The Toolbox

A TEACHING AND LEARNING RESOURCE FOR INSTRUCTORS

Volume 9 Issue 5 March 2011



The Art of the Question: You Get What You Ask For

or most students, the classroom is the primary learning environment where they go to seek (and expect) "the answers" from their professors. Too often, these purported answers are provided in limiting formats, such as bullet points on a PowerPoint slide, lecture content, or assigned textbook readings, that do not directly encourage dialogue or a back-and-forth exchange of information and ideas between and among the instructor and students. A traditional lecture can potentially minimize learning to the level of simply storing bits of recalled data. Using questions, however, is an excellent tool for encouraging a two-directional (or multidirectional) flow of information.

Asking good questions is an art form. To achieve a more engaged exchange of ideas, insights, opinions, and information, questions must go beyond the expectation for a single correct verbal response or a true/false, multiple choice, or fill-in the blank answer. Further, the quality of the questions asked can serve as a key determinant for the level at which students actually learn. Wiggins and McTighe (2005) illuminate this critical relationship:

The best questions point to and highlight the big ideas. They serve as doorways through which learners explore the key concepts, themes, theories, issues, and problems that reside within the content, perhaps as yet unseen: it is through the process of actively "interrogating" the content through provocative questions that students deepen their understanding. (p. 106)

Erickson (2007) identified three types of questions common in classroom settings:

- Factual—can be easily answered with clearly defined right and wrong responses (e.g., Who was the first president of the United States?)
- Conceptual—require deeper, more abstract and theoretical thinking (e.g., What were the primary differences of opinion between the framers of the U.S. Constitution, and how did they resolve their identified areas of conflict?)
- Provocative—invite out-of-the-box thinking and stretch students' understanding of well-known events and circumstances (e.g., In what ways would our lives be different today if Great Britain had prevailed during the Revolutionary War?)

The goal, of course, is to strive for classroom learning experiences that focus on questions that are conceptual and provocative in nature.

Another way of thinking about the process of crafting questions is the hierarchy of thinking skills portrayed in Bloom's Taxonomy (Anderson & Krathwohl, 2001). The levels of thinking activity outlined in this model are (from the least to most sophisticated): remembering, understanding, applying, analyzing, evaluating, and creating. For all faculty

It's better to know some of the questions than all of the answers.

- James Thurber

Who questions much, shall learn much, and retain much.

Sometimes the questions are complicated and the answers are simple.

- Francis Bacon

- Dr. Seuss

We thought that we had the answers, it was the questions we had wrong.

- Bono

engaged in higher education, it is important to assess the level of questioning that typically occurs during classroom interactions and determine whether the questions require students to think critically. Obviously, questions that ask students to remember or understand are less likely to promote critical thinking than those that ask them to evaluate or create. Figure 1 provides examples of verbs that correspond with Bloom's model and can be used to craft questions that require higher order thinking and responses.

Levels of Cognitive Process	Action Verbs
Remembering Can the student recall or remember the information?	Define, duplicate, list, memorize, recall, repeat, reproduce, state
Understanding Can the student explain ideas or concepts?	Classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase
Applying Can the student use the information in a new way?	Choose, dramatize, demonstrate, employ, illustrate, interpret, operate, schedule, sketch, solve, use, write
Analyzing Can the student distinguish between the different parts?	Appraise, argue, compare, criticize, differentiate, discriminate, distinguish, examine, experiment, question, test
Evaluating Can the student justify a position or decision?	Appraise, argue, judge, defend, select, support, value, evaluate
Creating Can the student create a new product or point of view?	Assemble, construct, create, design, develop, formulate, write

Figure 1. Action verbs for crafting questions based on Bloom's Taxonomy levels. Adapted from A Faculty and Staff Guide to Creating Learning Outcomes by J. Gahagan, J. Dingfelder, and K. Pei, p. 16. Copyright 2010 by the University of South Carolina.

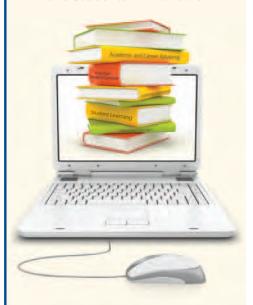
Strategies for Developing Skills in the Art of the Question

Consider these strategies for enhancing your ability to ask questions that challenge and stretch the thinking and learning of your students.

- Create questions prior to class. Good questions require thoughtful planning. As you prepare for your classroom learning experiences, include the process of creating thoughtful questions that promote critical thinking. By focusing on conceptual and provocative questions that incorporate higher level action verbs, questions can become a pathway to learning as you engage with your students.
- Wait for a response. After a question has been posed, there may be an uncomfortable period of silence as students process the question, consider possible responses, and internally negotiate the risk and value of being the first to respond. A question worth asking requires time for thoughtful consideration, so the period of silence is to be expected. Resist the temptation to jump in and fill that void with your own talking or to answer to the question. If students know that you will be waiting for a thoughtful response, as long as that may take, they

Online Courses

on The First-Year Experience[®] and Students in Transition



Course Dates

April 4-May 6, 2011

Models and Methods of Student Advising: Promoting Career and Academic Success and Transition

Instructor: Paul A. Gore, Jr. Associate Professor of Educational Psychology and Student Success Special Projects Coordinator University of Utah

May 9-June 10, 2011

Proving and Improving: The Pillars of First-Year Assessment

Instructor: Jennifer R. Keup Director of the National Resource Center for The First-Year Experience and Students in Transition University of South Carolina

Course cost: \$425 Limited to 25 participants

Register online at www.sc.edu/fye/oc

will become accustomed to creating insightful replies. Also, asking students to write a response to the question can "fill" the silence while helping students gather their thoughts.

- Use questions as a starting point for conversation. As you craft your questions, be ready with follow-up questions that will take the topic to a deeper level and promote further exploration. This too can be part of the planning that you do prior to class. A series of connected questions can help students go deeper in their thinking.
- Maintain an openness to unexpected answers. When questions are posed, there can be a subtle expectation that a "correct" answer is hiding out there, waiting to be discovered. It is a pleasant surprise when the response of an individual or the group creates a line of thinking that is novel and unexpected. The freedom to think in new ways and to generate unique answers to posed questions happens in a learning environment where students know they will be affirmed and supported for thinking outside the box.
- Encourage students to ask good questions. One of the goals of good teaching is to facilitate critical thinking on the part of the learner. A way of achieving this is to provide opportunities for students to create their own questions about course content. For example, students could be asked to draft questions on a 3x5 card related to the previous day's class discussion or assigned reading. A quick scan of the presented questions, and a response by the instructor, could serve as a transition strategy between class sessions. When a thoughtful and challenging question is posed, take the opportunity to praise the writer for the depth of their thinking and analysis. Further, you may wish to turn the question around and ask for a response from the class (or even say "I am not sure how to answer this one...I will investigate an answer before our next class").
- Build answers through collaborative thinking. One way of encouraging students to embrace the possibility of varied answers to posed questions is to invite them to talk in small groups and then share their collective responses with the larger group. It can be instructive for both faculty and students to observe how several small groups may take the same question and generate a variety of creative responses.
- Invite colleagues to observe your teaching with an emphasis on your
 questioning techniques. Although it is possible to monitor our own questionasking patterns, it is always helpful to have a colleague specifically observe this
 aspect of the teaching and learning process.

Begin today to practice and develop your skills as a question artist!

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Anderson, L. W., & Krathwohl, D. R. (Eds.). (2001). A taxonomy for learning, teaching and assessing: A revision of Bloom's Taxonomy of educational objectives: Complete edition. New York, NY: Longman. Erickson, H. L. (2007). Concept-based curriculum and instruction for the thinking classroom. Thousand Oaks, CA: Corwin Press.

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New Releases

2011





Monograph No. 54

Transfer Students in Higher Education: Building Foundations for Policies, Programs, and Services That Foster Student Success

Mark Allen Poisel and Sonya Joseph, Editors

ISBN 978-1-889-27171-2. \$35.00



Research Report No. 1

2008 National Survey of Sophomore-Year Initiatives: Curricular and Cocurricular Structures Supporting the Success of Second-Year College Students

Jennifer R. Keup, Jimmie Gahagan, and Ryan N. Goodwin

ISBN 978-1-889-27172-9. \$20.00

For ordering information, please visit www.sc.edu/fye/pubs

WHAT'S HAPPENING at The National Resource Center

Conferences and Continuing Education

Online Courses

The National Resource Center is offering 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 and limited to 25 participants and use tools such as e-mail, threaded discussions/forums, listservs, and blogs. For more information, visit www.sc.edu/fye/oc

Online Courses Offerings:

April 4-May 6, 2011

Models and Methods of Student Advising: Promoting Career and Academic Success and Transition Facilitated by Paul A. Gore, Jr.

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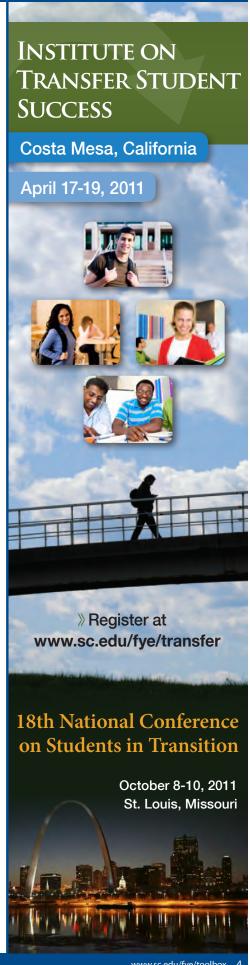
Institute on Transfer Student Success

April 17-19, 2011

Costa Mesa, CA

Registration Deadline: April 14, 2011

The Institute on Transfer Student Success will provide participants with the opportunity to discuss the impact of transfer students on their respective campuses and develop an action plan for creating or enhancing pathways for transfer 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. The content and organization of the Institute draws heavily on Transfer Students in Higher Education: Building Foundations for Policies, Programs, and Services That Foster Student Success, a new monograph from the National Resource Center. Several monograph authors and other invited faculty will be on site to lead sessions and consult with participants about their action plans. Registration information is available at www.sc.edu/fye/transfer



Save the Dates

24th International Conference on The First-Year Experience

June 21-24, 2011 Manchester, England

18th National Conference on Students in Transition

October 8-10, 2011 St. Louis, MO Proposal Deadline: June 3, 2011

Institute on First-Year Success in the Community College

November 6-8, 2011 Cincinnati, OH

31st Annual Conference on The First-Year Experience

February 17-21, 2012 San Antonio, TX

25th International Conference on The First-Year Experience

July 16-19, 2012 Vancouver, British Columbia, Canada

Publications

The National Resource Center is pleased to announce the release of a sophomore-year research report and a new monograph focused transfer students.



Research Report No. 1

2008 National Survey of Sophomore-Year Initiatives

Jennifer R. Keup, Jimmie Gahagan, and Ryan N. Goodwin

As institutions have shored up retention in the first college year, they have become alarmed by the number of students failing to complete the second year. This new research report on the 2008 National Survey of Sophomore-Year Initiatives offers insights into the strategies being adopted to help sophomore students continue to learn, develop, and succeed in college. Ordering information can be found at www.sc.edu/fye/publications/rr/index.html



Monograph No. 54

Transfer Students in Higher Education: Building Foundations for Policies, Programs, and Services **That Foster Student Success**

Mark Allen Poisel and Sonja Joseph, Editors

Whether they swirl, double-dip, move forward, backward, or laterally, today's transfer students have multiple and complex enrollment patterns and comprise a significant and growing percentage of the college student population. This new

monograph presents what we know about transfer students, addresses assumptions and myths about the transfer experience, and explores the changing demographics of this student group. Adopting a student-centered approach, the volume offers strategies to begin (and continue) the work of serving students and creating transfer-friendly campus



Cohosted by:

Tamagawa University, Japan Teesside University, United Kingdom University College Dublin, Ireland University of Manchester, United Kingdom York University, Canada



Register before May 18, 2011 to receive the conference discount.

For more information visit: www.sc.edu/fye/ifye environments. Transfer issues are explored from the perspective of both sending and receiving institutions, and research, case studies, and best practices are provided to help institutions meet the challenges of enrollment, orientation, advisement, coordination of services, retention, and graduation of transfer students. To learn more or order a copy, visit www.sc.edu/fye/publications/monograph/monographs/ms054.html

Research

2009 National Survey of First-Year Seminars

An executive summary of the 2009 National Survey of First-Year Seminars can be viewed now on the NRC website at www.sc.edu/fye/research/reports/index.html. A research report containing detailed analyses is scheduled for release in December 2011.

Paul P. Fidler Research Grant

The Paul P. Fidler Research Grant is designed to encourage 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 being done 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. Completed applications must be received by the National Resource Center by midnight EST, July 1, 2011. To learn about the grant, visit www.sc.edu/fye/research/grant

NRC Exhibits and Presentations

Like many of you, the staff of the National Resource Center plan to be actively involved in the spring 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 Educational Practices: Strategies for Achieving 21st Century Learning Outcomes. Presentation by Tracy L. Skipper, NRC assistant director for publications; at the 2011 ACPA Annual Conference in Baltimore, Maryland; March 29, 2011; 1:30-2:30 pm; Baltimore Convention Center, Room 349.

Exploring the Impact of Peer Leadership experiences on Academic Development.

Presentation by Jennifer R. Keup, NRC director: at the 2011 ACPA Annual Conference in Baltimore, Maryland; March 29, 2011; 4:30-5:30 pm; Baltimore Convention Center, Room 345.

First-Year Seminars at Two-Year Colleges: Data Informed Design. Research presentation by Jennifer R. Keup, NRC director, and Donna Younger, director of student engagement, Oakton Community College; at the 2011 American Association of Community Colleges (AACC) Annual Convention in New Orleans, Louisiana; April 12, 2011; 8:45-9:45 am; Hilton New Orleans Riverside Hotel, Grand Salon Section 7.

Presentation by Jennifer R. Keup, NRC director; at the University of California First-Year Best Practices Conference in Riverside, California; April 14-15, 2011.

Using Longitudinal Assessment for Institutional Improvement. Panel session including Ryan D. Padgett, NRC assistant director for research, grants and assessment; at the 2011 Association of Institutional Research (AIR) Forum in Toronto, Ontario, Canada; May 23, 2011; 8:30-9:30 am.



A biannual publication from the National Resource Center for The First-Year Experience® and Students in Transition

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 firstyear, 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 to sign up for content alerts or view archived issues.

New Evidence on the First-Year Seminar: Assessing and Evaluating Seminar Objectives, Topics, Innovations, and Learning Outcomes. Roundtable presentation by Ryan D. Padgett, NRC assistant director for research, grants and assessment; at the 2011 Association of Institutional Research (AIR) Forum in Toronto, Ontario, Canada; May 23, 2011; 11:55 am-12:35 pm.

30th Annual Conference on The First-Year Experience Updates

NRC Philanthropy Project

The National Resource Center would like to express our gratitude to participants at the 30th Annual Conference on The First-Year Experience who contributed funds during the conference that resulted in the donation of 1,185 copies of *Empowering Parents of First-Year College Students: A Guide for Success* for use in two high schools in the City of Atlanta. At the conclusion of the conference on February 8, 2011, guides were delivered to Maynard H. Jackson High School and Frederick Douglass High School. Both schools employ a system of small learning communities designed to prepare students to meet the challenges of the 21st century and give them a world-class educational experience. The guides will be distributed to students and their parents to help them prepare for college.

2011 Outstanding First-Year Student Advocates

The National Resource Center and Wadsworth/Cengage Learning announced the 10 educators who were selected as the 2011 Outstanding First-Year Student Advocates at the 30th Annual Conference on The First-Year Experience in Atlanta, Georgia. These educators share a common goal of improving the educational experience for entering college students. They have been awarded this distinction for their exceptional work on behalf of first-year students and for the impact their efforts have on the students and culture of their institutions. Their achievements can be viewed at www.sc.edu/fye/centerinitiative/advocates/currentyear/index.html



Left to right: Kia Kuresman, Director of New Student Programs, Goucher College; Michelle Bandla, Coordinator of the First-Year Program, SUNY Oswego; Rachel Duff Anderson, Director of First-Year Experience, Siena Heights University; Fabania DesRosiers, Assistant Professor of Psychology, Dominican College of Blauvelt; Keldon Henley, Vice-President for Student Services, Ouachita Baptist University; Julie Amon, Assistant Dean for First-Year Students, Case Western Reserve University; Marsha Fralick, Professor Emeritus, Cuyamaca Community College; Lizabeth Doherty, College Advisor, Mohawk Valley Community College; Marilyn Kurata, Core Curriculum Enhancement Director, University of Alabama at Birmingham; Denise Rode, Director of Orientation and First-Year Connections, Northern Illinois University.

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The Toolbox

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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

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