Instructional Scaffolding to Improve Learning

Similar to the scaffolding used in construction to support workers as they work on a specific task, instructional scaffolds are temporary support structures faculty put in place to assist students accomplish new tasks and concepts they could not typically achieve on their own. “As students begin to demonstrate task mastery, the assistance or support is decreased gradually in order to shift the responsibility for learning from the [instructor] to the student” (San Jose Evergreen Community College District, 2003).

Why use Instructional Scaffolding?

One of the main benefits of scaffolded instruction is that it provide for a supportive learning environment. Instructors are caring and interested in helping students learn. Students are free to ask questions, provide feedback and support their peers in learning new material. Instructors who use instructional scaffolding become more of a mentor and facilitator of knowledge than the dominant content expert. This teaching style provides the incentive for students to take a more active role in their own learning. Students share the responsibility of teaching and learning through scaffolds that require them to move beyond their current skill and knowledge levels. Through this interaction, students are able to take ownership of the learning event. The need to implement a scaffold will occur when you realize a student is not progressing on some aspect of a task or unable to understand a particular concept. Although scaffolding is often carried out between the instructor and one student, scaffolds can successfully be used for an entire class. The four points below provide a simple structure of scaffolded instruction:

“First, the instructor does it. In other words, the instructor models how to perform a new or difficult task, such as how to use a graphic organizer. For example, the instructor may have a partially completed graphic organizer on an overhead transparency and "think aloud" as he or she describes how the graphic organizer illustrates the relationships among the information contained on it.

Second, the class does it. The instructor and students work together to perform the task. For example, the students may suggest information to be added to the graphic organizer. As the instructor writes the suggestions on the white board, students fill in their own copies of the organizer.

Third, the group does it. Students work with a partner or a small cooperative group to complete a graphic organizer (i.e., either a partially completed or a blank one).

Fourth, the individual does it. This is the independent practice stage where individual students can demonstrate their task mastery (e.g., successfully completing a graphic organizer to demonstrate appropriate relationships among information) and receive the necessary practice to help them to perform the task automatically and quickly” (Ellis and Larkin (1998), as cited in Larkin (2003)).

Instructional scaffolds promote learning through dialogue, feedback and shared responsibility. Through the supportive and challenging learning experiences gained from carefully planned scaffolded learning, instructors can help students become lifelong, independent learners. You can learn more about Scaffolding at: http://www.niu.edu/spectrum/2008/fall/scaffolding.shtml or by contacting Janet Giesen at (815) 753-1085.

References

Many faculty consider live, personal interaction to be the most valuable element of quality teaching and learning experiences. Wimba Classroom is a new online collaboration tool that integrates with Blackboard and allows educators and students to engage in meaningful and memorable interactions by combining interactive technologies with instructional best practices.

Some of the features of Wimba Classroom include:
- presentations with audio and video narration
- multi-way audio and video chat
- public and private text chat
- electronic whiteboard
- polls, quizzes, and surveys
- desktop sharing/application sharing
- breakout rooms
- full-featured archives
- telephone access
- accessibility features

Examples of a few possible applications of an online collaboration suite in a 21st century learning environment include:
- Fostering on-demand, informal communication from student-to-student and student-to-instructor.
- Inviting guest experts to present real-time online lectures to students using a wide array of rich media.
- Using a live online classroom to provide revision sessions for students needing extra help or optional assessment preparation sessions. Providing the link to the session archive for those who were unable to attend.
- Offering peer-to-peer “coffee breaks” or optional study sessions for students to network and learn from each other’s experiences.
- Offering online office hours with voice and video
- Allowing for online conversations with both voice and video in areas such as patient diagnosis for healthcare, public speaking exercises, negotiation skills in business, or any discipline where communication is the key.


Faculty Development Offers Online Programs

NIU Faculty Development and Instructional Design Center has recently begun offering online development workshops to supplement the face-to-face sessions that are already offered. These online sessions provide NIU faculty/staff and teaching assistants with the opportunity to participate remotely from their office or home computer or even by phone. Sessions are archived for on-demand playback and made available at http://www.niu.edu/facdev/programs/archives.shtml.

Programs offered in the online format will be designated as "ONLINE" in the monthly program schedule delivered electronically via email and RSS each month.

For more details concerning our upcoming online workshops or to subscribe to the online program schedule so that you’ll be notified when new online programs are announced, visit http://www.niu.edu/facdev/programs/fscurrent.shtml.

Appreciative Inquiry

“Appreciative Inquiry: A Positive, High Engagement Process and Philosophy for Increasing Teaching and Institutional Effectiveness,” by Dr. Ray Wells (Company of Experts) on Friday, January 9, 2009 from 8:00 am to 4:00 pm. The workshop is only for NIU administrators, faculty, staff. Register online at: http://www.facdev.niu.edu, by phone (815) 753-0595, or by email facdev@niu.edu.
Faculty Development and Instructional Design Center is pleased to announce the Spring 2009 Teaching Effectiveness Institute, “Teaching Inclusively: An Approach to the Dynamics of Diversity in the University Classroom,” by Dr. Maurianne Adams (University of Massachusetts-Amherst) on Thursday, January 8, 2009, 8:00 a.m. to 4:00 p.m.

This institute will model an interactive social justice education approach that participants can experience and also make decisions about approaches that best suit their discipline, training, prior experience, and temperament. Four educational components of diversity in classrooms will be examined: (1) our understanding of who our students are and how their diverse social identities affect their interactions in socially diverse classrooms; (2) our own social identities as faculty in relation to social differences among our students; (3) challenges and opportunities we face as we create inclusive curricula in our courses and disciplines; (4) exposure and hands-on experience of pedagogical strategies that foster active learning and effective interpersonal interaction in classrooms that are socially and culturally diverse.

Maurianne Adams teaches social justice education graduate courses on foundations of social justice education and social identity. She has co-edited and written chapters on pedagogy, religious oppression, and knowing one’s. Dr. Adams has published articles on inclusive learning and faculty development.

The workshop is only for NIU faculty, staff and teaching assistants. You can register online at http://www.facdev.niu.edu or by phone (815) 753 0595, email facdev@niu.edu, or fax: (815) 753 2595. Registration Deadline: December 19, 2008.

Online Teaching Series

Last summer, Faculty Development and Instructional Design Center piloted a series of workshops aimed at helping NIU faculty prepare for online teaching. The Online Teaching Series consisted of six hands-on stand-alone workshops that provided NIU faculty and staff with a systematic overview of the various pedagogical and pragmatic considerations necessary in offering a quality online learning experience for students.

Online courses present a number of unique challenges even for experienced faculty. Preparing to teach online is an exciting process, but one that does require necessary up-front work. Even if the course was previously taught in the face-to-face format, one cannot always assume that materials and techniques that worked in the face-to-face environment will necessarily work in the online version of the course. Absence of visual cues and immediate feedback from students and reliance on mostly text-based communication will create a very different dynamics in an online course.

Sound pedagogical techniques and instructional strategies should always be at the core of any online course. The mode of delivery, media, and tools used to deliver materials might differ, but the course should have clear goals and objectives, a course structure that is easy to navigate, assignments and activities that promote collaborative learning, and feedback that is timely and appropriate.

Faculty need to select tools that can be used in an online course that would help achieve the learning and teaching goals for the course and would compensate for lack of immediate feedback and visual cues present in face-to-face courses.

There are some very important questions and issues that need to be considered in the initial stages of planning an online course. As you are designing an online course, you should ask yourself about your teaching style. It often helps to first think of your face-to-face courses and ask the following questions:

**Content Delivery:** How do you prefer to deliver content in the face-to-face classes?

**Interaction:** In a face-to-face class, how do you promote interaction between students?

**Assessments:** How do you assess student knowledge in your face-to-face classes?

**Feedback:** How do you tend to respond to student questions in a face-to-face class? How do you let them know where they stand in terms of their grade?

Online Teaching Series workshops attempt to target these challenging questions and present faculty with a chance to experience various aspects of an online course from a student perspective. Each workshop participant is given access to a Blackboard course with workshop outlines, materials, hands-on activities, as well as links to numerous resources discussed during the Online Teaching Series.

Any NIU faculty and staff interested in developing and teaching an online or blended course will find this series of workshops to be of benefit. While each session is stand-alone, participants who complete the entire series of sessions will likely benefit most. To learn more visit http://www.facdev.niu.edu/facdev/programs/onlineteachingseries
Looking to stay up-to-date on the latest news and upcoming workshops for faculty and staff at NIU? One way to do so is to follow the Faculty Development news feed on Twitter at http://twitter.com/facdev

Twitter is an online application that is part blog, part social networking site, and part cell phone/IM tool. It is designed to let users describe what they are doing or thinking at a given moment in 140 characters or less. As a tool for students and faculty to compare thoughts on a topic, Twitter can be used academically to foster interaction and support metacognition (“7 Things,” 2008).

Notices from Twitter, also referred to as tweets, can be viewed either online by logging in at twitter.com or can be delivered automatically by instant message (IM) or text message (SMS).

For a three minute introduction to Twitter, visit http://www.youtube.com/watch?v=ddO9idmax0o

References


The Mac Series

Faculty Development and Instructional Design Center currently offers numerous multimedia-based workshops, ranging from basic video capture to advanced short focused tutorials. Until recently, participants have relied on PC-based computer workstations in the Digital Multimedia Studio computer lab. Recent market trends indicate a surge in U.S. Higher Education Market Share of Apple computers from 10.1% (2003) to 20.5% (2007) (IDC WW PC Tracker, Nov. 2007). In anticipating a possible growing demand, Faculty Development has acquired several Mac Pro workstations. This will permit instruction of a number of Mac-OS applications, currently in development for Fall (2008) and Spring (2009). The proposed ‘Mac’ Series workshops include - Creating Enhanced Podcasts, Using iMovies, and Garage Band Basics.

Podcasting has become an increasingly popular form of content distribution in education, a trend also evident at NIU. While the Faculty Development and Instructional Design Center has offered an audio podcasting workshop for almost two years, one of the proposed workshops will allow instructors to expand online instruction to include ‘enhanced’ podcasting. An enhanced podcast is a podcast multimedia format that allows images to be displayed in time with audio (Figure 1). Thus, faculty will be able to distribute voice narrated lectures to their student using the subscription feature of podcasting. This added capability is likely to enhance the ‘Mobile Learning’ capability of the NIU community. This workshop, Creating Enhanced Podcasts, may be offered in the Fall 2008 semester.

The other two Mac-based workshops focus on audio and video editing: Garage Band Basics and Using iMovie. Although the Garage Band software is promoted as a personal recording studio for musicians, the Garage Band Basics workshop will focus on the program’s versatility for recording/editing/arranging/mixing voice recording, and adding music.

The iMovie software uses an intuitive interface that significantly facilitates the process of video editing, creating new movies, and publishing them for viewing on a course website or for sharing on the popular website, YouTube. Garage Band Basics and Using iMovie are tentatively scheduled for Spring 2009. Other Mac-based workshops are being considered for the 2009-2010 school year.

In addition to offering these new workshops, the Faculty Development and Instructional Design Center continues to provide lab facilities for faculty to practice creating their instructional materials. Check Faculty Development’s website to register for these workshops as they become available.

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