GAME CHANGERS

EDUCATION and INFORMATION TECHNOLOGIES

Edited by **DIANA G. OBLINGER**



Game Changers: Education and Information Technologies

© 2012 EDUCAUSE

This book is released under a Creative Commons Attribution-NonCommercial-NoDerivs 3.0 license (<u>http://creativecommons.org/licenses/by-nc-nd/3.0/</u>). Authors retain the copyright to their individual contributions, which are released under the same Creative Commons license except as noted.

For more information or for permission requests, please visit <u>educause.edu/copyright</u>. This book is available in its entirety on the EDUCAUSE website, at <u>educause.edu/books</u>. ISBN 978-1-933046-00-6

FROM THE EDITOR

I would like to thank the many people who made this book possible, particularly Gregory Dobbin for managing the project and Karen Mateer for her research.

-Diana G. Oblinger

EDUCAUSE

EDUCAUSE is a nonprofit association and the foremost community of IT leaders and professionals committed to advancing higher education. EDUCAUSE programs and services are focused on analysis, advocacy, community building, professional development, and knowledge creation because IT plays a transformative role in higher education. EDUCAUSE supports those who lead, manage, and use information technology through a comprehensive range of resources and activities. educause.edu

ellucian.

Game Changers: Education and Information Technologies is published by EDUCAUSE, with generous support from Ellucian.

Cover and interior design by Michael Brady Design (michaelbradydesign.com).

SUNY Empire State College: A Game Changer in Open Learning

Meg Benke, Alan Davis, and Nan L. Travers

The Learning-Focused Institution as a Game Changer

Introduction

THE STATE UNIVERSITY OF NEW YORK'S (SUNY) Empire State College was established in 1971 by Ernest Boyer¹ in a period of significant social and cultural change. Inspired by the works of John Dewey, Paulo Friere, Ivan Illich, and others, the college was fiercely radical and anti-establishment, and was determined to break all the shackles of tradition in order to better serve those traditionally underrepresented in higher education.² This included forgoing classes in favor of independent and group studies; rejecting traditional disciplinary departments; eschewing grades for narrative evaluations; and, with faculty mentors working with learners individually, devising unique and personalized degree programs that incorporated learning acquired beyond the academy. Unlike prescribed curricula and course outlines, co-developed learning contracts presumed that learners had unique goals and interests and were active partners in the design of their own learning.³

The college was thus "open" in every sense of the word and in ways that went beyond simply having open admissions or flexible delivery modes, as was the case originally at the UK's Open University, which also opened in 1971.

The college has resisted forces pushing its unique educational model toward traditional instruction. Along with other adult learner-focused institutions that began in the early 1970s and that have stayed true to their original mission (e.g., Goddard College, Evergreen State College), the college has withstood adaptation to more mainstream structures—for instance, to meet state

This chapter is licensed under a Creative Commons Attribution 3.0 Unported License



^{© 2012} Meg Benke, Alan Davis, and Nan L. Travers

and federal funding requirements. It began as a game changer, and has deliberately continued in that role.

While the college has diversified its approaches since 1971, adding considerable online capacity and programs that are somewhat more standard, the individualized mentor-learner model just described still informs its core values and operations. Today, the college is substantially more cost effective (both for the learner and taxpayer) than traditional four-year and graduate institutions, public or private. The college has a lower-than-average administrative overhead, shows increasing measures of learner success and persistence each year, and has the highest student satisfaction in its SUNY sector.

In its vision for 2015, SUNY Empire State College continues to challenge the norms of higher education. It thrives on innovation in order to remain resilient in a changing educational world and to fulfill its mission, currently stated as follows:

SUNY Empire State College's dedicated faculty and staff use innovative, alternative, and flexible approaches to higher education that transform people and communities by providing rigorous programs that connect individuals' unique and diverse lives to their personal learning goals.

The thrust of the college's current work involves redefining and repositioning the college as an "open university" in a digital age by

- optimizing the affordances of emerging technologies to enhance the mentor-learning experience;
- building on the college's strength in the recognition, articulation, and accreditation of informal and alternative college-level learning;
- extending access to all forms of open educational resources and developing the supports for learners to use and integrate different resources;
- developing flexible and stackable structures that best match learners' needs, goals, and directions; and
- engaging in the wider discourse and scholarship of open education in all its manifestations.

Recognizing Learning No Matter Where It Occurs

A basic tenet of SUNY Empire State College is that learners have valuable college-level knowledge that can be assessed and credentialed toward their degree. For many learners, assessing and awarding credit for prior learning allows them to complete their degrees without repeating courses and incurring redundant expenses and loss of time.

The Council on Adult and Experiential Learning defines prior learning as "learning that a person acquires outside a traditional academic environment. This learning may have been acquired through work experience, employer training programs, independent study, non-credit courses, volunteer or community service, travel, or non-college courses or seminars."⁴ Credit for prior learning can be awarded based on a number of assessment options. These include training or exams that have been preevaluated through outside organizations, such as the American Council on Education, through the college's own evaluation, or through an individualized prior learning assessment process.

Empire State College permits up to three-quarters of the bachelor's degree to be earned through a combination of transfer and prior learning assessment credit (provided that the learning is relevant to the degree sought). Prior learning assessment at the graduate level is more limited, but still possible in certain programs. The master of business administration allows up to one-half of the degree to be acquired in specific areas through an examination process, and the master of arts in adult learning includes individualized prior learning assessment. Empire State College has long recognized learning acquired outside the academy, and our learners have realized reduced costs and time to degree completion.

Individualized Learning Design

The learners' prior learning provides the foundation upon which Empire State College develops a personalized degree program within the broad guidelines for the majors. Learners collaborate with a faculty mentor in the design of their education, particularly in their degree program. The program might be unusual and unique, or more traditional and recognizable, depending on the learner's own educational and employment goals. The college's innovative, alternative, and flexible approaches provide learners with the opportunity to connect their unique and diverse lives to their personal learning goals.

Within this personal degree plan, a learner can design individualized, independent studies in partnership with an appropriate faculty mentor, either faceto-face or online. Learners are expected to be active partners in the design of the learning contract associated with any study, with the faculty mentor acting as a learning coach, posing questions, and helping the learner think through the issues. For example, to fulfill a general education requirement, a learner with an interest in fiber arts might design an independent study to explore the political and policy implications of fiber and fabric throughout the history of the United States.

In the college's mentor-learner model, learners examine what they have learned, where they want to go in their education, and what it takes to get there. Learners note that although the degree planning and prior learning assessment processes are difficult, they develop self-awareness as learners and the capacity to continue their learning in work and other educational settings. They also comment that the career exploration portion of degree planning helped them understand what was expected in their field and how to design their degree to meet those expectations. Employers have reported that our learners are very well prepared, and many progress in their careers and/or continue to further their studies.

As access to content and resources becomes ubiquitous, the role of the faculty mentor aligns closely with what Siemens⁵ posits as the real value in higher education. What can be scaled and duplicated is content, but what is embodied in the Empire State College mentor remains vital to a college education: "personal feedback and assessment, contextualized and personalized navigation through complex topics, encouragement, questioning by a faculty member to promote deeper thinking, and a context and infrastructure of learning."

A Learning-Focused Institution

In modern higher education, almost all institutions strive to be "learner centered" or "learner focused" as opposed to "faculty centered." This rightly puts the learner in the middle of the educational process, and yet still maintains a clear separation between the roles of learners and faculty.

A key attribute of a game-changer college is being "learning focused," wherein the institution is organized and committed to learn and to adapt to new innovations and opportunities, and that emphasizes members of the faculty and learners as equal partners.

At SUNY Empire State College, faculty mentors are thoroughly engaged in all aspects of learning design. In doing so, they also learn, and they leverage this learning to better support new learners, to share ideas for new curricula with colleagues, and to be aware of trends in their own fields. "Curriculum development" is therefore a collective and continuous cycle of discovery and delivery: the faculty mentors remain current, and the institution can respond to changes in the educational needs of communities and the workplace. Others in the field of mentoring⁶ discuss this process, which could be termed as relational or reciprocal mentoring.

Scholarship and Game Change

SUNY Empire State College fully embraces Ernest Boyer's expanded definition of scholarship related to discovery, integration, application, and teaching.⁷ Scholarship is thus not bounded by discipline, nor disconnected to teaching and learning, nor is it distinct from communities of practice. The supportive culture includes a Center for Mentoring and Learning, a Distinguished Professor of Mentoring, annual college meetings, publications, and new-mentor orientations, all designed to promote and disseminate engaged scholarship. Faculty recognition occurs through awards for excellence in mentoring and for excellence in connecting community service with learning, and faculty reassignments are directed toward the improvement and evolution of mentoring.

In the Center for Distance Learning, the college supports collaborative projects that explore innovative ways of working with learners, such as delivering science laboratories in online courses, or the use of mobile technology. Mentors, instructional designers, and librarians all contribute to the creation of online courses.

As innovations evolve, a learning-focused institution can integrate them with current practices. As a game changer and leader in open learning for the past forty years, SUNY Empire State College is undergoing a new era of innovation as it harnesses the affordances of emerging technologies to enhance its unique mentor-learning model and its expertise in assessing learning acquired outside the walls of the ivory tower.

SUNY Empire State College 2010/11 Key Data

	Head Count	Average Age
Undergraduate	18,656	36.0 yr
Graduate	1,128	39.7 yr
Total	19,784	

Percent Distribution of Learner Residency

Residence	Percentage
New York	87%
Other 49 States	10.0%
International	2.3%

Percent Enrollment Based on Gender

Male	Female
39%	61%

Average Advanced-Standing Credits Used within Undergraduate Degrees

	Bachelor's Degree	Associate's Degree
Transfer Credits	56 credits	21 credits
Prior Learning Assessment	36 credits	23 credits
Total Average Advanced-Stand- ing Credits	69 credits	29 credits

Looking Ahead: SUNY Empire State College as "New York's Open University"

The Open Movement

In the important and timely edition of the *EDUCAUSE Review* entitled "The Open Edition,"⁸ contributions included those that explored the idea of the open faculty, the open course, the open student, open technology, and so forth. It did not include an article on open institutions such as SUNY Empire State College and the role they can play in demonstrating what can be achieved based on their decades of experiences as game changers in higher education. In fact, open education has a rich philosophical and political heritage.

Open education involves a commitment to openness, and is therefore inevitably a political and social project. The concept of openness has roots going back to the Enlightenment that are bound up with the philosophical foundations of modern education with its commitments to freedom, citizenship, knowledge for all, social progress and individual transformation.⁹

The open education movement¹⁰ now goes beyond open admission, distance education, and various forms of "broadcast" teaching. It includes the expansion of shared open resources and virtual peer-mentoring environments that provide learners with the opportunity to create global networks of peers who are engaged in the same areas of learning. It offers faculty the opportunity to connect with other experts in the field and to learn from the learners as they explore, ask questions, and critique emerging knowledge. Open learning provides each learner and faculty mentor with multiple networks and opportunities to grow as an educated person and as a member of a profession. In all these respects, open education, broadly defined, builds upon and extends SUNY Empire State College's mentored-learning approaches. It also inspires discourse on new theories of learning.

As digital devices and networks have evolved, they have become central to the ways in which we relate to each other, to ideas and information, and to how we construct our lives:

- The information age provided freely obtainable information outside of higher education, while the recently emerged "relational age"¹¹ completely shifts how people use information and gain knowledge.
- Once the exclusive domain for in-depth and purposed knowledge, higher educational institutions no longer hold the monopoly. People gather

information for what they want or need, based on their own self-regulated choices, and connect that information to themselves, to others, and to the world around them.

- Siemens¹² noted a trend for increased informal learning across many different fields. Open educational resources can augment informal learning, increasing work-related knowledge sets for individuals without their having to attend higher educational institutions.
- Many of the processes previously handled by higher education can now be off-loaded to, or supported by, technology. "Know-how" and "knowwhat" are being supplemented with "know-where" and "know-when" the understanding of where to find needed knowledge, and how and when to connect and relate different aspects of that knowledge.

The role of higher education institutions therefore now shifts, since they possess the expertise to recognize, assess, and accredit knowledge. They also provide effective frameworks within which people can learn to learn and to purpose and repurpose that learning into constructed and organized knowledge. Paired with open learning resources, institutions can provide opportunities beyond what they normally offer and for learners who have not been able to access higher education. The net result is that learners have richer educational opportunities—and at much lower costs.

SUNY Empire State College, like several other institutions, has offered an innovative MOOC (Massive Open Online Course), which manifested many of the dimensions of technology-enabled open education. Creativity and Multiculturalism, jointly offered by an arts mentor and a math mentor, was open to all comers, with credit (for a fee) or without, or for those wishing to document their learning for subsequent recognition through prior learning assessment. Further MOOCs are being developed in quantitative studies and diversity.

The connected and relational aspects of contemporary open learning call for an approach to education that strikes a balance between the opportunities afforded by emerging technology and the dangers of relentless, unexamined information. The college's Project for Critical Inquiry¹³ aims for that balance by creating a single virtual space in which students, using a series of individualized learning contracts, are free to join, extend, repurpose, mash up, and adapt learning activities to suit their individual needs.

As a pedagogical commitment, critical inquiry stresses clarity of expression, rigorous critical thinking, and an understanding of the social, economic, and political dimensions of knowledge. Critical inquiry models encourage students to "follow the learning" while providing consistent access to faculty expertise and guidance. By providing students with an open, interdisciplinary forum in which to contribute to learning groups, the Project for Critical Inquiry also provides interesting opportunities for the identification and integration of prior learning. It is this faculty guidance around the examination of ideas that is the value added by higher education; the learners can access resources, but need support in developing judgment.

Prior Learning Assessment and Open Education

There are some gaps in the envisaged future of the open education movement. Learners using open educational resources can personalize their learning and create learning environments to match their own choices and needs, resulting in unusual, unique, and unpredictable paths. These learners also need to validate and accredit their college-level learning in order to have it transfer to other institutions of higher education and be accepted by employers.¹⁴

Consequently, higher education forerunners must expand the assessment of learning in open learning environments. With the higher levels of connectivity, experts from around the world can more readily engage. Networks of peers can share perspectives on each other's work or assess each other's learning, augmenting the feedback usually available from only one expert. For learning that emerges from the less prescriptive learning processes, institutions can apply prior learning assessment methods more broadly. Applying the retrospective analysis and reflection typically associated with prior learning assessment on this more emergent learning provides a valid and authentic assessment.

SUNY Empire State College is uniquely positioned to fill this gap. It has (1) a mentoring model designed to support learners to bring together multiple sources of study and exploration, as well as to guide reflection and deeper examination of that learning; and (2) ways to validate, assess, and accredit college-level learning, regardless of where or how the learning is acquired. The college is also exploring ways to incorporate Mozilla's Open Badges project as another way to document prior learning and for faculty to share expertise.¹⁵

Finally, as the open educational resources university's (OER university) first anchor partner in the United States, SUNY Empire State College is already working to meet the needs of OER learners in collaboration with like-minded institutions across the world through the OER university project. The project intends to support free access to OER learning materials to students around the world and coordinate assessment and credentialing through recognized educational institutions.¹⁶ Participants from several continents are designing open courses, which will have methodologies in place for learning assessment and transfer.

Stackable Learning Accreditation

There is a significant national push to increase the rate of degree completion, with multiple projects being funded through the U.S. Department of Labor and private foundations. For example, through Lumina Foundation funding, the Adult College Completion Network¹⁷ has been developed to support institutions engaging in various efforts focused on adults completing their degrees. In the recent report *College Completion Tool Kit*, the U.S. Department of Education¹⁸ identifies prior learning assessment as a key strategy for augmenting the efforts to assist adult learners toward degree completion, especially those with work and family commitments who stop in and out of higher education numerous times. Regulators, legislative members, accreditors, employers, and others are committed to achieving degree completion and raising participation rates as federal research links the country's economic vitality to the education of its workforce.¹⁹

In response, SUNY Empire State College is developing certificate programs for undergraduate and graduate levels that "stack" in multiple ways toward a final degree. Similarly, the learning gained through an open education resource can be assessed for college-level learning, the credit applied toward stackable certificates, and the prior leaning assessment used to fold in emergent learning.

Unlike a credit bank, which just collects assessed learning onto a transcript, the stackable learning accreditation model allows for more modular curricular and credentialing opportunities. Such modular credentialing does not replace standard paths to degrees, but recognizes key accomplishments on the pathway toward learners' goals. This approach increases access to marketable college credentials and ultimately supports degree-completion initiatives.

For example, learners may have more than one certificate based on their learning in professional fields. In addition, a learner may take courses through multiple means to create a general education certificate. Together, the professional and general education certificates would stack and form a coherent bachelor's degree. These smaller and more agile packages can be used to address a region's economic development needs.

Barriers to the use of open education and individualized, stackable learning accreditation stem from traditional concepts of education and of conventional degrees. For example, federal and state funding sources are designed to support almost exclusively first-time, full-time learners taking conventional degrees. Also, with diminishing state aid, the financial burden of an education is becoming more and more the learner's responsibility. Spacing out educational costs through incremental accomplishments may be more attractive to many learners than the daunting debt of four continuous years at full-time rates. Open institutions such as SUNY Empire State College have been dedicated to removing barriers to quality higher education (with costs being one of the highest barriers) for those underserved.

The Role of Academic Technologies

Typically, the information technology departments within institutions of higher education have taken on a service/support role to the academics. Academics rely on the technology team to ensure that supportive structures are in place and processes run smoothly. In the digital-learning world, teaching, learning, and technology are increasingly interdependent. The role of technologists has therefore evolved over the last decade to include a greater responsibility for learning design, while the academic faculty and staff now have a greater responsibility to understand how technology functions and impacts the educational processes.²⁰ The emergence of technology to support the individualized degree-planning process is one example of how SUNY Empire State College has brought the two functions into a closer partnership.

The basic structure of the individualized degree plan at SUNY Empire State College is that of a portfolio, which has evolved over the years into a homegrown electronic system. Recently, a team of faculty mentors and professional staff from the academic, technology, and learner-support areas across the college developed projects using new e-Portfolio systems in teaching and learning, degree planning and prior learning assessment, career development, assessment, and institutional effectiveness.

The e-Portfolio provides an environment for learners to reflect, interrelate, and assess their learning using multimedia, concept maps, and other digital structures. The process of assessing degree plans and college-level prior learning is also eased: faculty mentors provide ongoing feedback directly within each learner's portfolio and develop dialogue around specific topics. Evaluators have access to the documented knowledge and can view how learners organize and relate their concepts. Assessment strategies are linked to institutional and program standards and learning outcomes for credentialing.

Technology-enabled open educational learning environments linked with the use of open educational resources and e-Portfolios provide a platform within which each learner can develop an individualized learning environment, including a repository of his or her work and reflections that create links within the learning and connect it with other learners and scholars, as well as with the workplace and the community.

Engaging in the Wider Discourse of Open Education

Openness as a paradigm, and open education as a movement, evolved from complex histories and collective aspirations of open source, open knowledge, and open access initiatives in higher education. They have strengthened as a result of enduring democratic aspirations for alternative education and the ideals of social justice, and also by the affordances and the increasing ubiquity of emerging technologies. Exploring more deeply the meanings and possibilities of openness, scholars must ask how open tools, resources, and knowledge can demonstrably improve educational quality²¹ and must investigate "the transformative potential of open education."²² In order to remain a "game changer," the college and its scholars must engage thoroughly in this discourse.

Conclusion

Higher education in general has been slow to recognize opportunities for innovation and transformation, with change generally occurring on the fringes.²³ Calls continue from inside and outside higher education to examine issues related to the value of the credit hour and links to learners' learning outcomes and success.

Innovation is not undertaken just for the sake of change. According to Brewer and Tierney, "Higher education needs to be more competitive and cost conscious. But, ultimately, a more innovative postsecondary industry will increase access to higher education, create a better educated workforce, and enable individuals to participate more fully in the democratic public sphere."²⁴

Policy makers and Lumina, the Bill & Melinda Gates, and other foundations have supported initiatives to promote new models, enhance career readiness, and reduce time to degree completion. SUNY Empire State College has demonstrated transformative and disruptive approaches throughout its history. As "New York's open university," it remains a game changer by enabling learners to access open resources independently, engage through rich open learning environments with peer leaders and/or faculty mentors, document their college-level learning through e-portfolios for assessment, and stack credentials.

Acknowledgments

We would like to thank our colleagues at SUNY Empire State College who contributed in various ways to this chapter: Tai Arnold, Jill Buban, Dawn Riley, and Mitchell Nesler.

Notes

- E. L. Boyer and American College Testing Program, Emerging Learners . . . and the New Career Thrust in Higher Education (Iowa City, IA: American College Testing Program, 1972); E. L. Boyer and F. M. Hechinger, Higher Learning in the Nation's Service (Washington, DC: Carnegie Foundation for the Advancement of Teaching, 1981); E. L. Boyer and M. Kaplan, The Monday Morning Imagination: Report from the Boyer Workshop on State University Systems (New York: Aspen Institute for Humanistic Studies, 1976).
- 2. R. F. Bonnabeau, *The Promise Continues: Empire State College—The First Twenty-Five Years* (Virginia Beach, VA: Donning, 1996).
- 3. L. Herman and A. Mandell, *From Teaching to Mentoring: Principle and Practice, Dialogue and Life in Adult Education* (London: RoutledgeFalmer, 2004).
- Council on Adult and Experiential Learning, Moving the Starting Line through Prior Learning Assessment (2011), retrieved December 9, 2011, <u>http://www.cael.org/</u>pdfs/PLA_research_brief_avg_credit.
- G. Siemens, Connectivism: A Learning Theory for the Digital Age (elearnspace, 2004), retrieved September 5, 2011, <u>http://www.elearnspace.org/Articles/connectivism.</u> htm.
- N. H. Cohen, Mentoring Adult Learners: A Guide For Educators and Trainers (Malabar, FL: Krieger, 1995); L. A. Daloz, Mentor: Guiding the Journey of Adult Learners, 1st ed. (San Francisco: Jossey-Bass, 1999); M. W. Galbraith and N. H. Cohen, "The Complete Mentor Role: Understanding the Six Behavioral Functions," Journal of Adult Education 24, no. 2 (1996): 2–11.
- 7. E. L. Boyer, *Scholarship Reconsidered: Priorities of the Professoriate* (Carnegie Foundation for the Advancement of Teaching, 1990).
- EDUCAUSE, "The Open Edition," EDUCAUSE Review 45, no. 4 (2010), retrieved December 9, 2011, <u>http://www.educause.edu/EDUCAUSE+Review/</u> ERVolume442009/EDUCAUSEReviewMagazineVolume45/209245.
- 9. M. A. Peters and P. Roberts, *The Virtues of Openness: Education and Scholarship in a Digital Age* (Boulder, CO: Paradigm, 2011).
- M. A. Peters and R. G. Britez, Open Education and Education For Openness (Rotterdam: Sense, 2008).
- N. L. Travers, "United States of America: PLA Research in Colleges and Universities," in *Researching Prior Learning*, ed. J. Harris, C. Wihak, and M. Breier (Leicester, UK: National Institute for Adult Continuing Education [NIACE], 2011).
- 12. Siemens, Connectivism.
- 13. F. F. VanderValk, *Project for Critical Inquiry* (2011), retrieved December 9, 2011, <u>http://commons.esc.edu/criticalinquiry</u>.
- 14. A. Kamenetz, *DIY U: Edupunks, Edupreneurs, and the Coming Transformation of Higher Education* (White River Junction, VT: Chelsea Green Publishing, 2010).
- 15. MozillaWiki, "Badges" (2011), retrieved December 9, 2011, <u>https://wiki.mozilla.org/</u> <u>Badges</u>.

- 16. WikiEducator, *Open Educational Resource University* (September 11, 2011), retrieved December 9, 2011, <u>http://wikieducator.org/OER_university/Home</u>.
- 17. WICHE, *Adult College Completion Network* (2011), retrieved December 9, 2011, <u>http://adultcollegecompletion.org/content/adult-college-completion-network</u>.
- 18. U.S. Department of Education, *College Completion Tool Kit* (2011), retrieved December 9, 2011, <u>http://www.ed.gov/college-completion/governing-win</u>.
- 19. A. P. Carnevale, "The American Response to Financial Crisis Lessons for Low and Middle-Income Countries" (presentation to the World Bank Forum on Maintaining Productive Employment in Times of Crisis, April 29, 2009, at Georgetown University, Center on Education and the Workforce), retrieved December 9, 2011, <u>http://cew.georgetown.edu/resources/presentations</u>.
- T. Warger and D. Oblinger, "Surveying the Landscape," EDUCAUSE Review 46, no. 6 (November/December 2011), retrieved December 9, 2011, <u>http://www.educause.edu/EDUCAUSE+Review/EDUCAUSEReviewMagazineVolume46/</u> SurveyingtheLandscape/238377.
- 21. Toru liyoshi and M. S. Vijay Kumar, *Opening Up Education: The Collective Advancement of Education through Open Technology, Open Content, and Open Knowledge* (Cambridge, MA: MIT Press, 2008).
- 22. Ibid.
- 23. B. Wildavsky, A. Kelly, and K. Carey, eds., *Reinventing Higher Education: The Promise of Innovation* (Cambridge, MA: Harvard Educational Publishing Group, 2011).
- D. J. Brewer and G. Tierney, "Barriers to Innovation in U.S. Higher Education," in *Reinventing Higher Education: The Promise of Innovation*, ed. B. Wildavsky, A. Kelly, and K. Carey (Cambridge, MA: Harvard Educational Publishing Group, 2011): 11–40.

Meg Benke is Provost at SUNY Empire State College. Benke's work is dedicated to increasing access to higher education for adult learners through online education, and she advises universities on student services in online education programs. Benke is particularly focused on increasing employability of graduates and working to ensure that the outcomes of online and blended education match traditional education. **Alan Davis** is President of SUNY Empire State College. He has held academic leadership positions in a variety of traditional, online, and adult-focused institutions. He is president of the Canadian Society for the Study of Higher Education, a member of the Board of the Council for Adult and Experiential Learning, and serves on the Commission for Lifelong Learning for the American Council on Education. **Nan L. Travers,** Director of the Office of Collegewide Academic Review, oversees self-designed degrees, prior learning assessment (PLA), and ePortfolios. She serves on the board for LearningCounts. org and Prior Learning International Research Centre, and is the founding co-editor of PLA Inside Out: An International Journal on the Theory, Research, and Practice in Prior Learning Assessment.

This chapter is licensed under a Creative Commons Attribution 3.0 Unported License

