# **ACM-Teagle Collegium on Student Learning** Opening Conference: November 21-23, 2008 **Monmouth College**

### WORKING AGENDA

### The key goals of this project include

- enhanced understanding of the research on how students learn and how the brain works, particularly regarding metacognition;
- a resulting deeper understanding of **teaching** in the liberal arts college, with particular emphasis on how metacognition plays a crucial role;
- action resulting from that understanding: new ways of teaching, new kinds of assignments, new attitudes toward student learning and thinking;
- ongoing **projects**—both small and large, including, but not only, the Collegium projects—that gather evidence for what works in the classroom, focusing especially on teaching metacognition and what effects that has on student learning.

### **Pre-conference readings.**

- Svinicki (1999). New Directions in Learning and Motivation. In New Directions for *Teaching and Learning*, No. 80, pp. 5-7.
- Son, Kenna, and Pfirman (2006). A Metacognitive Pedagogy: The River Summer Project. Teagle Foundation White Paper.
- King and Baxter-Magolda (1996). A Developmental Perspective on Learning. *Journal of* College Student Development, 37 (2), 163-173.
- Additional readings are included in the conference booklet.

### Friday, November 21

6:00 pm: **Reception and Dinner:** Poling Hall, Morgan Room

> Welcomes: John Ottenhoff (Vice President, ACM); Mauri Ditzler (President, Monmouth College); Jane Jakoubek (VPAA and Dean of the

Faculty, Monmouth College)

8:00 pm: Keynote Address: Patricia M. King, University of Michigan

> The keynote will give an overview of new learning theories and research with particular focus on traditional-aged college students. What has recent cognitive science research told us about students as they come into our colleges? How might new research about how students learn encourage us to rethink the ways we teach? The keynote will focus broadly on cognition and offer both an overview of research about "how people learn" and what we're learning about the brain (especially 18-year-old brains). The keynote will also suggest points about the long-range goal of the project of

finding researchable questions for liberal arts faculty to pursue.

Dr. King's teaching and research focus on the learning and development of late adolescents and adults, especially college students. She is interested in approaches to student development that explore the intersections among developmental domains, such as intellectual, identity and social development, and how these affect a range of collegiate outcomes, such as intercultural maturity, citizenship, and character development. Her current work focuses on liberal arts education and the kinds of educational experiences that lead to self-authorship; this project, the National Study of Liberal Arts Education, is sponsored by the Center of Inquiry in the Liberal Arts at Wabash College (see

http://www.soe.umich.edu/liberalartstudy). She has co-authored two books, Developing Reflective Judgment (with Karen Strohm Kitchener) and Learning Partnerships: Theory and Models of Practice to Educate for Self-Authorship (with Marcia Baxter Magolda). She served as the founding editor of the national magazine, About Campus: Enriching the Student Learning Experience.

In addition to her faculty roles, she served as Director of the Center for the Study of Higher and Postsecondary Education at the University of Michigan from 2003-2006, as Chair of the Department of Higher Education and Student Affairs at Bowling Green State University from 1993-1998, and as Assistant Vice President for Student Services at Ohio State University from 1979-81, and has also served on several advisory boards for the American Association of Colleges and Universities. She is a Senior Scholar of the American College Personnel Association and received its Contribution to Knowledge Award in 1996. She received the Robert Shaffer Award for Contributions of a Graduate Faculty Member to Student Affairs from the National Association for Student Personnel Administrators in 1995.

### Saturday, November 22

8:00-9:00 am: Breakfast, Huff Athletic Center, Room 1012AB

**9:00-10:15:** Session 1: Panel Discussion: Understanding Cognition and Metacognition,

Huff Athletic Center, Room 1012AB

**Conveners**: John Ottenhoff and Jane Jakoubek

Goals: 1) Experts from various cognitive science fields will collaborate with keynoter Patricia King to fill in the keynote overview from Friday night with more detail and nuance; (2) Help the participants better understand recent developments in the various areas of metacognition and why those findings are important; (3) Make some initial moves toward connecting research and teaching concerns. Each panelist will speak for approximately 15 minutes, leaving time at the end of the session for discussion and questions.

• Patricia King, University of Michigan

- David Lopatto, Grinnell College
  - David Lopatto maintains diverse research interests in learning. He is lead analyst on the Summer Undergraduate Research Experience (SURE) survey funded by HHMI. He also directs the SUREay (academic year) survey project and in collaboration with partner institutions serves as lead analyst on the Classroom Undergraduate Research Experiences (CURE) survey project. He is the author of Survey of Undergraduate Research Experiences (SURE): First Findings (Cell Biology Education, 2004). Professor Lopatto has served as a consultant on assessment projects concerning the impact of undergraduate research experiences on learning, attitude, and career choice. With the assistance of talented students, Prof. Lopatto has maintained an ongoing summer research program extending his interest in learning to include mixed design quantitative/qualitative investigations of epistemological development and career choice.
- Beth Haines, Lawrence University

  Beth Haines is a development psychologist who specializes in

  cognitive development (i.e., quantitative reasoning, intuitive and
  explicit reasoning skills) and social cognition (i.e., attributional style,
  achievement confidence). She has done work on the development of
  college students' quantitative literacy skills, as well as exploring
  college students' confidence in their skills. She will discuss some of the
  intuitive strategies students employ when solving problems, as well as
  some of the challenges to strengthening college students'
  metacognitive skills, such as reasoning biases and difficulties in
  transferring learned skills to new contexts.
- John Horner, Colorado College John Horner is a Cognitive Psychologist with interests both in how we learn about complex systems and how our expectations about those systems can shape what we learn He was co-investigator on an NSF Young Scholars Program and has written articles on how humans and animals learn about their world. He also maintains a professional interest in the history and philosophy of science.

10:30-10:45 am: Break, Huff Athletic Center, Room 1012AB

**10:45 am-12:15 pm: Session 2**: Discussion Groups: Looking more closely at Metacognition, Huff Athletic Center, Room 1012AB

**Conveners**: Paul Kuerbis (Colorado College) and Chico Zimmerman (Carleton College)

Goals and emphases: (1) Closer examination of some threads in metacognition, following up on first morning session, within the larger framework of moving students from novice to expert learning; (2) More bridging between the research and teaching, facilitated by pairing of an expert from Session 1 with teaching and learning experts; (3) Drawing participants into the discussion by having them consider teaching practices

and assignments in light of the research being considered—and formulating questions about what more they'd like to know; (4) Highlighting differences in disciplinary approaches and assumptions;

## 1. Patricia King and Paul Kuerbis

## Topic: Self authorship and Learning Partnerships

King and Kuerbis will discuss with participants a process for helping structure intentional moments of disequilibrium in classrooms. Together they will explore what we know about how to move students toward "self-authorship" by validating their role as constructors of knowledge, building on their prior knowledge and experiences, and defining learning as mutually constructing meaning.

Room: Hewes Library, Rare Book Room

### 2. David Lopatto and Rachel Ragland (Lake Forest College)

Topic: Reflective Judgment and Authentic Learning Experiences
Lopatto and Ragland will ask participants to discuss how
undergraduate research experiences and other authentic learning
experiences may foster reflective judgment. Lopatto will share
findings from undergraduate surveys of research experiences, both
summer stand-alone experiences and course experiences in the
sciences. Ragland will share findings from a senior capstone course in
which students were asked to implement authentic disciplinary
practices and while also becoming reflective practitioners. Discussion
may include the general applicability of the benefits of research and
other authentic experiences across the disciplines.

Room: Hewes Library, Instructional Area, 1st Floor

## 3. Beth Haines and David Schodt (St. Olaf College)

# Topic: Developing Metacognitive Problem Solving Skills and Promoting Knowledge Transfer

Haines and Schodt will discuss how we might use metacognitive training to increase knowledge application and transfer. In doing so, we'll also analyze what kinds of practical knowledge and intuitive understanding that students bring to your classroom, as well as your experiences with students' motivational style and self-confidence in your discipline. Questions for participants to consider: (1) If you had to pick one or two concepts, strategies, or skills that you'd like students to learn well enough that they would apply them in other classes or in their lives in general, what would they be? (2) What types of metacognitive techniques or assignments would work in your classes to promote later application or transfer? (3) What kinds of practical knowledge/skills and intuitive understanding do students

bring to your classes? 4) What kind of confidence and personal/affective history do your students typically bring to your classes?

Room: Huff Athletic Center, Room 1010

#### 4. John Horner and Chico Zimmerman

Topic: The virtues of being a novice

College teachers often see their role as  $\Box$ turning novice students into experts in their own field. Yet, as King and Baxter-Magolda write (p. 168), "[T]he task of enhancing [student] development remains a daunting one because students' starting points often differ so sharply from the developmental goals that educators envision." Is it possible to embrace these disparate starting points as a strength rather than a weakness? Are there virtues to being a novice that we as teachers can take advantage of? What would "non-expert" learning goals look like, and what are the pedagogies that best support them?

Room: Wallace Hall, Room 102

12:15-1:30 pm: Lunch, Poling Hall, Morgan Room

**1:30-3:00 pm:** Session 3: Discussion and Workshop, Huff Athletic Center 1012AB

**Conveners**: Rachel Ragland and David Schodt

**Teaching Metacognition / Metacognitive Teaching** 

Karl Wirth, Macalester College

Goals: (1) Practical applications of the research to teaching; exploring answers to questions such as these: What difference does this research make for the way we teach? What do we know about teaching practices that might help students become "expert" learners in a variety of settings? What do we want to know about what our students know and how they are learning, especially as it relates to the metacognitive practices we are considering? (2) Getting participants to interact, focusing especially on translating the research ideas into assignments and classroom practices. (3) Finding researchable questions and moving toward engagement with the questions "How do I know this is working in the classroom?" and "What might evidence of success look like?" (4)Embodying our practice: thinking metacognitively about our work in this conference.

**3:00-3:15 pm: Break**, Huff Athletic Center, Room 1012AB

**3:15-4:30 pm:** Session 4: From Knowledge to Action: *What Next?*, Huff Athletic Center

1012AB

**Conveners**: John Ottenhoff, Rachel Ragland, David Schodt, Paul Kuerbis,

Chico Zimmerman

Goals: (1) Help participants consolidate what they've been learning and

discussing throughout the conference; (2) Move toward formulating plans of action for changing classroom practice (assignments, pedagogy) in light of new knowledge; (3) Begin formulating plans of action for assessing whether changes in pedagogy have the effects desired.

## 1. Researchable questions, meaningful answers

Ideas about researchable questions, classroom experiments, and the scholarship of teaching and learning.

## 2a. The Teagle Collegium Group

Description of the next steps of the Collegium project: discussion of project goals and collective brainstorming about kinds of studies might be done.

### 2b. Interest / working groups

Participants not interested in the Collegium project can work together in small groups—either from their home campus group, disciplinary groups, or groups from the morning break-out sessions—to think further about assignments or projects that might develop out of the conference work.

**Rooms Available:** Hewes Library, Rare Book Room; Hewes Library, Instructional Area, 1<sup>st</sup> Floor; Huff Athletic Center, Room 1010; Wallace Hall, Room 102

## 4:30 pm:

## Plenary Session: Brief end-of-the-day survey

- 1. What has been the most important insight so far?
- 2. What would be the most useful working group for you tomorrow morning?
- a group of my campus colleagues
- disciplinary colleagues (e.g. chemists, social scientists, etc)
- colleagues from the Saturday morning breakout group
- the Collegium group
- other: (specify)

### **Free Evening**

### Sunday, November 23

**8:00-9:30 am:** Breakfast, Stockdale Student Center, Highlander Room (2<sup>nd</sup> floor)

**9:30-10:45 am**: Interest / working groups, Stockdale Student Center, Rooms: Alumni

Lounge, Private Dining Room (main floor); Tartan Room, Conference

Room (lower level)

**Goal**: Being sure that all participants will leave the conference with some concrete plans for action.

Participants will have several options to continue working on researchable questions, assignments incorporating metacognitive activities into their teaching, and scholarship of teaching and learning projects. Assignments will be made on the basis of Saturday afternoon's survey.

**10:45-11:45 am:** Plenary Session: Making Connections, Stockdale Student Center,

Highlander Room

**Goal:** This conference will have covered a lot of information, and we hope it will have sparked some creative thinking; now, how do we put it all together, make connections, and formulate some coherent plans for next steps?

**Conveners**: Steering Committee

**12:00 noon:** Box lunches available for departure, Stockdale Student Center,

Highlander Room