

# Learning, Teaching and The Brain: Knowing and Doing are Different Things

by Anne Davies

By agreement with the author, the following article may be copied and used as part of a Classroom Connections International Professional Development Learning Session. Permission is also granted to others who are working in a professional development setting to make up to 150 copies as long as credit is given. All other reprint rights belong to the author and this document cannot be copied or disseminated without prior written consent.

## **Classroom Connections International**

2449D Rosewall Crescent  
Courtenay, British Columbia  
Canada  
V9N 8R9

Tel: 1.800.603.9888  
Fax: 1.250.703.2921  
email: [editor@connect2learning.com](mailto:editor@connect2learning.com)

© 2001 Anne Davies / 2003 Classroom Connections International - [www.connect2learning.com](http://www.connect2learning.com)

“We do not remember days;  
we remember moments.” – Cesare Pavese

Am I the only one who often feels inadequate in front of a class or working with a group of learners? I know how to teach well and I know why I should do the things I should do but that doesn't mean I always do them. I don't mean to say there aren't moments when I think I am a brilliant teacher but even in those moments I don't know if the learners would agree with my assessment. As a young teacher I expected to struggle the first few years I was teaching. I struggled when teaching 6 to 12 year olds and now as I work with 25 to 65 year olds I still struggle. Learners are learners no matter how young or young-at-heart they are.

It's true that I know a lot more than I did but I used to think that one day I would put all the pieces together at the same time, in the same place, with at least one group of learners for more than an hour or two but even that hope is fading. I keep learning more about learning and teaching so the list of what I should be doing gets longer and longer. Like taking my vitamin supplements, I have good intentions but knowing and doing are different things. I just get something figured out and into my teaching when something new comes along.

I decided the long list of things to do had to go, so I recently got organized and did a giant sort. I was hoping for three general categories because I could quickly read them each morning as I took my vitamin supplements. They wouldn't reduce to three for me. Nine was the best I could do. I decided that was okay because nine was almost ten which meant I could miss one month without feeling guilty. I'm calling them my monthly reflections for the year. I'm hoping they will complement what I already know and do while encouraging me to make adjustments in my teaching... one month as a time.

#### Monthly Reflection: Building Relationships

“Students work harder, achieve more, and attribute more importance to school work in classes in which they feel liked, accepted and respected by the teacher and fellow students.” (Primary Program, 2000; p.108). This month I will strengthen relationships as they are key to learning (Jensen, 1998). I will help students see that I am also a learner who takes risks, makes mistakes, uses them as feedback, and learns. I will let students see my human-ness.

#### Monthly Reflection: Environment

I will ask students to let me know what helps them learn in my class and what gets in their way “because learning is affected by environment” (Primary Program, 2000; p.31). This means asking students about what is working, what is not and figuring out with learners way they can take care of their needs without interfering with other students and their learning. It means learning more about what helps the brain. I will review the ideas in *Brain-Based Learning With Class* by Colleen Politano & Joy Paquin.

#### Monthly Reflection:

##### Involving Learners

This month I will involve learners more often and provide opportunities for them to work with each other. I will look for ways learners can assume more responsibility for our class and for their learning. I will teach, model and involve students in personal goal setting and self-assessment because it gives the brain necessary processing time (Gregory et al, 2000; Jensen, 1998). I will work towards the time when I am not the only source of control and order in our classroom. The research supports me in my endeavors because, “guided learning and learning from individual experiences both play important roles in the functional reorganization of the brain” (Primary Program, 2000; p.31) and students learn more when they are involved in their learning and assessment (Black & Wiliam, 1998).

#### Monthly Reflection:

##### More Meaning Making

I will involve students in learning things worth knowing and help them appreciate the “real world” reasons. I work to elicit students' curiosity - I get their brains interested in the learning because “meaning is central to learning” (Primary Program, 2000; p.31). Our brains are “hard-wired” from birth to seek meaning (Pinker, 1998).

#### Monthly Reflection:

##### Choice and Ownership

I will provide for student choice within structure. Students need to make choices to increase ownership and make learning easier. *One size fits all* doesn't work with learning and teaching. “Every brain is uniquely organized” (Primary Program, 2000; p.31) and when students make choices they can take better care of their learning (Politano & Paquin, 2000).

#### Monthly Reflection

##### Multi-sensory Experiences

Varied learning experiences supports “all kinds of minds” (Levine, 1993) so this month I will remember to allow and plan for active learning such as multi-sensory learning, projects, simulation, and dramatizations because “learning is a multi-sensory experience” (Primary Program, 2000; p.31).

#### Monthly Reflection:

##### Feedback

Models and exemplars help students see possibilities and give themselves specific and timely feedback. This month I will model welcoming mistakes as feedback and information about the learning during the learning and encourage my students to do the same because my brain needs “specific, constructive, and timely feedback” (Primary Program, 2000; p.42) in order to learn. I will think about assessment information as measures of progress, not measures of ability because “learning is developmental” (Primary Program, 2000; p.31).

## Monthly Reflection:

### Evaluate Less

This month I will remember the difference between assessment and evaluation and be more thoughtful about how and when I assess. I am learning ways to “assess without putting a mark on the page” so students have more time to learn (Gregory et al, 1997). In order to focus students on the learning, I give evaluative feedback such as marks and grades as *infrequently* as possible because “students who are performance oriented are more worried about making errors than about learning” (Primary Program, 2000; p.42). I will also do this because classroom assessment research shows clearly that the more descriptive feedback (specific, constructive, timely) students receive, the more they learn (Black & Wiliam, 1998).

## Monthly Reflection:

### Recognition Without Rewards

Daily I will work with learners to create a classroom atmosphere conducive to taking the risks necessary for learning – free of threats, sarcasm, and put-downs. My students will not be “punished by rewards” (Kohn, 1993). I will learn other ways to recognize their success (Cameron et al, 1997). I will present students with challenges and try to ensure success is possible with reasonable effort. This is worth doing because “Learning is enhanced by challenge and inhibited by threat” (Primary Program, 2000; p.31).

### My Personal Self-help List of Recommended Readings

1. Black, P., and D. Wiliam (1998). Inside the Black Box: Raising Standards Through Classroom Assessment. *Phi Delta Kappan* 80, no.2:1-20.
2. Cameron, C., B. Tate, D. MacNaughton, and C. Politano (1997). *Recognition Without Rewards*. Winnipeg, MB: Peguis Publishers.
3. Cameron, C. (1999). Slowing Down to the Speed of Learning. *Primary Leadership* 1, no. 2:61-63.
4. Gregory, K., C. Cameron, and A. Davies (1997). *Knowing What Counts: Setting and Using Criteria*. Courtenay, BC: Connections Publishing [www.connectionspublishing.ca](http://www.connectionspublishing.ca).
5. Gregory, K., C. Cameron, and A. Davies (2000). *Knowing What Counts: Self-Assessment and Goal-Setting*. Courtenay, BC: Connections Publishing. [www.connectionspublishing.ca](http://www.connectionspublishing.ca).
6. Jensen, E. (1998). *Teaching with the Brain in Mind*. Alexandria, VA: ASCD.
7. Kohn, A. (1993). *Punished by Rewards: The Trouble With Gold Stars, Incentive Plans, A's, Praise, And Other Bribes*. New York: Houghton Mifflin.
8. Levine, M. (1993). *All Kinds of Minds*. Cambridge, MA: Educators Publishing Service Inc.

9. Ministry of Education (2000). *Primary Program (Foundation Document)*. Victoria, BC: Queen’s Printers.

10. Pinker, S. (1997). *How the Mind Works*. New York: HarperCollins Publisher.

12. Politano, C. and J. Paquin (2000). *Brain-Based Learning with Class*. Winnipeg, MB: Peguis Publishers.

© 2001 Anne Davies

Dr. Anne Davies is currently teaching university courses part-time, writing, researching, and presenting across North America. Her e-mail address is: [anne@connect2learning.com](mailto:anne@connect2learning.com). She welcomes your comments.