Theory and Research as the Foundational Elements of a Learning Commons

David V. Loertscher and Carol Koechlin

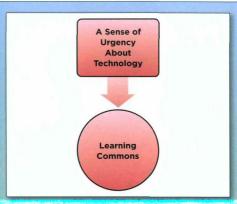
n 2008, when Loertscher, Koechlin, and Zwaan introduced the concept of a learning commons to replace the school library and computer lab, the idea seemed radical.

Three years later, the second edition of *The New Learning Commons Where Learners With* has been launched. During that time many schools and school districts across North America have been experimenting with various aspects of a learning commons as a dynamic place—where everyone in the school contributes to and has ownership of programs and facilities, where learning, creativity, and innovation rather than storage and retrieval are the driving forces. The authors built this model on the foundations of transformative education percolating from many experts around the world and national standards that demand deeper understanding of content and more sophisticated concepts of 21st-century skills and learning.

We are asked as we present around the country what theoretical and research support there is for the different components of the learning commons program. In response we have incorporated literally hundreds of links in the second edition of the book. However, in the past few months, a new crop of expert theory and research has emerged that supports our learning commons concepts. In this column, we present five documents worth considering. We state first a principle followed by the citation and link to the piece, then commentary, and finally next steps.

1. A Sense of Urgency to Utilize Technology to Make a Difference

One of many reports: Alliance for Excellent Education, "The Digital Learning Imperative: How Technology and Teaching Meet Today's Education Challenge," January 2012, http://www.all4ed.org/files/DigitalLearningImperative.pdf (the following quote is



from the press release).

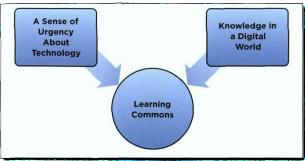
In a white paper as the basis of the celebration of Digital Learning Day, Feb. 1, 2012, the following comment declares a sense of urgency: "To overcome these obstacles, the nation's education system cannot continue to conduct business as usual," said Bob Wise, president of the Alliance for Excellent Education and former governor of West Virginia. "Applying technological tools of real-time data and assessments; adaptive software; online and digital content from many sources; and constant communication with students, parents and others involved in a student's education process, the teacher is able to design the pathway that works best for each student to realize his or her maximum learning potential. Slapping a netbook on top of a textbook is not enough," said Wise. "By applying technical tools, teachers can become true educational designers who harness the best pedagogy available to meet the individual needs of their students."

Comments: A foundational framework for the learning commons is to harness technology in very high-level learning experiences using thematic knowledge-building centers and creative investigation of complex texts using Book2Cloud environments. Pushing personal expertise to build collaborative intelligence in participatory spaces and using collaborative technologies such as Google Docs provide for learners of all abilities to grow and create together. In addition, as collaborative coteaching between classroom teachers and teacher librarians pushes to the center stage of the learning commons program, old ideas about the library dissolve, and exemplary teaching emerges.

A Major Theoretical Analysis and Synthesis of the Internet on Learning Reinforces the Concept of the Learning Commons as a Giant Collaborative

Book: Too Big to Know: Rethinking Knowledge Now That the Facts Aren't the Facts, Experts Are Everywhere, and the Smartest Person in the Room Is the Room by David Weinberger, Basic Books. 2012.

From the book jacket blurb: "We used to know how to know. We got our answers from books or experts. We'd nail down the facts and move on. But in the Internet age, knowledge has moved



onto networks. There's more knowledge than ever, of course, but it's different. Topics have no boundaries, and nobody agrees on anything. Yet, this is the greatest time in history to be a knowledge speaker if you know how. In Too Big to Know, David Weinberger, a leading thinker about the Internet, shows how networked knowledge increases understanding in business, science, education, and government and how it enables people to make smarter decisions than they could when they had to rely on traditional sources of expertise. This groundbreaking book shakes the foundation of our concept of knowledge-from the role of facts to the value of books and the authority of experts-providing a compelling vision of the future of knowledge in a connected world."

Comments: The democratization of expertise and its impact on what is known and what can be learned argue for the changing role of teachers from sages on the stage to guides on the side. Weinberger's argument supports the transfer of ownership of a "library" to the commons notion of general ownership surrounding the concept of learning. If all the adults and students in the school participate in the construction of both a personal and collaborative learning environment, the likelihood of exemplary excellence rises exponentially. Weinberger kills the notion of a single expert in the room.

- 3. The Redesign of Learning Experiences toward Higher-Level Thinking and Creativity Is Essential
- · Blog Post: "4 Lessons the Classroom Can Learn from the Design Studio" by Mick Harper, summarizing the ideas of

John Seeley Brown, http://www.fluency21. com/blogpost.cfm?blogID=2395&utm_sou rce=Committed+Sardine+Blog+Update&u tm_campaign=d302063dc6-RSS_EMAIL_ CAMPAIGNEtutm medium=email.

After a brief but excellent lecture by John Seely Brown in the blog post, the four critical designs of learning experiences should include:

- 1. A culture of critical collaboration
- 2. Interdisciplinary problem solving, every day
- 3. Tinkering with solutions and reclaiming failure
- 4. The shared power of the pencil and pixel

Comments: The collaborative structure of a learning experience in a Google site or other similar technology changes the very nature of the learning environment from a top-down assignment into a collaborative learning experience. Knowledge-building centers and Book2Cloud structures make participatory learning a natural expectation. While many content management systems reinforce traditional lecture, discussion, and regurgitation, simple tweaks in the presumed structure can turn a lowlevel assignment into an exciting project or inquiry collaborative experience.

- 4. Virtual Space Can Have a Profound Effect on Learning in Certain Circumstances
- · Research Report: "The Effects of Virtual Space on Learning: A Literature Review," by Olle Skold (First Monday, Volume 17, Number 1, 2 January 2012), http:// firstmonday.org/htbin/cgiwrap/bin/ojs/ index.php/fm/article/view/3496/3133.

In a review of a wide array of research, the authors concluded:

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YA NONFICTION

HOW DO YOU FEEL?

Dealing with Stress: A How-to Guide (Life-A How-to Guide). Lisa A. Wroble. Enslow Pub, 2012, \$23,95, 978-0-7660-3439-6. Grades 6-12. The Life series is designed to give teens' perspectives, in their own voices, on varying topics of interest including community service, driving, friendship, fashion, stress, technology, and volunteering. In this title, there are real-world tips on coping with stress such as exercise, good nutrition, and learning to relax. Fact boxes, sidebars, and even quizzes help get the point across! Chapter Notes, glossary, additional reading, Internet sites, and index are included.

Diabetes (USA Today Health Reports: Diseases and Disorders), Marlene Tarq Brill. Twenty-First Century Books, 2012. \$34.60. 978-0-7613-6085-8, Grades 8-12, With primary sources from USA Today, Diabetes uses color photos, charts, and case studies to present details for both reports and personal information. Back matter contains a detailed glossary, source notes, bibliography, and index.

Fibromyalgia (Diseases and Disorders). Melissa Abramovitz. Lucent Books/Gale Cengage, 2011. \$33.45. 978-1-4205-0673-0. Grades 7-10. The introduction defines fibromyalgia as a "controversial disease," and following chapters give causes and treatments. Color photos and charts add appeal, and broad concluding material contains chapter notes, glossary, and index.

Substance Abuse, Addiction, and Treatment. Michael J. Kuhar, Consultant. Marshall Cavendish Reference, 2012, \$59.95, 978-0-7614-7943-7 Print. 978-0-7614-9972-5 Ebook. Grades 8-12. Comprehensive signed articles in this encyclopedic reference tool provide well-researched information on A-Z medical and social topics. A chart of drugs has chemical and street names with the detailed index making this a dependable title for research.



JUNIOR FICTION

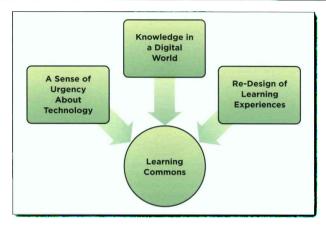
TOMORROW GIRLS

Behind the Gate [Tomorrow girls, bk. #1]. Eva Gray. Scholastic, 2011. \$6.99. 978-0-545-31701-6, Grades 4-6, In the first book of this post-apocalyptic series told from alternate POVs, Rosie, Maddie, Evelyn, and Louisa (this book's narrator) discover their exclusive boarding school is actually an Alliance sleeper cell school. Can they escape and survive long enough to tell the Resistance? Who can they trust?

Run for Cover [Tomorrow girls, bk. #2]. Eva Gray. Scholastic, 2011. \$6.99. 978-0-545-31702-3. Grades 4-6. The girls team up with boys from another school who are also on the run. Rosie (this book's narrator) may be a natural leader, but feeding and shepherding seven people while trying to avoid Alliance agents isn't easy. Then Maddie is targeted and kidnapped. Why her?

With the Enemy [Tomorrow girls, bk. #3]. Eva Gray. Scholastic, 2011. \$6.99. 978-0-545-31703-0. Grades 4-6. Evelyn (the new narrator) is full of conspiracy theories, which make more sense now that Maddie has been kidnapped. The escapees have to get to the leader of the resistance to warn her about the Alliance's plans, but they also want to rescue Maddie. They've got some surprises ahead...

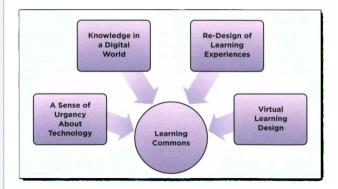
Set Me Free [Tomorrow girls, Bk. #4]. Eva Gray. Scholastic, 2011. \$6.99. 978-0-545-31704-7. Grades 4-6. Maddie (the final narrator) is rescued and discovers why she was targeted: her long-absent mom is the leader of the Resistance! Now, Maddie and her friends pitch in help defeat the Alliance. Running high-risk missions may help defeat the Alliance, but will any of them ever see their homes again?

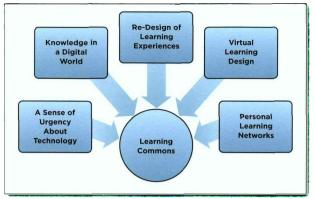


- · The increased use of virtual space necessitates the development of a theoretical and practical online pedagogy.
- · The design of learning tasks must be attuned to the benefits and drawbacks of the virtual space where it will be carried out.
- · Learning tasks must be designed to make sure students attain the skills required to fully utilize the modes of multimodal communication available in virtual space.
- · The ambiguity and uncertainty of virtual spaces presents a major pedagogic challenge but can nevertheless be used to support innovative approaches to learning.
- · Social constructivist, Vygotskian views of learning have a strong influence on the academic discourse on virtual space. pedagogy, and learning task design.

- · The architecture of virtual space is a social object and as such affects learning.
- · Virtual space designed for a specific activity may have positive effects on learning if it is compatible with the educational activity that takes place in that space.
- · Virtual space architecture plays an important role in supporting the emergence of a "sense of place" among students, which is beneficial for learning.
- The experience of virtual space—in terms of beauty, satisfaction, and interestis connected to the spatial properties and architectural elements of the space.

Comments: This research crushes the idea that improvement in teaching and learning can occur if traditional assignments are transferred to technology. Whether a learning experience is face to face, blended,





or totally online, new designs are critical. We have attacked the notion of bird units for over a decade as cut-and-paste exercises, netting very little learning. Instead, we propose the following:

- 1. Old method: question, find, consume, create, share, get a grade
- 2. More complex method: umbrella questions though which students find their passion, curate, consume, create, new challenge, mix what we know, put it all together, culminating activity, get two grades: one for personal expertise and one for collaborative intelligence, Big Think-get better next time.
 - 5. Personal Learning Networks and En-

vironments Are Growing as Essential Elements in Learning and in Global Competitiveness

· Research Report: "Understanding Personal Learning Networks: Their Structure, Content and the Networking Skills Needed to Optimally Use Them," by Kamakshi Rajagopal, Desiree Joosten-ten Brinke, Jan Van Bruggen, and Peter B. Sloep (First Monday, Volume 17, Number 1, 2 January 2012), http://www.uic.edu/htbin/cgiwrap/bin/ojs/ index.php/fm/article/view/3559/3131.

While discussing their research on PLNs for professionals, these researchers make the following observation: "In modern working life, professionals need to perform flexibly

and independently in ever-changing environments (Castells, 2000). To be able to do this effectively, they depend on various lifelong learning skills, among other autonomous and self-directed learning. As they are partly supported in their learning by interaction with their peers, an essential life-long learning skill they need to develop is the ability to find and to connect with relevant others, i.e., professional networking" (Johnson, 2008; Nardi et al., 2000).

Comments: Teacher librarians are accustomed to the development of research skills that are labeled information literacy. However, there is a larger perspective when one looks at the world of personal learning environments and personal learning networks. In the learning commons, conceptual framework is the idea of the development of PLEs, as illustrated below:

From the earliest work in elementary school, teacher librarians can introduce the development of a personal entryway or portal to the world of information and use that portal to create a personal learning network with all the 21st-century and technology tools at one's disposal. And this leads to the development of a personal portfolio that has not only a private space but also a public face.

CONCLUSIONS AND WHAT'S NEXT

In just three years, the learning commons as a transformative entity in the school has deepened. If one analyzes the trends over the last decade in curriculum, assessment, technology, the Internet, choice in schools, and emergence of online education, it becomes evident that traditional concepts of school librarianship as developed over the last 50 years must transform to stay relevant. The innovators of the field, such as Valerie Diggs, Michelle Luhtala, Sue Kowalski, Linda Waskow, and Sydnye Cohen (all of whom have written for Teacher Librarian), are but a few who have transformed their library programs and watched a tremendous change in role and effectiveness in their spaces. The future is now.

