

**From an Education Pipeline to Cycles of Learning:
*Is the Tipping Point for Education in Sight?***

Summary from the "Pipeline Matters Council:

Improving K20 Student Progression,"

July 13, 2009

Gordon Freedman
The Blackboard Institute

To the K-20 Pipeline Matters Council:

The President set an ambitious goal for our country to dramatically increase the number of citizens attaining a post secondary credential. The simple math of achieving this goal requires an unprecedented level of educational success at both the K-12 and post secondary levels especially for the students who we have historically not served well.

Through our core reform agenda we are laying the foundation for achieving our goals; but it is clear that significant innovation will be required to get to the finish line. We must find ways to increase access, personalization and the overall quality of learning experiences in order to allow many more students to be successful. Producing the breakthroughs we need in the timeframe we need them will require many stakeholders to work together - putting our young people first and proprietary interests second.

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Transmittal Note

The K20 Pipeline Matters Council was held on July 13, 2009 in Washington, DC. The purpose of the Council was to bring together various stakeholders across the education segments (K12, Community College, Four-Year Institutions) to examine how progression of students from Pre-K through college graduation could be improved.

Participants included educators, education leaders, state and Federal government employees, association heads and corporate representatives.

Blackboard Inc hosted the event through the Blackboard Institute, an organization within Blackboard dedicated to convening outside groups to work on complex education change issues. As the convener, the Blackboard Institute is playing the role of facilitation and convening. The outcome of the Council work is formed by the Council participating.

This summary is a reflection of that cooperative work by many individuals and with the help of professional facilitation. The work of the Council was intended to continue beyond the initial meetings and others are invited to join these efforts as they develop over the next year.

Gordon Freedman

Vice President Education Strategy
The Blackboard Institute
Blackboard Inc

I. A Council Across the Silos

What we have doesn't work and most education reforms only nibble at the edges of the non-responsive and cumbersome system. While reforming the traditional system, we must provide an alternative—one that is flexible, easy to access and use, immediate in response, and free-flowing, allowing the student to build on and explore learning in a compelling format where individuals are eager to learn. President Bill Flores, University of Houston - Downtown

According to *The Tipping Point* author Malcolm Gladwell, tipping points arrive unexpectedly. Yet, education seems impervious to any change, unexpected or planned. There is a glum sense that even the billions in the Stimulus might just lock in what already exists. To test the no-change hypothesis, education technology company Blackboard Inc., through its newly-formed Blackboard Institute, convened a national Council on the question of K20 progression: *How can we get greater numbers of students from kindergarten through college?*

The assembled Council included an unprecedented mix of K12, community college, and four-year institution leaders, government and legislative advisors and association heads. After an intense day of guided interaction with over 50 representatives from all over the U.S., the optimism in the room suggested that not all is cement in the world of education. Real change could be on the national horizon.

While the Council worked on both near-term and long-lead issues, larger-scale change questions took center stage early in the day and with considerable resolve. The larger system-changers concentrated on moving toward individualized instruction, serving students first instead of the adults in the bureaucracy, using assessment to allow more learning options -- and flexibility in what learning content, what place, and what amount of time constitute the learning experience. According to Bill Flores, who has worked in many different roles in the K20 spectrum, "We must keep in mind our desire to free learning from structured teaching with rigid curricula and policies that benefit the institutions, rather than the learner."

On the near-term issues, the group arrived at three areas for more immediate work: 1) dual enrollment (high school-college and community college-four-year institution) should be a universal option in every state, online and in the classroom, 2) the model for K20 education progression has to go from a linear pipeline to a larger cycle of lifelong learning with many on and off ramps and multiple paths, and 3) the gravity of the education change obstacles (cost, inefficiency, and inflexible design) need to be part of a national drive for awareness and action on par with energy, health care, and the environment.

1) Dual Enrollment

Dual enrollment is clearly a cross-over issue that state leadership in many states is pushing to the forefront in order to establish uniformity and universality in policy. The Council highlighted online and blended learning solutions for dual enrollment between high school and college, as well as between community colleges and four-year institutions, as a necessary step toward improved student progression across K20.

Community colleges sit in the middle of this discussion, as the workhorses between school and completing college. "If online were emphasized as a dual enrollment option (compared for example to

the dual options for high school students who would have to drive to physical college campus), then dual enrollment could build bridges at the weak transitional links between K12 and higher education,” offered education researcher and professor Patrick Dickson of Michigan State University.

2) A Better Model

The Council started out with a handsome PR agency-generated graphic of the K20 pipeline, a linear progression of the education segments interspersed with the transitions between them. The pipeline had exit indicators showing where large numbers of dropouts occurred – on average, classes dwindling from 100 9th graders to roughly 17 to 26 college graduates. In the course of the Council, participants aggressively morphed the straight pipeline with its leaks into a cycle, with many on and off ramps and loops where students might exit, get the required learning and credit elsewhere and then continue their progression. Dominic Brewer, assistant dean and economist at University of Southern California’s Rossier School of Education concluded, “the Council can be a critical vehicle in moving the discussion to both a student-centered approach and one that looks forward to establishing a completely different pipeline model rather than patching up the old one.”

3) Public and Governmental Awareness

“The most important work that I try to do is present the challenges facing New Mexico in easy to understand ways,” said Peter Winograd, Governor Bill Richardson’s education advisor. The historic confusion between all the different pieces of the education puzzle is often enough to stop the most ardent reformer. “I think the next step is to come up with a vision of what we see learning to be in the future. We need to create a totally new picture and then take that picture and develop a campaign to educate the public. Teacher development, dual enrollment, portfolios, early childhood, etc. are all pieces of the new vision,” said Allison Powell, vice president of iNACOL, the leading international association for K12 online learning.

II. **The Big Picture**

We must move beyond the industrial revolution "factory model" of education towards a student-centered, agile, 21st century model that will provide greater individualization of student learning and progression from K20. Kemi Jona, Director, Office of STEM Partnerships, Northwestern University

Is the situation finally bad enough to prompt action, or temp a tipping point? Michigan’s Superintendent of Public Instruction Mike Flanagan put it bluntly to the Council. “The bottom line is in a state like Michigan, we’re going down if we can’t change the system and get larger numbers of kids to high levels of proficiency. That’s our only salvation.” But what can break up the traditional model of 180 days of seat time, short class periods and grade progression? It’s clear in President Bill Flores mind, “We must move from the learner as prisoner (in a system that not only locks in the student, but also the teacher in a rigid system) to the learner as explorer, where students move easily and freely to areas of learning that stimulate their creativity, allowing them to explore new worlds.”

Echoing these sentiments on a local level, Mary Bull, superintendent of the Vallejo Unified School District, a lower performing district in Northern California, put it this way. “Since the system will not significantly change itself from the inside, it seems different models such as early college high schools; dual credit; and a parallel public education system that is virtually based might attract significant

numbers of students away from the typical public school, thus forcing the system from the outside to make significant changes.”

Michigan’s Flanagan agrees, “We’re going to have to move beyond our current boundaries, beyond this turf war of our current educational system.”

The system we have cannot produce the number of college graduates to supply the economy with enough high earners and creative innovators to generate more jobs and create new industries necessary to move our economy forward. Compounding this shortage of graduates, once the Stimulus dollars run out, we will most likely not be able to afford the cost of education as it is constructed today and at the inefficiency rate that currently exists.

This is true for K12 and for higher education. Ferris State University in Michigan is a progressive institution that is surviving the downturn in that state, which is the hardest hit in terms of job and revenue losses. “My initial thought is that we need to influence public policy at the state and district levels, not only for the purpose of gaining greater investments for education, but also for demanding more accountability for results. Incentives and consequences must all be used to assure that investments made in education result in positive outcomes for learners,” said Roberta Teahen, Ferris State’s vice president for academic affairs.

Community colleges occupy a unique position in our national education dialogue: Often the stepchild in large-scale reform discussions, community colleges are more like the anchors of both the education system and life-long learning and training. “Almost half of all undergraduate enrollments in higher education in the country are in one of our community colleges. So the colleges are a major factor and player in the United States, particularly in economic recovery and sustainability,” says Michael McCall, the President of the Kentucky Community and Technical College System, KCTCS. Pointing to his own state, McCall adds, “As of 2008, our 10-year anniversary, KCTCS has transformed the lives of more than 500,000 Kentuckians, bolstering the economy of our entire state.”

III. Where does Big Change Meet Practical Action?

The K20 Council has helped me to shape my focus on the critical need for the education system to shift its focus from the institution to the individual. Pete Cevenini, Cisco

On top of the agenda for big change, both in the Council and beyond, is individualizing education. How this becomes a reality, however, is a matter of great debate. Efforts around online learning, tutoring, more personalized charter schools and transferring some of the burden to parents or after-school programs are underway, but much remains to be done on this front

Peter Cevenini is Cisco’s K20 Lead within their Internet Business Solutions Group. “School reform has used as its basis, the institution as the focal point for improvements and evaluation.” Cevenini, a former high school principal said. “In our new modern world however, the “individual” reigns supreme with countless ways to customize his or her life. Learners should be able to customize their education according to learning styles, interests, needs, strengths and demographics.

Top performing schools are making great headway on individualizing education with the use of real-time data to change and modify education in the classroom for specific students or groups of students. There is little question that Bill Erlendson, assistant superintendent at San José Unified School District, wants

big change but believes he has to establish credibility one real-time data set after another and one teacher and one student at a time. “We have taken the discussion beyond academic data. We are doing this in our district in partnership with United Way and others to look at other indicators besides academic, including behavior and climate. We call it the A-B-C. So we can move from a process of intervention to prevention. If you know the past and you know the present, you can predict the future. And you can know which students are going to need what interventions prior to them needing those interventions.” The degree of commitment makes a difference. “So we’re adamant that a data warehouse can be more than just academic, but everybody needs to be on that same page,” says Erlendson.

New Mexico, from the Governor down, continues to enact bold steps toward education change. New Mexico, like Michigan has an online learning high school graduation requirement, a strong emphasis on K20 policy, planning and practice, and is very focused on data across the segments. Also, like Michigan and a number of other states, New Mexico provides online learning courses to fit into the big change agenda of the state by better distributing learning opportunities.

“New Mexico has created a unique PK-20+ approach to eLearning and eTraining which includes deployment of learning management and Web conferencing technologies that are being adopted statewide by K12, higher education, and state agencies. The unique approach is a positive disruption to the status quo, by providing more equitable distribution of highly qualified educators, dual credit opportunities, and digital resources, says Brian Ormand, director of the New Mexico Learning Network Program. “

No discussion of the “pipeline” or the “cycle of learning” is complete without raising the question of teacher preparation. It is a strategic weak point in the whole K20 system, and it is a point where significant change can occur. For San José Unified, which operates its real-time data warehouse with clarity and purpose, getting the right teachers is a challenge. “When you’re in our position and moving very quickly ahead in the use of data and how it can inform instruction, the universities are not giving us the teachers that know what we know. So we have to reinstruct our own teachers to teach them how to use data,” said Erlendson.

IV. Where Does Technology Fit into the Picture?

My interest in technology in the classroom is driven by a vision of a Twenty-First Century learning environment in which each teacher is well equipped to direct students' learning using the tools of today. The learner, with the world literally at his or her fingertips, can then own their learning. Mary Bull, Superintendent, Vallejo Unified School District

For education leaders realistic about education change, technology is not an either-or question. Educators working hard to modernize systems are committed to building learning cultures, fostering independent and group learning, communicating with students, between students, and with parents, and having active any-time, any-where teacher development. It is implicit in these activities that technology will play a larger role, but not for its own sake. However, bringing schools and the full cohort of higher education instructors into 21st century models of communication, interactions, and computing common to business and young people is no small task.

Mary Bull (Vallejo Unified) finds as a superintendent that technology is always on the sidelines. “Anyone who has spent much time in American high schools will tell you that the “sit and get” model is still the

dominant vehicle for imparting educational content (and the same holds true for colleges). Often, there is but one computer in a classroom, and it is for the teacher's use, mostly used for taking role or other administrative functions. In this setting, the students are far more proficient than their teachers in the use of current technology. .”

Where should technology discussion go and how should we think about it if technology becomes less of an item by itself and more part of the learning environment? Themy Sparangis, chief technology director for educational technology for the Los Angeles Unified School District, makes this distinction as he and the massive LA district consider technology solutions in education settings. “Today’s youth do not view cell phone texting, social networking, posting short media clips on sites such as YouTube, Facebook and MySpace, as high tech. To them, it is a way of life. We need to leverage this online culture in our educational environments to engage students as well as provide a relevant learning environment.”

Patrick Dickson (Michigan State University) points out that from his research and that of others “Online learning environments are potentially scalable while improving learning outcomes; traditional face-to-face instruction is not.” Dominic Brewer (USC) sees technology as a starting point. “Build off of technology and provide future visioning as to what is possible; don’t focus on barriers and constraints in existing structure but on demonstrating potential of new innovation,” Brewer says.

When the state steps into the picture to provide services via technology, it can begin a process where technology becomes an integral part of the education landscape. In New Mexico, IDEAL, the state virtual resource has not only brought courses and resources to teachers and students; it forced different state organizations to work together, resulting in a valuable outcome. According to Brian Ormand, an IDEAL board member, “The different sectors are collaborating in new ways for sharing content, platforms, and expertise. The key is deploying quality eLearning solutions in partnership with local education entities in communities including public schools, public charters, colleges, universities, etc. As a result, Innovative Digital Education and Learning in New Mexico (IDEAL-NM) has received strong support from the various stakeholders.”

V. At the End of the Day, What’s Important for the K20 System

“Individuals and communities need to be given and take responsibility for their educational destiny, and governments need to modernize the business model to support the new vision: Citizens engaged in relevant, realistic and applied education innovation to compete economically and culturally using their communities’ talents and assets.” Jami Grindatto, INTEL / Innovate-Education New Mexico Board Chair

Throughout the Council, Jonathan Ortman and Mark Marich from the Public Forum Institute acted as facilitator and polling specialist respectively. Their polling of the group was quite telling. On the question of “what is the ideal educational system” or what is most important to pay attention to in combining both the big picture and immediate attention, the top ten returns were:

Characteristics of an Ideal Education System (Source, Polling at K20 Council Meeting)
N = [40-44]

- | | |
|---|-----|
| 1. Modular competency based instruction at all levels of education | 8.7 |
| 2. System that supports multiple exit and entry paths | 8.6 |
| 3. Student flexibility/choice in learning (designed for how students learn) | 8.3 |

4. <i>Removal of barriers and access to learners</i>	8.3
5. <i>More effective teachers through revamping teachers' colleges</i>	7.9
6. <i>Individual student records (through student lifetime plus tracking data)</i>	7.8
7. <i>Keeping pace with technology students use (don't require schools to own it)</i>	7.8
8. <i>National standards (common and shared)</i>	7.7
9. <i>Realignment of incentive systems for institutions and administrators</i>	7.7
10. <i>New ways to finance educational system (no longer through property taxes)</i>	7.6

VI. At the End of the Day, What's Important within the Education Segment Silos

In contrast to the system change list above, which is a valuable set of guidance of what is important to future systems from a combined group of K12, community college, four-year institution representatives, the three lists below were generated by separate segment breakout groups. The K12, community college, and four-year institution representatives broke into groups and were given time to generate a list of what was most important to their respective segment. These were not ranked by importance as was the previous list.

Name Immediate, Feasible, High-Impact Solutions (Source, Report Out from Segment Groups)

K12

- Launch a public campaign on the value of education.
- Create a workable popular portal for sharing high-end successes that includes student and community commentary.
- Use technology to boost student engagement starting with building national federally funded online schools with first possible uses for credit recovery and schools undergoing reconstitution.
- Create a mechanism for K12 to communicate to higher education what the needs are for teachers and administrators coming into K12.
- Create a legislative committee out of this group to advocate for changes at state and federal levels to push for uniformity of education standards.
- Boost teacher quality by pushing limits on teacher evaluation, including in-depth teacher evaluations and intensive counseling for teachers unlikely to demonstrate success in engaging students.

Community colleges

- Create virtual shared resources and digital content as learning tools with the goal of achieving economies of scale while maintaining a local touch.
- Create policies to make articulation work so that community college students can earn an entirely transferrable credit if they wish.
- Community college job training should be aligned with local industries but should also lead local communities to prepare for economic shifts.
- Make dual enrollment programs at community colleges with high school focus more on skills they will need so they don't need remedial education.
- Offer testing and counseling early in high school to prepare students for career directions including programs at community colleges and other institutions.

Four-year colleges

- Develop early warning systems (capturing data) for students who are at risk.
- Create national online dual enrollment courses to allow high school students to prove they can do cognitive work and build better relationships with community colleges and four-year colleges.
- Intensify the focus on the dropout problem by recognizing faculty who change the dropout rate through intelligent course design and curriculum development.
- Design a prize with funding from various organizations to honor those who achieve the goals of repairing the leaky education pipeline.
- Use legislative activism to offer education institutions incentives to improve retention rates.
- Improve higher education teaching by drawing on the National Board model used to improve K12 teaching.

VII. Bending Tradition into Transformation, a Graphic View

Maps and an understanding of the terrain are crucial to winning military battles. In that very same way, a deep understanding of the terrain is crucial if we are to win the battle to educate our children. Once I am able to communicate the problem, then we can think more wisely about gathering data, identifying laws and regulations, targeting budgets and using the other policy levers to make a difference. Peter Winograd, Education Advisor, Office of Governor Richardson, New Mexico

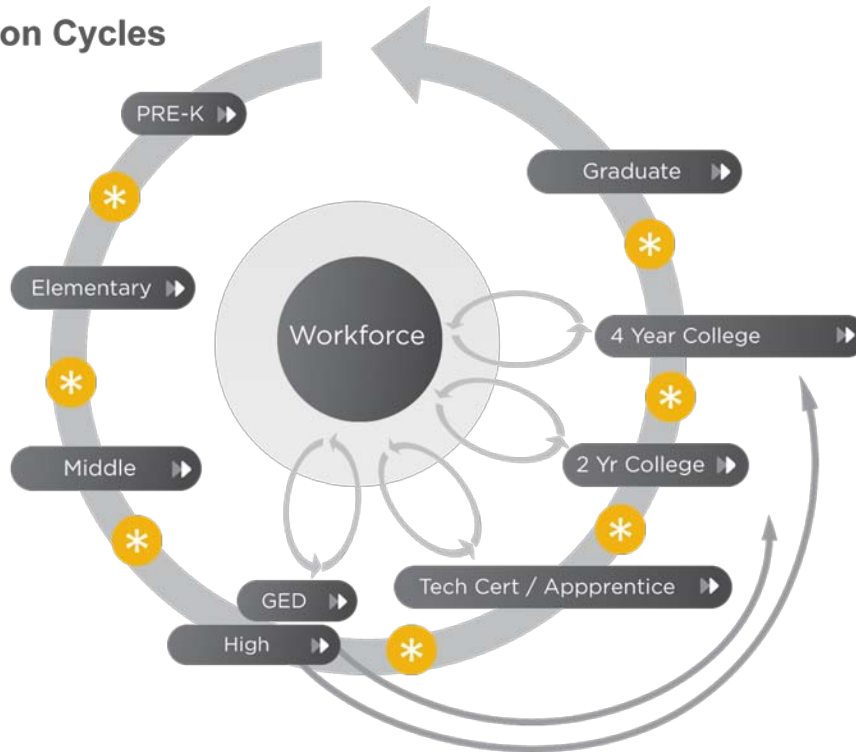
Perhaps the most impressive event of the day was the graphical re-arrangement of the K20 pipeline graphic that had been carefully prepared by the Pappas Group of McClean, VA. Pappas Account Manager Becky Shapiro and Graphic Designer Mina Choi were on site at the Council prepared to alter the pipeline graphic that was part of the discussion starter for the day.

The day started with the introduction of the first graphic (figure 1) and a tool kit for adding trouble spots on the pipeline or highlight areas of less concern. The drama began when the notion of a pipeline was challenged by many Council attendees; the question quickly became one of dealing with an outdated metaphor for education today.

“A pipeline is an industrial revolution metaphor for our current educational model. Our children are being pushed through a linear pathway while our society is rapidly moving toward more complex, self-organizing concepts that if we adopted them could enable individualized approaches to education,” said Jami Grindatto, the board chair of Innovate-Educate NM and director of corporate affairs for INTEL. “Our children should not be able to exit the education “grid” throughout their careers. Instead, they should be able to navigate in seas of engaging educational options where they can continually adapt their knowledge and skills to the unprecedented rate of change in science and technology.”

As the diagrams below indicate, the linear pipeline with single exits, or leaks, gave way to a grand cycle of education and learning that ultimately has many built in on and off ramps enabling a student to continue their educational trajectory through multiple options. The graphic designers added loops to

Education Cycles



VIII. The Pipeline Matters Council as a Prelude to Re-Definition and Action

“We need to fix the system we have today, while we design the system we need for tomorrow.”

The quote above from one of the Council participants summed up the dilemma of immediate action and well-planned future development. Throughout the day-long Council, the sense emerged that there needs to be a parallel track to (a) deal with the big questions of re-design and at the same time (b) the persistent problems that need immediate action can be dealt with now. This combined challenge confronts all of education and is necessary to help solve the progression issue in general.

Moving to Action: The Council focused the most passion and resolve on the three K20 issues mentioned previously. They range from the concrete to the more abstract.

1. Dual Enrollment (*a workable issue that needs immediate action across all states*)
2. Model Re-Design (*the development of a new education context into which changes must fit*)
3. Public Awareness (*the tying together of immediate action with large scale re-design efforts*)

Roughly half of the Council members expressed a desire to continue the work of the Council in further group meetings or in serving on committees to manage further work on one or more of the three issues above.

In furtherance of the resolve of the Council to work on these three issues, groups are going to be formed including both Council members and others who did not attend the Council to be part of these activities.

Since the Council could only accommodate a certain number of representatives from the K-20 spectrum, the widening out of those involved in these three areas is part of the Council activity.

It should be noted, that the Council was convened by Blackboard through the Blackboard Institute, but the work product of the Council will be independent, developed by the group to help advise and provide guidance to policy makers, practitioners, and to programs.

Shared Assumptions: There was a set of discussions throughout the day that highlighted shared assumptions or principles this group believes are necessary aspects of education change. While the list below was not developed solely by consensus or polling, the following six points of general agreement are to be found throughout the proceedings of the Council and in some of the polling questions.

1. Individualizing Education
2. Better Teacher Preparation
3. National Standards
4. Necessity of Early Education
5. Performance Measurement
6. Cooperation Between the Segments

What was clear was that the movement toward incorporating these six elements into a coherent education strategy and toward a new system was on the minds of most of the Council attendees.

These items and many more often approached as individual areas for reform or are part of independent projects. However, the consensus suggests that these elements need to come together in a more coherent model in the future that is consistent across states and with Federal policy and funding.

IX. Next Steps & Contacts

The next steps are as follows, based on Council input:

1. Working groups formed (dual enrollment, model construction, public-government awareness)
2. Adding members who did not attend this Council to the working groups
3. Circulating this report to local, regional, state, and Federal and other stakeholders for feedback.
4. Polling the expanded group to determine future meetings (virtual or in-person)
5. Reporting out on the working groups and establishing the next actions from the groups
6. Being open to suggestions on future work or processes
7. Initial coordination of the activities above by the Blackboard Institute and Council attendees
8. Development of web-based resource center

Contacts:

Please feel free contact us with questions, suggestions, contributions, corrections or addendums to this report. Also, since the Council included state delegations from New Mexico and Michigan, we have included the coordinators for those states who are working as part of the Council.

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X. Acknowledgements & Summary Statements

In assembling a unique group across the education segments, from associations and from government, such an event requires special help from a number of people and organizations.

- Thank you to the individuals who traveled to Washington D.C. for this event.
- Thank you to Blackboard for hosting the event and agreeing to act as a convener in a format new for the company
- Thank you to Scott Jaschik, Editor of *Inside Higher Education* (www.insidehighered.com) for his commentary and comments during the Council.
- Thank you to Richard Whitmore, former (garen fill in)
- Thank you to Jonathan Ortman and Mark Marich of the Public Forum Institute (www.publicforuminstitute.org) for their superb facilitation and on-site polling.
- Thank you to Becky Shapiro and Mina Choi from the Pappas Group.
- Michael Stanton, Jessie Woolley-Wilson
- Advisory Group: Linda Pittenger, Peter Winograd, Roberta Teahen, Harry McLenighan, Bill Flores, Louis Fox, Tracy Gray, Jamey Fitzpatrick

SUMMARY STATEMENTS

Susan Aldridge, President, University of Maryland University College (UMUC)

The Council provided a forum for the discussion of critical challenges in American education. One out of three public high school students fail to graduate from high school. As a President of one of the largest universities in the US, we must be concerned about the crisis in the high schools, the lack of alignment between high school and college curriculum and the support systems necessary to ensure that first generation college students achieve degree completion. The economic impact of correcting these issues will exponentially improve the GDP in America. The Council represents a diverse spectrum of academic leaders who intend to positively impact the crisis in American education.

Linda Pittenger, Consultant, Council of Chief State School Officers (CCSSO)

The new expectation for young people in this country is that each and every one graduate from high school prepared and ready to move on to higher levels of education and training. This is a huge and unprecedented challenge – not only for education but for our government and our communities - because that notion is in conflict with the system of education and the fragmented support structures that we have in place today. If we listen to the voices of students, we hear an urgent call for opportunities to learn that are neither time- nor place-dependent, that are less linear, that offer more options and more diverse options, and that are highly personalized and relevant. K12, higher education, and workforce – public and private – will need to come together if we are going to achieve a true K20 system that all students can access, can navigate, and can afford. The Pipeline Council is valuable because it challenges us to break out of what we've always done, and think about what we can do if we are willing to think and act together.

Appendix 1: The Blackboard Institute / Blackboard Inc.

As a member of the greater education community, the Blackboard Institute's mission is to help build both vision and consensus on common approaches for addressing persistent education issues and to tie those approaches to the education practice needed to create meaningful change. We aim to do this by leveraging the unique vantage point on education practice we established over a decade and collaborating with other education practice influencers to create actionable guidance and tools that education leaders can use to address the persistent problems with innovative solutions. As a newly-formed organization within the Blackboard organization, the Institute will work with associations, institutes, higher education and K12 institutions, and government agencies on a focused set of long-term problem areas in education. The initial areas of focus for the Institute are:

- I. Fully Online Programs Effective Practices
- II. K20 “Pipeline” Problems and Issues
- III. The Dynamics of Student Persistence

In each of these categories, the Institute will convene working groups from across the spectrum of education practice, policy, and education technology, will collect and disseminate key information in these categories, and will develop and distribute reports, media, and move toward recommendations generated by the working groups. For more information on the Blackboard Institute’s work and goals, please contact Gordon Freedman, Vice President Education Strategy or Garen Singer, Manager Education Industry Programs at Gordon.Freedman@Blackboard.com, Garen.Singer@Blackboard.com and (202) 463-4860 x 2591. Also see www.blackboard.com/research

About Blackboard

Blackboard Inc. (Nasdaq: BBBB) is a global leader in enterprise technology and innovative solutions that improve the experience of millions of students and learners around the world every day. Blackboard's solutions allow thousands of higher education, K12K12, professional, corporate, and government organizations to extend teaching and learning online, facilitate campus commerce and security, and communicate more effectively with their communities. Founded in 1997, Blackboard is headquartered in Washington, D.C., with offices in North America, Europe, Asia and Australia. www.blackboard.com

About the Author

Gordon Freedman, Vice President Education Strategy, Blackboard Inc.

Gordon Freedman is committed to education change at all levels to better fit the needs of today’s society and today’s populations. Freedman is Vice President of Education Strategy, Blackboard Inc. and also serves as advisor or board member on a number of U.S.-based non-profit education organizations. Freedman’s global work for Blackboard focuses on education change and innovation primarily in higher education and government policy. Freedman’s work in the U.S. is focused primarily on K12K12 re-invention and K20 planning, concentrating on New Mexico, California and Michigan. Freedman has authored a number of white papers for Blackboard including *“Unlocking the Global Education Imperative: Core Challenges & Critical Responses”* (2008).

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Appendix II: The Pipeline Matters Council Attendee Bios
Susan Aldridge, President, University of Maryland University College

Dr. Susan C. Aldridge is a highly accomplished leader in adult and distance education and president of the University of Maryland University College (UMUC). As its chief executive, Dr. Aldridge oversees the largest state university in the United States, with divisions in Maryland, Europe and Asia; the world's fastest-growing virtual campus; and more than 90,000 students in 25 countries.

A passionate educator and seasoned administrator with a distinguished career spanning more than two decades, Dr. Aldridge is deeply committed to creating high-quality academic programs and world-class services for adult students, including military service members and their families. In just three short years at UMUC, Dr. Aldridge has focused her extraordinary vision and energy on expanding the

university's global outreach and presence; increasing its enrollments; strengthening its infrastructure; and streamlining its massive business operation.

Before joining UMUC, she served as vice chancellor for Troy University's University College and eCampus in Alabama, directing operations in 17 states and 14 countries, and providing programs and services across 13 time zones.

In addition to receiving numerous awards and honors throughout her career, Dr. Aldridge has taken a leading role on higher education panels and academic conferences across the country and around the world—including the Fulbright Scholars Program in Egypt and a U.S. Department of Education-sponsored trip to promote U.S. education in South America. Dr. Aldridge has also served as chair and co-chair of the U.S.-China Forum on Distance Education, as well as co-chair of the U.S. Department of Defense Task Force on Distance Learning Standards. She is also one of 11 university presidents appointed to a commission sponsored by the American Association of State Colleges and Universities, tasked with studying how the United States can improve its system for higher education.

Dr. Aldridge is a member of the NASULGC-Sloan National Commission on Online Learning, the Maryland Pre-K to 20 Leadership Council and the Service members Opportunity Colleges (SOC) Board. In 2008, she was appointed by the U.S. Secretary of Defense to the Air University Board of Visitors. In 2009, she joined the Microsoft Advisory Council on Education Products. Dr. Aldridge received her doctorate and master's degree from the University of Colorado, and her bachelor's degree from Colorado Women's College.

Susan J. Bodilly, Director, RAND Education, Senior Social Scientist

Susan Bodilly, Ph.D. in Public Policy, has worked at RAND for more than 29 years. Her primary research interests and expertise lie in: K12K12 school reform; resource allocation and its impact on reforms; formative evaluation; and implementation analysis. She has evaluated an array of K12 improvement initiatives such as: the General Electric College Bound program; attempts by high schools to integrate academic and vocational education; attempts by the federal government to return Section Six schools on military bases to local control; and attempts by schools to implement Perkins legislation as evaluated under the National Assessment of Vocational Education. She played a leading role in the RAND evaluation of the New American Schools Initiative. She has managed review panels for the National Board for Professional Teaching Standards. She co-edited a book on scale up issues in education and published an extensive literature review on the use of out-of-school-time. Her latest report analytically describes collaborative systems intended to support high quality arts education experiences in six different cities. She is now leading an evaluation of the Ford Foundation's Collaborating for Educational Reform Initiative and an examination of five cities' attempts to improve out-of-school-time programming. She has held management positions at RAND for the past ten years, and is currently the Director of RAND Education.

Dominic Brewer, Associate Dean for Research and Faculty Affairs; Clifford H. and Betty C. Allen Professor in Urban Leadership; Professor of Education, Economics and Policy, University of Southern California, Rossier School of Education

Dr. Brewer is a labor economist specializing in the economics of education and education policy. Before joining USC in 2005, he was a Vice President at RAND Corp., directing RAND's education policy research program for more than five years. Dr. Brewer has overseen major projects focusing on educational

productivity and teacher issues in both K12 and higher education, and published more than 50 academic economics and education journal articles, book chapters and monographs.

His publications include a book on competition in higher education, *In Pursuit of Prestige*, and multiple articles in *Educational Evaluation and Policy Analysis*, *Journal of Human Resources*, *Journal of Labor Economics*, *Journal of Policy Analysis and Management*, and others. His work on class size includes a review of the research literature published in *Scientific American* and a report for the U.S. Congress on the costs of class size reduction under different policy designs.

He co-led the state-sponsored evaluation of California's charter schools (*Charter School Operations and Performance: Evidence from California*, 2003), and is one of the authors of *Rhetoric Versus Reality: What We Know and What We Need to Know About Vouchers and Charter Schools* (2001). Dr. Brewer most recently spearheaded RAND's effort to assist in major K12 reform in the State of Qatar, the centerpiece of which is a system of charter-like government funded schools; a book detailing this effort, *Education for a New Era*, was published in 2007.

Dr. Brewer is currently a co-editor of the economics section of the *International Encyclopedia of Education*.

Dr. Brewer holds a B.A. in Philosophy Politics, and Economics from Oxford, a Masters in Economics from Wisconsin and a Ph.D. in Labor Economics from Cornell. He has been an adjunct Professor of Economics at UCLA and a Professor of Policy at the RAND Graduate School. He was an associate editor of *Economics of Education Review* and is a frequent reviewer for IES, NCES, NSF and foundations. He has served in a number of service appointments in AERA including Division L Program Chair (2007). He holds courtesy appointments in the School of Policy Planning and Development, and in the USC College Department of Economics.

Mary M. Bull, Superintendent, Vallejo City Unified School District

Dr. Mary Bull's resume spans 38 years as an educator in both small and large urban and suburban districts including Austin Independent School District (ISD), Eanes ISD, and Birdville ISD in Texas, Lower Merion School District in Pennsylvania, and Carmel Unified School District (USD) and Vallejo USD in California. She has served as a teacher, campus administrator, director, assistant superintendent, and superintendent, supervising all aspects of district functioning including: Human Resources, Curriculum and Instruction, K12 Vertical Teams, Support Operations, Grant Development, Accountability and Research, and implementation of the Malcolm Baldrige Model for Performance Excellence.

Dr. Bull earned her bachelor's, master's and doctorate degree from the University of Texas at Austin and was selected as a graduate fellow in the Cooperative Superintendency Program at UT Austin. She served as an Assistant Professor and as Executive Director for the National Center for School Improvement at Texas State University in San Marcos.

Dr. Bull is currently the Superintendent of Vallejo City Unified School District, a highly diverse and economically challenged K12 district in Vallejo, California.

Peter Cevenini, K12 Education Lead, Cisco Internet Business Solutions Group (IBSG)

Peter Cevenini is the K12 Education lead for the Cisco Internet Business Solutions Group (IBSG) in North America. IBSG consults with many of the world's leading companies and governments to help them become more effective through changed business processes and intelligent technology deployment.

Before joining Cisco, Peter spent seventeen years as a public educator, serving in various roles including curriculum specialist, local director and high school principal where he served nine years. Peter designed, built and opened North Point High School, one of Cisco's premier 21st century schools, which has received state, national and international recognition. Peter also teaches graduate-level statistics part-time at The George Washington University in the Graduate School of Education and Human Development.

Cevenini brings a wealth of experience and knowledge of education to his practice, including detailed knowledge of curriculum and instruction, educational technology, special education, career and technology education and administration.

Cevenini holds a bachelor's degree in Psychology from the University of Maryland and a master's degree in Education from The George Washington University, where he is currently working on his dissertation

Terry Crane, Consultant, e-Luminate Group

Dr. Therese "Terry" Crane is an educational consultant who works with companies and institutions that are seeking to move into the 21st century with real solutions for challenging issues. She serves as the senior education advisor to the e-Luminate Group educational technology consulting practice. She applies her understanding of technology to solve educational problems, improve student achievement and foster teacher development.

With more than 30 years of experience as an educator, business executive and technology expert, Dr. Crane is widely recognized as one of the nation's most innovative leaders in educational technology. In 1999, eSchool News selected Dr. Crane as one of the "Impact 30"—the top influencers of educational technology for the decade.

Dr. Crane was the former vice president for education and family products at AOL. She was responsible for the education strategy and initiatives, including AOL@SCHOOL, the Research and Learn and Parenting categories serving 34 million homes and schools worldwide. She served as the AOL education advisor from 2003 to 2007.

Dr. Crane previously served as president of Compass Learning, formerly Jostens Learning Corporation, where she oversaw the management of the company's core K12 software business and served as the key liaison to the education community. In the 1990's, Dr. Crane led Apple Computer's highly successful, multi-billion dollar North American Education Division. In 1996, as Apple's senior vice president of worldwide strategic marketing, she developed long-term strategies for the consumer, education, publishing and scientific/technical markets.

Dr. Crane was co-chairman of the national CEO Forum for Education and Technology. The forum published a yearly report on the state of technology in U.S. schools from 1997–2002. As the 2003 chairman of the Partnership for 21st Century Skills, Dr. Crane led corporations and educators to set a vision for the 21st century learning environment.

Dr. Crane serves on the boards of Questia Media, Inc., Tutor.com, the Western Governor's University, Camden Learning Corporation and is the chairman of Nobel Learning Communities Inc. She serves on the National Education Association Foundation Board and co-chairs the Development Board for The University of North Texas School of Education. She was a seven-year trustee and chairman of the National School Boards Foundation and a former board member of TestU and AlphaSmart. An active participant in the education industry, Dr. Crane has been on the advisory boards for EdNet, the Software and Information Industry Association Board and the Education Industry Investment Forum Board.

A native of Texas, Dr. Crane has a doctorate in educational leadership and a master's degree in early childhood education from the University of North Texas. She earned her bachelor's degree in elementary education from the University of Texas at Austin. Dr. Crane began her career in the classroom, serving the Richardson Independent School District in Texas first as an elementary school teacher and then an intermediate principal. Intrigued by the possibilities personal computers held for her gifted and talented students, Dr. Crane designed and implemented the district's first technology plan in 1983.

Patrick Dickson, Professor, Educational Psychology & Educational Technology, Michigan State University

W. Patrick Dickson is a professor in the Ph.D. program in Educational Psychology and Educational Technology in the College of Education at Michigan State University. He teaches the capstone seminars for two online masters programs in which students design and publish comprehensive eportfolios presenting their work. He also teaches a doctoral seminar focusing on how technology is transforming higher education.

His research interests include the influence of early environments on intellectual development, visualization of quantitative data, online learning during out-of-school time, and research on the use of real-time data to improve teaching and learning in online environments.

He believes the growth of online learning across the lifespan is accelerating and irreversible and that the greatest untapped potential for enhancing education through online learning is after school, nights, weekends, and summers.

Dickson received his B.S. in chemistry from Georgia Institute of Technology. After serving four years as an officer in the U.S. Marine Corps, he earned M.A. in science education from Teachers College, Columbia University. He taught chemistry, physics, and mathematics in the Atlanta Public Schools and then earned his PhD from the School of Education at Stanford University. He spent one year as visiting scholar at the University of Tokyo. He was on the faculty at the University of Wisconsin-Madison for eleven years before moving to Michigan State University.

Bill Erlendson, Assistant Superintendent for Program Accountability and Community Development, San José Unified School District

Building on twenty-five years of teaching and administrative experience in public school and post secondary education, Dr. Erlendson serves as Assistant Superintendent for Program Accountability and Community Development for the San Jose Unified School District. As Assistant Superintendent, Dr. Erlendson's primary responsibilities include facilitating the data driven district wide continuous improvement process, funding and grant procurement, instructional technology, teacher professional

development, student services and coordinated health programs, curriculum and instruction, school reform, community, business and higher education partnerships, school and program accountability, public relations and public engagement.

Dr. Erlendson also serves as an adjunct professor for National University in the field of Educational Policy Development. Dr. Erlendson received his Bachelor of Arts degree from San Jose State University, a Masters in Educational Administration from the University of San Francisco, and a master's and doctorate degree in early music from Stanford University.

Jamey Fitzpatrick, President & CEO, Michigan Virtual University

Jamey Fitzpatrick has served as a catalyst for change and a champion of innovation in public education. As both an education and technology policy advocate, Mr. Fitzpatrick provides leadership for Michigan Virtual University (MVU), a private nonprofit 501(c)(3) organization. MVU operates the Michigan Virtual School (MVS), currently one of the largest virtual schools in the United States. MVU also operates Michigan LearnPort, a Web-based portal that provides low-cost and no-cost online professional development programs for Michigan's K12 community. Jamey served as the director of technology for the Michigan Department of Education, where he was the lead architect of the state's 1998 technology plan. Jamey also worked for Saginaw Intermediate School District as a REMC Director and in the private sector for Pitney Bowes Corporation. Mr. Fitzpatrick serves on the Board of Trustees for Olivet College in Olivet, Michigan, as well as the Michigan 4-H Foundation Board.

William V. Flores, President, University of Houston-Downtown

On June 5, 2009, the University of Houston System's Board of Regents appointed Dr. William Flores as the fifth president of the University of Houston-Downtown. He officially takes office August 1, 2009.

Prior to joining UHD, Dr. Flores served as Deputy Secretary for the New Mexico Higher Education Department. He was appointed to the post by New Mexico Governor Bill Richardson in May of 2007. He became Interim Cabinet Secretary there in April 2009.

From 2001 to 2007, Dr. Flores served as Executive Vice President and Provost of New Mexico State University. In 2003, he served as Interim President for one year. During Dr. Flores' tenure as provost, the university increased student enrollment; expanded distance education programs, including online degrees; opened a center in Albuquerque; and dramatically increased fundraising. He served as Dean of the College of Social and Behavioral Sciences at Cal State Northridge and, earlier, as associate dean of School of Social Sciences at Fresno State. Dr. Flores taught at Cal State Fresno, Santa Clara University and Stanford University where he also served as Associate Director of the Inter-University Program for Latino Research. He has extensive service in community-based agencies, including as Executive Director of the Gardner Community Health Center in San Jose. He has conducted research projects in voting rights, community empowerment, higher education policy and violence prevention. He co-edited the book, Latino Cultural Citizenship.

Born in San Diego, Dr. Flores attended the University of California in Los Angeles where he graduated with a Bachelor of Arts in Political Science in 1970. He received his Master of Arts in Political Science from Stanford University in 1971 and his Ph.D. in 1987 also from Stanford University in Social Theory and Public Policy.

Louis Fox, Vice President for Technology & Innovation, Western Interstate Commission for Higher Education

Louis Fox currently divides his time among three organizations, serving as Senior Advisor for Global Information Technology at Duke University; Vice President for Technology & Innovation, Western Interstate Commission for Higher Education; and Director of Strategic Relations for the Pacific Northwest Gigapop.

Fox spent twenty-five years at the University of Washington, serving in a variety of capacities including Research Professor in the Information School; Associate Vice President of Computing & Communications; Vice Provost for University-Community Partnerships; Associate Vice Provost for Undergraduate Education; and Special Assistant to the President.

Fox has an active research program, focusing on the applications of information technology for the betterment of communities in education, health, and business. Some of these research efforts have resulted in new organizations, including the National Internet2 K20 Initiative, which he has led since its inception in 2001, and which brings together over 60,000 U.S. schools, colleges and universities, libraries, and museums to get new technologies into the hands of innovators across all educational sectors; and the Digital Learning Commons, which Fox led as Founding CEO, and which provides high-quality educational resources (digital courses, curriculum, library and collaboration tools) to Washington State high school students and teachers.

Christine Geith, Assistant Provost, MSU Global, Michigan State University

Dr. Christine Geith is executive director of MSUglobal and assistant provost at Michigan State University. She is a founding partner in several entrepreneurial learning ventures including Learn2Grow.com, the Global Community Security Institute, AmericanCitizenPlanner.com and MyHorseUniversity.com. Dr. Geith pioneers new approaches in higher education using information and communications technologies, open content and online/blended learning. She was a founding director of the Global University Alliance while at Rochester Institute of Technology where she was director of the Educational Technology Center and executive director of e-learning. Dr. Geith has an MBA and a Ph.D. in Higher Education. She leads the OpenCourseWare initiative at MSU, researches and writes in the fields of online learning and open educational resources, and currently serves on the advisory board of WikiEducator.

Tracy Gray, Managing Director, American Institutes for Research

Tracy Gray, Ph.D., is a nationally recognized expert in education and technology implementation and has led numerous projects in the U.S. and internationally, examining the impact of technology on educational achievement. She has published and lectured widely on issues related to the integration of emerging technologies into the classroom and after-school programs. A recent publication is *“Teacher Learning Online: Improving the Teaching of Mathematics Through Better Professional Development”* for the U.S. Department of Education. She currently serves as the managing director of for the Center on STEM Education and Innovation at the American Institutes for Research. She also directs the National Center for Technology Innovation (www.NationalTechCenter.org) and the Center for Implementing Technology in Education (www.CITEd.org) which are focused us on improving the learning opportunities for students with disabilities by fostering technology innovation.

Before working at AIR, Dr. Gray was vice president for youth services at the Morino Institute and was responsible for the design and implementation of the Youth Development Collaborative (YDC). That effort sought to understand the complexities of integrating technology into schools and community-based organizations nationwide. Under her leadership, the lessons learned from the YDC led to the YouthLearn Guide: A Creative Approach to Working With Youth and Technology and the YouthLearn website (www.youthlearn.org). Those award-winning tools are resources for teachers and staff interested in using technology to enhance educational programs for children. Dr. Gray also was the deputy executive director and chief operating officer for the Corporation for National Service that enabled more than 50,000 corps members to work in 1,500 programs throughout the United States. Dr. Gray holds a Ph.D. and M.A. in education and psychology from Stanford University.

Jami Grindatto, Director of Corporate Affairs, New Mexico and Texas, Intel Corporation

Jami Grindatto is the New Mexico Corporate Affairs Director for Intel's New Mexico site in Rio Rancho, NM, directing government affairs, media & communications, education and community relations.

Jami joined Intel in 1994. He led the Factory Automation Architecture design used in Intel's newest 300mm silicon wafer fabrication processes, directed the Itanium® Independent Software Vendor enablement effort, and was Director of the Americas for Intel® Solution Services.

Prior to joining Intel, Jami was a principal consultant on graphical application development – his clients among others included Honeywell, Intel and Sandia National Laboratories.

Jami is the recipient of the 1999 Intel Achievement Award. He's active in the community and a member of several boards, including the Governor's Business Executives for Education, New Mexico First, and he is the 2007 Chairman of the Rio Rancho Regional Chamber of Commerce. He earned a B.S. in Computer Engineering from the University of New Mexico. Jami was born and raised in Switzerland and played professional basketball in Europe prior to coming to the United States.

Ray Henderson, President, Blackboard Learn

As President of Blackboard's teaching and learning division, Ray oversees product development, client success and support as well as the global services and managed hosting functions.

He formerly led ANGEL Learning's product strategy, product development and go-to-market efforts. His more than twenty years of experience in educational publishing and technology platform development shape a vision where the customer experience is paramount and the customer voice is integral to product development.

Ray began his pursuit of technology platform development while Earth & Space Sciences editor at Pearson, where he developed Companion Websites™, the first major brand of internet products in higher education. He went on to lead product development at eCollege®, an early pioneer in the learning management system arena. Prior to joining Blackboard in 2009, Ray led ANGEL Learning's product strategy, product development and go-to-market efforts and served as president for digital product development at Pearson Education where he assisted in developing several industry leading online learning brands and the technology and operational organizations required to support them on a global scale in the market. These included Course Compass™, InformIT™, MyMathLab and related products.

Ray has a strong interest in affecting industry collaborations. As a founding board member of Safari Books Online, LLC, he was instrumental in creating a highly successful joint venture for digital reference products between O'Reilly and Pearson. As an advocate for open standards for online courseware development, Ray conceptualized the Common Cartridge standard. He serves on the board of directors for the IMS Global Learning Consortium educational standards body where he persists in developing this and other educational technology standards.

Ray is a graduate of Trinity University in San Antonio, Texas, with degrees in philosophy and biology.

Scott Jaschik, Editor, Inside Higher Ed

Scott Jaschik, editor, is one of the three founders of Inside Higher Ed. With Doug Lederman, he leads the editorial operations of Inside Higher Ed, overseeing news content, opinion pieces, resources, and interactive features. Scott is a leading voice on higher education issues, quoted regularly in publications nationwide, and publishing articles on colleges in publications such as The New York Times, The Boston Globe, The Washington Post, Salon, and elsewhere. He has been a judge or screener for the National Magazine Awards, the Online Journalism Awards, the Folio Editorial Excellence Awards, and the Education Writers Association Awards. Scott is a mentor in the community college fellowship program of the Hechinger Institute on Education and the Media. From 1999-2003, Scott was editor of The Chronicle of Higher Education. Previously at The Chronicle, he held numerous other positions, and his reporting work was honored by Investigative Reporters and Editors and The Washington Monthly. Scott grew up in Rochester, N.Y., and graduated from Cornell University in 1985. He lives in Washington.

Kemi Jona, Kemi Jona Associates

Dr. Jona has worked at the forefront of the e-learning and online learning fields for many years. He has worked with leading universities—including Carnegie Mellon, Cornell, Columbia, and Northwestern—on the design, development, and deployment of innovative online professional masters and non-credit programs, undergraduate courses, and blended offerings. He has also advised on the evaluation and adoption of a range of learning management systems and other technologies to support online learning.

Dr. Jona has also worked extensively in the corporate training and e-learning field. He was a Senior Design Architect at Cognitive Arts where he designed and oversaw the development of custom learning solutions for numerous corporate clients including GE Capital, Wal-Mart, Eaton/Cutler-Hammer, and Andersen Consulting (now Accenture). These solutions include learning technology, curriculum restructuring, redesign of classroom-based courses and seminars, and instructional design staff workshops.

Dr. Jona received his doctorate in Computer Science from the Institute for the Learning Sciences at Northwestern University where he was part of the team that developed the Goal-Based Scenario (GBS) approach to e-learning design. At the Institute, he created innovative learning systems for government and defense sponsors, including a multi-year partnership with the U.S. Environmental Protection Agency (EPA) that produced an award-winning interactive learning system currently in use throughout the U.S.

Dr. Jona is currently a Research Associate Professor of Learning Sciences and Computer Science at Northwestern University where he leads research and development projects in instructional design and

online learning. He advises the university on the design of their online professional masters and non-credit programs as well as online K12 courses offered by the Center for Talent Development.

He is a frequent invited speaker at industry conferences and the author of numerous book chapters, articles, and research papers on the topics of online learning, curriculum design, intelligent tutoring systems, authoring tools, and Goal-Based Scenarios. He is often asked to conduct workshops on instructional design techniques, teacher training, and emerging trends in learning technology.

Bethany Little, Senior Education Counsel, U.S. Senate Committee on Health, Education, Labor, and Pensions

Bethany Little is Chief Education Counsel to Senator Kennedy for the Committee on Health, Education, Labor and Pensions. In this role she works on legislation governing early childhood programs, elementary and secondary education, higher education and workforce training. Prior to joining the Senate HELP Committee staff, she was Vice President for Policy and Federal Advocacy at the Alliance for Excellent Education where she was responsible for guiding the Alliance's policy work on high school reform issues, including accountability and school improvement, adolescent literacy and college preparation. Bethany came to the Alliance from the Children's Defense Fund, where, as Director of Government Relations, she managed advocacy efforts and provided policy direction. From 2001-2003, Bethany worked in the office of United States Senator Patty Murray (WA) as a Legislative Assistant focused on education, welfare, and children and families issues. Prior to that, she was Associate Director for the White House Domestic Policy Council serving as an education policy advisor to President Clinton and Vice President Gore. She has also held positions at the U.S. Department of Education, Council for Excellence in Government, the Presidential Inaugural Committee, and Clinton/Gore '96. She is a graduate of Georgetown University with a B.S. in Foreign Service.

David Marr, President, Blackboard Transact

David leads Blackboard's Transact business that delivers enterprise Commerce, Security Management and notification platforms. The Transact platforms provide a comprehensive and secure enterprise-class software and hardware solution that can also integrate with Blackboard's enterprise e-Learning application. The Transact solutions enable institutions to deliver on-campus, off-campus and online commerce, security and notification solutions to students, faculty and staff.

Prior to leading Transact, David was the SVP of Global Consulting and ASP services for the Blackboard global community. His leadership ensured that clients' mission critical e-Learning programs were effectively integrated, implemented and maintained to meet the needs of their diverse constituencies.

Before joining Blackboard, David was as a Managing Director at BearingPoint (formally KPMG Consulting), a global systems integrator where he served educational institutions, as well as federal, state and local governments. Prior to his Managing Director position at BearingPoint, David served in the audit practice at KPMG Peat Marwick.

David brings twenty years of business experience in working closely with academic and government entities to develop and implement customized business solutions enabled by leading-edge technology. His career highlights include deploying the country's largest K12 data warehouse for the State of Georgia's 1.7m students and its 186 school districts. The solution also integrated with the district's academic systems in support of statewide assessment and reporting. David led BearingPoint's multi-year

modernization partner re-engineering effort at the U.S. Department of Education's Office of Federal Student Aid, BearingPoint's National Higher Education Data Warehouse and Business Intelligence solution as well as developed BearingPoint's CRM strategy, "Student for Life".

David has served as a national speaker presenting on topics such as: "The Future of Technology in Education," "Modernization of the US Department of Education," "Providing Access to Education through Technology," and "Emerging Issues in Higher Education."

Elfreda W. Massie, Senior Vice President, Blackboard Connect

Dr. Elfreda W. Massie is a veteran with 29 years experience in public school administration, curriculum and instruction. Dr. Massie has gained accolades within both the private and public sectors for her lifelong work to improve the education and lives of the nation's young people and their families.

She began her career as an elementary school teacher in Baltimore County, MD. Subsequently, she has held key positions in the field of education, including District of Columbia Public Schools' Interim Superintendent of Schools and Chief of Staff; Baltimore County Public Schools' Deputy Superintendent, Director of Staff Development, and Director of Human Resources; and Montgomery County Public Schools' Associate Superintendent for Personnel Services. She has also served as an adjunct professor at the Johns Hopkins University and the Union Institute and University.

In the private sector, Dr. Massie served as Managing Director of The NTI Group, a privately held company that provided comprehensive mass communication and notification systems designed specifically for educational and government organizations; and held the positions of Vice President for Professional Development and Vice President for Strategic Alliances for Harcourt Achieve, a global pre-K through adult educational publishing company.

Dr. Massie serves on the Blackboard K12 Advisory Board and is on the board of the See Forever Foundation, a non-profit organization that supports the growth and development of the Maya Angelou Public Charter School, a multi-campus, alternative high school located in the District of Columbia. She is also a board member and Trustee of the National School Boards Foundation, a non-profit organization that works to promote excellence and equity in public education. She was recently appointed to serve on the Executive Council of New York University's Metropolitan Center for Urban Education, which is dedicated to pursuing research and developing educational practices that improve the quality of education for all children at the local and global levels. Dr. Massie's commitment to improving the education of all children extends beyond her work in the U.S. She has been appointed to serve on the African American Women's Advisory Council to President Ellen Johnson Sirleaf of Liberia, and was the co-chair of the Education and Economic Development Committee.

Michael McCall, President, Kentucky Career and Technical Colleges

Dr. McCall has served for over 37 years in community and technical colleges. He has been recognized for his advanced collaborative partnerships, economic development, innovative use of technology, and the utilization of team-oriented management.

In August of 2006, Dr. McCall received the 2005 National Council for Continuing Education and Training's National Leadership Award -- Inside the Field.

The National Institute for Staff and Organizational Development honored Dr. McCall with their 2005 International Leadership Award.

Dr. McCall received the prestigious honor from Kentucky Monthly Magazine as the 2004 Kentuckian of the Year.

On June 30, 2006 Dr. McCall completed his tenure as Board Chair of the American Association of Community Colleges (AACC). This marked the first time a System-level president was elected chair of the AACC board. Under his chairmanship a community college caucus was established.

Prior to his appointment as the founding president of KCTCS, Dr. McCall served as President of South Carolina's comprehensive technical college system and provided leadership for South Carolina's economic development training programs.

Earlier in his career, Dr. McCall served as president of Florence Darlington Technical College in Florence, SC, and as president of Paul D. Camp Community College in Franklin, VA. Dr. McCall was also a dean and a faculty member at community and technical colleges in Virginia.

Harry McLenighan, Department Chair, Education Doctorate, Ed.D., Capella University

Dr. McLenighan has focused on education issues as a P12 teacher and administrator and university faculty member and administrator for 40+ years. He has served as senior high school English teacher and principal and as a university faculty member and administrator focused on administrator preparation and licensure.

During his seven years with Capella University he has led - first as department chair in leadership and most recently as dean of the School of Education - its successful efforts to differentiate its programs through specialized accreditations - including but not limited to state approved licensure programs in reading and literacy, special education leadership, principal and superintendent licensure, special education teaching licensure, and early childhood and family education licensure. He also initiated the school's pursuit of NCATE accreditation, a three year process that will be completed in February, 2010.

Most recently, Dr. McLenighan has as chair for the Education Doctorate designed and developed the university's first professional doctorate, the EdD in Educational Leadership and Management. Learner launch of the EdD coincides with this conference. On Monday, July 13, 2009, six cohorts made up of 140 learners begin their Capella EdD journey.

Dr. McLenighan's current interests include promoting learning outcomes transparency; encouraging site based, organizational improvement focused educational research; advocating for national standards for teacher and administrator licensure; and supporting evidence based school and learning improvement initiatives.

Dr. McLenighan completed his doctoral studies at the University of St. Thomas in St. Paul, MN, and he maintains current Minnesota licensure as a teacher (English, Social Studies) and administrator (principal and superintendent).

George L. Mehaffy, Vice President for Academic Leadership and Change, American Association of State Colleges and Universities

George Mehaffy serves as the Vice President for Academic Leadership and Change at the American Association of State Colleges and Universities (AASCU). His division is responsible for a number of special programs and projects for AASCU presidents and chief academic officers in the areas of leadership and organizational change in higher education, focusing on issues such as technology, teacher education, international education, and civic engagement. He organizes and directs two national conferences annually for AASCU chief academic officers and manages a variety of leadership programs and special projects. Some of his division's recent projects have included a comprehensive partnership program linking AASCU and Chinese universities, an articulation and transfer initiative with the American Association of Community Colleges; a multi-state project on evidence in teacher education; a study of institutions with high graduation rates; a technology conference series at the University of Central Florida in partnership with EDUCAUSE, and a Hispanic student success study. Recently his division, in partnership with NASULGC, created the Voluntary System of Accountability (VSA).

Much of his current work focuses on civic engagement in higher education. In 2003 he launched a civic engagement initiative, the American Democracy Project (ADP), in partnership with *The New York Times*, involving 228 AASCU institutions representing 1.8 million students. That project has generated a broad range of national and campus-based activities, including 5 national and 10 regional meetings; a Wingspread Conference that produced a monograph for senior university leaders; a partnership with the National Survey of Student Engagement (NSSE) to develop an instrument to assess civic engagement; a monograph on voter education and registration; and a monograph on civic engagement in the first year of college. Recently, the project created a new series entitled Civic Engagement in Action. Four current initiatives in this series include the Political Engagement Initiative, an effort to create opportunities for political engagement throughout the curriculum, a partnership with Tom Ehrlich and the Carnegie Foundation for the Advancement of Teaching; the 7 Revolutions initiative, seeking to prepare globally competent citizens, a partnership with the Center for Strategic and International Studies (CSIS); The Stewardship of Public Lands, preparing students to be engaged in resource management issues, a partnership with the Yellowstone Association; and Deliberative Polling, a project involving 16 AASCU campuses in a partnership with Jim Fishkin and the Center for Deliberative Democracy at Stanford University.

Chris Miller, Executive Director, The Advisory Board Company

Chris Miller is an Executive Director at The Advisory Board Company, where he is responsible for higher education memberships serving provosts, business executives, and student affairs leaders. Since 1992, he has held a broad range of management positions at the Advisory Board and its sibling firm, The Corporate Executive Board, leading programs that serve hospital CEOs and clinical executives, as well as managers of the R&D, information technology, and strategic planning functions at Global 1000 corporations.

Mr. Miller has led research initiatives on many topics at the intersection of science and business strategy, including the evaluation and funding of emerging technologies in decentralized organizations, the globalization of R&D, the creation of inter-organizational business shared services, and remote monitoring medical technologies.

Mr. Miller received his Bachelor of Arts degree from Cornell University, where he studied American literature and neurobiology.

Keith Miller, President, Greenville Technical College

Dr. Keith Miller became the second president of Greenville Technical College on July 1, 2008. He brought experienced leadership to the position, having spent 12 years as a college president in Illinois, first for Spoon River College and later for Black Hawk College.

Miller began his own college education at a community college, earning an associate degree in technical education – radiologic technology from Hutchinson Community College in Kansas. Later, he earned a bachelor's degree in biology at the University of Kansas, a master's degree in Community College Teaching from Pittsburg State University, and a doctorate degree in Adult and Continuing Education from Kansas State University.

Miller has served in many capacities at the colleges where he has worked including instructor, dean, and vice president. In addition, his career has taken him into the private sector, working in health care. From 2008 to 2009, Miller served as Chairman of the Board for the American Association of Community Colleges (AACC), the leading advocacy organization for the nation's almost 1,200 colleges and their 11.5 million students. He currently serves as past chairman for AACC's board, and is on the board of directors for the American Council of Education, the higher education organization that represents presidents and chancellors of all accredited, degree-granting institutions in the United States.

These experiences leave him well prepared to lead South Carolina's largest technical college and to build new partnerships and opportunities for growth at the institution.

William E. Milliken, Founder and Vice Chairman, Communities In Schools, Inc.

Bill Milliken, founder and vice chairman of Communities In Schools, Inc., is one of the nation's foremost pioneers in the movement to give young people the help they need to graduate from high school and go on to rewarding lives.

The year 2000 marked the 40th anniversary of Milliken's commitment to children, and saw him receive two major national awards. The Edward A. Smith Award for Excellence in Nonprofit Leadership honors one executive each year who exemplifies "extraordinary leadership" over a lifetime of service. The "Champion for Children" award from the American Association of School Administrators (AASA) honors a nationally known non-educator whose contributions have significantly and positively influenced the lives of children.

Communities In Schools is the nation's leading community-based organization helping kids stay in school and prepare for life. Currently, CIS directly serves nearly 1.2 million students and their families each year in more than 3,250 schools in 27 states and the District of Columbia. Its grass-roots, personalized approach embodies Milliken's long-held philosophy, "Programs don't change children – relationships do."

Milliken's activism began in 1960 when he joined Young Life, an ecumenical youth organization. He helped initiate "street academies" for young people who had dropped out of school and wanted a chance to resume their education, as well as live-in programs for substance abusers and youth in need

of shelter and support. Milliken's experiences led him to search for a comprehensive approach to helping young people. This search culminated in the 1970s with the development of a model program that repositioned existing community resources into schools — the Communities In Schools network, which Milliken led as president until May 2004.

Milliken has served four U.S. presidents. During the Carter Administration, he was the White House Advisor on Youth Issues. In 1989, Milliken advised President Bush for the Education Summit with the nation's governors. Most recently, Milliken was involved in the planning of The Presidents' Summit for America's Future. In 1994, Milliken received the National Caring Award as one of the “10 most caring people in America.” In 1992, he received the Temple Award for Creative Altruism, given by the Institute of Noetic Sciences, which honors individuals “whose lives and work demonstrate the transformative power of caring coupled with imagination and enterprise.” Milliken is a Jefferson Awards national public service award winner for 2009.

Milliken serves on the board of Leadership Foundations of America and the Institute for Collaborative Leadership. He is the author of three books, *So Long, Sweet Jesus, Tough Love* and *The Last Dropout: Stop the Epidemic!* He received an honorary degree of Doctor of Humane Letters in 2007 from Bard College.

Michael Morehead, Interim Dean, College of Education, New Mexico State University

Dr. Michael A. Morehead graduated from the University of Missouri with a Ed.D. in Educational Administration in 1978. During his tenure as a public school educator, Dr. Morehead taught middle school Social Studies and worked as a school administrator. Since 1978, he has worked at Northern Arizona University and Emporia State University where he coordinated student teaching programs, field experience programs and admission to teacher education. Dr. Morehead has published a book on student teaching and over forty articles and monographs for various journals and organizations. He has served on the editorial board for several journals and was chairperson of the National Field Directors Forum. He has made over 100 presentations to State, Regional and National organizations. Dr. Morehead's primary research interests are teacher education and educational administration. He continues to be actively involved in the Association of Teacher educators and the American Association for Colleges of Teacher Education. Dr. Morehead has been Interim Dean since Summer of 2008, and previously Associate Dean for the College of Education since 1992, during which time he was instrumental in several program changes.

Jonathan Mott, Asst. to the Academic VP - Academic Technology, Brigham Young University

Jon Mott serves as the Assistant to the Academic Vice President – Academic Technology. He reports to the Academic Vice President and provides strategic guidance on academic technology issues. He also works closely with the University's Chief Information Officer and serves as the liaison between the Academic VP's office and the Office of Information Technology. He serves as chair of the Academic Support Coordinating Committee and the Academic Technology Advisory Committee. He is an Adjunct Professor of Instructional Psychology & Technology and also teaches in the Masters in Public Policy Program.

Jon previously served as Managing Director at the Center for Instructional Design (now the Center for Teaching and Learning). He earned a B.A. in political science from BYU in 1992 and a Ph.D. in political science from the University of Oklahoma in 1998.

Jon is currently a member of Blackboard's Client Strategy Council and the Adobe Higher Education Advisory Board. He blogs about academic technology at jonmott.com.

Brian Ormand, Director, NM Learning Network

Dr. Brian Ormand is Director of the New Mexico Learning Network Program, and Director of ICT Strategic Relations at New Mexico State University. Dr. Ormand has a passion for advancing educational practice through the effective, prudent, and systemic implementation of instructional technology. A primary research focus for Dr. Ormand is the diffusion of innovation, related to eLearning and instructional technologies. His research has included a quantitative study of faculty adoption of instructional technologies, and ongoing analysis of student adoption. His background also includes an MBA with an emphasis on implementation of educational technology systems. He has worked extensively with eLearning at a state level providing leadership in both the statewide virtual college (higher education) and virtual school (PK12) initiatives. He has served as the Chair of the IDEAL-NM Advisory Board, a board member on the NM Coalition of Charter Schools, and an affiliate member of CHECS ETC (statewide Higher Education IT organization). Dr. Ormand has also been a leader in many of the student and faculty technology support services at NMSU including the Institute for Technology Assisted Learning (ITAL), Student and Faculty technology advisory committees, eLearning Management System (eLMS), Association of Computer and Network Support (ACANS), and numerous other support systems and technologies.

Linda Pittenger, Chief Design Consultant for the Virtual Learning Magnet for Space Science and Mathematics, Council of Chief State School Officers

Ms. Pittenger is recently retired from the Kentucky Department of Education, where she served as Division Director for Secondary & Virtual Learning. In that capacity, she coordinated the state's secondary reform initiative, served as Director of the Kentucky Virtual Schools, acted as the Department's liaison on K20 initiatives to improve college and work readiness, and led implementation of the web-based Individual Learning Plan for all students in grades 6 - 12. Prior to that time, Ms. Pittenger served as a Director in the Department's Office of Education Technology where she oversaw implementation of the E-rate program and served on the leadership team implementing Kentucky's Master Plan for Education Technology as part of the 1990 Education Reform Act.

Ms. Pittenger was a founding Board member of the North American Council for Online Learning. She serves on the Advisory Board for the National Repository of Online Content, and has served on several committees of the Southern Region Education Board to support quality and expansion of virtual learning initiatives among the states.

Ms. Pittenger works with the Kentucky Community and Technical College System as P16 Liaison to the college presidents and the Kentucky Department of Education. She is under contract with the Council of Chief State School Officers as Chief Design Consultant for the Virtual Learning Magnet for Space Science and Mathematics. The VLM for Space Science and Mathematics is the first of a planned network of online magnets that will support students to high levels of learning and achievement in areas of global importance.

Allison Powell, Vice President, International Association for K12 Online Learning (iNACOL)

Allison Powell is the Vice President of the International Association for K12 Online Learning (iNACOL), which provides expertise and leadership in K12 Online Learning. Before joining iNACOL, Allison taught in both face-to-face and online K-8 environments. She helped build the Clark County School District's Virtual High School and an online professional development program for the Nevada school district. She has served as a board member for various educational organizations and programs. She is currently finishing her doctorate from Pepperdine University in educational technology.

Bill Randall, Associate Vice President for Learning Technology Systems, North Carolina Community College System

Dr. Bill Randall became the first North Carolina Community College System Associate Vice President for Learning Technology Systems in July 2003. He was charged to support, promote, and expand learning technology – specifically in the areas of library services, distance learning & e-learning infrastructure, and broadband connectivity. His responsibilities also include development of digital learning content via NCCCS's Virtual Learning Community. He has served on numerous state committees and presented at state and national conferences. Bill has championed the innovative uses of distance learning technology in meeting the mission of the NCCCS and represents the NCCCS on the North Carolina E-Learning Commission where he serves as co-chair of the Infrastructure Committee. He serves on the North Carolina Virtual Public School Advisory Board and has been involved in e-learning infrastructure aspects of (1) the joint collaborative NCCCS/UNC 2+2 Initiative and (2) the Learn and Earn Online Initiative. He is the project “owner” of the North Carolina Learning Object Repository. His motto: “Better living (and funding) through collaboration”. Bill earned a BS at Indiana University, MA at Appalachian State University, and his Ed.D. at The University of North Carolina at Greensboro

Paul E. Resta, Director, Learning Technology Center, University of Texas at Austin

Paul E. Resta holds the Ruth Knight Millikan Centennial Professorship in Instructional Technology and serves as Director of the Learning Technology Center at the University of Texas at Austin. His current work focuses on web-based learning environments, planning and policy issues in the use of information and communication technologies in teacher education, and the use of digital tools to support culturally responsive learning.

Dr. Resta is the Founding President of The International Society for Technology in Education (ISTE). He serves as President of the International Jury for the UNESCO King Hamad Bin Isa Al-Khalifa Prize for the Use of Information and Communication Technologies in Education, and Chair of the United Nations Scientific and Cultural Organization (UNESCO) Working Group on E-Learning for Teacher Development. He also serves on the Microsoft Partners in Learning National Advisory Group.

In 2007, Dr. Resta received the Society for Information Technology in Teacher Education (SITE) Lifetime Achievement Award. He is also the recipient of the Navajo Nation Chief Manuelito Award for outstanding contributions to Indian education. He is the founder of *ENAN*, the Educational Native American Network, enabling Indian schools across the country to access the Internet. He was a leader in the Four Directions Project that explored the use of new telecommunications and multimedia technologies to help Native schools and communities to develop culturally responsive curriculum. He also developed the technology plan for the *Smithsonian Institution National Museum of the American Indian*.

In 2001, Dr. Resta received the U.S. Distance Learning Association Award for Outstanding Achievements in Higher Education and the University Continuing Education Association National Distance Learning Course Award. Examples of recent books include: *Information and Communication Technologies in Teacher Education: A Planning Guide*, UNESCO; *Teacher Development in an E-Learning Age*, UNESCO; and *Toward Digital Equity: Bridging the Divide in Education*, Allyn & Bacon. He has numerous articles and chapters. Recent examples include: The Presidential Timeline of the 20th Century, *Social Education*, 7(3)115-1; Technology in Support of Collaborative Learning, *Educational Psychology Review*, 19 (1)65-83; Digital Technology to Empower Indigenous Culture and Education in *The World Yearbook of Education 2004: Digital Technology, Communities and Education*, Kogan Page Publishers. He currently serves as editor of the Digital Equity Section of the *International Handbook of Information Technology in Education* (in press).

Andy Ross, Vice President, Florida Virtual School

As the Vice President of the Florida Virtual School, Global Services department, Andy Ross is responsible for broadening the presence of his school in the national and international educational marketplace. Mr. Ross brings to his present position extensive experience in management, marketing and customer service. During his twenty-nine years at IBM and IBM Business Partners, he provided total hardware, software, and services solutions to educational clients throughout a multi-state area. Immediately prior to accepting his current position with FLVS, Mr. Ross served as the Executive Director for the Fulton Education Foundation for Fulton County Schools in Atlanta, Georgia.

Mr. Ross' decision to join the FLVS team was motivated by his commitment to education and to the use of technology to support instruction. He believes that the world of virtual learning offers increasingly greater possibilities for enhancing and broadening K12 education. He also believes that FLVS is uniquely positioned to be the preeminent leader in the effort to provide high-quality educational opportunities to students regardless of where they may live. Mr. Ross earned his Bachelor of Science degree in Marketing and Organizational Behavior from the Business School at the University of Colorado in Boulder.

Patrick Russo, Superintendent of Schools, Henrico County Public Schools

Dr. Russo assumed the post of Henrico County Public Schools Superintendent of Schools effective July 1, 2009. Henrico is a school system of almost 50,000 students, outside of Richmond, Virginia.

Dr. Russo has more than 33 years of experience as a teacher, principal, assistant superintendent and superintendent. In the last 23 years, he has been a superintendent in New York, Georgia, North Carolina and Virginia. Dr. Russo has a Bachelor's Degree in Business Administration from The University of Charleston, a Master of Arts Degree in Secondary Education from Adelphi University, a Master of Business Administration from Dowling College, a Professional Diploma from Long Island University and a Doctorate of Education from Virginia Polytechnic Institute and State University.

Dr. Russo was superintendent of Hampton City Public Schools starting in 2004 and the school division has thrived under his leadership. During his tenure, 97% of all comprehensive schools earned full accreditation, an increase from 74% in 2003-04. Dr. Russo also emphasized eliminating the academic achievement gap between students of all races and economic levels. In five years, Hampton schools closed the gap between African-Americans and Caucasians in 14 of 16 instructional areas. The Hampton school system also saw a rise in SAT scores with an 18-point increase in just one year. In a recent

comprehensive annual parent survey, 80% of parents gave Hampton City Public Schools an overall grade of "A" or "B".

Dr. Russo is a proven advocate of teachers. He worked directly with the Hampton City School Board and the City of Hampton to provide teachers with some of the highest pay increases on the Virginia Peninsula for the past four years. He values providing a safe and comfortable learning environment and worked with the Hampton police chief on the development of the country's only regional youth violence and gang prevention program. Dr. Russo also worked with city leaders to embark upon an aggressive school construction plan. As a result, two PreK-8 schools are scheduled to open in the fall of 2009.

The Hampton school division has won many national and state awards under Dr. Russo's leadership, including the American School Board Journal Magna Award, the Virginia Tech Excellence In Education Award, the National School Public Relations Association's (NSPRA) Golden Achievement Award, the National Civic Star Award (State Winner) and the John Hopkins University National Network of Partnership Schools (NNPS) Award for Excellent Partnerships.

Dr. Russo has been named Georgia's Superintendent of the Year, Regional Superintendent of the Year in North Carolina, and on three occasions was named one of the Top 10 Executive Educators, selected by the national publication Executive Educator. He was also named the 2008 Hampton Association of Educational Office Professionals' Co-Administrator of the Year. Dr. Russo is a member of numerous professional and community organizations.

A leader who is committed to community engagement in the educational process, Dr. Russo combines solid business practices with his educational administration leadership skills to meet the needs of students, teachers, administrators, key stakeholders and the community. In every school district he has served, Dr. Russo made it a priority to include and engage community and faith-based organizations. While superintendent of Savannah-Chatham County Public Schools in Georgia, he developed the Community Schools Resource Team (CSRT) Project. The annual school division Community Priority Workshop allows for many stakeholder groups to be engaged in identifying and supporting yearly school division objectives. These teams provided support and were valuable resources in a school district with a more than 70% free and reduced lunch student population.

Dr. Russo's commitment to education is a family affair. His wife Brooke is a registered nurse and teaches at a regional vocational school in the Hampton area. They have five children: Erik, Meagan, Sarah, and school aged twins, Ashleigh and Patrick, who will attend elementary school in Henrico County Public Schools.

Tom Ryan, Chief Technology Officer, Albuquerque Public Schools

Tom Ryan is currently working for Albuquerque Public Schools (APS) as the Chief Information Officer. APS serves over 89,000 students and is the largest school district in the state of New Mexico. The APS Technology Department has 85 employees supporting online learning, technical support for hardware, software, networking and core enterprise applications

He has worked for public education for over 29 years as a teacher for 14 years, a principal, and district administrator. He has a Ph.D. in Curriculum and Instruction with an emphasis in Learning Technologies from NMSU. He is a member of IDEAL-NM Advisory Board, which is the state K20 online learning system. He is past chair of the NM Council of Technology in Education, NM Technology Council Board member, and ISTE member. He has served as adjunct faculty for UNM designing and teaching courses

online. He works with several national committees such as iNACOL, and the Council of Great City Schools.

As the former principal of Del Norte High School, Tom received a Milken Educator Award. He has received several awards for technology innovation and has presented at several conferences across the country.

Tom was a four-year letterman at UNM in football and wrestling and an All WAC center. He is married with four children. His wife and daughter are both teachers, and two of his sons are still in college.

Frederick Siff, Vice President and CIO, Emeritus, University of Cincinnati

Fred Siff is Professor, Vice President & CIO, *Emeritus*, at the University of Cincinnati, having recently retired as the University officer responsible for coordination of both technology architecture and policies and for provision of university-wide computing, telecommunications, administrative and academic systems and associated support services to the university. Prior to coming to UC in October 1998, he held similar positions at the University of California, Santa Cruz, and George Mason University. His undergraduate degree is in Mathematics and both his Master's and Ph.D. are in Operations Research from New York University. Beyond the immediate CIO business, at UC, he taught a graduate seminar in IT Strategic Planning and was actively involved with a number of educational transformation projects, most recently statewide course management services, corporate adoption of the university user support model and UC Mobile; in the state served on the Boards of both the regional and statewide professional organizations for IT-based economic development; in the region facilitated the Cincinnati (Corporate) CIO Roundtable. Several of these will continue in his emeritus role. He is a member of SAP's Higher Education and Research Advisory Council and Blackboard's Client Strategy Council.

Steve Smith, Chief Information Officer, University of Alaska

Steve Smith is the Chief Information Technology Officer (CITO) for the University of Alaska. He has over thirty years experience in all aspects of information technology in higher education. His educational background includes an undergraduate degree with an emphasis in broadcasting and filmmaking from the University of Iowa and a graduate degree in telecommunications from the University of Hawaii. His professional experience includes campus computing, library systems, public broadcasting, distance delivery, and extensive experience in network operations and design including satellite systems to remote areas and high speed Internet2 optical networks. In his role as CITO for the University of Alaska he has worked on policy, regulation, IT investment strategy, and public-private partnerships. He was a founder of the Fairbanks Community Network and is one of three U.S. representatives on the Information Communications Technology Network for the Arctic Council, comprised of the eight arctic nations.

He is on the executive board of the Northwest Academic Computing Consortium, Chair of the Pacific Northwest Gigapop Advisory Council, a board member of ResearchChannel, President of the Alaska Telecommunications Users Consortium, and the executive liaison for the University of Alaska for Internet2. His latest major endeavor is consolidating the statewide IT departments with the University of Alaska Fairbanks IT departments.

Themistocles Sparangis, Chief Technology Director, Educational Technology, Los Angeles Unified School District

Dr. Themistocles (Themy) Sparangis is responsible for the Educational Technology group for the Los Angeles Unified School District and reports directly to the Chief Information Officer.

The Educational Technology Group integrates the use of technology in schools and classrooms to support and achieve the District's instructional goals, help to meet the Superintendent's goals, provide an engaging learning environment in order to raise student achievement, decrease dropouts, and provide equitable access to learning opportunities for all students.

Dr. Sparangis obtained a Bachelor of Arts in General Physics from the University of California, Los Angeles. He continued his graduate studies at the University of Southern California, where he obtained a Master of Science in Teacher Education and a Doctorate of Education, specializing in International Education. He is a credentialed Teacher in Secondary Physical Science, having taught Advanced Placement Physics, Physics, and Physical Science in the Los Angeles Unified School District. He also holds an Administrative Credential issued by the State of California.

Dr. Sparangis is a member of Phi Delta Kappa (PDK), the International Society for Technology in Education (ISTE), and Computer Using Educators (CUE), The Consortium for School Networking (CoSN) and the North American Council for Online Learning (NACOL).

Roberta Teahen, Associate Vice President for Academic Affairs, Ferris State University

Roberta Teahen was appointed Associate Vice President of Academic Affairs in May 2007, after serving almost five years as the Dean of the University Center for Extended Learning at Ferris State University

Prior to taking a position with Ferris, Dr. Teahen spent most of her career at Northwestern Michigan College (NMC) in Traverse City, MI, from which she retired in 2001 with Faculty Emeritus status. During her 25 years at NMC, she served in varied roles, including Business Faculty, Business Division Chair, Director of the Center for Business and Industry, Dean of Occupational Studies, Director of Student Development and Learning Services, and Dean of Workforce Development.

Dr. Teahen was the first coordinator of the highly successful Trends in Occupational Studies conference that attracts about 700 Michigan community college educators annually; developed Leadership for Learning institutes for the Michigan Department of Labor and Economic Growth, and worked with the Michigan Virtual Learning Collaborative in the development of online programs. She has served on a wide variety of professional committees and work groups through her career.

For almost 20 years, she has served as a peer reviewer with the Higher Learning Commission (HLC) of the North Central Association and has conducted evaluation visits to a wide variety of higher education institutions. As an experienced team chair, she also serves as a regular trainer for new peer reviewers, including the topic of recognizing quality in online learning. She is also a member of the Institutional Actions Council of the HLC, the 26-member decision-making body of the Commission. This group reviews and acts upon all team and staff reports regarding institutions' accreditation status.

Community activities have included inaugural board membership for Leadership Grand Traverse, community board membership for Munson Healthcare System, founding member of the Women's Political Caucus and Women's Network, president of the Grand Traverse Women's Republican Club,

board member of the Traverse Bay Area Economic Development Corporation, and as a community board member for National City Bank Corporation.

Professional interests include learning in its varied perspectives, including a focus on designing effective learning systems ("Designing for Learning"), assessment, and the learning-centered college.

Evelyn Waiwaiole, Director, NISOD

Named the Suanne Davis Roueche NISOD Director and Lecturer in the College of Education at The University of Texas in September, 2008, Evelyn N. Waiwaiole began leading NISOD in October 2007.

Evelyn comes to NISOD from the Community College Bridges to Opportunity Initiative, also at The University of Texas at Austin, where she served as project manager since June 2006. She has also served as associate director of NISOD; project manager for the MetLife Foundation Initiative on Student Success; college relations coordinator for the Community College Survey of Student Engagement (CCSSE); and policy analyst for the Center for Community College Policy, Education Commission of the States (ECS).

Recognized as a 2002-2003 Associates Fellow with The National Center for Public Policy and Higher Education, Evelyn is known for her keen awareness of policy leadership and its impact on higher education. She also serves on the Community College Survey of Student Engagement Advisory Board and is the author of articles related to student success, retention, and persistence.

Evelyn earned a doctorate from The University of Texas at Austin in higher education administration, with a specialization in community college leadership; a master's in economics from The University of Oklahoma; and a bachelor's in psychology and math from Texas A&M University.

Richard Whitmire, Immediate Past President, National Education Writers Association

Richard Whitmire, who serves as Immediate Past President of the National Education Writers Association, is an independent education writer. Currently, he is the Project Journalist for the 2009 Broad Prize for Urban Education.

After graduating from the College of Wooster in Ohio, Whitmire taught high school English for one year and then held several newspaper jobs in upstate New York before moving to Washington to take a job handling special projects with Gannett News Service. After working on the design and launch of USA Today he returned to Gannett News Service to cover the Pentagon. In 1986 he received a Knight Journalism Fellowship to study national security topics at Stanford University. After the 1991 Gulf War Whitmire switched to reporting on education.

In 2000 he joined the editorial board of USA Today, where he wrote editorials about education issues. In 2004 he concluded a Journalism Fellowship in Child and Family Policy at the University of Maryland where he looked at why boys are falling behind in school. His book, Why Boys Fail, is due to be published in January. Whitmire left USA Today in January, 2009.

Peter Winograd, Education Policy Advisor, Office of Governor Richardson

Dr. Winograd currently serves as Governor Richardson's Education Policy Advisor. Prior to taking this position in 2009, Dr. Winograd served as the Director of the New Mexico Office of Education Accountability (OEA) for six years. The OEA was created in 2003 as part of New Mexico's landmark Public School Reforms Act, and its purpose is to work cooperatively with the Public Education Department, Higher Education Department, school districts and other agencies of the state in order to provide an independent source of information about the progress of education reform; and to provide leadership assistance and problem solving support to the Governor, Legislature, state and educational agencies, and citizens in their efforts to improve New Mexico's educational system.

Dr. Winograd directs the Wallace Foundation Educational Leadership Grant and also directed the New Mexico Title II Teacher Quality Grant from 1999-2003. Since coming to New Mexico in 1996, Dr. Winograd has obtained and directed more than \$17 million in grants aimed at improving the quality of teacher and principal recruitment, preparation, and support.

Dr. Winograd's previous experience includes serving as Director of The Center for Teacher Education & Educational Policy in the College of Education at the University of New Mexico; Chair of the Department of Curriculum and Instruction at the University of Kentucky; Director for the University of Kentucky Institute for Educational Research; and Co-Director for The University of Kentucky and University of Louisville Joint Center for the Study of Educational Policy. Over his career, Dr. Winograd has published more than 60 books, book chapters and refereed articles dealing with literacy, assessment, and education reform.

Dr. Winograd received his doctoral degree from the University of Illinois in 1981.

Jessie Woolley-Wilson, President, Blackboard Learn - K12

As President of Blackboard's K12 Group, Jessie Woolley-Wilson brings more than fifteen years experience in the education industry to Blackboard. In her role, she oversees Blackboard's growth and development strategy focused on elementary and secondary education. Jessie brings a tremendous amount of knowledge and experience in helping schools implement technology programs that positively impact student learning.

Prior to joining Blackboard, she served as President of LeapFrog SchoolHouse where she was instrumental in establishing SchoolHouse as a leader in education technology and as one of the fastest growing educational software producers.

Throughout her fifteen-year career in the education industry, Jessie has held several leadership roles in general management, marketing, and business development. She has extensive experience managing start-ups, turnarounds, and high-growth environments. Prior to joining LeapFrog, Jessie was Vice President of Marketing College Solutions at collegeboard.com, the interactive division of The College Board. In addition, Jessie was part of a three-member executive team that built MyRoad.com, an e-learning company that helped middle school, high school, and college students prepare for college and careers, before it was acquired by The College Board in 2001.

Jessie began her career in education at Kaplan, where she held roles as Regional Area Director of the Southern California Test Prep Service Centers and Executive Director of Pre-College and Pre-Graduate testing programs. She was also President of Crimson & Brown Associates, a diversity recruiting firm and Kaplan's first acquisition in the career industry.

Jessie received her MBA from the Graduate School of Business at Harvard Business School and her BA in English from The University of Virginia. She is a 2007 Henry Crown Fellow of the Aspen Institute and is on the Board of the National Education Association Foundation, Junior Achievement of the National Capital Area and the Partnership for 21st Century Skills. Jessie most recently was appointed to the World Economic Forum's Global Agenda Council on Technology and Education. The World Economic Forum is an independent international organization committed to improving the state of the world by engaging leaders in partnerships to shape global, regional and industry agendas.

Ursula Wright, Chief Operating Officer, National Alliance for Public Charter Schools

Ursula Wright is the Chief Operating Officer for the National Alliance for Public Charter Schools. Before assuming her current position, Ursula served as the Chief Financial Officer for the National Alliance for Public Charter Schools for three years. Her diverse professional experience includes corporate finance, operations, and business development positions at some of the nation's leading firms, including The Chase Manhattan Bank, PricewaterhouseCoopers, Cassidy & Associates, and, most recently, GXS (formerly a General Electric subsidiary). She has been active in the World Bank's Development Marketplace Business Plan Competition and helped to found a charter school in Washington, D.C. Ursula earned an Economics degree from Spelman College and a Master of Business Administration from the Kellogg School of Management at Northwestern University.