



## The Reality of Uncertainty: A Tool for Teaching

**A**s students arrive on campus and attend classes, they embark on a new series of experiences designed to help them acquire knowledge, deepen their ability to engage in critical thinking, and master discipline-specific skills and competencies. Recently, however, critics of higher education have expressed concern that predominant curricular practices in colleges and universities fall far short of these expectations and are generally limited to the delivery of objective knowledge that can be easily packaged and measured (Arum & Roksa, 2011). The challenge for faculty in these institutions becomes one of both teaching the basic known facts of an academic discipline while also making an intentional shift toward tasks that invite students to think creatively, critically analyze assumptions, and wrestle with uncertainties. These are the skills that match up with the realities of life in the 21st century.

**“Tomorrow’s illiterate will not be the man who can’t read; he will be the man who has not learned how to learn.”**

texts versus open-source documents (i.e., documents that are open to public editing and contribution). The most familiar example of open-source documents are found on Wikipedia, described as “a free, web-based, collaborative, multilingual encyclopedia project .... Its 19 million articles (over 3.7 million in English) have been written collaboratively by volunteers around the world” (Wikipedia, n.d., para. 1).

In academia, faculty members have historically belittled the validity of Wikipedia and similar open-source websites as inferior collections of information. Giles (2005) compared 50 Wikipedia and Encyclopedia Britannica articles for omissions, factual errors, and misleading statements. Perhaps surprisingly, the Wikipedia articles were found to have 162 errors while Encyclopedia Britannica contained 123 errors. Thomas and Brown (2011) point out that the significance of Giles’ research goes beyond a simple tabulation of the data. They contend that a fluid, ever-changing source of information, like Wikipedia, has clear advantages over a published text—most notably, the ability to rapidly update content as new information becomes available. Once a book is published, the content is frozen in time. Relying on that frozen source of information may be just as troublesome as depending on a resource collaboratively written by volunteers.

In a constantly changing world, faculty may face challenges when selecting the information that students consume and are required to master as part of their assigned courses. These challenges are best illustrated by the tension in the academy between citing and using traditionally published



**“The quest for certainty blocks the search for meaning. Uncertainty is the very condition to impel man to unfold his powers.”**

– Erich Fromm

## Embracing Uncertainty as an Instructional Tool

With a call to enhance the level of critical thinking within college courses (Arum & Roksa, 2011) and a world filled with fluid and changeable sources of information, how can faculty members create meaningful and engaging learning experiences? The following approaches respond to this challenge:

- Provide opportunities for students to engage with a selected variety of open-source materials. Part of this process must, however, include a requirement that they critically examine the information presented and verify its accuracy (Konieczny, 2007). Students should also be reminded to apply this same level of skepticism and verification of accuracy to information cited in traditionally published books.
- Assign students the task of creating their own wikis on a variety of topics related to course content. The Wikipedia website ([www.wikipedia.com](http://www.wikipedia.com)) provides opportunities for readers to craft wikis on topics that have not yet been explored. Students could work in groups to put together wikis and then engage in a peer review process for the purpose of verifying and refining the work done by their classmates.
- Engage students with problem-based learning tasks that do not necessarily have a single, correct answer. Students may discover that sometimes the best solution to a problem could be the lesser of two evils or that obvious solutions may present a new set of unforeseen consequences—just as in real life. According to Chun (2010), this type of learning experience forces students to grapple with the fact that not every presented scenario has a clean, perfect, and/or right solution.

In an uncertain world, students need the skills to respond and adapt. Psychologist Herbert Gerjuoy stated in the book *Future Shock* (Toffler, 1970/1984), “Tomorrow’s illiterate will not be the man who can’t read; he will be the man who has not learned how to learn” (p. 414). Help your students to think adaptively, respond proactively, and critically embrace the realities of uncertainty.

## References

- Arum, R., & Roksa, J. (2011). *Academically adrift: Limited learning on college campuses*. Chicago, IL: University of Chicago Press.
- Chun, M. (2010). Taking teaching to (performance) task: Linking pedagogical and assessment practices. *Change*, 42(2), 22-29.
- Giles, R. (2005). Internet encyclopedias go head to head. *Nature*, 438 (7070), 900-901.
- Konieczny, P. (2007). Wikis and Wikipedia as a teaching tool. *International Journal of Instructional Technology and Distance Learning*, 4(1), 15-34.
- Thomas, D., & Brown, J. S. (2011). *A new culture of learning: Cultivating a culture of imagination in a world of constant change*. Seattle, WA: CreateSpace Publishing.
- Toffler, A. (1984). *Future shock*. New York, NY: Bantam. (Original work published 1970)
- Wikipedia. (n.d.). *Wikipedia*. Retrieved from <http://en.wikipedia.org/wiki/Wikipedia>

Institute on

FIRST-YEAR

STUDENT SUCCESS

IN THE

COMMUNITY COLLEGE

November 6-8, 2011  
Cincinnati, Ohio

With enrollments  
in community  
colleges on the rise,  
the quality of the  
first-year  
experience for  
students is even  
more critical  
to their success.

Register at:



[www.sc.edu/fye/sscc](http://www.sc.edu/fye/sscc)



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

# WHAT'S HAPPENING

## at The National Resource Center

### Conferences and Continuing Education

#### Online Courses

The National Resource Center offers online courses on topics of interest in higher education. The courses are designed to provide participants with the same content and opportunities for interaction with peers and with the instructor as traditional (i.e., classroom-based) learning environments while taking advantage of pedagogy and teaching techniques that are not possible or common in those settings. The courses have limited enrollment and use tools such as e-mail, threaded discussions/forums, listservs, and blogs. For more information, visit [www.sc.edu/fye/oc](http://www.sc.edu/fye/oc).

#### Conferences and Institutes

##### Institute on First-Year Student Success in the Community College

November 6-8, 2011

Cincinnati, Ohio

The National Resource Center invites professionals involved in first-year initiatives in community colleges to participate in the Institute on First-Year Success in the Community College. This Institute will provide attendees the opportunity to discuss the current role of the community college in higher education and develop an action plan for creating or enhancing pathways for community college student success. Interactive sessions are designed with practical application in mind so that participants will be ready to implement strategic initiatives when they return to campus. For more information, please visit [www.sc.edu/fye/sscc](http://www.sc.edu/fye/sscc).

##### 31st Annual Conference on The First-Year Experience

February 17-21, 2012

San Antonio, Texas

*Proposal Deadline: October 17, 2011*

This annual conference is designed to provide educators from nearly every corner of higher education a comfortable, welcoming environment to share innovative ideas, programs, tools, and research critical to the first-year experience. Registration and proposal information is available at [www.sc.edu/fye/annual](http://www.sc.edu/fye/annual).

#### Save the Dates

##### Institute on First-Year Seminar Leadership

April 15-17, 2012

Columbia, South Carolina (University of South Carolina)

##### 25th International Conference on The First-Year Experience

July 16-19, 2012

Vancouver, British Columbia, Canada

## Online Courses

on The First-Year Experience®  
and Students in Transition



### Course Dates

**April 2 – May 4, 2012**

#### Instructor Training and Development: Critical Foundations for First-Year Seminar Programs

*Instructor:* Mary Stuart Hunter, Associate Vice President for the National Resource Center for The First-Year Experience and Students in Transition and U101 Programs at the University of South Carolina.

**May 14 – June 15, 2012**

#### Transfer Student Success: Meeting the Needs of a Unique Population on College Campuses

*Instructor:* Mark Allen Poisel, Associate Provost for Student Success at Pace University.

**July 9 – August 10, 2012**

#### Developing and Constructing Valid Survey Instruments

*Instructor:* Ryan D. Padgett, Assistant Director of Research, Grants, and Assessment for National Resource Center for The First-Year Experience and Students in Transition at the University of South Carolina.

Courses are limited to the first 25 registrants.

**Register online at**  
**[www.sc.edu/fye/oc](http://www.sc.edu/fye/oc)**



## Publications

The National Resource Center is pleased to announce the release of two new publications:

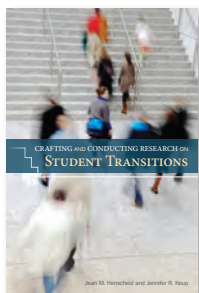


### The First-Year Seminar: Designing, Implementing, and Assessing Courses to Support Student Learning and Success, Volume I: Designing and Administering the Course

Jennifer R. Keup and Joni Webb Petschauer

This five-volume series is designed to assist educators who are interested in launching a first-year seminar or revamping an existing program. Volume I opens by defining common seminar configurations, goals, and course topics, drawing on national studies and institutional research

reports. It offers guidance in selecting a seminar model, addresses strategies for launching and administering the seminar, and describes successfully managing change within the course. Broadly conceived, this first volume in the five-volume series lays the ground work for more in-depth coverage to follow. To learn more or order a copy, visit [www.sc.edu/fye/publications](http://www.sc.edu/fye/publications).



### Crafting and Conducting Research on Student Transitions

Jean M. Hensheid and Jennifer R. Keup

Designed for students and educational professionals researching students' movement into and through higher education, *Crafting and Conducting Research on Student Transitions* is a concise resource, describing both qualitative and quantitative methods. The authors walk readers through the process of selecting a topic, designing a study, and disseminating the research results on explorations of the college student

experience from the first college year to beyond graduation. To learn more or order a copy, visit [www.sc.edu/fye/publications](http://www.sc.edu/fye/publications).

## Research

### Grants

The ACPA - College Student Educators International Commission for Admissions, Orientation and the First Year Experience (AOFYE) and the National Resource Center for The First-Year Experience and Students in Transition invite applicants for their 2012 Research Grant Competition. AOFYE and the National Resource Center will jointly award one grant in the amount of \$500 to promote original, descriptive, or evaluative research; philosophical studies; or institutional assessment or evaluation on issues surrounding admissions, orientation, and/or the first-year experience. All ACPA members are eligible to apply for this research grant. The application deadline is November 14, 2011. Details about the grant are available at <http://www2.myacpa.org/aofye-grantsrecognition/grant-guidelines>.



*E-Source for College Transitions* is a complimentary biannual electronic newsletter published by the National Resource Center for The First-Year Experience and Students in Transition.

Its primary purpose is to provide practical strategies for supporting student learning and success. Articles on a variety of topics related to student transitions are welcome, including those focusing on:

- › Strategies for addressing the first-year, sophomore, senior, and transfer transitions at different types of institutions
- › Innovative teaching strategies and programs addressing the needs of special student populations
- › Strategies for assessing student learning experiences, programs, or courses
- › Descriptions of institutional initiatives with demonstrated results
- › Descriptions of new and relevant print and online resources



Visit [www.sc.edu/fye/esource](http://www.sc.edu/fye/esource) to sign up for content alerts or view archived issues.

## NRC Exhibits and Presentations

Like many of you, the staff of the National Resource Center plan to be actively involved in the fall 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 to meet NRC staff members.

**High-Impact Programs on Student Persistence: Evidence From Institutional-Level Data Collected by the National Resource Center for The First-Year Experience and Students in Transition.** Presentation by Ryan D. Padgett, NRC assistant director of research, grants, and assessment; at the 2011 National Symposium on Student Retention in Charleston, South Carolina; October 31-November 2, 2011.

**Applying the Principles of High-Impact Practices to Orientation and Transition Programs.** A roundtable discussion facilitated by Tracy L. Skipper, NRC assistant director for publications; at the 2011 National Orientation Directors Association Conference (NODAC) in New Orleans, Louisiana; November 1, 2011, 9:15-10:15 a.m.

**High-Impact Practices in the First Year: A Springboard for Success.** Keynote address by Jennifer R. Keup, NRC director, at the 2011 Annual First-Year Conference at UW-Madison in Madison, Wisconsin; November 11, 2011.

**The Impact of Undergraduate Research on Students' Inclination to Inquire and Lifelong Learning.** Research paper by Cindy Ann Kilgo, NRC graduate assistant for research, and Ryan D. Padgett, NRC assistant director of research, grants, and assessment; at the 2011 Association for the Study of Higher Education (ASHE) Conference in Charlotte, North Carolina; November 17, 2011, 12:45-2:00 pm.

**First-Year Seminars: Alignment From Course Administration Through Assessment.** Roundtable session facilitated by Jennifer R. Keup, NRC director, and Ryan D. Padgett, NRC assistant director of research, grants, and assessment; at the 2011 Association for the Study of Higher Education (ASHE) Conference in Charlotte, NC; November 18, 8:15-9:00 am.

**How Impactful Are High-Impact Practices?** Symposium by Ryan D. Padgett, Susan Albertine, Charles Blach, Jennifer R. Keup, Jillian Kinzie, and Ernest Pascarella; at the 2011 Association for the Study of Higher Education (ASHE) Conference in Charlotte, North Carolina; November 18, 2011, 3:45-5:00 pm.

## 31st Annual Conference on The First-Year Experience®

### Conference Highlights

- » Colleague clusters at luncheon
- » Featured Speakers:  
Dewayne Matthews, Vice President for Policy and Strategy of the Lumina Foundation for Education  
Charles Blach, Director of the Center of Inquiry at Wabash College
- » Commercial and nonprofit exhibits
- » Focused dialogues to facilitate networking

**FEBRUARY 17-21, 2012  
SAN ANTONIO, TEXAS**



[www.sc.edu/fye/annual](http://www.sc.edu/fye/annual)

**Cohosted by:** Texas Higher Education Coordinating Board,  
Trinity University and University of Texas at San Antonio

Join NRC on

**facebook**

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

We're now  
on Twitter!

Visit [www.twitter.com/nrcfyesit](http://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](mailto: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, SC.

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

## Publication Staff

Editor: Toni Vakos  
Graphic Designer: Shana Bertetto