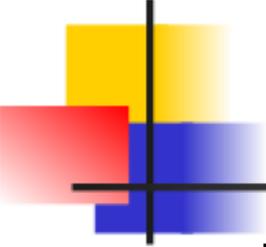


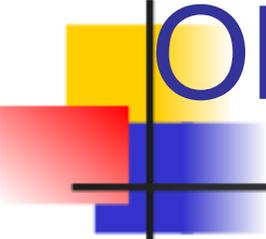
Structuring the Inner Dialogue Through Learning Strategies Instruction

A School Wide Approach



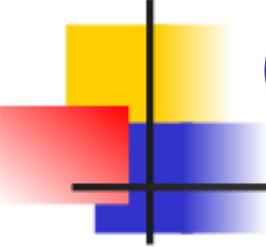
Objectives for this Workshop:

- Explain the difference between the specific and non-specific learning strategies within the context of a cognitive learning model.
- Introduce the Information Processing Model and Metacognition within the context of a Cognitive learning model.



Objectives

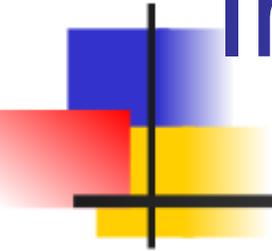
- Relate the concept of a learning disability to a breakdown within the metacognitive information-processing model.
- Present specific cognitive learning strategies as method of improving the metacognition of all learners.



Objectives

- Share our vision and goals of a school-wide approach to learning strategies instruction.

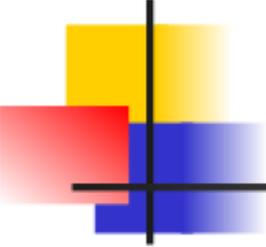
Behavioural Versus Cognitive Approaches to Classroom Instruction





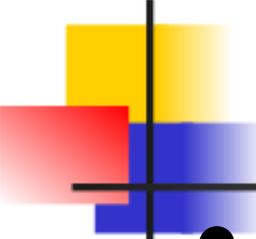
Behaviourism

A Brief Summary



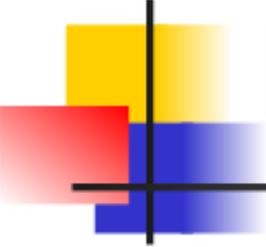
Classical Conditioning

- Occurs when a neutral stimulus (metronome) becomes associated with a reflex (salivation).
- 1903 –(Ivan Pavlov) Experiments with food, dogs, and a metronome
- Dogs were conditioned to salivate at the sound of the metronome through classical conditioning.



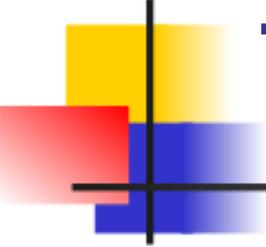
Operant Conditioning

- A learner operates on the environment and receives a reward for certain behaviours or operations (Mergel, 1998).
- Behaviours that are rewarded are likely to be repeated.
- B.F. Skinner is often considered to be the father of Behavioural psychology for his theories on Operant Conditioning (Lerner, 2003).



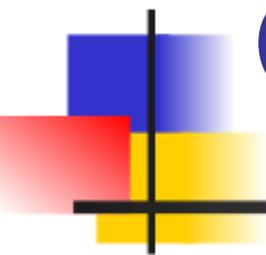
Behaviourism - Summary

- Humans learn like animals (Bender, 1992).
- Learning is acquiring new behaviours.
- Teaching is consistently implementing behavioural interventions (Bender, 1992).



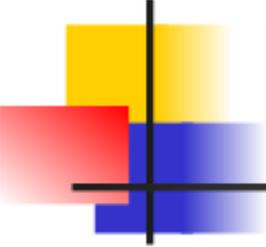
The Basis of Behaviourism

- Stimulus-Response pattern



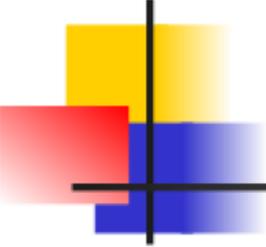
Cognitivism

A Brief Summary

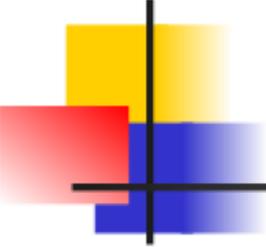


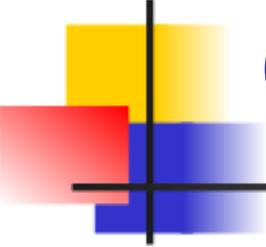
Limitations of Behaviourism

- Limitations of Behaviourism to explain some aspects of human behaviour aided the rise of Cognitivism.

- 
-
- Behaviorism is not able to explain learning when there is no reinforcement and just occurs on its own.
 - Why don't children imitate all behaviour that has been reinforced?
 - Why do children often model behaviour that has not been reinforced?

Behaviourism and Cognitivism - What's the Difference?

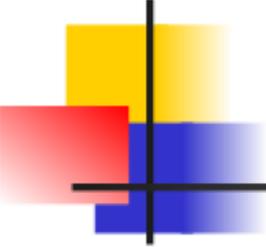
- 
-
- Behaviourism is based on observable changes in behaviour. Behaviourism focuses on a new behavioural pattern being repeated until it becomes automatic.
 - Cognitivism is based on the *thought process behind the behaviour*. Changes in behaviour are used as indicators of what is happening inside the mind.
 - (Mergel, 1998)



Cognition - Talking to Yourself

- Humans are constantly instructing themselves through an inner language (Bender, 1992)
- Teaching should focus on structuring this inner dialogue.

Behavioural Model



ANTECEDENTS



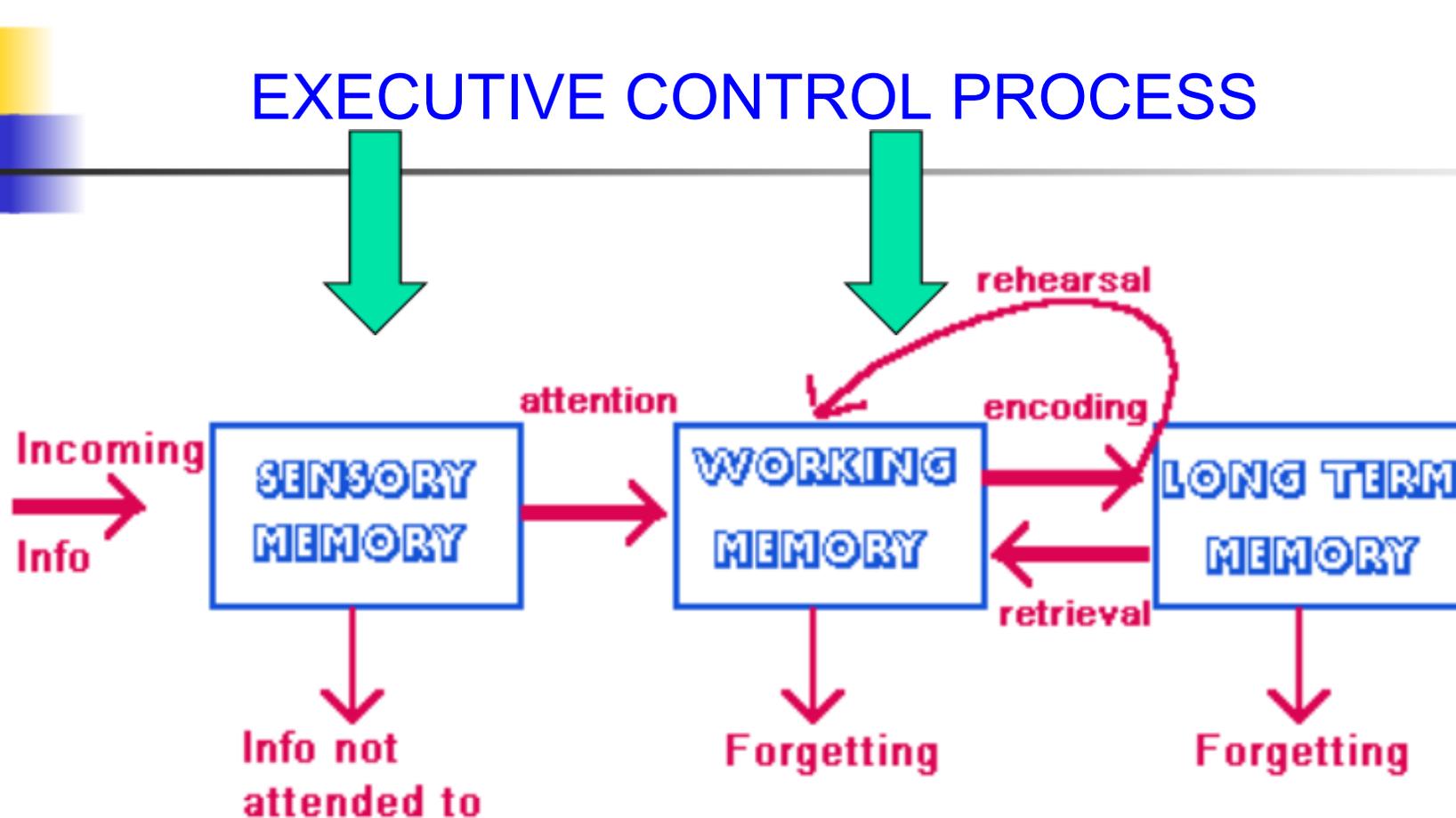
BEHAVIOUR



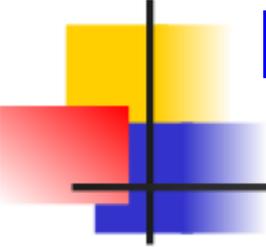
CONSEQUENCES

Based on a stimulus-response pattern

The Information Processing Model of Cognition



Based on metacognition or inner dialogue



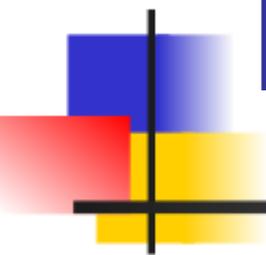
EXECUTIVE CONTROL PROCESS



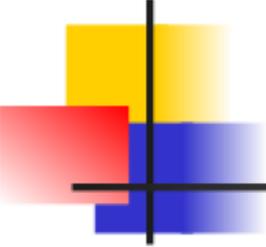
METACOGNITION



INNER DIALOUGE: THINKING ABOUT THINKING



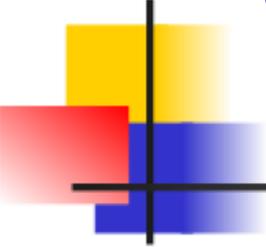
Learning Disabilities

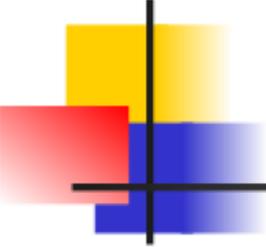


Learning Disabilities Defined- Canada

"A number of disorders which may affect the acquisition, organization, retention, understanding or use of verbal or nonverbal information. These disorders affect learning in individuals whom otherwise demonstrate at least average abilities essential for thinking and/or reasoning. As such, learning disabilities are distinct from global intellectual deficiency (Learning Disabilities Association of Canada, 2002)."

Individuals with Disabilities Education Act (IDEA)

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- A "discrepancy between achievement and intellectual ability (Lerner, 2003)."



Facts on Learning Disabilities

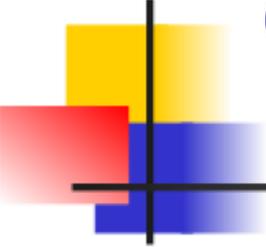
- One in ten Canadians has a learning disability.
- 30-70% of young offenders have experienced learning problems.
- 22% of all Canadians are illiterate.
- Almost 50% of adolescent suicides had previously been diagnosed as having learning disabilities.

(Child & Family Canada,
1997)

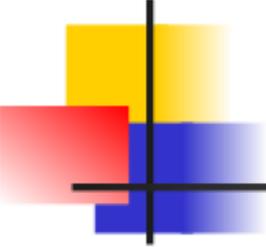
A Glimpse of Learning Disabilities



Visual Perception Disability (Simulation)



- **READ this sentence:**
- **FINISHED FILES ARE THE
RESULT
OF YEARS OF SCIENTIFIC STUDY
COMBINED WITH THE
EXPERIENCE OF YEARS.**
- **Now count aloud the F's in that
sentence.**



There are six F's in the sentence.

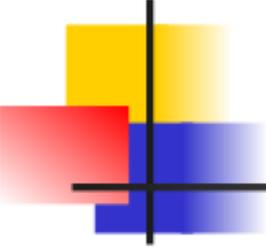
One of average intelligence finds **three** of them.

If you spotted **four**, you're above average.

If you got **five**, you can turn your nose at most anybody.

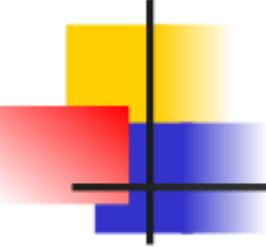
If you caught **six**, you are a genius.

There is no catch.



Poor Motor Abilities

- Try to write a sentence with your opposite hand.



Mathematical Difficulties

- You have a pile of 24 coins. Twenty-three of these coins have the same weight, and one is heavier. Your task is to determine which coin is heavier and do so in the minimum number of weightings. You are given a beam balance (scale), which will compare the weight of any two sets of coins out of the total set of 24 coins. How many weightings are required to identify the heavier coin (Stone, 2004)?

Answer

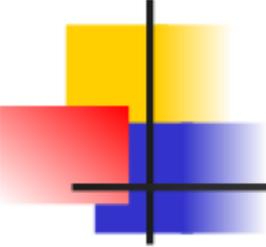
- It can be done in three weightings.

Weighing 1: Break the coins into three piles of eight. Weigh one group of eight against another group of eight. If the scale balances, then the group that hasn't been weighed has the heavier coin. If the scale tips, then that group contains the heavier coin.

Weighing 2: Break the group of eight that has the heavier coin into three groups (three coins, three coins, and two coins). Weigh one set of three against the other set of three. If it balances, the group of two has the heavier coin. If the scale tips, then that group has the heavier coin.

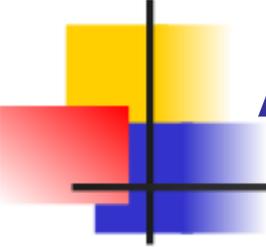
Weighing 3: If the heavier coin is in the group of two, then just weigh one coin against the other to determine the heaviest coin. If the heavier coin is in a group of three, then take two of those coins and weigh them against each other. If the scale balances, the coin that hasn't been weighed is the heavier coin. If the scale tips, then that is the heavier coin (Stone, 2004)

(Stone, 2004)



Attention Span Difficulties

- A landlord is threatening to evict a father and his beautiful young daughter, unless she agrees to marry him. In a false gesture of sincerity, he offers her an opportunity for her and her father to remain in the house, without marrying him. He has a silk bag in which he says he has placed a white and a black stone from the footpath on which they're standing. If she picks the white stone from the bag, without looking, she wins; if she picks the black, she loses. However, the young girl saw him place two black stones in the bag. She can't expose him in front of the witnesses without angering him and making things worse. How does the clever girl win (Eluzions, 2003)?



Answer

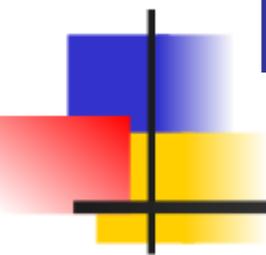
- She withdraws a stone and instantly drops it into those on the ground and is lost. To know what colour it was they must look at the stones remaining in the bag (Eluzions, 2003).

Source: <http://eluzions.com/Puzzles/Lateral/>

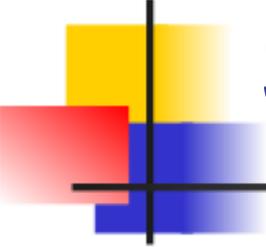
What Happens if There is a Problem With the Metacognitive Process?



Breakdown in Learning - Learning Disability

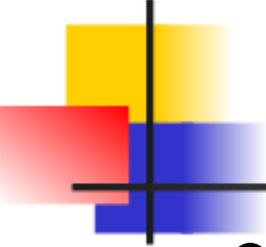


Learning Strategies Instruction



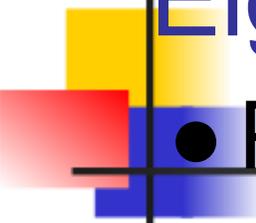
Strategies Instruction

- Focus on how students learn, rather than what they learn (Lerner, 2003).
- Are designed to structure and facilitate a student's inner dialogue.
- For students with learning disabilities, strategies instruction tries to provide them with metacognitive techniques that successful learners may already have.

- 
-
- Specific learning strategies employ the use of acronyms to structure inner language (Bender, 1992).
 - Non-specific strategies do not use acronyms, but are still designed to structure inner language.
 - Much of the work involving Learning Strategies was pioneered by Donald Deshler and the University of Kansas Learning Disabilities Institute.

How to Teach Learning Strategies





Eight Steps to Strategies Instruction

- Pretest and Commitment

- Describe the Strategies
- Model the Strategies
- Verbal Rehearsal
- Controlled Practice and Feedback
- Grade-Appropriate Practice and Feedback
- Posttest
- Generalization

(Bender, 1992)

Specific Learning Strategies

THRILD WISSC

RIDER

ACID

PARA-Pointing COPS

WATO

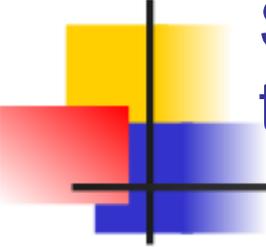
SEE

SWAP

SLANT

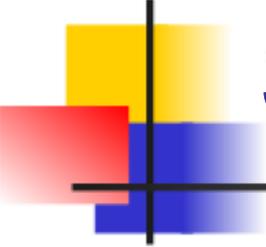
ABOM

CANDO



SLANT is a strategy designed to help students ready themselves for class.

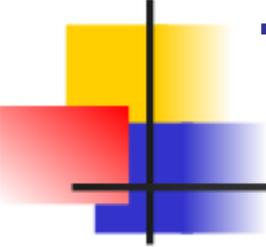
- S- Sit Up Straight
- L – Lean Forward
- A – Activate Thinking
- N – Note Important Points
- T – Track the Talker



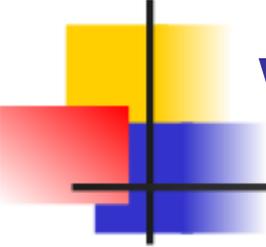
ABOM – Classroom Readiness Strategy

- A – Agenda
- B – Books Open
- O – On Time
- M – Materials

CANDO – Binder Organization Tool

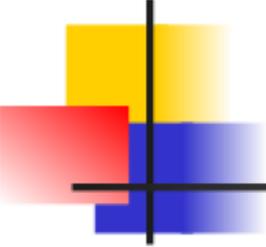


- C – Corrections Done
- A – All Notes There
- N – Neat
- D – Dividers
- O – Organized



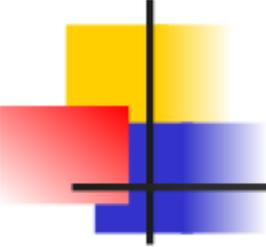
COPS – Way of analyzing written work.

- C – Capitals
- O – Overall
- P – Punctuation
- S - Spelling



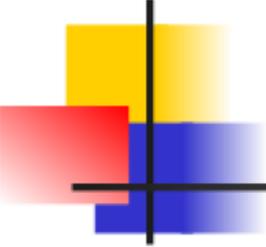
THRILD

- THRILD is strategy used in previewing a chapter.
- T- Title
- H- Headings
- R - Read First Paragraph
- I - Illustrations
- L - Last Paragraph Read
- D - Discussion Questions



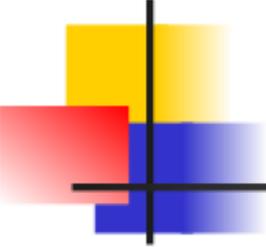
RIDER

- RIDER is a reading strategy designed to improve reading comprehension.
- R- Read
- I - Imagine a picture
- D - Describe the picture to yourself
- E - Elaborate on the details
- R - Repeat the earlier steps with a new sentence or section of text.



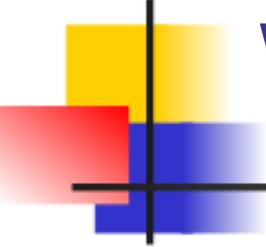
ACID - Marks

- ACID marks is a another strategy that is used to increase reading comprehension. It is designed to help a learner interact with reading material.
- A - What parts of the reading do you agree with?
- C - What parts of the reading is confusing?
- I - What parts do you find interesting?
- D - What parts do disagree with?



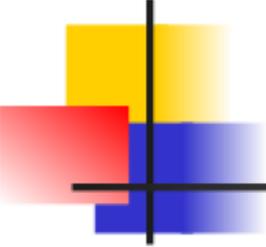
PARA-Pointing

- Parapointing is a technique that is used to retrieve important information from written text.
- P - Preview the article to determine the content.
- A - Analyze and highlight the most important information.
- R - Read/Reread only the highlighted information.
- A - Accent or put the highlighted information in note form into the margin area.

The logo features a vertical black line on the left side, intersected by a horizontal black line. To the left of the vertical line are three overlapping squares: a yellow one at the top, a red one in the middle, and a blue one at the bottom. The word "WATO" is written in a large, blue, sans-serif font to the right of the vertical line.

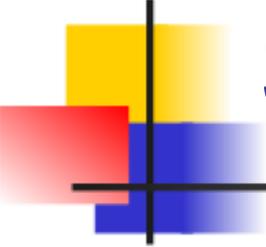
WATO

- WATO is a method used for analyzing historical or fictional characters.
- W - What are some important words spoken by the character?
- A - What are some of the important actions of the character?
- T - What are some of the thoughts of the character?
- O - Is there other information of that is relevant?



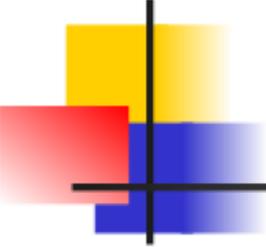
SEE

- SEE is a method that is used to organize thoughts for either paragraph construction or debate.
- S - Statement
- E - Examples illustrating your statement
- E - Explanation of how the examples prove your statement.



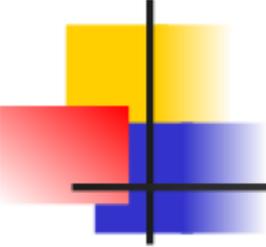
SWAP

- SWAP is a method used to analyze political cartoons, or even historical and fictional characters.
- S - Symbols
- W - Words
- A - Actions
- P - Purpose



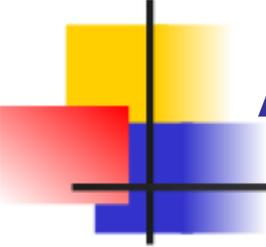
WISSC

- WISSC is a strategy designed to help students remember how to solve quadratic equations.
- W – Write the equation in standard form.
- I – Identify Coefficients
- S – Substitute into the equation.
- S – Solve
- C - Check



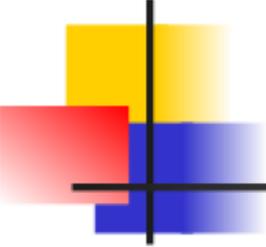
Does a Strategies Approach Work?

- Students instructed in learning strategies specific to job applications consistently completed applications accurately (Nelson & Smith, 1994).
- Research demonstrates that strategies instruction works well with learning disabled students (Bender, 1992).
- The RIDER strategy has been proven to increase reading comprehension (Bender, 1992).
- Research has proven that writing strategies instruction improves the writing performance of learning disabled students (Schumaker & Deshler, 2003).
- Strategies instruction improved tests scores in inclusive classes from 57-71% (Boughdah & O'Neil, 1999)



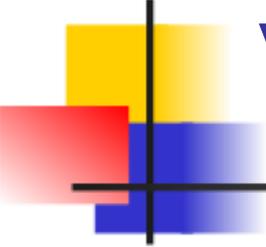
Why a School-Wide Approach?

- If strategies instruction is effective with Learning Disabled children, why not teach strategies to all children?
- If we teach strategies to all children, why not approach it in a school-wide, comprehensive manner?
- In the latest AFL Reading Assessment, very little attention is being given to specific reading strategies by ELA and Non-ELA teachers.



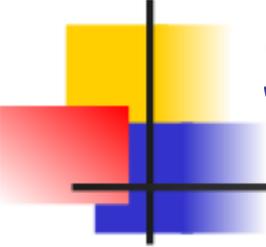
Potential Benefits

- Research clearly indicates that strategies instruction works and improves metacognition.
- Staff working towards common goals and bringing out the “hidden” curriculum.
- Less preparation NOT more.
- Leveling the playing field for all students and improving the learning opportunities of everyone.

The logo for Vanguard School features a stylized 'V' shape composed of overlapping colored squares: a yellow square at the top left, a red square at the bottom left, and a blue square at the bottom right. A black vertical line and a black horizontal line intersect at the center of the 'V' shape.

Vanguard School

- Learning Strategies instruction was a focus of one of our professional learning community meetings.
- Parts of this workshop were shared, and Grades 7-12 teachers were asked to begin implementing these strategies across the curriculum.



Stumbling Blocks

- Doesn't apply to math.
- I already have my plans.
- This is nothing new.