

# NATIONAL CONFERENCE ON EFFECTIVE TRANSITIONS IN ADULT ED

Nov. 17-18 Conference, Rhode Island

## Joyce's Session Notes

### MONDAY:

#### Session 1 – Would we teach differently if we didn't know test results?

This session, given by Mary Lou Friedline, highlighted the importance and value of teaching to learning styles and multiple intelligences. Ms. Friedline emphasized that many teachers use TABE test results as the foundation for student instruction, but it is equally important to assess learning styles and to include multiple intelligences surveys when developing lesson plans.

Ms. Friedline encouraged teachers to use information about students' learning styles to alter their teaching strategies. She discussed a number of approaches that are effective in the adult ed classroom: offer quizzes in different formats, use individual and group instruction, give students some independent study time in the classroom, utilize the computer, use charts and grids, help students use text visuals and highlighters, and design lesson plans around multiple intelligences and learning styles.

Ms. Friedline distributed several sample inventories for multiple intelligences and learning styles and offered web sites for further research and teaching strategies:

<http://www.stemnet.nf.ca/~dsulliva/EP/Multiple%20Intelligences.htm>

<http://www.uwsp.edu/Education/lwilson/lessons/intro.htm> .

#### Session II – New Strategies for Effective Instruction of Adult Learners

John Parks LeTillier outlined the basics of memory and how we can help adult students learn and retain information. His session began with some background information on brainwave states and the transfer of memory. He stated that an understanding of the four brainwave states can give educators insights into important educational strategies. The four states are Beta, Alpha, Theta, and Delta. Theta is when we are processing sleep and when the transfer from short-term memory to long-term memory takes place. Memory begins in the area of the brain known as the hippocampus where it is held until it is transferred to long-term memory in the cerebral cortex.

According to Mr. LeTillier, it takes ten minutes to “refire electricity” over a newly formed neuro network. It then takes 24 hours to review and reinforce new learning. It will take 7 days to fully consolidate a long-term memory. LeTillier stated that it is very important to reinforce and review new material prior to going to sleep, since sleep is when information is transferred to long-term memory. He emphasized that there is no

comprehension without mental visualization, and that we all visualize while reading in order for comprehension to take place.

LeTillier played some memory games with participants to reinforce his theories about learning and memory. Further information is available from his company, Quantum Learning Education, at [www.qln.com](http://www.qln.com).

### **Session III – Algebra as the Gatekeeper: Developing Algebraic Reasoning**

Pam Meader of Portland, Maine, presented this session on developing algebraic thinking. She began by identifying the three components of numeracy that should be embedded in every math lesson: context, content, and cognitive/affective processes. Mathematical context is the use and purpose of the task. The content is the knowledge necessary to complete a mathematical task. The cognitive/effective process is the process that enables an individual to solve problems. Algebraic reasoning is an important component of the cognitive/affective process.

Ms. Meader discussed the barriers that adults face in transitioning from GED to college level mathematics, especially math anxiety. Much of a student's math anxiety can be relieved by focusing on procedures instead of how to manipulate numbers and symbols.

According to his book, *Fostering Algebraic Thinking*, Mark Driscoll describes algebraic thinking as "being able to think about *functions* and how they work". It is important for students to focus on sense making, not symbol manipulation. Thinking about numerical procedures—looking for patterns and making predictions--starts in elementary grades.

Ms. Meader demonstrated how to foster algebraic thinking by giving participants problems to solve. Participants were encouraged to use any resource available to them, including predicting, using tiles, making tables, and acting the problem out. Another pattern of algebraic thinking is called "doing and undoing". In this process students look at the end result and work backwards to discover the solution.

Once teachers have helped students develop algebraic reasoning they will be able to use adaptive reasoning, which is the ability to recognize connections between mathematical relationships. These reasoning skills, also called the cognitive/affective processes, are a critical foundation for understanding mathematical concepts and thereby being able to solve problems.

## **TUESDAY:**

### **Session IV - Our Mission is Transition**

Donna Miller-Parker and Sara Baldwin of South Seattle Community College discussed strategies they used in their basic education program to encourage students'

transitions to further education. The multi-level approach begins with three steps: (1) Developing an awareness for basic education students of the opportunity to continue on to college during their initial orientation; (2) Involving basic education students in college counseling and referral activities. This includes assigning an advisor to each student. (3) Providing academic preparation and support. This facet involves developing a "transitions portfolio" for each student.

The portfolio consists of faculty-developed content, and the content is revised as necessary. The portfolio is on-going and travels with the student. It is helpful when students meet with advisors over the course of their education. Students are given assignments to complete for their portfolio. Examples of the assignments are to write/develop their education plan, financial plan, academic homework, employment planning, and scheduling. The most important aspect is to have students take responsibility for their portfolios.

All faculty are involved in this initiative, and South Seattle Community College (SSCC) has a "faculty learning community". For example, nursing staff faculty work with ABLE students who plan to pursue courses in the health care field. Lectures are recorded and available for review by students on-line. This often helps students avoid the need to repeat courses because they can review lectures as often as needed.

The faculty learning community is a vital part of the success of SSCC's transitions program. Stipends are awarded to faculty for up to three professional development trainings per year. They have a heavy emphasis on pedagogy of adult learners and use a non-traditional instructional approach. Faculty are also shown a video of students discussing what helped and didn't help them in their coursework. Leadership and support are strong from the President of the college. The faculty are still trying to contextualize the curriculum, but feel they haven't succeeded yet. The effort continues!

**Session V** followed lunch, but I had to leave to catch my plane.