Lessons from New Zealand

In late February, 13 members of ISTE's Special Interest Group for Teacher Educators (SIGTE) participated in a global exchange, traveling to New Zealand on a SIG-sponsored study tour hosted by CORE Education (www.core-ed.org), a nonprofit research and development organization that supports the use of educational technology across New Zealand through professional development, consulting, and education events. The SIGTE study group included teachers, university faculty, and corporate employees from the United States and Puerto Rico. This article is the first installment of a three-part series presenting lessons they learned from their colleagues down under.

The SIGTE study group. Front row (left to right): Sarah McPherson, Holli Buck, Arlene Borthwick, Linda Forrest, Karen Gotimer, Ginger Seeley, and José Hernández; second row (left to right): Matt Tippen (CORE Education), Ann Cunningham, Mia Kim Williams, Eleanor Binstock, George Lipscomb (standing), Mike Charles, and Alexis Torres.

British author Matt Ridley reminds us that "innovation is a collective enterprise that relies on exchange" and that the process of cumulative innovation is achieved through a global exchange of ideas.

It was in this spirit that we traveled nearly 8,000 miles for the opportunity to swap ideas about learning and teaching with our fellow educators in New Zealand. While we were there, we visited schools in Auckland and Christchurch and had the opportunity to talk with administrators, teachers, and students. We also participated in the Learning@School Conference in Rotorua and met with teacher education faculty from the University of Auckland and the University of Canterbury.

Reflecting on our learning from the visit, we identified three key themes:

- 21st century skills in the New Zealand key competencies
- Learning communities, literacy development, and technology integration
- Distributed leadership for achieving student, staff, and community learning

In this article, we focus on our first theme. In two upcoming issues of *L&L*, we'll share more about the others.

Key Competencies

As we visited schools and their websites, we became aware of how prominent the Ministry of Education's key competencies were in the teaching and learning we observed in every school. These key competencies are:

- Thinking
- Using language, symbols, and texts
- Managing self
- Relating to others
- Participating and contributing

At Fendalton Open-air (Primary) School (www.fendalton.school.nz) in Christchurch, we were immediately impressed by a graphic of the key competencies (see "Taking Action to Make a Difference" on page 16) displayed with these elements that Fendalton added:

- Thinker
- Communicator
- Team player

By Arlene Borthwick, Mike Charles, and Sarah McPherson

ISTE's Special Interest Group for Teacher Educators share perspectives on education that sparkle!

Fendalton students participate in collaborative inquiry and action planning as part of the "making a difference" approach to learning.

Fendalton Open-air School embedded a star in its playground to represent the attribute sparkle, an element that the school added at the center of New Zealand's key competencies.

- Dream maker
- Sparkle and belonging (at the center)

Principal Paul Sibson explained that "sparkle" is what makes each child special or unique. The school even has a sparkling star embedded in one area of its playground as a representation of this attribute. The key competencies and Fendalton's approach to "makes a difference" learning (www.fendalton.school.nz/mad.php) through inquiry-oriented projects reflect a student-centered approach to developing skills akin to those in the Framework for 21st Century Learning (www.21stcenturyskills.org), including communication and collaboration, initiative and self-direction, and productivity and accountability. For example,

Fendalton students are investigating whether iPads or laptops are more useful tools in their classrooms and which technology the school should purchase for the coming year.

The government requires schools in New Zealand to have a student management system, and Fendalton created its own. The school's website links to a video of Principal Sibson explaining the use of learning reports—formative assessments that students can understand, explain, and use for goal setting. The online digital format enables students to share their learning, allows for parental feedback and involvement, and lets students comment on their own and other students' learning. This approach gives students ownership of

their learning with informed support from parents and others.

Vision for Learning

Ilam School, also located in Christchurch, is a primary school with the motto "Celebrating Achievement, Celebrating Diversity." The student body represents more than 30 cultural and national backgrounds, and the school's charter references Te reo Māori, the language of New Zealand's indigenous population. At Ilam School, we had a lengthy conversation with Principal Lyn Bird, who recently completed her doctoral dissertation on student self-regulated learning.

The school's vision focuses on the development of lifelong learners who

TAKING ACTION TO MAKE A DIFFERENCE

Thinking

Uses creative, critical, and logical processes to make sense of and question information and experiences

Reflects on their own learning

Challenges ideas

To do

Inquirer

Researches

Futurist

Innovator

Develops skills

Creator

Evaluates

Thinker

Asks questions

English/science/technology

Analyses

Transfers ideas

Organises

Can put things into practice

Managing Self

Makes plans

Sets high standards

Can overcome hurdles

Self-responsible

Has a sense of personal identity

Responsible risk taker

Is resilient

Intrapersonal

Is resourceful

Persevering

Knows when and how to make well-informed choices

Dream Maker

Self-motivational

Has awareness of the effects of words and actions on others

Social studies/health/PE

Acts appropriately

To be

Has a can-do attitude

Sparkle and Belonging

Fun loving   Positive

Passionate   Lifelong learner

Support   Relationship   Challenge

Is informative and imaginative

To know

To live together

Shares ideas

Meaning maker

Social Studies/Health/PE

Negotiates

Uses formal and informal language appropriately

Communicator

Openness

Explores new concepts

Team Player

Participates and contributes

English/mathematics/arts/languages

Participator and contributor

Can produce written, spoken, and visual texts

Uses tools for understanding the world

Collaborates and cooperates

Recognises others' points of view

Values and celebrates diversity

Knows she has a place in the world

Multiliterate

Uses mathematical, scientific, and technological language

Flexible

Respects

Takes an active role locally, nationally, and globally

Interprets and uses words, numbers, images, movement, metaphor, and technologies in a range of contexts

Understands the need to balance rights, roles, and responsibilities

Contributes to the economic and environmental well-being of society

Using Language, Symbols, and Texts

Relating to Others

Participating and Contributing

RESPONSIBILITY AND RESPECT FOR OURSELVES, OTHERS, AND ENVIRONMENT

This graphic is an adaptation of a diagram on display at Fendalton Open-air School in Christchurch that outlines New Zealand's key competencies. The two inner circles contain additional key elements added by Fendalton.

are innovative, confident, and resilient. Both students and teachers are involved in inquiry approaches to learning. The school's website notes that inquiry learning provides the context for students to investigate authentic problems and develop connections and understandings of their world. A recent year-long theme that students identified was sustainability, with opportunities to learn to compost, plant gardens, and test water quality. The school's focus on learning communities also includes a philosophy of "teaching as inquiry" and a structured plan for teacher reflection in learning circles throughout the school year. Key conversations revolve around monitoring student progress using e-portfolios that include student work samples and their annotations.

Students at Ilam have the opportunity to become "Teke Angels" who provide technology support and facilitate the CHILL (Children Leading their Learning) Expo, a two-day series of workshops led by students. The graphic on page 18 depicting technology education at Ilam addresses technology quite broadly, including adaptation, innovation, and systems design. This broader view is similar to that of a U.S. report released by the National Academy of Engineering in 2009 that encourages integrated inquiry learning in K–12 education.

Raising Student Achievement

The New Zealand Ministry of Education is continually seeking ways to raise student achievement and reduce inequalities that may exist across schools. The outcome is that New Zealand schools embrace the importance of valuing and prioritizing Māori language, customs, and traditions for all New Zealanders. Teaching and learning in all schools include acknowledgment of the Māori language, culture, and contribution to New Zealand's heritage. At the Learning@School Conference, we noted that several speakers first greeted the audi-

ence in the Māori language before giving their presentations in English as an acknowledgment of the importance of Māori culture in New Zealand.

Other initiatives include the recent release of National Standards for Lit-

eracy and Numeracy, the ministry's Digital Strategy, and funding of broadband Internet connectivity in schools. The standards ensure that all students (K–8) will achieve academic competencies in literacy and mathematics. The
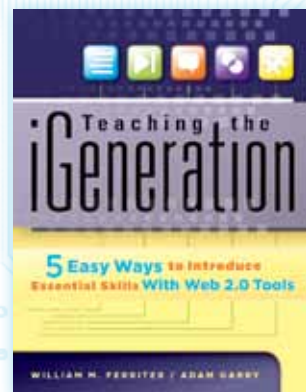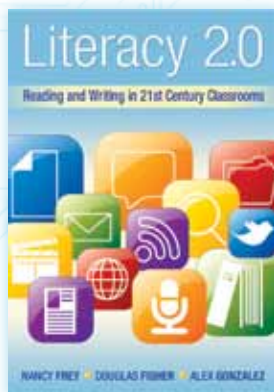
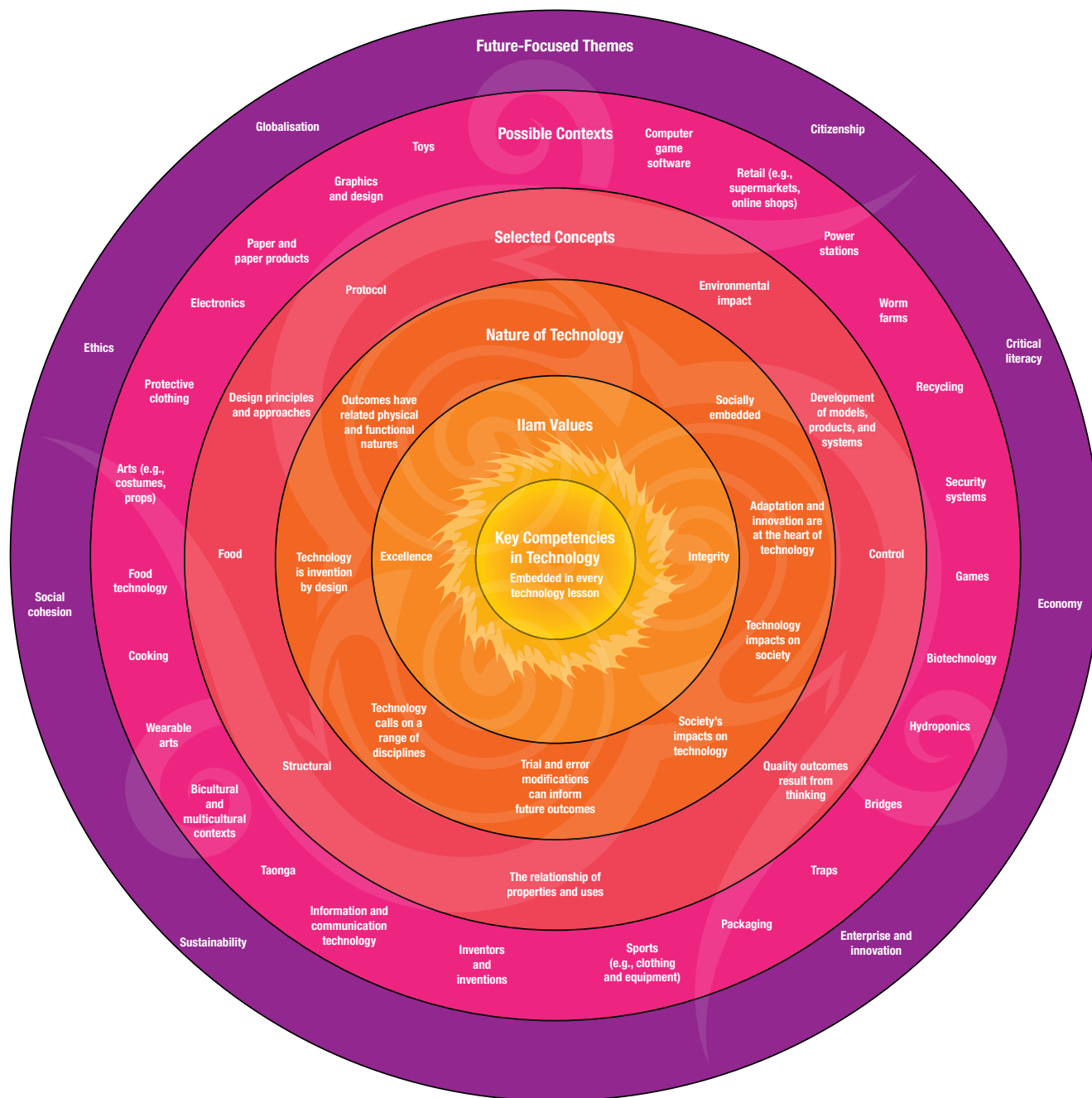**Technology** is intervention by design. It uses practical and intellectual resources to develop products and systems that expand human possibilities by investigations addressing needs and realising opportunities.

This graphic, adapted from an image provided by Ilam School, is an overview of technology as one of New Zealand's eight curriculum areas.

digital strategy goes beyond connections to include technology competencies for creativity and collaboration. We learned that initial expenditures

for technology focused on professional development with a "Principals First" initiative in 1999. Next came a program for teacher professional development

centered on information and communication technology (ICT) for curriculum integration. The commitment of funding for broadband throughout

the country is indicative of a commitment to globalize education for New Zealand children and their families.

Takeaways

Our school visits provided a firsthand look at New Zealand's approach to leadership, teaching, and student experiences to build key competencies (http://keycompetencies.tki.org.nz/In-leading). Comparing and contrasting what we found in New Zealand with what we find in U.S. schools leads us to consider how we might like to re-vision K–12 and preservice teacher education for the 21st century. In general, we noted more whole-school planning for and implementation of authentic and self-regulated learning by New Zealand students of all ages than we might find in many U.S. schools. We will also share with our colleagues and students innovative practices we saw that address character development for learning; teacher learning circles to support student progress; and school, home, and community partnerships to enhance student success. We found our global learning exchange both interesting and valuable, giving us new perspectives on learning and teaching.

The second article in this series will feature ways we saw technology used to empower student voices in the classroom, in the community, and across the world.

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