courses into those neat charts that people have kind of framed for Programs of Study is not doing a Program of Study.

We really need to make sure that we do the hard work, like Omaha has done. It's about standards realignment, building the right curriculum. And it's not just curriculum for the CTE courses, but the academic and the CTE courses. And creating assessments that are able to measure our work.

So, I think that it's really important as we move forward that we make sure that Programs of Study are adopting this framework. As I travel the country, I have seen in states and localities that have adopted secondary Programs of Study and postsecondary Programs of Study. And as Ivan mentioned, it's really important to underscore that there aren't and shouldn't be separate secondary and postsecondary Programs of Study. The idea is really about maintaining the learner levels and making sure that it is building a system across [inaudible].

So, we were really thinking about not just repackaging what we've already done but building on the past and doing something new. And I think that there's such an incredible opportunity before us in CTE to be able to take advantage of the work that we've done, a lot of the good work that we've done around CTE. People are starting to look to CTE as solutions for more issues. Like building and meeting the workforce pipeline needs, providing relevancy for academic learning, increasing academic achievement, and making sure that students are college- and career-ready.

All of those things, and when you have those conversations, all of those challenges are things that not only CTE can help to solve, or be a solution for, but I think Programs of Study can help us do it in a much more systemic way. What is clear, I think though, is that our interest in and desire for change often outpaces our system's ability to respond. The opportunities that we have before us and some of the tools that have been created and shared with you today, like those 10 core components or some of the models that Omaha has shared, are really tools that we can build on. And we shouldn't have to recreate the wheel.

So I'm hoping that the work that has been shared, and there are a number of other resources available on the Web. We did a series of four Webinars on Programs of Study that outline kind of the four critical components that are in the law in more detail and provided the precursor to the 10 components that Ivan shared that can be
made available at careertech.org. I hope that you’ll use all of those resources because we have such incredible opportunities before us. I think Programs of Study are the pathways for us to really be able to serve more students and take advantage of the good work that CTE has been doing and provide the services to more students in a more systemic way. So I will cut it short there because I know we are out of time. I'm going to turn it back over to the next speaker.

**Kirsten Sundell:** OK. Thank you, Kim. This is Kirsten, I want to share with all of you ... We are pretty much at the 3:00 hour. I know that we announced that the Webinar was going to end at this hour, but we’d very much like to keep it going if at all possible. If you on our panel are available to participate and if our attendees are able to stay with us, we’d like to answer and ask some questions.

What we're going to do is we're going to ask a few now. We had quite a few pour in during the Webcast. So we're going to ask a few. We are also going to answer all of your questions offline, and provide transcripts on our Web site at www.nrccte.org.

And also if you have additional question, you can email them direct to us at nrccte@louisville.edu. And you'll see that e-mail on the screen right now.

So I'm going to start with a question that came in during the Webinar, and links to something that was asked before the Webinar. Say you have a student - this is to Ken and basically the whole panel - say you have a student who goes through a Program of Study, you know, through the whole four-year course sequence, and then doesn't move on to a technical college or university, or moves on to college or university and then doesn't get into the same program area that that student studied in high school. Is that student still evidence of success? Does that make for a successful Program of Study?

**Stacia Weaver:** Hi, my name is Stacia Weaver and I'm going to go ahead and answer that question as far as the health occupations is concerned. One of the things that we offer is the training in Certified Nursing Assistant. And a student who complete the entire Program of Study but yet does not enroll in that in a postsecondary institute, we absolutely consider that a success, because we would rather them take these courses for free, be successful at our school, and understand that healthcare is not for them, than to enroll in a postsecondary school, use their time and their money and their effort to find out in a few years that it's not for them.

And so we consider even those students that complete our courses, they figure out it's not for them, we consider them an absolute success, just as much as we consider the students who go on to nursing school or medical school, or work in the industry.

**Kim Green:** Kirsten, this is Kim. We just actually were having this conversation, thinking about accountability. And in my mind the difference between Tech Prep and Programs of Study which some people, I think, have asked some questions about, is that Tech Prep was pretty linear and said that if you started in the health occupations program at the secondary level, the only success you would have was if you went into health occupations or a health-related field at the postsecondary level. To me what Programs of Study does because the content that is being taught initially is much broader, it's kind of like the secondary portion is kind of like a stem. And then the Programs of Study at the postsecondary level then become like the blossoms, where there is a whole spectrum of things that you can successfully transition into at
the postsecondary level because you've been exposed to different broader content at the secondary level. And all of those transitions are successes.

Ivan Charner: This is Ivan Charner. I would agree with what Kim just said. I mean, I think that the operational definition is pretty clear: while it says that it leads to courses that lead to a postsecondary-level credential, I think the example of the Certified Nursing [Assistant] students who don't go on to the nursing program is the perfect one. That Program of Study would usually have them lead to the nursing program at the postsecondary level, but if they finished in high school, that's OK, because they've decided to move on to a different area, or aren't ready just yet to move into the nursing program, that may be three or four or five years down the road. But it could lead to a postsecondary-level credential.

Kirsten Sundell: OK, I have another question. I hope that Laura Beavers is still with us. Laura, are you there?

Laura Beavers: Yes.

Kirsten Sundell: Hi, Laura. We had a question come in prior to the Webinar about what your curriculum alignment process looked like. Can you describe for us how you and the teachers you work with aligned between your secondary-level courses and postsecondary in your program?

Laura Beavers: What our course offerings are for the construction academy?

Kirsten Sundell: What curriculum alignment looked like for you, what the process looked like for you, you know, coordinating your classes across the construction academy and connecting to the postsecondary level?

Laura Beavers: OK, as far as the construction side of it, we align our curriculum with some construction textbooks and construction calculators, and the mathematics part of it is aligned with a curriculum through the whole Omaha public schools. We have the same standards for the math and the English that they do for the entire Omaha Public Schools for each course. The teachers get together at least three or four times a week, the four teachers in the construction academy, and we align our curriculum, make sure that we are on the same page. As far as, if in the construction classroom they are building roofs, we all try to apply some of our curriculum that week or month to that concept. Does that answer the question?

Jim Stone: Can you say maybe just a little bit more about the process itself? With your community college partners, for example, do you meet with them on a regular basis, when you began to develop this Program of Study did both groups bring their curriculum to the table? Did you lay it out and look where the points of intersection were? One of the questions that we get here at the Center frequently is about process. And I wonder if you could just say a bit more about that.

Laura Beavers: Well, we have an advisory committee that meets three or four times each school year, and we have some of our community college and university people on that committee. So we talk to them a lot at those points. As far as how it all started six years ago, I wasn't here. Or eight years ago, when we all started completely, you know. Do you know?

Ken Spellman: Yeah. There was a need in the industry, as Laura indicated, our advisory board is great, I mean, they're super. They actually kind of started the
process for us. A small group of probably about 10 or 15 approached Omaha Public Schools, and they were concerned, as they indicated earlier, that we were eliminating construction programs at our high schools because of the resources and staff. We just couldn't find folks to do that. And so they were concerned about us eliminating our programs, but it ended up we consolidated our resources, we put all of our efforts into one program at the Career Center. Again, what really makes the Career Center unique, I mean that is one of the few true academy programs we have in this district. English makes sense because it's got the construction twist on it. These kids are in the construction lab doing Algebra 3/4, Geometry 1/2 activities, and kids get it when it's relevant, and that's what really makes it successful.

Kirsten Sundell: Ken, we have a question that came in. I'm sure everyone can see it on the screen now about accountability, and how you capture the industry-based certifications in order to report out for your Perkins requirements. So can you tell us a little about how industry credentials, standards, certificates are integrated into a Programs of Study?

Ken Spellman: Yeah, in Nebraska we don't have mandated reports, so to speak, to the feds and things. We are currently in limbo or transition in that. We do have our academic accountability. Most of the same things that our math and our English kids are taking, and so we really stress to our staff members that if our kids don't do well on the state writing and reading, then it could impact our funding as well. My staff is doing a great job. We'll go out and visit with our teachers on literacy and numeracy and how to incorporate that into their courses. It's just not the core teachers that need to worry about it, it's everybody on the same page.

Our technical accountability standards for Perkins are kind of in limbo right now. We're kind of working towards creating a statewide certification or technical skill test or certification test. We really strive for...the more certified programs we have such as NATEF in our automotive, our CNA, our Cisco, the better, because those are technical skills, industry standards. So we kind of pride ourselves on as many certified programs as we could possibly do.

But as far as the state goes, we're transitioning into a statewide standard or test for CAD, for example. A statewide test for construction. That's in progress right now.

Kirsten Sundell: OK, we've had a couple of questions come in. First, how did you choose where to implement the programs that you've chosen for your high schools, and how did Nebraska end up determining the six clusters out of the 16 total that you've used?

Ken Spellman: For our programs at our high schools and the career specializations at our high schools, we take several things into consideration. We have a pretty awesome Web site that's put out by Nebraska Career Education. It's a Kuder interest survey, and our students will take that assessment. And we will kind of base our courses gauged on their interests. We also look at our student population, and our school location. We have a pretty wide and diverse school district. It's 15 to 20 miles across. So if we have a school located in and around manufacturing or some type of assembly type of plants, we will try to focus a particular career specialization in that area as well.

Another thing is our facilities. We want to make sure that our facilities accommodate the programs, despite career specialization. The only reason we put that space
program, for example, at Burke was because the planetarium wasn't being utilized to its full extent, and that was a perfect fit for us.

We also look at our teacher expertise. The Law and Public Safety program, for example, at Northwest High School. We have a lawyer that was burned out in the law profession that went back to school, and is now teaching social studies. I mean, it was a perfect fit. Let's put a Law and Public Safety program in there. We take a look at a lot of different things.

And then, also, what does Nebraska need for careers and industry? We really keep an eye out on what's new and what's hot, and where jobs are at in our metro and our state.

**Kirsten Sundell:** Ken, we also had a question about guidance counselors. Can you talk a little about the district process, what is done with counselors and how they get involved with the Programs of Study?

**Ken Spellman:** Yeah. They're with us hand in hand. They really are. Because they try to keep up as much as possible in what we're doing. And as far as placing kids in our Programs of Study, we work with our career counselors quite a bit at each of our high schools. We also have a counselor on our advisory board, our superintendent's advisory board, that we keep updated on a constant basis. It actually makes their job easier if they know what's going on.

And as I indicated earlier, those drawing boards, we mass produce those things. Those are the sequence of courses, and the counselors, they love them, especially at the middle school. It's an easy way for them to conduct a career lesson, and give career advice. So counselors are an important part of what we do.

Also, if the counselors are aware of your programs, they have a better handle on who should be in your program and who shouldn't. What students will fit in your programs, and which ones won't, so we're always trying to keep everybody on the same page.

**Jim Stone:** One of the questions that has come in online, I think all of you can see as well as that that came in before, is sort of back to the choice question. The clusters you chose from the list that's possible as well as whether or not schools can decide within your district to go off and create a Program of Study that isn't one of those six. How is that managed within your district?

**Karen Spencer-May:** The career clusters actually encompass all of the 16 career clusters, so most any job that you go to look into, you can find in one of those clusters. And so as far as the individual schools, and where they choose to put their talents or their focus, it really goes back to all those different things that Ken was talking about. You know, what talents do you have at the school, what facilities what accommodate this. You know, the needs, the resources, neighborhoods, what's available there as far as resources. All those kinds of things played into what went into each of those Programs of Study.

**Jim Stone:** Thank you. This is Jim Stone, the director of the National Research Center for Career and Technical Education. I really appreciate the panelists' willingness to hang in and continue after our announced closing time. But we do have to bring this conversation to a close for today. What I would ask is that if you didn't have a chance to have your question asked, we do have others that we didn't
get to, please send them. As Kirsten said, you can send an email to nrccte@louisville.edu. And we'll combine those questions with the other questions that we didn't get to today. We'll post these online with the Webinar.

So again, I want to thank Kim and Ivan, and Corrine, all of our colleagues out there in Omaha with Ken. And I really appreciate the interest, the passion, the excitement, and you sharing from your experience to help others give this some serious considerations to help them noodle through how to make Programs of Study work in their community. So again, thank you and we will be following up with other Webinars and Webcasts on Programs of Study in the coming months.

Transcription by CastingWords