

Constructivist Views of Learning



EPSE 501 Seminar By:
Iren and Davinder

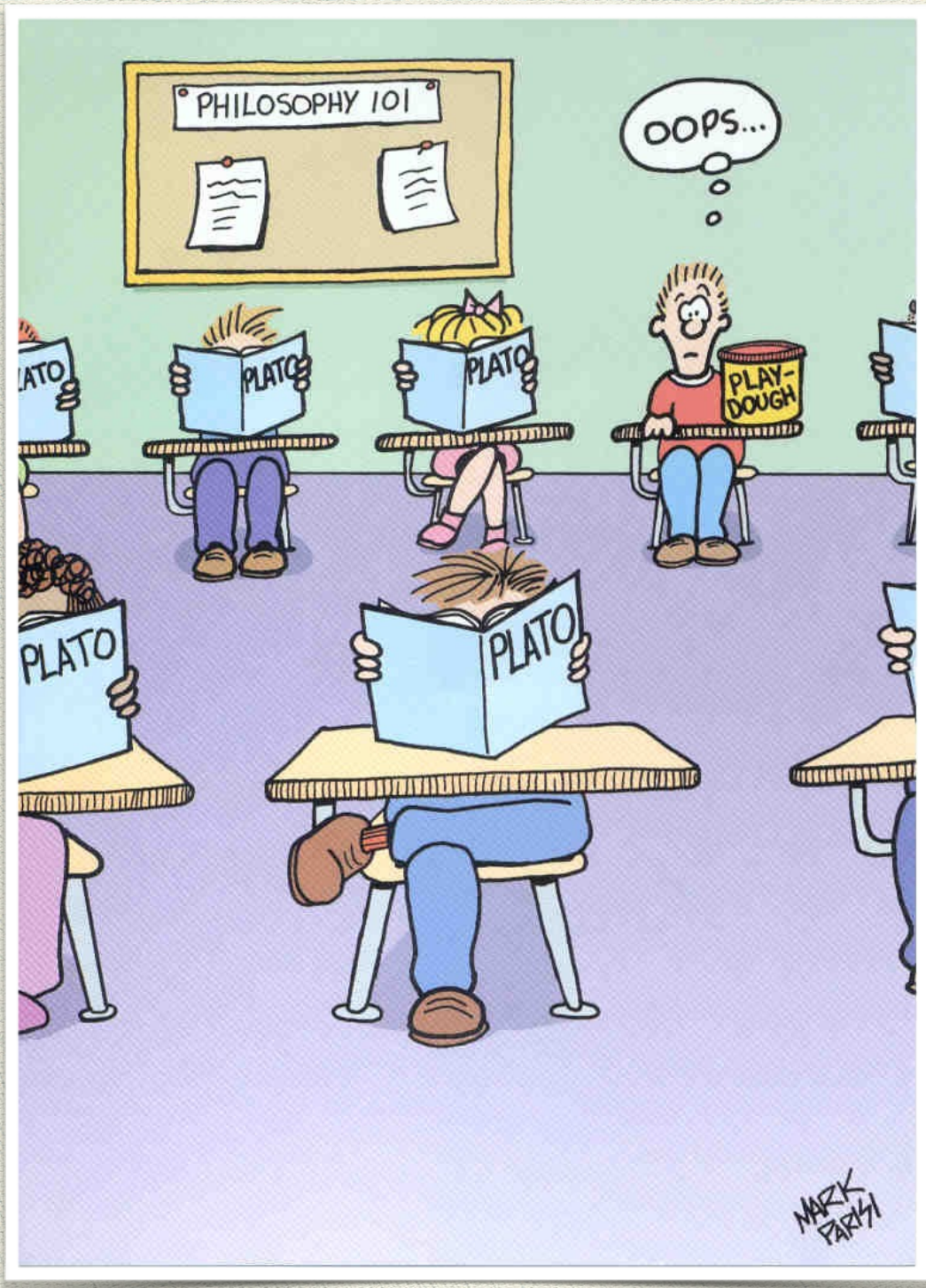


Ertmer & Newby (2013)

- ◆ Constructivism is the creation of knowledge through meaningful experiences (branch of cognitivism)
- ◆ Mind filters information to create its own interpretation of reality
- ◆ Making meaning of the world is open to change

- ◆ Learner and environmental factors influence learning (interaction between these two variables creates knowledge)
- ◆ Learning does not require the memorization of particular facts
- ◆ Learning must include: activity (practice), concept (knowledge), and culture (context)

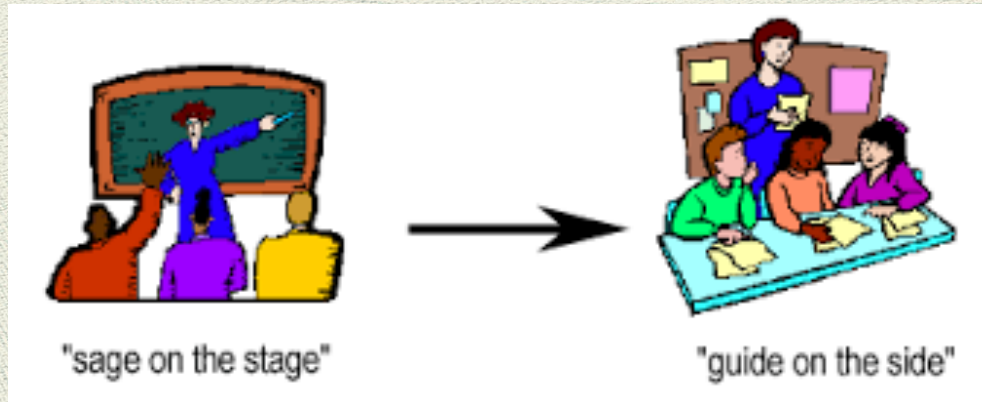




- ◆ Three stages of knowledge acquisition are introductory (behaviourist), advanced (constructivist), and expert
- ◆ The constructivist approach may be effectively used at the advanced stage
- ◆ Strategies of constructivism include:
collaborative learning, use of multiple sources, debate, discussions, and reflective awareness



Behaviourist → Cognitivist → Constructivist



Teaching → Learning

Passive transfer of facts and routines → Active application of ideas to problems

- ◆ Teacher's role is to:
 - ◆ instruct students on how to construct meaning and be able to monitor and evaluate those meanings
 - ◆ create authentic experiences in relevant contexts for learners



Piaget

Cognitive Constructivist



Vygotsky

Social Constructivist

Weegar & Pacis (2012)

- ◆ Learning occurs through active participation

PIAGET (Cognitive Constructivist)	VYGOTSKY (Social Constructivist)
<ul style="list-style-type: none">◆ Children learn according to appropriate “ages” and “stages”◆ Knowledge needs to be constructed through prior personal experiences to create mental images◆ Teacher has a limited role only to assist children in creating their own knowledge	<ul style="list-style-type: none">◆ Children learn within social settings◆ Learners construct their own knowledge based on their own experiences◆ Teacher plays a crucial role in the construction of meaning as a co-explorer

Epistemological comparison (examining how we know what we know and how it relates to education)

IDEALISM (Behaviorist)	REALISM (Behaviorist)	PRAGMATISM (Constructivist)	EXISTENTIALISM (Constructivist)
<ul style="list-style-type: none"> ◆ Idea centered (not subject or child centered) ◆ Teacher is central to learning ◆ Activities: lecture, discussion, imitation 	<ul style="list-style-type: none"> ◆ Content centered ◆ Teacher presents content in an organized manner ◆ Activities: standardized tests, serialized textbooks, discipline specific curriculum 	<ul style="list-style-type: none"> ◆ Using ideas for problem solving (application of knowledge) ◆ Teacher as facilitator ◆ Activities: interdisciplinary curriculum 	<ul style="list-style-type: none"> ◆ Individual based (subjective and unique) ◆ Learners construct their own meaning ◆ Teacher as guide ◆ Activities: small group discussions and dialogue

Online Activities



Behaviourism

Constructivism

Assessment: oral / written tests

Active learning

Direct instruction (asynchronous)

"Guide on the side"

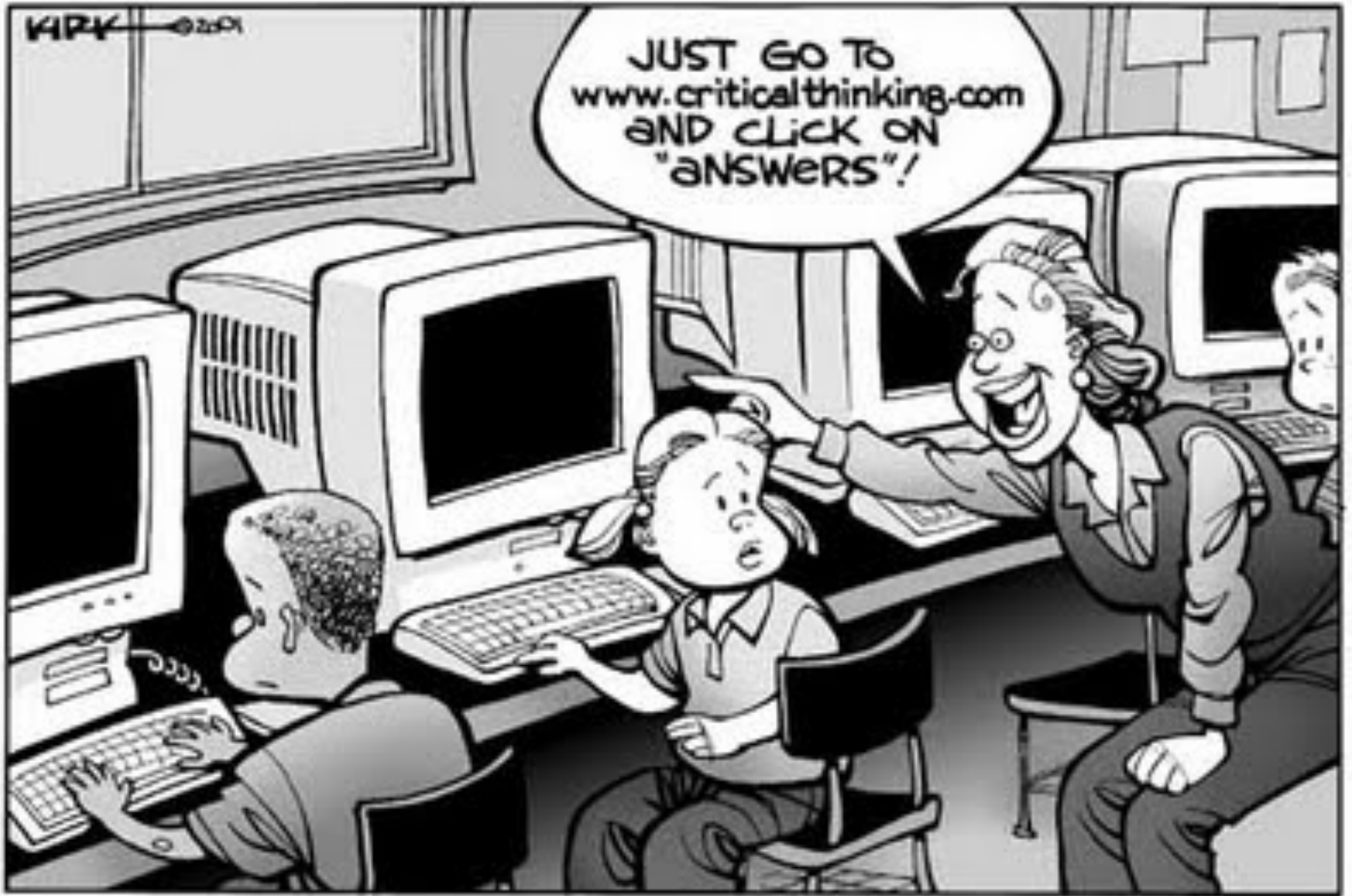
"Sage on the stage"

Cooperative learning,
open-ended problems,
and experimentation

Impact on instructional design

Learners construct own
understanding of the world
based on unique personal
experiences
(Dewey, Piaget, Vygotsky)

Threaded discussions and
problem based learning
projects (synchronous)



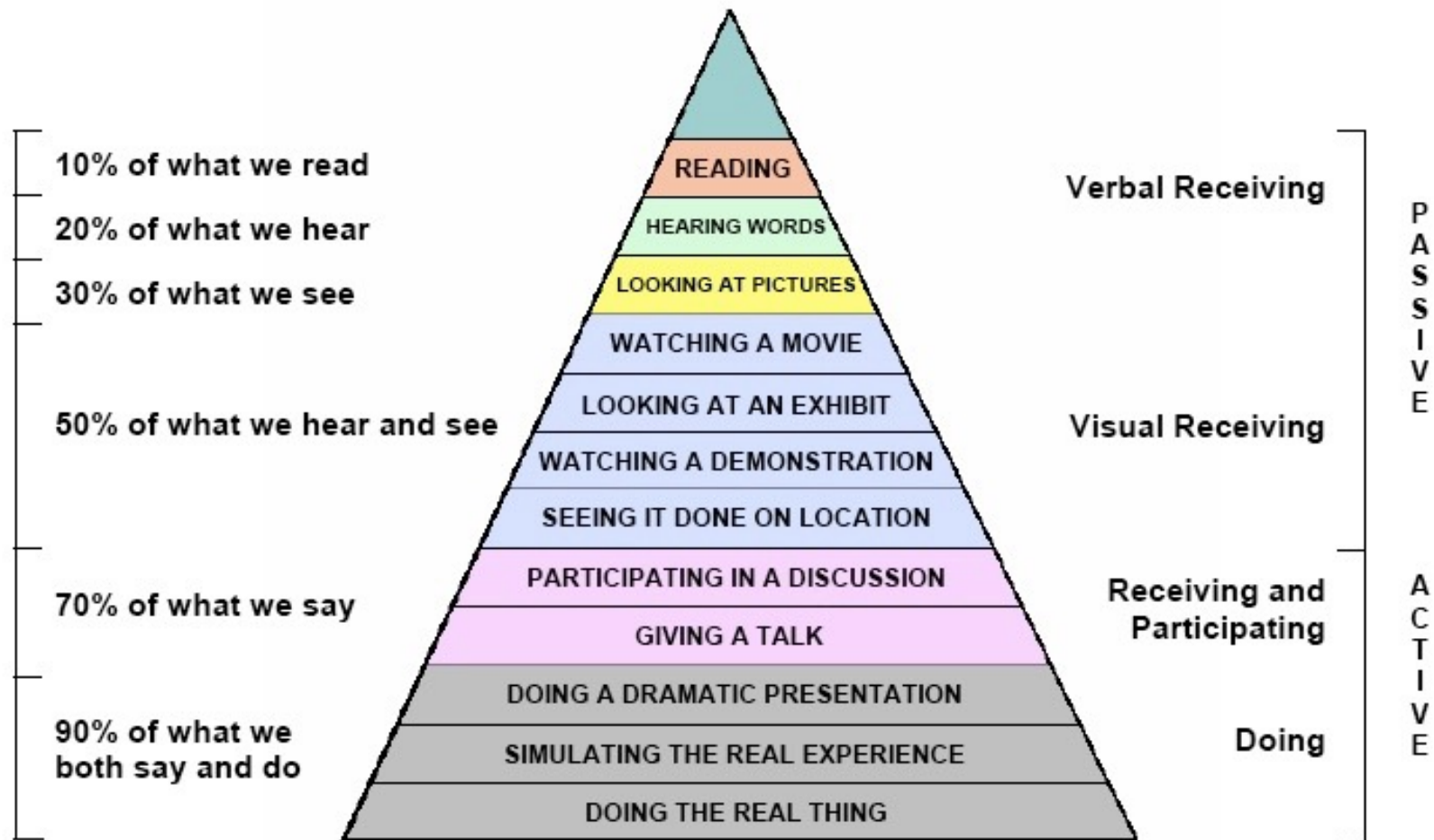
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CONE OF LEARNING

WE TEND TO REMEMBER OUR LEVEL OF INVOLVEMENT

(developed and revised by Bruce Hyland from material by Edgar Dale)



Edgar Dale, *Audio-Visual Methods in Teaching* (3rd Edition). Holt, Rinehart, and Winston (1969).

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Ministry of Education

Area of Learning: ENGLISH LANGUAGE ARTS

Grade 7

BIG IDEAS

- Language and **text** can be a source of creativity and joy.
- Exploring **stories** and other **texts** helps us understand ourselves and make connections to others and to the world.
- Exploring and sharing multiple perspectives extends our thinking.
- Developing our understanding of how language works allows us to use it purposefully.
- Questioning what we hear, read, and view contributes to our ability to be educated and engaged citizens.

Learning Standards

Curricular Competencies	Content
<p><i>Using oral, written, visual, and digital texts, students are expected individually and collaboratively to be able to:</i></p> <p>Comprehend and connect (reading, listening, viewing)</p> <ul style="list-style-type: none"> • Access information and ideas for diverse purposes and from a variety of sources and evaluate their relevance, accuracy, and reliability • Apply appropriate strategies to comprehend written, oral, and visual texts, guide inquiry, and extend thinking • Synthesize ideas from a variety of sources to build understanding • Recognize and appreciate how different features, forms, and genres of texts reflect different purposes, audiences, and messages • Think critically, creatively, and reflectively to explore ideas within, between, and beyond texts • Recognize and identify the role of personal, social, and cultural contexts, values, and perspectives in texts • Recognize how language constructs personal, social, and cultural identity • Construct meaningful personal connections between self, text, and world • Respond to text in personal, creative, and critical ways • Understand how literary elements, techniques, and devices enhance and shape meaning • Recognize an increasing range of text structures and how they contribute to meaning • Recognize and appreciate the role of story, narrative, and oral tradition in expressing First Peoples perspectives, values, beliefs, and points of view • Recognize the validity of First Peoples oral tradition for a range of purposes 	<p><i>Students are expected to know the following:</i></p> <p>Story/text</p> <ul style="list-style-type: none"> • forms, functions, and genres of text • text features • literary elements • literary devices • argument <p>Strategies and processes</p> <ul style="list-style-type: none"> • reading strategies • oral language strategies • metacognitive strategies • writing processes <p>Language features, structures, and conventions</p> <ul style="list-style-type: none"> • features of oral language • paragraphing • language varieties • syntax and sentence fluency • conventions • presentation techniques



Character Groups:

◆ The Dog: Sharissa, Peter, Renuka



◆ Ben: Todd, Joti, Cherie



◆ The Dog Rescue: Carrie, Oli, Angela



◆ The Fire Brigade: Sheela, Kaitlin, Jenn



◆ The Police: Simon, Amy

◆ Bella: Belinda, Robyn, Shawna





Reading with Mrs. Sandhu and Ms. Braich

This book just ate my dog!



Your task is to:

- ◆ Complete the journey of your character
- ◆ Think about where they are and what they are doing after they have vanished into the fold of the book
- ◆ Explain the remaining journey of your assigned character using ChatterKid (create a max. of 2 clips)
- ◆ Be prepared to airplay to share your story



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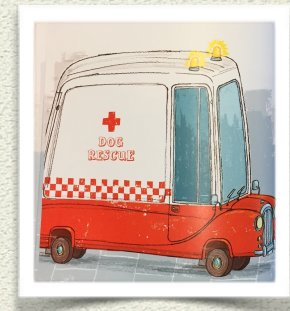
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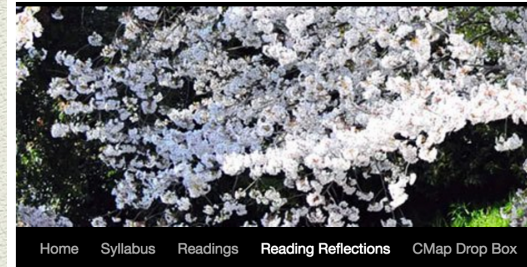
◆ Bella: Belinda, Robyn, Shawna



Summary of Articles and Reflections:

- ◆ Better understood the differences between the theories
(Peter, Sharissa, Angela, Cherie, Robyn, Renuka)
- ◆ Use behaviouristic or cognitive strategies for introducing new knowledge and then use constructivist strategies to develop those concepts
(Sheela, Sharissa, Belinda, Robyn, Todd)
- ◆ The theories are complicated and inter-related
(Peter, Joti, Simon, Oli, Todd, Jenn)
- ◆ Applies to every learner (children and adults)
(Kaitlin)
- ◆ Real life experiences and connections to create an authentic context for learning
(Kaitlin, Sheela)

EPSE 501 Blog Site



- ◆ Teacher to facilitator or “guide on the side,” co-explorer
(Peter, Kaitlin, Angela, Carrie, Robyn, Renuka)

- ◆ Connections to BC curriculum
(Amy, Joti, Angela, Carrie, Oli, Robyn, Renuka)

- ◆ Relates to IB curriculum
(Cherie)

- ◆ Changes in assessment (eg: Inquiry based/PBL)
(Peter, Carrie, Renuka, Jenn)

- ◆ Making online learning engaging and more participatory
(Amy)

- ◆ Not enough evidence of constructivist online learning strategies provided
(Carrie, Simon, Belinda)



Supplemental Resources:

- ◆ Sir Ken Robinson's thoughts on changing education paradigms:

Do Schools Kill Creativity?

<https://www.youtube.com/watch?v=iG9CE55wbtY>

Changing Education Paradigms

<https://www.youtube.com/watch?v=zDZFcDGpL4U>

