

PAES Instructional Enhancement Initiative

College of Education, The Ohio State University

PAES Winter Teaching Seminar

Recommended readings:

- Angelo, T., & Cross, K. P. (1988). *Classroom assessment techniques*. San Francisco: Jossey-Bass.
- Bransford, J. D., Brown, A. L., & Cocking, R. R. (Eds.). (2000). *How people learn: Brain, mind, experience, and school*. Washington, DC: National Academy Press.
- Davis, B. G. (1993). *Tools for teaching*. San Francisco: Jossey-Bass.
- McKeachie, W. J. (1999). *Teaching tips (10th ed.)*. Boston: Houghton Mifflin.
- Walvoord, B. E., & Anderson, V. J. (1998). *Effective grading*. San Francisco: Jossey-Bass.


During winter quarter, 2002, nine PAES faculty members are participating in a four-session workshop on instructional enhancement. The group meets for two hours, every-other week, with Dr. Kathryn Plank of the Office of Faculty and TA Development. The goals of the group are to:

- Talk with colleagues about teaching, share ideas, and learn what others are doing
- Reflect on our teaching
- Read about critical issues in teaching and generate practical solutions to our most pressing challenges

To date, the group has discussed how students learn, how to help students become

motivated, classroom management issues, structuring out-of-class activities, and teaching methods for active learning. Still to come are discussions on technology in the classroom, and assessing student learning. Participants bring their own experiences and ideas, and Kathryn supplies supplemental materials and ideas from FTAD.

Perhaps one of the most important benefits of the workshop, according to those in attendance, is the opportunity to stop and reflect on the process of teaching. The seminar “carves out” time from busy schedules and gives participants a structured piece of time to become reflective instructors.



The structure of the teaching seminar gives me permission to spend time focusing on how to improve my teaching...

-Dr. Wendy Naumann

Workshop participants are:
Dr. Joe Wheaton, CERSSP
Dr. Rick Suminski, SES
Dr. David Stein, WDE
Dr. Rick Petosa, SES
Dr. Wendy Naumann, CERSSP
Dr. Antoinette Miranda, CERSSP
Dr. Laurice Joseph, CERSSP
Dr. Paul Granello, CERSSP
Dr. Darcy Haag Granello, CERSSP

Announcing the first PAES Instructional Enhancement Initiative Newsletter....

Let Darcy know what you think (granello.1@osu.edu) - and I'll be working to solicit input and ideas for future newsletters, including short articles (like the one on pages 2-3) that cover an important aspect of instruction.

**Next newsletter date:
Spring, 2002**

Teaching Initiative Website

Did you know....The PAES Instructional Enhancement Initiative has a website? Go to the PAES Website (www.coe.ohio-state.edu/paes) and click on “information for faculty,” then “Instructional Enhancement Initiative.”

The website has

- results from the autumn faculty focus groups
- a list of OSU resources on teaching and learning
- a link to the “Feedback on Your Instruction” website
- links to other important websites that focus on teaching at the university level

If you have any links you would like added to the website, please email to granello.1@osu.edu

Contextual Teaching & Learning

The following description of contextual teaching and learning is intended to provide a brief overview of this method of instruction.

Within the broad field of education, there has been a long-running discussion on the role of using real-world context as a pedagogical tool to enhance learning. At the turn of the twentieth century, Binet concluded that children's learning and intelligence is a process that varies across situations, and not a static trait, as previously purported (Cunningham, 1995). As early as 1916, John Dewey argued that schools should emphasize meaningful and purposeful activities that directly relate to everyday life. In 1922, educational psychologist E. L. Thorndike argued that education should be based on knowledge and skills that are directly relevant to real-world applications, rather than the abstractions and theoretical discourse that often occurred in school settings.

In recent years, the call for inclusion of applied learning has appeared in the teacher education literature, using such names as "situated cognition," "authentic activities," "distributed cognition" and "communities of practice" (Borko & Putnam, in press). Recently, these ideas and terms have been integrated under an umbrella term, "contextual teaching and learning" (Sears & Hersh, in press).

Contextual teaching and learning has many different definitions, each of which is based on a different perspective (Hayes, 1993; Hayes, Hayes, Reese & Sabin, 1993). At the heart of the contextualist philosophy is the belief that behaviors are seen as acts-in-context (Biglan, 1993). The act of learning, like all other human behaviors, does not occur in a vacuum. People learn in a variety of contexts and from a variety of situations (Frisby, 1998).

In this view, learning can no longer be comprehended as simply response acquisition. Response acquisition viewed learning as a mechanistic process with a passive learner whose repertoire of behaviors is shaped by rewards and punishments (Mayer, 1998). Traditional pedagogy assumed that knowledge can be learned independently and practiced in isolation from context (Gagné, 1985).

By contrast, in a contextual approach, learning is attached to the context in which the knowledge is constructed, and knowledge is seen as inseparable from the context and activities within which it develops (Borko & Putnam, in press). In this view, teachers become participants, along with the learners, in the process of shared cognition (Mayer, 1998).

There are five fundamental components to contextual teaching and learning. They are:

The Situated Nature of Cognition

Those who advocate a contextual approach believe that the physical (environmental) and social context within which the learning occurs is an integral part of the learning activity (Resnick, 1991). Knowledge that is mastered in one context is not assumed to be automatically transferable to other contexts.

Contextual theorists argue that the most effective way to transfer learning is to actively participate in the new situation. When students engage in authentic activities – that is, learning activities that approximate as closely as possible what actually occurs in the field – they advance cognitively and learn critical thinking and problem-solving skills more effectively than through traditional didactic classroom activities (Brown et al., 1989). Situated learning helps students bridge the practice/theory gap.

The Social Nature of Cognition

Social constructivists believe that knowledge is not about replicating within a person something that already exists in the external world. Rather, each individual interprets knowledge based on previous experiences and the social context. This does not deny the existence of an external reality, but points out that there is no access to this reality, and therefore, people's perceptions of reality are what are significant. Learning and thinking, in this view, are primarily social acts. "Through discussion with others – where ideas are shared, challenged, negotiated, and justified – new levels of conceptual understanding can be reached . . . knowledge of the world is thus based on negotiated understandings" (Marshall, 1998, p. 452). Learning becomes an active event in which individuals attempt to interpret and understand the world and use feedback from others to form their reality.

Contextual Teaching & Learning, Continued

The Distributed Nature of Cognition.

Related to the idea of social cognition is the distributed nature of cognition. Distributed cognition is based on the understanding that a particular individual cannot retain all the information necessary to complete most tasks. Cognition, therefore, is not individually held, but is distributed over the individual, other people, and the environment (Moore & Rocklin, 1998). Professional preparation is often focused on individual performance and individual competence, but in the real world, most tasks are collaborative in nature. Distributed cognition requires a different role for the instructor, who no longer must have complete expertise in the area being taught. In the contextual model, the instructor becomes a guide who helps students navigate through the available information on a particular topic.

Problem-based Learning

Another concept embedded in contextual teaching and learning is problem-based learning. Similar to situated learning, it is based on the belief that students develop their cognitive skills, improve their long-term retention of material, and develop sound problem-solving skills when they are presented with real-world problems to solve (Pierce & Jones, in press). Using this approach, students are presented with a problem and they work individually or collaboratively to develop solutions. Problem-based learning integrates situated learning (it is based on real-world applications), social cognition (problems are worked through together and often redefined as students wrestle with applications), and distributed cognition (various perspectives are brought into the discussion). In the classroom, instructors become coaches and guides. This approach requires students and faculty to be comfortable with the lack of definitive answers to the problems. Students are not seeking *the answer*, but *an answer* or alternative.

Authentic Assessment

A final component of contextual teaching and learning that merits discussion is the use of authentic assessment. Given the pedagogical shift from didactic, knowledge recitation to application, analysis, and synthesis that occurs with contextual teaching, it is reasonable to conclude that traditional assessments

are not sufficient to capture the learning that has occurred. Paris (1998) stated that authentic assessment should occur continuously in classrooms, be based on authentic and meaningful tasks and, in and of itself, promote meaningful learning. In this model, assessments would include such items as exhibits, portfolios, and performances.

References

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To become more involved in the initiative,
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PAES TEACHING INITIATIVE WEBSITE:
WWW.COE.OHIO-STATE.EDU/PAES
THEN, LOOK UNDER “INFORMATION FOR FACULTY”

Mid-year Update on Initiatives

Autumn Quarter

1. Focus groups held at the Autumn Quarter PAES meeting encouraged faculty to reflect on instruction (see website for results)
2. Two mentoring luncheons (one for assistant professors and one for associate professors), focused on determining individual goals for instructional enhancement
3. PAES participated in the COE Teaching Enhancement Seminar on November 30. Nine PAES faculty attended the workshop
4. Two articles on instructional enhancement were distributed to all PAES faculty

Winter Quarter

1. The PAES Winter Teaching Seminar, a 4-week workshop, has nine faculty participants.
2. An article on self-reflective teaching/documentation of instruction was distributed to all PAES faculty
3. Two mentoring luncheons (one for assistant professors and one for associate professors) focused on documentation of instruction
4. The PAES Instructional Enhancement website was developed
5. There is on-going data collection on faculty expertise in all areas of instruction

Spring Quarter (proposed)

1. Continue work on website, distribution of appropriate articles, and data collection.
2. Mentoring luncheons to focus on one aspect of instruction
3. Informal discussion group(s) around teaching
4. A formal workshop on one aspect of teaching, with a PAES faculty member as presenter.
5. Begin to develop a database of PAES faculty expertise.
6. Other ideas as suggested by PAES faculty....

(to suggest an idea for spring quarter, contact Darcy at granello.1@osu.edu)