Prompt and Response: Creating Cognitive Links Strengthens Learning

In the ideal learning environment, outcomes, assigned readings, classroom experiences, and the assessment of student performance connect seamlessly in ways that are interdependent and interactive. Yet, in reality, the classroom is not ideal, and faculty may struggle to help students make these connections. For example, instructors make outside reading assignments to help students connect with the material, engage actively in the classroom, and achieve identified outcomes; however, they generally are (often realistically) suspicious about whether students actually read their assigned texts (Clump, Bauer, & Bradley, 2004; Lei, Bartlett, Gorney, & Herschbach, 2010). How can faculty create assignments that prompt and encourage students to engage in the preparatory reading and exploration that facilitates more active and informed participation in the classroom?

To motivate students to read their assignments and interact with instructional content, as well as strengthen this part of the learning process, the principle of cognitive affordances can be useful. Norman (2002) defines cognitive affordances as

> those fundamental properties that … provide strong clues to the operations of things. Knobs are for turning. Slots are for inserting things into. Balls are for throwing or bouncing. When affordances are taken advantage of, the user knows what to do just by looking. (p. 423)

In the cited examples, each of the physical objects (i.e., knobs, slots, balls) prompts specific actions. Responses to these affordances are learned over time as the appropriate action (i.e., turning, inserting, throwing) consistently provides the desired result. Just as these physical objects trigger specific responses, faculty, likewise, can craft clear, concrete instructions and prompts that engage students in active learning by having them think, write, or interact with what they have read or researched. Hartson (2003) describes this perspective on cognitive affordances to include “a design feature that helps, aids, supports, facilitates, or enables thinking and/or knowing about something” (p. 319).

When faculty use the concept of cognitive affordances effectively, they create a link between content and some form of response that can significantly impact the ways students engage with assigned readings and other learning experiences. For example, students are

- assigned to read a body of instructional content and then directed to respond by collaborating with classmates in constructing a wiki,
- instructed to seek out and read articles and web-based resources that present points of view diametrically opposed to the position taken by the author of an assigned reading and then summarize arguments on both sides of the issue,

“\[The more you read, the more things you will know.  
The more that you learn,  
the more places you’ll go.\]  
— Dr. Seuss,  
I Can Read With My Eyes Shut!”
asked to gather information through on-the-street (or on-campus) interviews and then summarize their findings, or

given the task reading a newspaper editorial on a timely topic and respond by drafting a letter to the editor.

In each of these examples, the information-gathering phase (e.g., reading, listening) prompts a response (e.g., constructing a wiki, drafting a letter). The faculty member’s direction to gather information is linked directly, and serves as an affordance, to the creation of a specific type of response (e.g., written product, presentation).

Consider and compare the following descriptions of the same reading assignment:

Assignment #1
Read chapter 7 in your textbook. You will be responsible for the material related to emotional intelligence. This content will be included on the final examination.

Assignment #2
Based upon this week’s reading related to emotional intelligence and information from the in-class survey, please post a profile of your strengths and weaknesses in this area. Also, respond to the postings of two classmates.

In Assignment #1, the instructor asks students simply to read a portion of their textbook with the promise (or threat) that some material from this chapter may reappear as a test question on the final examination. This assignment is a relatively weak and imprecise cognitive affordance; the link between the assignment and demonstrated learning is not defined clearly and does not prompt students to take any specific action other than read the assigned text. In Assignment #2, however, the instructor provides students direct, immediate instruction on how to apply what they are learning from reading the text, participating in class, and interacting with their peers (i.e., process content from the reading and survey, respond to the content, and critique the work of their classmates). This cognitive affordance offers the learner clear cues about the assignment and the desired outcomes.

These strategies can help students immediately process, apply, evaluate, and synthesize the media (e.g., books, articles, interviews, and video and audio clips) they have been absorbing. Cognitive affordances—prompts and responses—prepare students for myriad levels of examination as part of the upcoming classroom engagement.

Help your students make the connections to course content!

References
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. Courses have limited enrollment and use tools such as e-mail, threaded discussions and forums, listservs, and blogs. For more information, visit www.sc.edu/fye/oc.

Online Course Offerings:
April 9-May 11, 2013
Strategic Planning for Your First-Year Experience Program—facilitated by Bernard Sevarese, Associate Director in Undergraduate Admissions and First-Year Experience, and Julie Schultz, Senior Assistant Director of Undergraduate Admissions and First-Year Experience, at The Ohio State University.

May 21-June 22, 2013
Models and Methods of Student Advising: Promoting Career and Academic Success and Transitions—facilitated by Paul A. Gore, Associate Professor of Educational Psychology, at The University of Utah.

Conferences and Institutes

32nd Annual Conference on The First-Year Experience
February 23-26, 2013 | Orlando, Florida
The First-Year Experience conferences are meetings where educators from two- and four-year institutions come together to share ideas, concepts, resources, assessment tools, programmatic interventions, and research results focused on the first college year. Registration information and a tentative schedule are available at www.sc.edu/fye/annual.

Save the Dates
Institute on Sophomore Student Success
April 12-14, 2013 | USC Columbia, South Carolina

26th International Conference on The First-Year Experience
June 17-20, 2013 | Waikoloa, Hawaii’s Big Island

20th National Conference on Students in Transition
October 19-21, 2013 | Atlanta, Georgia

33rd Annual Conference on The First-Year Experience
February 14-18, 2014 | San Diego, California
Publications

New Releases

The Senior Year: Culminating Experiences and Transitions
Mary Stuart Hunter, Jennifer R. Keup, Jillian Kinzie, & Heather Maiaetta, Editors

Increasing pressures on colleges and universities to ensure degree completion and job placement as measures of success make it imperative that the path to graduation is clear and that seniors receive the support needed to earn a degree and make a successful transition to life beyond college. This new edited collection describes today’s college seniors and offers strategies for supporting them to graduation through high-impact educational initiatives. Contributors also address issues related to career development; workplace transitions; and opportunities for integration, reflection, closure, and ongoing engagement as students leave college. Educators charged with improving the end-of-college experience will find this an invaluable resource.

Call for Proposals

Proposal Deadline: June 1, 2013
The National Resource Center for The First-Year Experience and Students in Transition currently is accepting proposals for book-length manuscripts examining the transition experiences of college student populations that have been historically underserved or given limited consideration in the design of higher education contexts. Each volume will explore the experiences of a specific population in depth and draw on the theoretical, research, and practice literature to examine critically some of the fundamental assumptions underlying student success initiatives in higher education with an eye toward reshaping campus culture, policies, and practices to support the learning and development of the population under study. For more information, contact Tracy L. Skipper, Assistant Director for Publications, at (803) 777-6226 or via e-mail at tskippe@mailbox.sc.edu. Or download the complete call for proposals at http://www.sc.edu/fye/publications/development.html.

NRC Exhibits and Presentations

Like many of you, the staff of the National Resource Center 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 NRC staff members.


Leveraging Programmatic Decision Points for First-Year Seminar Success. Presentation by Jennifer R. Keup, Director, National Resource Center for The First-Year Experience and Students in Transition, at the 2013 ACPA, College Student Educators International Convention, 10:30 a.m., Tuesday, March 5, 2013, Planet Hollywood, Celebrity Ballroom 2.

Using Emerging Evidence and Recommendations to Support Senior-Year Students’ Experiences. Roundtable session by Dallin George Young, Assistant Director for Research, Grants, and Assessment, and Jennifer R. Keup, Director, National Resource Center, at the 2013 ACPA Annual Convention in Las Vegas, Nevada, 7:30–8:30 a.m., Wednesday, March 6, 2013, Bally’s Las Vegas, Skyview 6, Table 35.