ECEM 130 MEETING 3 Math Lab 4/15/09

Assignments:

Read: Chapter 2
Discovery Journal: Reflect Questions, Page 62

Your Discovery Journal may be in notebook or electronic form. We would like to look at your journal entries on Mondays during class. Please bring a printout if your journal is electronic.

Review Monday's Class:

Questions and Comments
Insights and Ideas

Chapter 1 Children and Mathematics: A Natural Combination

PowerPoint presentation

Chapter 2: Building a Knowledge Base and Learning to Reflect

PowerPoint presentation
Developmental Theory Videos

Activities:

Go to and explore the websites referred to in Chapter 2, page 61-62

WEBSITES

Behaviorists

B.F. Skinner: http://www.youtube.com/watch?v=mm5FGrQEyBY&feature=related

Social Cognitive Theory

Bandura: http://www.youtube.com/watch?v=SW9I7X9Wmqo&feature=related
Bobo Doll: http://www.youtube.com/watch?v=ZeE_Ymzc1rE

Visual Approach

Concrete Stage: http://www.youtube.com/watch?v=BeyQ5VRm_S4
Semi concrete: http://www.youtube.com/watch?v=1IjesoJJTp0
Abstract Stage: Abacus Video: http://www.youtube.com/watch?v=s-EKxq1oTPw

Montessori Method

http://www.youtube.com/watch?v=OM1Gu9KXVkk

Vygotsky: Social-Constructivist

http://www.youtube.com/watch?v=K9KDH8sHhtM&feature=related
http://www.youtube.com/watch?v=h6oQfZ-PrwM&feature=related
http://www.youtube.com/watch?v=JR0iOfVv6p4&feature=related

Piaget

Stages of Cognitive Development:
http://www.youtube.com/watch?v=fcjPkPIwsog&feature=related
http://www.youtube.com/watch?v=9yhXjJVFA14&feature=related

Sensorimotor Stage, Object Permanence:
http://www.youtube.com/watch?v=F2PAg-olPUQ
http://www.youtube.com/watch?v=fJW6KUIdG0s&feature=related
http://www.youtube.com/watch?v=aMgb42EBpMc&feature=related

Pre-operational Stage:
http://www.youtube.com/watch?v=pH35cBLQJ24

Concrete Operational Stage:
http://www.youtube.com/watch?v=B65EJ6gMmA4
http://www.youtube.com/watch?v=YJyuy4B2aKU&feature=related
http://www.youtube.com/watch?v=GX9h9u7Yyks

Multiple Intelligence/Howard Gardner

Interview with Howard Gardner: http://www.youtube.com/watch?v=YxLCtADvCik
Decoding Multiple Intelligence: http://www.youtube.com/watch?v=TunVzkyO3H0&NR=1

WEBSITES TO EXPLORE (page 61-62 of text):

PBS Parents, Child Development: http://www.pbs.org/parents/childdevelopment/

Project Construct National Center: http://www.projectconstruct.org/

NCTM Illuminations: http://illuminations.nctm.org/

US National Science Foundation – Mathematics Research Overview:
http://www.nsf.gov/news/overviews/mathematics/index.jsp

Eisenhower National Clearinghouse: http://www.goenc.com/