

DIVING DEEPER

MESA NATIONAL CONFERENCE 12TH & 13TH APRIL 2002

More than Words

Jody Plecas

As time passes I recognise the rhythm and flow of the world. Much of my understanding of it goes beyond words.

We learn in a variety of ways, visually, auditory and tactile (or kinesthetically). These ways of learning are activated through explicit or cognitive learning like lectures, textbooks, discussions and research. However we also learn implicitly through physical and experiential means. 40% of an adults learning intake is through visual means, 30% is auditory and 30% is kinesthetic. We must include each of these areas to address both explicit and implicit learning.

The audience of the Diving Deeper conference was given a simple test handout (Attachment 1) to determine what perspective the audience had. In summary the group showed 22 were more visual, 20 were more kinesthetic and only 4 results showed a bent toward auditory intake. (Attachment 2 is a collation of the test)

Clues	Learning Tips
<p>Visual Learners Usually:</p> <ul style="list-style-type: none">• Need to see it to know it.• Have strong sense of color.• May have artistic ability.• Often have difficulty with spoken directions.• May Over-react to sounds.• May have trouble following lectures.• Often misinterprets words. <p>Auditory Learners Usually:</p> <ul style="list-style-type: none">• Prefer to get information by listening-needs to hear it to know it.• May have difficulty following written directions.• Difficulty with reading.• Problems with writing.• Inability to read body language and facial expressions. <p>Kinesthetic Learners Usually:</p> <ul style="list-style-type: none">• Prefer hands-on learning.• Often can assemble parts without reading directions.• Have difficulty sitting still.• Learn better when physical activity is involved.• May be very well coordinated and have athletic ability.	<p>Visual Learners Should:</p> <ul style="list-style-type: none">• Use graphics to reinforce learning; films, slides, illustrations, diagrams and doodles.• Color code to organize notes and possessions.• Ask for written directions.• Use flow charts and diagrams for notetaking.• Visualize spelling of words or facts to be memorized. <p>Auditory Learner Should:</p> <ul style="list-style-type: none">• Use of tapes for reading and for class and lecture notes.• Learning by interviewing or by participating in discussions.• Having test questions or directions read aloud or put on tape. <p>Kinesthetic Learners Should:</p> <ul style="list-style-type: none">• Engage in experiential learning (making models, doing lab work, and role playing).• Take frequent breaks in study periods.• Trace letters and words to learn spelling and remember facts.• Use computer to reinforce learning through sense of touch.• Memorize or drill while walking or exercising.• Express abilities through dance, drama or gymnastics.

(Used with permission of Diane Von Hardenberg, Modality Preference Inventory, Middlesex Community College <http://www.mxctc.commnet.edu/clc/survey.htm>)

Publications which will be of assistance to teachers are 'Learning with the Body in Mind' by Eric Jensen (who is currently speaking in Adelaide) and the 'AB Sea' by Nancy Tsernjavski.

Eric says "when we move, we groove" and his book explains why kinesthetic approaches are vital to good teaching. He further explains that "body centered learning is the acquisition of knowledge that takes place primarily outside of conscious awareness" and that "thoughts are merely movements that haven't happened yet".

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Nancy's "AB Sea" book helps to illustrate the diversity of educational opportunities that can employ multiple intelligences in marine education and is highly recommended.

The conference delegates are challenged to examine their teaching spaces . Three activities/enactments to trial could be having the students /audience creating a storm soundscape, then exemplifying water movement while becoming a catchment (and taking pollution down to the sea), and finally a seagrass meadow.

Finally, the delegates are encouraged to also make use of the Arts (and Arts specialists) as a wonderful way to consolidate cognitive learning and to make sense of the sea.

Information intake styles.....

At the end of each numbered section mark the letter that best describes your learning 'comfort zone'

- | | | |
|-----------|--|--------------------------|
| 1 | a) My papers and notebooks always seem messy. | <input type="checkbox"/> |
| | b) I start a project before reading the directions | <input type="checkbox"/> |
| | c) I remember information better if I write it down. | <input type="checkbox"/> |
| 2 | | |
| | a) When I read, I need to use my index finger to track my place on the line | <input type="checkbox"/> |
| | b) I hate to sit at a desk for long periods of time | <input type="checkbox"/> |
| | c) Looking at the person teaching helps keep me focused. | <input type="checkbox"/> |
| 3 | | |
| | a) I do not follow written directions well | <input type="checkbox"/> |
| | b) I prefer first to see something done and then to do it myself | <input type="checkbox"/> |
| | c) I need a quiet place to get my work done | <input type="checkbox"/> |
| 4 | | |
| | a) If I hear something, I will remember it. | <input type="checkbox"/> |
| | b) I use the trial and error approach to problem-solving | <input type="checkbox"/> |
| | c) When I take a test, I can see the textbook page in my head | <input type="checkbox"/> |
| 5 | | |
| | a) Writing has always been difficult for me | <input type="checkbox"/> |
| | b) I like to read my textbook while riding an exercise bike | <input type="checkbox"/> |
| | c) I need to write down directions, not just take them verbally | <input type="checkbox"/> |
| 6 | | |
| | a) I often misread words from the text-(i.e., "them" for "then") | <input type="checkbox"/> |
| | b) I take frequent study breaks | <input type="checkbox"/> |
| | c) Music or background noise distracts my attention from the task at hand. | <input type="checkbox"/> |
| 7 | | |
| | a) I would rather listen and learn than read and learn | <input type="checkbox"/> |
| | b) I have a difficult time giving step-by-step instructions | <input type="checkbox"/> |
| | c) I don't always get the meaning of a joke | <input type="checkbox"/> |
| 8 | | |
| | a) I'm not very good at interpreting an individual's body language. | <input type="checkbox"/> |
| | b) I enjoy sports and so well at several different types of sports | <input type="checkbox"/> |
| | c) I doodle and draw pictures on the margins of my notebook pages | <input type="checkbox"/> |
| 9 | | |
| | a) Pages with small print or poor quality copies are difficult for me to read | <input type="checkbox"/> |
| | b) I use my hands when describing things | <input type="checkbox"/> |
| | c) I have trouble following lectures | <input type="checkbox"/> |
| 10 | | |
| | a) My eyes tire quickly, even though my vision check-up is always fine | <input type="checkbox"/> |
| | b) I have to rewrite or type my class notes to reinforce the material | <input type="checkbox"/> |
| | c) I react very strongly to colours | <input type="checkbox"/> |

a = auditory b = kinesthetic (tactile) c = visual

Learning Styles <http://www.mxctc.commnet.edu/clc/survey.htm>

Either print this page and take the inventory or keep track of your score. Read each statement and select the appropriate number response as it applies to you.

Often (3)	Sometimes (2)	Seldom/Never (1)
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Visual Modality

- _____ I remember information better if I write it down.
- _____ Looking at the person helps keep me focused.
- _____ I need a quiet place to get my work done.
- _____ When I take a test, I can see the textbook page in my head.
- _____ I need to write down directions, not just take them verbally.
- _____ Music or background noise distracts my attention from the task at hand.
- _____ I don't always get the meaning of a joke.
- _____ I doodle and draw pictures on the margins of my notebook pages.
- _____ I have trouble following lectures.
- _____ I react very strongly to colors.
- _____ **Total**

Auditory Modality

- _____ My papers and notebooks always seem messy.
- _____ When I read, I need to use my index finger to track my place on the line.
- _____ I do not follow written directions well.
- _____ If I hear something, I will remember it.
- _____ Writing has always been difficult for me.
- _____ I often misread words from the text-(i.e., "them" for "then").
- _____ I would rather listen and learn than read and learn.
- _____ I'm not very good at interpreting an individual's body language.
- _____ Pages with small print or poor quality copies are difficult for me to read.
- _____ My eyes tire quickly, even though my vision check-up is always fine.
- _____ **Total**

Kinesthetic/Tactile Modality

- _____ I start a project before reading the directions.
- _____ I hate to sit at a desk for long periods of time.
- _____ I prefer first to see something done and then to do it myself.
- _____ I use the trial and error approach to problem-solving.
- _____ I like to read my textbook while riding an exercise bike.
- _____ I take frequent study breaks.
- _____ I have a difficult time giving step-by-step instructions.
- _____ I enjoy sports and so well at several different types of sports.
- _____ I use my hands when describing things.
- _____ I have to rewrite or type my class notes to reinforce the material.
- _____ **Total**

Total the score for each section. A score of 21 points or more in a modality indicates a strength in that area. The highest of the 3 scores indicates the most efficient method of information intake. The second highest score indicates the modality which boosts the primary strength. For example, a score of 23 in the visual modality indicates a strong visual learner. Such a learner benefits from the text, from filmstrips, charts, graphs, etc. If the second highest score is auditory, then the individual would benefit from audio tapes, lectures, etc. If you are strong kinesthetically, then taking notes and rewriting class notes will reinforce information.

Learning Styles—Clues and Learning Tips

Clues	Learning Tips
<p>Visual Learners Usually:</p> <ul style="list-style-type: none">• Need to see it to know it.• Have strong sense of color.• May have artistic ability.• Often have difficulty with spoken directions.• May Over-react to sounds.• May have trouble following lectures.• Often misinterprets words.	<p>Visual Learners Should:</p> <ul style="list-style-type: none">• Use graphics to reinforce learning; films, slides, illustrations, diagrams and doodles.• Color code to organize notes and possessions.• Ask for written directions.• Use flow charts and diagrams for notetaking.• Visualize spelling of words or facts to be memorized.
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Adapted from the Tutor Trainer's Manual, Tyler Junior College, Tyler, TX.

Learning Styles

How do you take in information? Does your learning style match the teaching style of your instructor? This workshop gives insight into the ways in which individuals learn and how they can use their strengths to maximize information gathering

Learning Styles–Differences

People learn in different ways. There are a number of factors in combination that affect the way in which an individual learns new information. Major factors contributing to your learning style include:

- **Sensory Modalities–visual, auditory, and kinesthetic**
- **Reasoning Types–deductive, inductive**
- **Learning Environment–interpersonal (working with others), intrapersonal (working alone)**

The Senses

- **Auditory–Listening**
 - prefer verbal instructions to written ones
 - is comfortable using spoken reinforcement mentally as well as aloud
- **Visual–Seeing, Reading, Visualizing**
 - does well with reading comprehension
 - prefers maps to verbal directions
- **Kinesthetics–Moving, Touching, Writing**
 - writing things down clarifies thoughts
 - likes to draw pictures
 - enjoys working with hands–likes lab classes

Reasoning Type

- **Deductive reasoning**
 - studies premise first, then draws conclusions
 - sees big picture first, then looks for details
- **Inductive reasoning**
 - likes to see examples first when learning new information before developing an overview
 - prefers to learn game rules as it is played, not beforehand

Learning Environment

- **Intrapersonal–working alone**
 - likes to solve problems by oneself
 - does not like to work or study in groups
- **Interpersonal–working with others**
 - prefers discussion with family and friends before decision is made
 - likes to do assignments and study with others

Middlesex Community College
100 Training Hill Rd
Middletown
CT 06457
USA

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<http://www.newhorizons.org>
 - **An excellent site about the brain**
<http://www.hhmi.org/senses/a/a110.htm>
 - **Middlesex Community College** <http://www.mxctc.commnet.edu/clc/survey.htm>
 - **L.S. ideas for 1st grade by Afton Diemart** <http://www.northrim.net/afton/>
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Conferences - Workshops

AUGUST 2002

Eric Jensen Teaching with the Brain in Mind – Adelaide

Two workshops

The workshop sessions will focus on brain-compatible learning, linking latest research in neuroscience with specific, practical, classroom-ready applications

Dates: Friday 16th/Saturday 17th or Sunday 18th/Monday 19th

Times: 8:30am – 4pm each day

Price: \$175 includes 2-Day program, workfolder, refreshments, certificate of attendance.

Venue: Lakes Resort Hotel, Brebner Drive, West Lakes, South Australia

Booking: Focus Education,

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Flagstaff Hill

South Australia 5159

Phone or fax: 08 8358 6993

Email: john.joseph@focusededucation.com.au

Eric Jensen is a member of the prestigious Society for Neuroscience and New York Academy of Science. He's a popular speaker at most major conferences, including ASTD, ASCD, NYRE, NAESP, SEAL, SALT, and IAL. He was named to Who's Who of the World and voted an Outstanding Young Man of America. He was the designer and key trainer for the MetWest Initiative (Australia)--one of the world's largest learning and training programs.

Jensen authored Student Success Secrets, (Barron's) The Little Book of Big Motivation, (Ballantine/Fawcett) The Learning Brain, SuperTeaching, Brain-Based Learning, Music with the Brain in Mind, Learning with the Brain in Mind, Different Brains, Different Learners, Brain Compatible Strategies, The Great Memory Book (The Brain Store) and Teaching with the Brain in Mind ('98) ASCD.