



#### **TABLE OF CONTENTS**

- I. Context
- **II. Structure of Education**
- III. Taking the Lead
  on Leadership,
  Vision and Investment
- **IV. Next Steps**
- V. Additional Information

November 6–14, 2009 CoSN Senior Delegation to

# Scotland and Netherlands Real Investment/Real Innovation

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# CoSN Senior Delegation to Scotland and Netherlands:

Real Investment/Real Innovation
November 6 - 14, 2009

#### I. CONTEXT

In November, 2009 The Consortium of School Networking (CoSN) led a United States (US) *Senior Delegation* to the Netherlands and Scotland as part of its ongoing efforts to facilitate a global conversation on the use of Information and Communications Technologies (ICT) in education. Building upon the experiences of three previous delegations — Western Europe (2002), Australia (2004), Scandinavia (2007) — the *agenda* included high-level meetings with both public and private-sector officials and visits to schools exemplifying the ways in which ICT is being deployed in classrooms.

Across the globe, technology is being leveraged to enhance learning and boost administrative efficiency in schools. US educators and policy makers need to look at best practices from around the world if they hope to use technology to transform learning and enable the enterprise of education. CoSN is dedicated to uncovering and exploring innovative approaches wherever they are being employed to ensure that North American educators and policy makers can devise practices and enact policies that lead to the successful use of technology in schools.

-Keith Krueger, CEO, CoSN

Guided by the fundamental assumption that we can learn from other countries, just as other countries can learn from us, the goals of the delegation were to:

- Determine how strategic investments in ICT by Scotland and the Netherlands are preparing students for success in a global economy;
- Explore innovative uses technology, including Web 2.0 collaborative tools, national learning platforms and other cutting edge applications;
- Discover common challenges in using ICT to transform learning;
- Identify innovative policies and practices in Scotland and the Netherlands that might be replicated in the US; and
- Share our findings with interested groups and individuals.









The educators we met during our visit share many of the same problems we are encountering in the US and grapple with similar issues – how to transform education through the use of ICT, how to engage

**Helen Padgett** 

**Netherlands** 

she'd like to get

out of the trip to Scotland and the students for higher achievement, how to measure this achievement, how to retrain teachers

to use the new technologies and teaching strategies and certainly how to fund and sustain it. But the approaches and the solutions in addressing these problems are unique.

We were fortunate to capture our experiences on a *video blog*, allowing us to interview students, teachers, administrators, and policymakers, highlight our impressions and share real time what the delegation was encountering.

At each turn through Scotland and the Netherlands, the delegation encountered innovative approaches to solving common problems. In one school in the Netherlands, a "laptop doctor" was set up to help teachers and students when hardware stopped working, allowing for continuous, uninterrupted instruction and learning. In Scotland, a teacher used students' interest in Nintendo's Gameboys to help them practice their mathematics facts while simultaneously chatting and learning with students at another school across the country.

Innovation was the key to governments sparking educational changes and improvements. Innovation sustained teachers in their search for support as they improved their practice and became knowledge assemblers. And, innovation set the stage for continuous improvement of the system.

These innovations would not be possible without significant strategic investments by the Scottish and Dutch governments.

Scotland's investment in ICT is exhibited through **Glow** – sometimes referred to "the world's first national intranet for education." As one blogger noted " ... it is very impressive to see the Scottish government articulate a vision and align the resources to support the tools that they have deemed essential to execute their vision...and more importantly, that they believe to be essential to the success of their students and in turn, the long-term economic well-being of their nation."

The Netherlands has taken a different approach to investing in ICT through a unique nonprofit partnership with government funding called *Kennisnet*. The effort is well staffed and well resourced at every level with a commitment from the government. Kennisnet offers all primary, secondary and tertiary educational facilities independent advice and services regarding the effective and safe use of technology.

In each of these countries we saw exemplary ICT integration in schools. Students were engaged, working together and there was a seamless, nearly transparent use of technology to support learning. But, as the delegation noted, these innovations are taking place in the US in some classrooms. We each could name classrooms and schools that are utilizing these tools to support learning. The differences are policies that support and encourage innovations to scale up successfully and in a shorter time frame.

It is clear at this point that there is both great commitment in terms of people and finances to look at the uses of educational technology to increase learning opportunities for students in both Scotland and the Netherlands. Second, it is also clear that both countries are facing the same, if not greater, financial challenges that we face in the United States. Given this, we need to determine how the political leaders in these countries have truly figured out the importance of using technology to segue deeper learning opportunities for students and have provided hundreds of people working at the national level to lead these efforts. What does this commitment look like in the US? In our current challenges, can we reach out to learn from other places?

—Fred Morton, Director, Maggie Walker Governor's School for Government and International Studies and Executive Committee, American Association of School Administrators (AASA)





#### II. STRUCTURE OF EDUCATION

Visiting schools, observing students, and talking with teachers and administrators gave the delegation a unique understanding of how theories, resources and government policies are put into practice.

#### **Glow-ing In Scotland**

Funded and managed by **Learning and Teaching Scotland (LTS)** and delivered by a private company, **Research Machines (RM)**, Glow claims to be the world's first national intranet for education. It is a safe online environment for students, teachers, and parents, as well as an area to create personalized work spaces and share curricular resources. Glow also provides a variety of **online tools** to help students communicate and collaborate across the network.

Glow was formally released to schools in the fall of 2007. Two years later, all school systems in Scotland have voluntarily signed on to participate in Glow. In partnership with RM, LTS provides continuous professional development (CPD) through various means — onsite and remote with teachers required to have a portfolio and to attend 35 hours of professional development per year supporting the new curriculum.

Glow supports a number of tools and components available to all students, teachers and parents in Scotland. Teachers are empowered to utilize Glow as a resource for students, allowing lessons to be more personalized and providing opportunities for learning beyond the classroom walls, while still inside a secure environment. Glow Groups allow classes to complete class work and homework online, work with other classes in different schools, and even work with pupils across the world on collaborative online projects

Educators are encouraged to improve their practice through online learning and create new opportunities for collaboration. With a Glow account a user can access web conferencing tools using video, audio and a shared whiteboard space, a web-based email system, secure online chat, instant messaging, discussion boards, and a national Virtual Learning Environment (VLE). Glow is free to the schools and helps reduce expenditures by centralizing the tools and VLE within the nationally funded and administered intranet.

# Tom Greaves offers his views on the cost savings from Glow

Written descriptions of Glow cannot replace the real excitement we witnessed in seeing how it is being deployed in Scottish schools. At St.

James Primary School (Paisley) we saw students actively engaged in learning, teachers facilitating that learning and technology seamlessly integrated into the experience.

- Primary 1's (5 year olds) used video conferencing with another P1 class from the Shetland Islands. Using Glow, the students could see, hear and communicate with the students in the Shetland Island class. They asked questions about life in and out of school comparing it to their own experiences.
- Primary 7's (11 year olds) participated in a "Transitions" exercise. In pairs they worked on laptops and entered questions into a special group area asking the secondary school teachers questions about how their school experience would be different and receiving

information to ease the transition to a new

school environment.

Primary 6's (10 year olds) used Glow for a writing assignment to document how to make Kokeshi dolls as part of a unit on Japanese culture.

Sheryl Abshire describes how students are using Glow at

St. James School

The a-ha moment for me was in Scotland and the excellent implementation of Glow in two different settings with both kindergarten students and with middle school age students. **Teachers were empowered to** utilize Glow as a resource for students and they used it as a tool to enable the lesson design to be successfully delivered and for students to be empowered through the technology to connect with students in other settings. Lessons were more personalized, and provided opportunities for learning beyond the classroom walls.

—Lois Adams-Rodgers, Deputy Executive Director, Council of Chief State School Officers





#### **Glow in Action**

We observed students in another school using the Glow

Meet web conferencing tool to compete on math

Lois AdamsRodgers discusses
the challenges and
opportunities of
using new media
and technology to
offer personalized
learning for
students

facts with pupils in another school in Scotland using Nintendo DS Touch Screens. Using technology to engage pupils in practicing their computation skills, with the added dimension of friendly competition with peers kept the students engaged in the fast-paced activity.

In **St. Ninian's High School** (Kirkintilloch), a teacher explained how he is using Glow Learn to track student progress on specific assignments and task items.

The possibilities for connecting classes and creating learning opportunities are numerous, and it was fascinating to find that many of the ideas for the best ways to use Glow came from the teachers and their classes. At Holy Family Primary School in East Dunbartonshire, Deputy Head Teacher, Mrs. Marie-Louise Brogan,

It is clear that the kind of passionate and caring educators that we met on our visit to a primary school remain the key to Scotland's long-term educational success. With that in mind, it was still very impressive to see the Scottish government articulate a vision and align the resources to support the tools that they have deemed essential to execute their vision...and more importantly, that they believe to be essential to the success of their students and in turn, the long-term economic well-being of their nation. Although these Scottish education leaders admit they have embarked on a journey for which they do not have all the answers, they recognize they cannot afford to wait.

—Ann Flynn, Director, Education Technology, National School Boards Association

created "Game for Life" which runs from January to June and enables students to participate in a simulation where they have a job, manage a budget, track mortgage rates and then apply for a mortgage, purchase their first home, pay property tax, purchase insurance, shop for food for five healthy meals a week, etc. It makes learning real for students and demonstrates what is needed in order to have a good life.

Just as there is a wide variation in the effective use of technology across the U.S, this is also the case in Scotland. We saw many excellent examples of integrating technology resources across content areas for students use and there seemed to be a comfort level with the use of Glow among many of the teachers and head teachers we met. Yet we were also told that the use of Glow by all teachers is still a work in progress, and the real test will be ongoing development, enhancement and integration into the daily work of Scottish classrooms.

Listen to
Mick Adkisson
talk about
teachers being
the most creative
developers of
content.

## The Netherlands: Leveraging Teacher Expertise to Create, Publish and Share Digital Learning Lessons

teacher-created digital repositories produced
collaboratively in the Netherlands. In each case teacher
expertise was leveraged to create, publish, and share digital learning
objects and lessons. We also had the good fortune of visiting a
school in which the teaching and learning experience was
continually enriched and strengthened by using ICT.

We saw three strong examples focusing on

I sit here in the airport thinking back on three days of vastly different experiences. We saw amazing uses of technology in classrooms and very traditional uses of technology. Traditional and technology seems like an oxymoron. Today's primary visit was what I think we all wish for all students. There was individualized instruction facilitated by technology, the integration of students' interests into their learning, and a teacher that was so excited by her students that she was nearly bouncing with her excitement. I think through all this has come the continued realization of how important a smart, engaged, curious teacher is to the effective use of technology in the classroom -in fact, to any effective learning in the classroom.

—Andrea Prejean, Senior Policy Analyst, National Education Association

First, the *DigilessesnVO*, *nl* project was particularly unique for its business and production model. It uses a cooperative group of schools that pay for the opportunity to create and share in the learning object repository. Teachers are motivated to produce lessons for their classrooms and make them available to other teachers in the cooperative.



Schools are charged € 2,300 per school/per year (at current exchange rates, approximately \$3,000 US) to participate in the program. They also set a minimum level of participation for each participating school to produce at least 10 lessons/learning objects annually. At present, there are 30 participating schools with the resources developed only available to the schools in the cooperative.

Listen to some comments on DigilessenVO.nl

digital learning objects/lessons.

In this model, teachers are not authors, they are "arrangers". Teachers send digital object/lesson arrangements to editors. Six senior arrangers do the bulk of the work and serve as editors. The fee pays for the software, editors, and one senior level program director (one day/week). In some respects, this is like a private company that is working with schools who agree to work "collaboratively" together on the creation and sharing of

This is something that is truly worth investigating, not just because of its size but because it is formally supported by the **Dutch government through** Kennisnet and it has clear goals around professional development, professional learning communities and practical uses of online educational resources. In fact, they have included incentives for community members who contribute "quality" online educational resources.

-Steve Nordmark, Vice President, **Solutions Management &** Development, netTrekker

It's not clear what the ongoing success of the DigilessenVO.nl model will be, but the US can certainly learn from this unique model. In the US we do have examples of private companies building and selling software to schools/districts for similar purposes, school systems using state and district funds on similar collaborative learning object repository, as well as foundation supported efforts like **OER Commons** and **Curriki**. What seems to be unique with DigilessenVO.nl is the mix of a school collaborative, a cooperative business model and a minimum participation threshold.

A second example, **Digischool**, was started ten years ago by Erik Verhul, a secondary level social studies teacher with another teacher colleague as a nonprofit education solution. In partnership with Kennisnet over the past decade, DigiSchool has built what might be the largest online teacher network – over 200,000 teachers throughout the Netherlands reaching nearly every teacher in the country. They are organized around subjects and grades, throughout all primary and secondary education levels. "Community organizers" stimulate the activity in this **online network** in addition to maintaining their full time teaching position; for their efforts they receive a small stipend.

Finally, we were fortunate to have Marc Durando, CEO of the *European Schoolnet (EUN)*, provide an overview of *The Learning Resource Exchange (LRE)*. Launched as a publicly available service to schools by European Schoolnet and its supporting Ministries of Education in December 2008. LRE enables schools to find educational content from different countries and providers and currently offers over 130,000 learning resources and assets including content from 17 Ministries of Education and a growing number of partners both in Europe and the US. LRE contains resources on virtually every curriculum subject and includes those directly produced by ministeries and other public bodies, as well as resources developed by teachers and the private sector. A goal of LRE is to identify resources that "travel well" and can be used by teachers across geographic borders and in different learning contexts.

Discussions and descriptions of programs and projects offer one perspective. Visiting a school and witnessing what occurs there helps to bring that perspective to life. Our visit to *Alberdingk Thijm*College was an excellent example of how digital content is being deployed at the school level and how technology is used seamlessly as part of the learning process. According to Herman Righter, ICT Director, the goal is to become the number one ICT school in all of Europe. Here teachers have access to online lessons

We saw and heard about policies and strategies in place that make it easier for teachers to spend time doing what is important, interacting and guiding students in their learning. As teachers expose students to more and more ICT, where will they get the content and lessons to help them? Our hosts today said that it takes 11-16 hours to put together a 45 minute lesson. Obviously, teachers don't have the time to design a whole curriculum of lessons. Thirty schools have banded together to create an online environment for teachers to contribute and share ICT lessons. For 2300 Euros and the agreement of each school's teachers to contribute 10 lessons/per year, teachers form a community and share their expertise. Everybody wins. We can learn from the Dutch schools.

—Andrea Prejean, Senior Policy Analyst, National Education Association

created and screened by other teachers. Students have their own laptop with access to broadband.

Teachers are encouraged to experiment with the use of ICT in classrooms and share their experiences with colleagues. Students are viewed as an important partner in developing IT based education because "they are the digital natives."



### III. TAKING THE LEAD ON LEADERSHIP, VISION AND INVESTMENT IN CLASSROOM TECHNOLOGY

The excitement and the innovation we observed in classrooms and heard about in meetings with

teachers and administrators in Scotland and the Netherlands could not have occurred without

the foundation of a strong policy framework, a clear vision and strategic investments.

Finding out about these policies, visions and investments was a central part of our week together.

of Parliament,
Jan Jacob van Dijk
during our
meeting with
him at the
Hague

Listen to a

discussion

between the delegation and

**Dutch Member** 

The passion and strategic focus exhibited by our hosts made it clear that they had a vision based on the belief that ICT can—and does — make a difference in the lives of their students, coupled with a sense of urgency about how to make that difference happen quickly and equitably. From the senior officials who addressed us, to the one-on-one conversations with staff and students in local schools, it was evident that

there was a shared vision of where they wanted to go, even if they had not yet all arrived at the final destination.

This kind of vision and commitment of resources to ICT has been largely absent at the national level in the US given the structure of American education with most technology planning and acquisition decisions driven by state agencies and local district administrators. An important exception is the long-term support of E-Rate, a federally directed but not funded program that supports classroom and library Internet connectivity. We are hopeful that the *National Education Technology Plan* recently released may provide some of the missing vision for US educators and policymakers.

#### **Funding Today for the Future**

schools serving a student population is 2.5m.

One overarching conclusion that the CoSN delegation took away from its visit to Scotland and the Netherlands is that those two nations (plus the United Kingdom overall) invest significantly more at a national level in ICT in the classroom than is the case here in the United States. Taking into consideration that US federal education technology funding in 2009 was uncommonly high, receiving a significant boost through the American Recovery and Reinvestment

Act (\$650 million) on top of an annual appropriation for

the Enhancing Education Through Technology
program (\$272 million), the US expended \$922
million on classroom technology to support nearly
50 million students. Though exact comparisons
are difficult because of the differences in government

looking at two different systems – one in Scotland and one in the Netherlands. What I've really been interested in seeing is what kind of government support ICT gets. And what I've concluded is that Scotland and the Netherlands substantially support their ICT in a much greater way than the United States does.

For the past week we've been

—Jon Bernstein, President, Bernstein Strategy Group

#### Listen to Jon Bernstein

comment on comparative government spending on technology

entities and programs, the following spending levels are illustrative. The most recent budget for BECTA, the UK government agency leading the drive to ensure the effective use of technology throughout learning, was GBP 108.8m (or \$161m) for a student population of 8m. In the Netherlands, the Ministry of Education expended € 21.8m (or \$27.7m) last year to operate Kennisnet, an organization that is focused entirely on supporting ICT implementations in K12

Country	Per student ICT expenditure in US \$
US* * based on EETT appropriations of \$272 m excluding funding under ARRA	\$5.44
United Kingdom	\$20.10
Netherlands	\$10.80



#### ICT is a Necessity not a Luxury

Listen to Frans

Schouwenburg,

and Secondary

Kennisnet Sector Manager for Primary

approach to open

Education, describe the

Based upon our personal observations and discussions during our week long delegation, we sensed that Scotland and the Netherlands approach ICT in the classroom as an absolute necessity — not as a luxury — for improving learning and teaching as well as developing workforce skills. Leaders at *Learning and Teaching* 

**Scotland** and **Kennisnet** described their focus on investigating and delivering quality

technology programs and materials in schools, innovating education through ICT and making the best use of technology currently available in schools. We found this attitude inspirational, particularly in view of the continuing debate in the US about the unproven and uncertain value of technology. While Scotland and the

Netherlands have already accepted as a basic a premise the value of technology to education with significant progress in implementing comprehensive classroom technology programs, the US is still debating whether technology

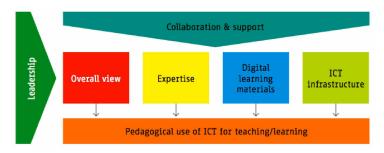
impacts achievement and, if so, how and to what extent that occurs.

An excellent example of the value placed on classroom technology can be found in the work of Kennisnet. This year Kennisnet is rolling out *Wikiwijs*, an open

internet-based platform for teachers / professors, where they can find, use and develop open learning materials. They are also developing initiatives around digital identity and social networking. Throughout our discussions with leaders at Kennisnet, they reminded us that we cannot ignore Web 2.0 trends and student usage of Web 2.0 tools but must embrace and shape them for learning. Contrast this with the typical situation in the US where we block and ban access to social networking sites rather than promote and adapt for learning.

Another example Kennisnet's work is the Four in Balance Monitor, providing educator's insight into the current benefits of ICT in Dutch schools. The Monitor is a conceptual framework based on the notion that effective long-term use of ICT requires the balanced deployment of vision, expertise, digital learning materials and ICT infrastructure. Using this framework,

schools can self assess their readiness to achieve effective and efficient use of ICT in education, as well as compare their results with other schools and national indicators.



#### **Doug Brown**

talks about
home access;
the true last mile
to learning in
Britain

**Importance of Research** 

We were impressed with the direct investment in institutions funded and operated by the government that conduct research and development in ICT, with the aim of fostering innovation. By contrast, the US federal government employs a handful of individuals at the federal level to concentrate on education technology and engages in funding limited research and development.

The British Education Communication and Technology
Agency, or BECTA, describes itself as "the government agency
leading the national drive to ensure the effective and innovative use
of technology throughout learning." BECTA employs approximately
300 employees. In addition to offering schools in the United
Kingdom (including Scotland), advice, training and resources to
integrate technology into curricula, BECTA is helping deliver Internet
access to low-income student homes through its voucher initiative
allowing low income families to use the technology for a range of
social and economic purposes, including finding jobs, paying bills
online, and bringing them into an increasingly digital world.

In a briefing by Francesc Pedro from the **Organisation for Co-operation and Development (OECD)**, the delegation heard

soon. The report contains lots of very interesting and important information about ICT use. One of his figures shows the extent of availability of ICT for students in the European countries at school and at home. The stats for home usage were generally close to 100 percent. While there was considerable variation with regard to school use the percentages were universally lower. The US decided not to participate in this study when data was collected a couple of years ago. Too bad because it would have been very helpful to have the stats on the above findings n this detailed study. -Jim Bosco, Professor Emeritus,

We heard from Francesc Pedro at

OECD giving us a preview of a

report that will be published

—Jim Bosco, Professor Emeritus, Educational Studies Western Michigan University CoSN Principal Investigator, Web 2.0 in Schools Leadership and Policy

about the **New Millennium Learners Project** focused on analyzing and understanding the expectations and attitudes of the new generation of learners and addressing topics like video games, gender issues in technology, and how to move beyond traditional textbooks with digital content. These same ideas are often debated among US educators, yet no focused research agenda has been established by the federal government to provide guidance. It was also striking that the OECD researchers gave a high priority to listening to student voices.



Listen to Guus
Wijngaards, director of
INHolland University's
Centre for eLearning,
discuss the growing gap
between informal and
school based learning

A final example of research are the efforts of INHolland University's Centre for eLearning in conducting studies on how best to integrate informal and formal learning environments, and how to replicate successful approaches.

These research examples at BECTA, OECD and INHolland, while too costly for each state or district to replicate, are excellent illustrations of true leadership at a national or multi national level. If similar initiatives were launched in the US, results from such projects could help inform and support decision-making at the local level.

#### Final Thoughts on ICT Leadership

During our week-long journey through Scotland and the Netherlands, the delegation meet with public officials who clearly believe ICT is a critical component of ensuring their economic future by developing a trained workforce. We also met visionary leaders at the building level who believe ICT can help transform learning for their students and who are inspiring and leading teams of talented teachers to embrace today's schools.

#### **Tom Greaves**

talks about the level of spending on IT resources in Scotland, Netherlands and the European Union

At both the policy and practitioner level, education technology is not the goal, nor is ICT projects. Rather these efforts are viewed as Teaching and Learning initiatives. There is also a fundamental understanding of the importance of developing, supporting and sustaining a system that gives access to all students, teachers, schools and parents.

Scotland and the Netherlands have moved forward by:

- Recognizing a link between long-term economic success and the deployment of ICT resources;
- Articulating a vision for ICT use coupled with appropriate funding;
- Conveying a sense of urgency about the necessity of further investment in research; and
- Understanding that ICT for learning is an evolutionary process that will continue to change as new devices.

Replicating the policies and approaches that exist in Scotland and the Netherlands will be difficult given that the system of local control is a powerful cornerstone of American public education. In the US, it will take far more than convincing the vast number of principals, teachers, superintendents, locally elected school board members, state policymakers, community and district technology leaders that education technology can make a difference. Our system of public education requires that belief ultimately align with state and district resources and budgets. At the federal level, leadership at the US Department of Education and the White House can play a critical role in defining a vision that articulates how technology addresses some of today's greatest education challenges and creating the sense of urgency that will inspire local leaders to interpret and adapt ICT. Whether it is improving graduation rates, raising student achievement, increasing interest in STEM careers, or preparing high quality teachers, ICT must be embraced and incorporated as part of the vision and the solution for education here in the US.

#### **Key Links**

#### Glow

http://www.ltscotland.org. uk/glowscotland/index.asp

#### Kennisnet

http://www.kennisnet.nl/

### Learning and Teaching Scotland

http://www.ltscotland.org. uk/index.asp

**Learning Resource Exchange** http://lre.eun.org/

#### **BECTA**

http://www.becta.org.uk/

#### **OECD**

http://www.oecd.org/

Lois AdamsRodgers describes
how US organizations
can, together, send
a strong message
about the importance
of technology
funding in the US

of the term Information and Communications Technology or ICT to move the emphasis away from being just a "technology" project, conjuring up decade's old images of boxes and wires or IT certification programs. Such a move will require a commitment from educators and their professional associations, publications, and vendors to educate the American public. In the long run, that language could help everyone recognize that technology is no longer an "add on"

to the curriculum or optional luxury, but essential to educating tomorrow's leaders.





#### **IV. NEXT STEPS**

The delegation brought together a committed and dedicated group of senior education professionals interested in moving the agenda for ICT in education forward in US classrooms. Given the diversity of the group across education institutions and affiliations, we hope to continue our collaboration, build upon the findings and experiences of the delegation, learn more about the Scottish and Dutch policies and see how these might be applied to the US educational experience. We also hope to disseminate our findings to a broad range of constituencies. Together the groups represented on the delegation can work towards demonstrating how other countries are using technology to better serve each and every student and teacher with the resources necessary for improvement.

#### **ADDITIONAL INFORMATION**

#### **US Senior Delegation**

#### **Sheryl Abshire**

Chief Technology Officer Calcasieu Parish School System Lake Charles, LA

#### Lois Adams-Rodgers

Deputy Executive Director Council of Chief State School Officers Washington, DC

#### **Mick Adkisson**

Manager, Education Advocacy Smart Technologies Portland, OR

#### Jon Bernstein

President Bernstein Strategy Group Washington, D.C.

#### Jim Bosco

Professor Emeritus, Educational Studies Western Michigan University Principal Investigator, Web 2.0 in Schools Leadership and Policy Consortium for School Networking

#### **Steve Brown**

Mobile Digital Arts Mill Valley CA

#### **Ann Lee Flynn**

Director, Education Technology National School Boards Association Alexandria, VA

#### **Tom Greaves**

Chairman The Greaves Group Encinitas, CA

#### **Kathy Hurley**

Senior Vice President, Strategic Solutions and Partnerships Pearson & Pearson Foundation Upper Saddle River, NJ

#### **Keith Krueger**

CEO

Consortium for School Networking Washington, D.C.

#### **Fred Morton**

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#### **Steve Nordmark**

Vice President Solutions Management & Development, netTrekker Cincinnati, OH

#### **Helen Padgett**

President, International Society for Technology in Education (ISTE)

#### **Kevin Pawsey**

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#### **Andrea Prejean**

Sr. Policy Analyst National Education Association Washington, DC

#### Irene Spero COO

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#### **Craig Wacker**

Program Officer The John D. and Catherine T. MacArthur Foundation Chicago, IL

#### **Kate Wallace**

VP Strategic Partnerships RM Educational Software, Inc. Hyannis, MA

#### **Agenda**

#### **Sunday, November 8**

#### **Radisson Hotel Glasgow**

15:30 – 16:30 Orientation – Overview on agenda, expectations, responsibilities, and creating a great delegation experience

16:30 – 18:00 Overview on UK Experience with ICT in Education

Doug Brown, Expert Consultant, BECTA

18:30 Group dinner sponsored by Pearson Foundation and Fronter UK Ltd.

#### **Monday, November 9**

09:00 School Visits 1:

A visit to schools within an education authority (comparable to U.S school district) to experience firsthand the opportunities and challenges encountered in using technology to support the learning process. The intention is to allow delegates to meet some teachers, mentors and see pupils who are using Glow. There should also be an opportunity to meet a local authority (district) member of staff. The group will be split across 3 schools:

Group 1 - St. Ninian's High School, Bishopbriggs Group 2 – Lairdsland Primary School, Kirkintilloch Group 3 – Johnstone High School, Johnstone

12:30 Depart Schools

13:00 Meet with senior staff at Learning and Teaching Scotland (LTS) for discussion

on the use of technology to support learning and teaching in Scotland

15:30 Group dinner sponsored by RM

#### **Tuesday November 10**

09:00 School Visits 2:

Group 1 – Todholm Primary, Paisley

Group 2 – Holy Family Primary School, Kirkintilloch Group 3 – St James's Primary School, Paisley

10:30 Depart schools

11:00- 14.30 Meeting with RM staff in the Learning & Teaching Scotland building, The Optima, to learn about the Glow operation http://ltscotland.org.uk/glowscotland/index.asp and meet senior RM staff for discussion of GLOW

Participants: RM -John McCarney, Head of Education Services, Stuart Sefton – Senior Service Delivery Manager, Bruce Murray – Education Manager, Tom Gregory – Project Manager and LTS Marie Dougan – and other LTS col-

leagues TBC

11.00 Educational Issues

—Engagement with Districts (local authorities)

—Rollout and Implementation Issues—Embedding Glow in Schools

—Continuing Professional Development & Training

—Supporting the New Curriculum

-Raising Standards and Raising Attainment

—Parental Involvement

13:00 Lunch

13:30 Conclusions

—Issues arriving from visit

—Lessons learned

—Agreed actions and follow up

19

**Technical Solution** 

- —Identity matching/Authentication
- —Provisioning
- —Security of Access
- —Scalability

**Operations Overview** 

- —Pro-active management of solution
- -National Helpdesk
- —Support to local authorities
- —Building and running the data centers
- 14:30 Depart from LTS building for Glasgow airport for Amsterdam

#### Wednesday, November 11

10:00 – noon Meetings with Kennisnet, a public ICT support organization.

The meetings will focus on exchange of ideas regarding policy, interaction with authorities, research on

ICT in education, professional development of teachers and administrators followed by lunch.

12:00 – 13:00 Lunch at Kennisnet

13:00 – 13:45 Travel to Jaarbeurs Utrecht

14:00 – 18:00 Onderwijsdagen (Education Days) conference

Presentation by members of delegation at Onderwijsdagen (Education Day) conference in Utrecht scheduled at

14:00 until 14:45

19:00 – 22:00 Dinner hosted by Kennisnet

#### **Thursday, November 12**

9:30- 12:00 Meeting at INHolland University in Rotterdam(Postumalaan)

Exchange of views as well as presentations by

Marc Durando (EUN),

Francesc Pedro (OECD),

Ferry de Rijcke (Former President of European Organization of Inspectorates)

12:00 – 12:45 Lunch at INHolland

12:45 – 13:15 Travel to The Hague

13:30 – 15:00 Introduction and discussion with Prof Jan Jacob van Dijk, Member of Dutch Parliament and Education Spokesman

for the Christian Democratic Party.

18:00- 21:00 Dinner hosted by INHolland

#### Friday, November 13

9:30 – 11:00	School Visit to Het Alberdingk Thijm College
12:00 – 12:45	Tour Creative Learning Lab and Waag Society
12:45 –15:00	Working Time & Preparation of Final Report
20:00 – 22:00	Farewell Dinner in Amsterdam – sponsored by netTrekker and SmartTechnologies

20

#### Saturday, November 14

#### Appendix of URLs

#### Page 3

Helen Padgett

http://cosn2009.wordpress.com/ 2009/11/09 /helen-padgett/

Video blog

http://cosn2009.wordpress.com/

Glow

http://www.ltscotland.org.uk/glowscotland/index.asp

#### Page 4

Kennisnet

http://www.kennisnet.nl/

#### Page 5

Learning and Teaching Scotland http://www.ltscotland.org.uk/in dex.asp

Research Machines (RM)

http://www.rm.com/Home/RMComHome.aspx

Online tools

http://www.youtube.com/watch ?v=sxM7Fplz95M&feature=player

#### Page 6

Tom Greaves

http://cosn2009.wordpress.com/page/5

Sheryl Abshire

http://cosn2009.wordpress.com/ 2009/11/11/sherylabshire-at-stjames-school

#### Page 7

St. Ninian's High School
http://cosn2009.wordpress.com/
2009/11/11/st-ninianshighschool-teacher-explains-glowlearn/

Lois Adams-Rodgers

http://cosn2009.wordpress.com/ 2009/11/12/technology-andpersonalized-education/

#### Page 8

Mick Adkisson

http://cosn2009.wordpress.com/ 2009/11/11/teachers-are-themost-creative-developers-ofcontent/

DigilessenVO.nl, http://wp.digischool.nl/digilessen/

#### Page 9

**OER Commons** 

http://www.oercommons.org/

Curriki

http://www.curriki.org/xwiki/bin/view/Main/WebHome

DigiSchool

http://mijn.digischool.nl

Online network

http://digitaalleermateriaal.kennisnet.nl/

#### Page 10

Learning Resource Exchange <a href="http://lreforschools.eun.org">http://lreforschools.eun.org</a>

European Schoolnet www.eun.org/

Alberdingk Thijm College
http://www.klg.nl/AlberdingkThi
jmCollege/Homepage/tabid/130/
Default.aspx

#### Page 11

Jan Jacob van Dijk
http://cosn2009.wordpress.com/
2009/11/13/questions-at-thehague

National Education Technology Plan http://www.ed.gov/technology/netp-2010

#### Page 12

Jon Bernstein

http://cosn2009.wordpress.com/ 2009/11/11/jonbernstein-comments-ongovernment- spendingon-technology/

#### Page 13

Learning and Teaching Scotland

http://www.ltscotland.org.uk/in

dex.asp

Kennisnet

http://www.kennisnet.nl/

Wikiwijs

http://wikiwijsinhetonderwijs.nl /over-wikiwijs/english/

Frans Schouwenburg

http://cosn2009.wordpress.com/ 2009/11/11/a-familiar-nationalcontext-for-education-reform/

#### Page 14

Doug Brown

http://cosn2009.wordpress.com/ 2009/11/09/homeaccess-the-truelast-mileto-learning-in-britain/

**BECTA** 

http://www.becta.org.uk/

OECD

www.oecd.org

New Millennium Learners Project http://www.oecd.org/document/10/0,3343,en\_2649\_358455 81\_38358154\_1\_1\_1\_1,00.html

#### Page 15

Guus Wijngaards

http://cosn2009.wordpress.com/ 2009/11/13/the-growing-gapbetween-informal-and-schoolbased-learning/

Tom Greaves

http://cosn2009.wordpress.com/ 2009/11/12/tom-greaves-oneuropean-versus-us-spendingon- itresources/

#### Page 16

Lois Adams-Rodgers http://cosn2009.wordpress.com/ 2009/11/13/lois-adams-rodgersat-INHollandscot5

#### **Background Materials for Scotland**

#### Learning and Teaching Scotland (LTS)

Learning and Teaching Scotland (LTS) provides advice, support, resources and staff development to the education community, creating a culture of innovation and excellence throughout Scottish education.

http://www.ltscotland.org.uk/index.asp

A description of ICT in Scottish schools is available at

http://www.ltscotland.org.uk/ictineducation/index.asp

#### Glow

Managed by Learning and Teaching Scotland and delivered by Research Machines (RM), Glow is the world's first national intranet for education.

http://www.ltscotland.org.uk/glowscotland/

#### **Scottish Education System**

State schools are owned and operated by the local authorities which act as *Education Authorities*, and the compulsory phase is divided into primary school and secondary school (often called high school). Schools are supported in delivering the National Guidelines and National Priorities by Learning and Teaching Scotland. For a description of the structure of Scotland's Education System, go to

http://www.educationuk.org/pls/hot\_bc/page\_pls\_user\_article?x=181466037604&y=0&a=0&d =WHY\_SCOT\_STRUC

The history of Scotland's education system is described at

http://www.educationuk.org/pls/hot\_bc/page\_pls\_user\_article?x=181466037604&y=0&a=0&d = WHY\_SCOT\_HIST

#### **Background Materials for Netherlands**

#### **EUN's Insight Report on Netherlands**

This document created by Kennisnet reports on the changes that the Dutch education system is going through and describes the partnerships created to integrate ICT in public schools. To access all components of the report, select Netherlands in Search Country Report, select issue and a menu of choices will appear.

http://insight.eun.org/ww/en/pub/insight/misc/country\_report.cfm

#### **OECD: National Case Studies on Information Communications Technology in Schools**

OECD conducted case studies to understand how ICT relates to educational innovation. This document summarizes of the case studies from four Dutch primary and secondary schools.

http://www.oecd.org/dataoecd/61/38/2740291.pdf

#### Impacts of ICT in Education: The Role of the Teacher and Teacher Training.

European Conference on Educational Research, September 1999

Even though the paper is ten years old, it is a good description of the teacher's role in integrating new digital media in the classroom.

http://www.leeds.ac.uk/educol/documents/00001201.htm

#### Battling Urban Deprivation: ICT Strategies in the Netherlands and Europe

This article describes research on the use of ICT in Netherlands and its role in addressing the socio-economic gap.

http://www.bk.tudelft.nl/users/fernande/internet/JUT2.pdf

#### **Collaboration on ICT in Dutch Higher Education**

This article covers the work of SURF, a primary Dutch national cooperative organization for higher education and research, on the use of ICT for higher education.

http://www.educause.edu/EDUCAUSE+Review/EDUCAUSEReviewMagazineVolume42/CollaborationonICTinDutchHighe/158134

23

#### Kennisnet

Kennisnet supports educational facilities by proving links between education and ICT geared towards maximizing the impact of learning.

http://about.kennisnet.nl/

#### **INHolland**

INHolland University of Applied Sciences is an institution of higher education in the western part of the Netherlands offering competence-based learning.

http://www.inholland.nl/INHOLLANDCOM/Home.htm

#### **Alberdingk Thijm College**

This College operates as an ICT school to enrich teaching using ICT. Students have their own laptop, work with digital materials and are well prepared to function in a dynamic society.

http://www.klg.nl/AlberdingkThijmCollege/Homepage/tabid/130/Default.aspx

#### **Waag Society**

Waag Society develops creative technology for social innovation. The foundation researches, develops concepts, pilots and prototypes and acts as an intermediate between the arts, science and the media.

http://www.waag.org/

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