



Teaching and Learning in the Digital Age: The Rules Have Changed

In 2001, Marc Prensky divided the world's population into two distinct groups: digital natives and digital immigrants. Digital natives, which include the vast majority of today's college students, grew up surrounded by computers, video games, the Internet, cellular phones, and digital music players. Digital immigrants remember a world in which these technologies were nonexistent or emerging and, perhaps, less intertwined with almost every aspect of life. But, as Cowan (2011) argued, digital natives, although technologically savvy, are not necessarily digital learners, learners with the skills necessary to choose and use digital resources and tools for learning effectively. For example, digital natives can download a song from iTunes, create a Facebook page, or post pictures online easily, but they may still lack the skills to use the note-taking and highlighting tools in an eBook, critically analyze web-based content resources, or work with varied presentation and publishing tools, which all enhance the academic experience. To become digital learners, digital natives must not only know the technology but also know how to work with it.

When this conversation moves into the context of higher education, the interaction between a rapidly changing technological landscape and the highly diverse skill levels among students and faculty creates many pedagogical challenges (e.g., choosing and integrating technology effectively, ensuring that faculty and students have the skills necessary to deploy identified technological tools correctly, developing ways to assess the value-added nature of technology in the instructional process). As technology changes and evolves, these challenges will continue, requiring specific attention and an intentional focus on enhancing the skills of students and faculty. The following strategies can help students, digital natives, engage in digital learning effectively and faculty members, many of whom probably are digital immigrants, implement and become comfortable with ever-changing technology.

Student Learning Patterns

Instructors can integrate basic strategies into any course or discipline to help digital natives become digital learners. A good starting point is for faculty to fully use the learning management system available on their campus (e.g., Moodle, Canvas, Blackboard, Learning Studio). These platforms contain several tools that can be deployed easily to engage students in critical thinking and accountability for their learning (e.g., discussion forums, online quizzes, journals), allowing them to work directly with the technology. Including these requirements in first-year seminars and courses will pay longterm benefits as students proceed through their academic programs. Other examples include:

- providing opportunities for students to analyze critically the content and claims made by various course-related websites. For example, a faculty member might give students a topic to explore on the Internet, asking them to find web resources presenting contrasting positions on the assigned topic;



“The principal goal of education is to create men and women who are capable of doing new things, not simply repeating what other generations have done.”

—Jean Piaget, psychologist and philosopher

- creating assignments that require students to use unique tools for presenting their work, such as Glogster (www.edu.glogster.com), Pecha Kucha (www.pechakucha.org), or Pinterest (www.pinterest.com); and
- having students submit and revise their assignments electronically (e.g., research projects, essays).

Incorporating these or other digital elements within a learning experience should be intentional and based on ways the technology will enhance the learners' understanding and mastery of course content. Having students actively engage with digital technology gives them opportunities to learn how to use it effectively to meet learning outcomes.

Faculty Approaches to Teaching

Although many instructors continually break new ground applying technology to engage with students inside and outside the classroom, faculty use of technology in teaching, in general, is rather bleak (Allen, Seaman, Lederman, & Jaschik, 2012). For reluctant faculty, adopting and integrating technology in three phases—decide, deploy, and discern—is one way for them to begin learning and implementing new skills and tools, helping these digital immigrants become digital learners themselves. First, instructors must decide what technological tools are available based on what students need to learn, demonstrate, and accomplish. The second phase is to deploy the technology, but faculty must first learn it themselves and ensure that students have the skills to use the tools effectively. The third phase is to discern strategies for determining the level at which the technology helps students accomplish identified learning outcomes. To assess these levels and their success, faculty might compare the results of student performance with and without the added feature of digital resources or ask students to reflect on their digital learning experience and how it enhanced learning outcomes. Other strategies include:

- recapturing the feeling of being a student again and learning something new;
- exploring, learning, and using one new technology tool every year (or every semester);
- considering ways to assess the impact of new technologies on students' learning;
- thinking about gradual adjustment to incorporate technology that will help faculty become comfortable with these resources and students learn how to use them. Resource examples include online rather than in-class quizzes, wikis rather than in-class presentations, podcasts to share information on a particular topic, virtual field trips, or Skype conversations with authors and experts in the discipline (Toledo, 2007); and
- taking advantage of the wealth of video resources available (e.g., www.TED.com) to enrich the quality of courses (both inside and outside the classroom).

Proliferating technology opens new pathways to knowledge for students and challenges instructors to venture outside their comfort zones, expand their horizons, and create new, enriching learning opportunities.

REFERENCES

- Allen, E., Seaman, J., Lederman, S., & Jaschik, S. (2012). *Digital faculty: Professors, teaching, and technology, 2012*. Washington, DC: Inside Higher Ed. Retrieved from http://www.insidehighered.com/sites/default/server_files/files/DigitalFaculty.pdf
- Cowan, B. (2011, November 6). "Digital natives" aren't necessarily digital learners. *The Chronicle of Higher Education*, 52(10), A39.
- Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon*, 9(5), 1-6.
- Toledo, C. A. (2007). Digital culture: Immigrants and tourists responding to the natives' drumbeats. *International Journal of Teaching and Learning in Higher Education*, 19(1), 84-92.

These books and resources can help instructors as they explore new technologies and begin to incorporate them in and outside the classroom:

Allen, E., Seaman, J., Lederman, S., & Jaschik, S. (2012). *Digital faculty: Professors, teaching, and technology, 2012*. Washington, DC: Inside Higher Ed. Retrieved from http://www.insidehighered.com/sites/default/server_files/files/DigitalFaculty.pdf

Allen, I. E., & Seaman, J. (2013). *Changing course: Ten years of online education in the United States*. Babson Park, MA: Babson Survey Research Group and Quahog Research Group. Retrieved from <http://files.eric.ed.gov/fulltext/ED541571.pdf>

Bowen, J. A. (2012). *Teaching naked: How moving technology out of the college classroom will improve student learning*. San Francisco, CA: Jossey-Bass.

Thomas, D., & Brown, J. S. (2011). *A new culture of learning: Cultivating the imagination for a world of constant change*. North Charleston, SC: CreateSpace.

U.S. Department of Education, Office of Planning, Evaluation, and Policy Development (2009). *Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies*. Washington, DC: Author. Retrieved from <http://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf>

What's Happening at The National Resource Center

Conferences and Continuing Education

Conferences and Institutes

33rd Annual Conference on The First-Year Experience

February 15-18, 2014

San Diego, California

Diane R. Dean, associate professor for higher education administration and policy at Illinois State University; Arthur Levine, president of the Woodrow Wilson National Fellowship Foundation and president emeritus of Teachers College, Columbia University; and Vasti Torres, dean of the College of Education at the University of South Florida, will be the featured speakers at the 33rd Annual Conference on The First-Year Experience. Conferences are meetings where educators from two- and four-year institutions come together to openly share ideas, concepts, resources, assessment tools, programmatic interventions, and research results focused on the first college year. Registration and proposal information is available at <http://www.sc.edu/fye/annual>.

Diversity, Learning, and Student Success: Policy, Practice, Privilege at the Network for Academic Renewal Conference sponsored by the Association of American Colleges and Universities

March 27-29, 2014

Chicago, Illinois

Learn about the role of diversity and equity in student success and examine—through evidence-based research and model programs—culturally attentive initiatives that increase student persistence while empowering all students with the knowledge and skills to succeed in work and contribute to the well-being of a global society. Speakers will include Julianne Malveaux, Candace Thille, Sylvia Manning, Lester Monts, Michelle Asha Cooper, José Moreno, Christi Pedra, and Lon Kaufman.

For best rates, register before February 12, 2014. To register, please go to <http://www.aacu.org/meetings/dlss/reginfo.cfm>.

Save the Dates

Institute for the Success of Student Veterans

April 4-6, 2014

University of South Carolina (Capstone Campus Room), Columbia, South Carolina

21st National Conference on Students in Transition

October 18-20, 2014

Denver, Colorado

Online Courses

The National Resource Center offers online courses on topics of interest in higher education. The courses provide participants the same content and opportunities for interaction with peers and the instructor as traditional (i.e., classroom-based) learning environments while taking advantage

[WWW.SC.EDU/FYE/ANNUAL](http://www.sc.edu/fye/annual)



33rd ANNUAL CONFERENCE ON
**THE FIRST-YEAR
EXPERIENCE®**

*San
Diego, California*

February 15-18, 2014



NATIONAL RESOURCE CENTER
FIRST-YEAR EXPERIENCE® AND
STUDENTS IN TRANSITION
UNIVERSITY OF SOUTH CAROLINA

of pedagogy and teaching techniques that are not possible or common in those settings. The classes use tools such as e-mail, threaded discussions or forums, listservs, and blogs. Enrollment is limited to 25 participants. Visit <http://www.sc.edu/fye/oc> for more information.

Common Readings: Creating Community Beyond the Book

March 3-April 4, 2014

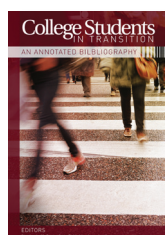
Facilitated by Catherine F. Andersen, associate provost for Academic Affairs at the University of Baltimore and a Fellow at the John N. Gardner Institute on Excellence in Undergraduate Education.

Adults and Adulthood in Higher Education

April 7-May 9, 2014

Facilitated by Donna Younger, president, Younger Directions, Inc.

New Releases



College Students in Transition: An Annotated Bibliography

Stephanie M. Foote, Sara E. Hinkle, Jeannine Kranzow, Matthew D. Pistilli, La'Tonya Rease Miles, & Janelle G. Simmons

The transition from high school to college is an important milestone, but it is only one of many steps in the journey through higher education. Interest in the numerous transitions students make—through the sophomore year, from one institution to another, and out of college—has grown exponentially in

the last decade. At the same time, educators recognize that each transition experience is unique, shaped by the individual student context. A new annotated bibliography helps researchers and practitioners navigate the emerging literature based on college student transitions beyond the first year, with special focus on adult learners, student veterans, and those studying in different cultures.

Please visit us online at <http://www.nrcpubs.com/p/119/annotated-bibliography-on-college-student-transitions> to order your copy.

National Resource Center Exhibits and Presentations

Like many of you, the staff of the National Resource Center for The First-Year Experience and Students in Transition is actively involved in the conference circuit. We are pleased to share the following upcoming opportunities to hear about the results of research studies conducted by the Center, learn about best practices, and meet National Resource Center staff members.

Life After Seminar: The Impact of Transfer on Students After Completing a First-Year Seminar.

Presented by Rico R. Reed, assistant director for Administration and Resource Development; at the 2014 National Institute for the Study of Transfer Students (NISTS); 11:15 a.m.-12:15 p.m.; Friday, February 5, 2014; JW Marriott Atlanta Buckhead; Atlanta, Georgia.

Surveying the National Landscape of First-Year Seminars: a High-Impact Practice.

Presented by Dallin George Young, assistant director for Research, Grants, and Assessment, and Jessica M. Hopp, graduate assistant for Research, Grants, and Assessment; at the Annual Conference on The First-Year Experience; 4:15-5:15 p.m.; Monday, February 17, 2014; Manchester Grand Hyatt-Balboa AB; San Diego, California.

Institute for the Success of Student Veterans

April 4-6, 2014

University of South Carolina
Columbia, South Carolina

REGISTER AT WWW.SC.EDU/FYE/ISSV



NATIONAL RESOURCE CENTER
FIRST-YEAR EXPERIENCE® AND
STUDENTS IN TRANSITION
UNIVERSITY OF SOUTH CAROLINA

Sign up for



Looking for new teaching strategies or fresh ideas for first-year seminars? *E-Source*, the National Resource Center's online newsletter for college transitions, offers a wealth of information. *E-Source* also is accepting submissions for the fall 2014 issue. To view the archives, review submission guidelines, and receive content alerts for new issues, please go to www.sc.edu/fye/esource

Wonder Women: Leaning In as Women in Student Affairs. Presented by Jodie E. Koslow Martin, vice president for Student Engagement at North Park University; Jennifer R. Keup, director of the National Resource Center for The First-Year Experience and Students in Transition; Jennifer Stripe Portillo, vice president for Student Affairs at The Chicago School of Professional Psychology; Sara E. Kinkle, assistant vice president for Student Affairs at West Chester University; and Heather Shea Gasser, assistant program director of RISE at Michigan State University; at the 2014 American College Personnel Association (ACPA) Annual Conference; 5-6 p.m.; Monday, March 31, 2014; Indianapolis Marriot Downtown-Marriot Ballroom 3; Indianapolis, Indiana.

Results from the 2013 National Survey of Peer Educators: Program Practices and Peer Leader Perceptions. Poster session presented by Mary Stuart Hunter, associate vice president and executive director; at the National Association of Student Personnel Administrators Annual Conference; 9-10:15 a.m.; Tuesday, March 18; Baltimore, Maryland.

Spirituality, Authenticity, Wholeness, and Self-Renewal in the Academy. Discussion session presented by Mary Stuart Hunter, associate vice president and executive director; at the National Association of Student Personnel Administrators Annual Conference; 8:40-9:30 a.m.; Wednesday, March 19; Baltimore, Maryland.

Surveying the National Landscape of First-Year Seminars: A High Impact Practice. Presented by Dallin George Young, assistant director for Research, Grants, and Assessment, and copresented by Jennifer R. Keup, director; at the 2014 American College Personnel Association (ACPA) Annual Conference; 4:30-5:30 p.m.; Tuesday, April 1, 2014; Indiana Convention Center-133; Indianapolis, Indiana.

The Power of Peers: Exploring the Impact of Peer Leadership Experiences. Presented by Jennifer R. Keup, director, and co-presented by Dallin George Young, assistant director for Research, Grants, and Assessment; at the 2014 American College Personnel Association (ACPA) Annual Conference; 3-4 p.m.; Tuesday, April 1, 2014; Indiana Convention Center-133; Indianapolis, Indiana.

Research

Paul P. Fidler Research Grant

The Paul P. Fidler Research Grant encourages the development and dissemination of knowledge that has the potential to improve the experiences of college students in transition. The grant is named in memory of Paul P. Fidler, a faculty member at the University of South Carolina, whose pioneering research on student learning and success had a vital impact on work to promote the success of all students in transition. The grant award includes a cash stipend, travel to two national conferences, a presentation at a national conference, and priority consideration for publication. The application window for the 2014-2015 Paul P. Fidler Research Grant will open April 1, 2014, and close at 11:59 Eastern, July 1, 2014. For more information, please visit <http://www.sc.edu/fye/research/grant>.

Like us on

facebook

Visit www.facebook.com/fyesit to be directed to our Facebook page. Like us and receive access to a network of educators committed to college student success.

Follow us on



Visit www.twitter.com/nrcfyesit to follow @NRCFYESIT and become even more connected with the ongoing work of the Center.

The Toolbox

Author: Brad Garner

Telephone: 765.677.2452

E-mail: brad.garner@indwes.edu

Address: Indiana Wesleyan University
4201 South Washington Street
Marion, IN 46953

The Toolbox is an online professional development newsletter offering innovative, learner-centered strategies for empowering college students to achieve greater success. The newsletter is published six times a year by the National Resource Center for The First-Year Experience and Students in Transition at the University of South Carolina, Columbia, South Carolina.

The online subscription is free. To register for newsletter alerts and access back issues, please visit www.sc.edu/fye/toolbox.

Publication Staff

Editor: Larry Wood

Graphic Designer: Allison Minsk