The opening statement in the recent Josiah Macy Jr. Foundation report (Stuart & Triola, 2015) states, “The opportunities to remake America’s health professions education and healthcare delivery systems are boundless. We are limited only by our willingness to change and our capacity to innovate” (p. 25).

Within the context of the opening statement, the opportunities for change will focus on the conference’s first recommendation:

In health professions education, technology should be used to support the ongoing development of learners from undergraduate levels through clinical practice; enhance interprofessional learning opportunities; and empower every student, faculty member, and clinician to embrace the role of both teacher and lifelong learner. (p. 32)

At various times in each of our lives, we participate as learners and as educators. Technology supports ongoing development across a spectrum of use. For some, learners are purchasing new computers to embark on the learning continuum through doctoral education, excited to access all the potential electronic resources. For example, many high school students exclusively work on iPads® only to be disappointed in the use—or, rather, lack of use due to institutional policy—of technology as they begin their college education. Why does this discrepancy exist in institutions of higher education?

Educators are skillfully embracing new ways to encourage learning, inviting learners to explore and discover through the technology portal. Educators today can teach online and bring clinical expertise to the eyes and hands of learners more than half a continent away at hours conducive to the learner’s preference. Limited residency programs promote skill acquisition, as the learning pair come together for vital content in a face-to-face environment as programs dictate.

The first Macy report recommendation emphasizes this caveat, to maximize opportunities for lifelong learning anytime, anywhere. Additionally noted is the push to facilitate individualized learning, personalized progression toward mastery, and active collaboration among educators and learners. The use of various strategies, designed and implemented with special consideration given to enhancing the efficiency and effectiveness of teaching and learning across educational and healthcare delivery settings, aids to expand interprofessional learning opportunities not bound by time or place and to allow individuals to refresh knowledge and skills through just-in-time learning and training.

Several of the health professions education schools, as well as learners, have developed mobile applications (apps) to support individualized learning anytime, anywhere. Examples of apps were reviewed from sites mentioned in the report: the University of California, San Francisco’s NeuroExam Tutor iOS app (http://meded.ucsf.edu/tele/neuroexam-tutor-ios-app); and the Osmosis web- and mobile-learning platform, developed by Johns Hopkins for medical students and used by more than 20,000 medical students (http://www.osmosis.org). Both of these apps are specific to medical students, yet they provide great access for this explicit student population.

The Khan Academy received funding from the Robert Wood Johnson Foundation (http://www.rwjf.org/en/how-we-work/grants/grantees/khan-academy.html). It is a free online educational resource that provides self-
paced, mastery-based education, again targeting medical education, to help learners prepare for health care professions. The 2015 Medical College Admission Test content review includes videos and practice questions within the following topic areas: biochemistry, biology, chemistry, physics, physiology, psychology, and sociology.

Vanderbilt’s VSTAR lifelong learning platform is designed to support learners’ individualized learning plans and to aggregate outcomes to guide improvement of institutions’ education programs (https://vstar.mc.vanderbilt.edu/). VSTAR enables a learning health care system to support lifelong self-directed learning across the medical education continuum and supports the vision of a learning health care system through a platform that offers various modes, such as:

- Learn: full-fledged learning management system.
- Portfolio: student e-portfolio system to support self-directed lifelong learning.
- Curriculum map: curriculum mapping, search, and reporting.
- Help: single point-of-contact help desk and support articles.
- Outcomes database: tracking and compiling student and cohort outcomes.
- Freeform: social learning network, faculty–student collaborations, and interactions.

VSTAR is advertised to include personalized, self-directed learning; digital learning and flipped classrooms; and dashboards and social learning networks. Other health care systems have similar platforms for learning. These platforms require the precious resource of time to learn the navigation pathways. Repetitive frequent use of comparable platforms increases the continued sustained full use of the systems.

Smart Sparrow uses a software platform that empowers educators to create their own adaptive lessons. The lessons ensure that learning is accomplished in two ways—through unique feedback and an adapted learning pathway (http://www.smartsparrow.com). Learning occurs by doing, where workflow is optimized between subject matter experts and developers. The site quotes, “I hear and I forget. I see and I remember. I do and I understand.” This platform is intended to be used for more than posting texts and uploading videos. The creative use of educator-determined wizards individualizes the content to the needs of the learner. Developers assist in creating simulations so the educator can concentrate on teaching. This platform helps the educator to teach smarter.

NextGenU.org provides free, for-credit online learning resources across the spectrum of health sciences education (http://www.nextgenu.org). Courses range across the public health and medicine disciplines, including undergraduate and graduate curriculum, as well as continuing medical education. In addition, the courses are competency based and include peer and mentored training in more than 130 countries.

The mission of the Macy Foundation’s vision for the future of health professions education is the intelligent use of educational and information technologies, which support the linkage between education and delivery systems to create a continuously learning health system. In this system, educators, learners, and clinical data inform continuous improvement processes, enable lifelong learning, and promote innovation to improve the health of the public. This can certainly be realized through creative innovative approaches such as those proposed in the aforementioned platforms.

**REFERENCE**