Child Development Theories in Practice and the Appropriate Use of Technology

Mini-course design
(Part of the Northern Lights Level II Framework of Professional Development)

Northern Lights Level II Core Competencies for Early Childhood Professionals
to address to successfully deliver this session:

<table>
<thead>
<tr>
<th>Child Development</th>
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<tbody>
<tr>
<td>A. How Children Develop</td>
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<tr>
<td>1. Identifies major theories and theorists of child development</td>
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<td>2. Begins to identify a personal philosophy</td>
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<th>Teaching and Learning</th>
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<td>B. Learning Environment</td>
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<td>6. Uses technology (e.g. television, videos, computers, video games) and adaptive technologies in appropriate and meaningful ways</td>
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Note to the instructor:

This is an outline of consistent, yet flexible curriculum to use to teach early childhood professionals in Vermont about the specific Northern Lights Core Competencies for the Early Childhood Professionals listed above.

We expect that you are the expert, and we want you to be supported as an instructor. The materials here are not intended to be a “canned” curriculum, but rather, supports to use as you like for instructing on these concepts. The curriculum is consistent in that the core competencies and the outline of topics described below must be addressed; however, the curriculum is flexible in that you can follow it as is, change the order and format of delivery, and/or choose to use or change any of the resources. For further information, please contact the Vermont Northern Lights Career Development Center (http://northernlightscdc.org).
There are 2 documents for you (the instructor) to work from to prepare and deliver this mini-course.

1. You are now reading the first document, the **mini-course design** including most handouts.
2. The document that contains **articles** to distribute to students, as part of homework and for further information. Copyright permission has been granted to us for our purposes.

**Table of Contents: What you will find in this mini-course design**

1. Agenda, page 3.
2. Checklist for preparing to teach this mini-course, page 4.
3. Icebreaker, pages 5-6.
4. Talking points, pages 7-16.
   a) 5 basic handouts for Piaget, Montessori, Erikson, Vygotsky, and Reggio Emilia
   b) Homework between sessions
   c) Theories at a glance (2 pages)
   d) Suggestions of appropriate technology
   e) “Tips for Choosing Software” from *Failure to Connect: How Computers Affect our Children’s Minds – For Better and For Worse* by Jane M. Healy, PhD
   f) “Musical Resources for Children” from *Zero to Three* journal
   g) Evaluation to use if one is not supplied by the host of the training
Agenda

Child Development Theories in Practice and the Appropriate Use of Technology

Suggested Time Frame

Class 1 – 2.5 hours total

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<thead>
<tr>
<th></th>
<th>Activity</th>
<th>Time</th>
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<tbody>
<tr>
<td>1</td>
<td>Welcome and introductions</td>
<td>5 minutes</td>
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<tr>
<td>2</td>
<td>Icebreaker and discussion</td>
<td>25 minutes</td>
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<tr>
<td>3</td>
<td>Group research and reports</td>
<td>55 minutes</td>
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<tr>
<td>4</td>
<td>Short break</td>
<td>5 minutes</td>
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<tr>
<td>5</td>
<td>Instructor presents on other theories and theorists</td>
<td>30 minutes</td>
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<tr>
<td>6</td>
<td>Questions, wrap-up, and explanation of homework</td>
<td>30 minutes</td>
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Class 2 – 2.5 hours

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<tr>
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<th>Activity</th>
<th>Time</th>
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<tr>
<td>1</td>
<td>Sharing of homework observations and discussion of theories as they pertain to observations</td>
<td>50 minutes</td>
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<tr>
<td>2</td>
<td>Discussion of personal philosophy: which theories make sense for you as a teacher?</td>
<td>30 minutes</td>
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<tr>
<td>3</td>
<td>Short break</td>
<td>5 minutes</td>
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<tr>
<td>4</td>
<td>Appropriate use of technology: what place does computers, television, and music have in early childhood settings?</td>
<td>55 minutes</td>
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<tr>
<td>5</td>
<td>Conclusion and evaluations</td>
<td>10 minutes</td>
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Checklist for preparing to teach this mini-course

In preparation to teach this mini-course, you (the instructor) of this class can

☐ Read through the materials to get familiar with the information and implementation for this class.
☐ Read the handouts and articles.
☐ Check the list of references and resources. Websites and books listed are great sources of information on child development theories and the appropriate uses of technology.
☐ Photocopy and cut the icebreaker for the first class.
☐ Photocopy the 5 theorist handouts for groups, and the other handouts, including homework sheets. You may consider making 3 copies of the homework worksheet for each participant.
☐ Gather any other materials needed for the class, such as a bowl to place icebreaker strips in, markers/chalk to record thoughts and ideas, paper and crayons for activity, etc.
☐ Consider creating a flip chart, or projecting a large version of the “Theories at a Glance” handout to display during Class 2.
Introductions and Ice Breaker (30 minutes)

Before the first class begins, duplicate the “Icebreaker” sheet (page 6), and cut it into strips.

During class:

1. Introduce yourself as the instructor. Describe how you use theory and what perspective you bring to this discussion. If you wish, describe how you see the current state of the field of theory. Describe the value of taking an eclectic approach while looking critically at all of the theories.

2. Invite participants to introduce themselves including their names, where they work, and what age group they currently work with.

3. Pair up participants. Ask them to work with someone they don’t know, such as the person sitting across from them or someone who works with the same age group. Place strips into a bowl, and ask each pair to choose one. On each strip will be the name of a theorist well as a belief of that theorist. For example:

   "Jean Piaget
   Knowledge is acquired through interaction."

4. Ask the pairs to read their strips together, and give about five to ten minutes to discuss the following questions: Have they viewed this in their own practice? What did it look like? Do they agree or disagree? What are criticisms and weaknesses?

5. When time is up, ask pairs to share their thoughts with the group. This is not supposed to be a high-risk activity. If a pair is struggling, ask them to give an example or counterexample from their own experiences with children.

6. Follow the discussion with this multi-part question: Why should you, as an early childhood professional, know about child development theories, and how are they relevant to your practice?

🌟 These facts can lead to great discussions. Allow for more time if necessary, and remember that this is just the introduction.
**Jean Piaget**
Knowledge is acquired through interaction.

**Jean Piaget**
Biology and experience play equal roles in developing a human.

**John Dewey**
Education should be child-centered.

**John Dewey**
Education is a part of life.

**Maria Montessori**
Early childhood teachers should provide real tools that work.

**Maria Montessori**
Children should have responsibility to keep space clean.

**Erik Erikson**
Children acquire new skills through conflict resolution.

**Erik Erikson**
Attachment to adults develops trust.

**Rudolph Steiner**
Children learn best through imitation.

**Rudolph Steiner**
Television viewing discourages growth of the imagination.

**Reggio Emilia approach**
All children have interest in constructing their learning.

**Reggio Emilia approach**
Parent participation is essential.

**Sigmund Freud**
Early social interactions with set patterns for life.

**Sigmund Freud**
Children become more independent at two years old.

**Frederick Froebel**
Play is the engine that drives true learning.

**Frederick Froebel**
Children can only learn what they are ready to learn.

**Lev Vygotsky**
Children’s minds stretch through challenges.

**Lev Vygotsky**
Growing and learning doesn’t always happen naturally.

**B.F. Skinner**
The child’s environment shapes learning and behavior.

**Arnold Gesell**
Development is biological and occurs automatically.
1. After the completion of the ice breaker, next inform the participants that they will be helping to present the theorists and theories in class.

2. Split the class into five smaller groups or pairs, depending on the size of the class.

3. Then, hand out one of the five theorist sheets (pages 17-21) to each group.

   a) Explain that the five theorists that they will be helping to present are Lev Vygotsky, Jean Piaget, Erik Erikson, Reggio Emilia approach, and Maria Montessori, people who developed theories based in varied areas of child development.

4. Give time for groups to read through the packet’s information and discuss it. You may want to pose some questions for each group to answer in their discussion. You can circulate around the small groups to encourage them on the task and to help them when they are stuck.

5. Call the whole group together and invite each group to report out briefly on their discussion, with your interjections.

6. As each group is presenting each theorist, write down the important facts on a chalk board or large piece of chart paper. Draw out any basic, important information that is not mentioned by the groups. You can use the information provided on the following pages to help you with your talking points.

**Instructor information: talking points for small group presentations**

Though the following information is supplied to the participants in their packets, it is also for you, the instructor, to ensure that major points are included in the presentations done by the class participants. If there is time, there are questions listed next to the theorists for discussion.

**Maria Montessori** (1870 – 1952, Italy)

   a) Interest in children developed after working as a medical doctor with patients in an asylum. Children who were deemed “un-teachable” responded to her
   b) Opened the Casa di Bambini (Children’s House) to keep children off the streets
   c) Children need things their own size (furniture, tools) and at their viewing level
   d) Tools should be “real” – real scissors, knives, hammers, pitchers, rulers, etc.
   e) Children work independently
   f) Influenced Piaget and Vygotsky
   g) Not all Montessori schools are accredited and just use the name as part of their philosophy
   h) Environment includes not only space children use

Ask participants: Why would Montessori believe that children should use “real” tools, such as a sharpened knife to cut vegetables, instead of a butter knife? When Montessori opened her school, she created a place where everything was available and usable by the children, in order to teach them to become independent in their own learning. Given the population of children she was teaching, why would this be important? How does it work for other populations?
but also the adults and other children that they interact with
i) Environment needs to be beautiful and orderly for children to learn order
j) Children learn best through sensory experiences
k) Children are responsible for own learning
l) Children should be able to get what they need and put it away when done
m) Children learn by doing, and make experiences their own by practicing them over and over
n) Provide large blocks of time to be structured by children to complete comprehensive and meaningful activities
o) “Teach little and observe much”
p) Didn’t believe that there were children that couldn’t learn
q) The adult helps the child, and the child helps the adult

Jean Piaget (1896 – 1980, Switzerland)
a) Can’t separate mental from physical growth
b) Children build and construct their own higher levels of learning
c) Environment doesn’t influence children the same way at different ages – development can be sped up or slowed down
d) Knowledge constructed through action
e) Assimilation/accommodation – assimilation is when a child fits experiences into existing reaction, accommodation is when a child changes their reaction to meet new experiences (i.e. sucking on a nipple can be transferred to a pacifier). A baby will try to transfer to a blanket, but will learn that the blanket does not produce the same sensation
f) Young children are “egocentric” in the way they are focused only on what is their point of view i.e. – two preschoolers talking to each other can have two different conversations.
g) Different stages – sensorimotor and preoperational for early childhood
   i. Sensorimotor (6 substages)
      1. From birth to 2, from existing on reflexes to beginning to recognize symbols
   ii. Preoperational
      1. 2 through 6

Erik Erikson (1902 – 1994, Frankfurt, Germany)
a) Student of Freud
b) Heavily focused on the theme of life - coined the term “identity crisis” (he believed this happened in teen years)
c) Development lasts through life
d) Eight stages of life, stages are set by a “crisis” that must be resolved before being able to move onto the next stage
e) Stages set through nature

Stage 1: Infancy -- Age 0 to 1

- Crisis: Trust vs. Mistrust
- Strength developed – hope
- Description: In the first year of life, infants depend on others for food, warmth, and affection, and therefore must be able to blindly trust the parents/caregivers for providing those.
• Positive outcome: If their needs are met consistently and responsively by the parents/caregivers, infants not only will develop a secure attachment with the parents, but will learn to trust their environment in general as well.
• Negative outcome: If not, infant will develop mistrust towards people and things in their environment, even towards themselves.
• At this stage providers should attend to children as they cry, as infants are learning to trust that they will be taken care of. When trust is established, they can deal with delayed attention when they are older, thus debunking the myth that babies can be “spoiled” if attended to.

**Stage 2: Toddler -- Age 1 to 2**

- Crisis: Autonomy (Independence) vs. Doubt (or Shame)
- Strength developed – willpower
- Description: Toddlers learn to walk, talk, use toilets, and do things for themselves. Their self-control and self-confidence begin to develop at this stage, and they are beginning to understand themselves as an individual.
- Positive outcome: If parents encourage their child's use of initiative and reassure her when she makes mistakes, the child will develop the confidence needed to cope with future situations that require choice, control, and independence.
- Negative outcome: If parents are overprotective, or disapproving of the child's acts of independence, she may begin to feel ashamed of her behavior, or have too much doubt of her abilities.
- Strong sense of self, simple choices needed, eliminate false choices

**Stage 3: Early Childhood -- Age 2 to 6**

- Crisis: Initiative vs. Guilt
- Strength Developed – purpose
- Description: Children have newfound power at this stage as they have developed motor skills and become more and more engaged in social interaction with people around them. They now must learn to achieve a balance between eagerness for more adventure and more responsibility, and learning to control impulses and childish fantasies.
- Positive outcome: If parents are encouraging, but consistent in discipline, children will learn to accept without guilt, that certain things are not allowed, but at the same time will not feel shame when using their imagination and engaging in make-believe role plays.
- Negative outcome: If not, children may develop a sense of guilt and may come to believe that it is wrong to be independent.
- Actively focused and less defiant

**Lev Vygotsky** (1896 – 1934, Russia)
- a) Studied Piaget, Montessori, Freud
- b) Objected to intelligence tests
- c) Theory that social and cognitive dev. work together and grow together
- d) Learning through play
- e) Zone of Proximal Development (ZPD) – distance between the most difficult task a child can do alone,

Ask participants: What's an example of an interaction at each of the three stages that would either foster or limit the growth of the strength to be developed?

Ask Participants: In utilizing small groups, can you think of two children to pair in your room? What could they learn from each other? What could one child help the other one do?
and the most difficult task a child can do with help
f) Scaffolding – assistance to reach a task - teacher or other children – pair children who can learn form each other
g) Curriculum planning to guide children to next level
h) Language presents a shared experience – talking is necessary to clarify points and learn about communication
i) Development is interactive
j) Cultural Context Theory: Biology and experience play equal roles and development occurs as a child acts on the environment.

Reggio Emilia Approach
a) Constructivist approach from Italy, created in the town of Reggio Emilia by parents and educators with the help of Loris Malaguzzi
b) First school opened in 1963 for 3-6 year olds, in 1970 infant/toddler centers were added
c) Influenced by Montessori, Vygotsky, Erikson, and Piaget (among others)
d) Education based on relationships
e) Children have rights, great potential, and learn and grow in relation to others
f) Rights of parents, rights of teachers
g) Fundamental principles of Reggio:
a. Child as protagonist
b. Child as collaborator
c. Child as communicator
d. Environment as the third teacher – how space is set up and used
e. Teacher as partner and guide
f. Teacher as researcher
g. Documentation as communication
h. Parent as partner – parent participation key
h) Documentation fundamental to program - photographs, panels
i) Deep studies on subject matter

*The One Hundred Languages of Children* - drawing, sculpture, gesture, drama, play, conflict, negotiation, imagination, generosity, logic, etc.

Short break *(5 minutes)*
When the participants have concluded presenting their theorist, invite them to take a short break.

Instructor presentation *(30 minutes)*
When the class reconvenes, present the last of the theorists for this class: Albert Bandura, Frederick Froebel, John Dewey, and Arnold Gesell.

1. Begin by touching on the earliest of the child development theorists:

John Locke (1632 – 1704, England)
Believed that the child’s mind is a blank slate where experience writes a story, children are born with different temperaments, instruction should be tailored to fit differences in children

Jean-Jacques Rousseau (1712-1778, Switzerland/France)
A child at birth is nature unspoiled by civilization

Johann Pestalozzi (1746 – 1847 – Switzerland)
Followed Rousseau’s teachings. Developed the “Pestalozzi Method”, where children, instead of learning through words, learned through activities and actions.

2. **Albert Bandura** (1925-present, Alberta, Canada)
   a) Social-Learning/Environmentalist theory - believed that a child’s environment shapes learning and behavior, and a child learns best by being given direction and by rote activities. Activities are teacher-initiated.
   b) Believed that violent behavior is taught to children through modeling, and is not inherent.
   c) Children can learn aggressive behavior through other influences such as the media or the environment
   d) Bobo doll experiment - had young children watch a video of a person being violent towards a Bobo doll, an inflated, plastic doll that bounces back when hit. When the children completed watching the video, they were put into a room with toys that they were not allowed to play with. Once they became frustrated and angry, they were put into another room with the Bobo doll. 80% of the children in the experiment modeled the behavior of the adult, and acted violently towards the doll. It was also found that although they acted violently towards the doll, they did not do so towards other children.
   e) Believed that there are four things that have influence on a child’s behavior following the observation of a violent act:
      f) Attention: children must pay attention to what the model is saying/doing in order to be able to repeat the behavior.
      g) Retention: committing the act to memory
      h) Motor reproduction: reproducing the behavior
      i) Motivation/Reinforcement: the expectation of positive reinforcement for behavior. For example: Superheroes who are not punished for violent behavior.
      j) Many critics of Bandura’s theory say he ignores an individuals’ biological state such as temperament, genetics, brain patterns, and learning differences

3. **Frederick Froebel** (1782 – 1852, Germany)
   a) Constructivist, a student of Pestalozzi
   b) Created kindergarten, “The Garden for Children”
   c) Use of tools instead of books
   d) Established “gifts” – 20 separate manipulatives including blocks, clay, and weaving paper
   e) Children should master one gift before moving on to the next
   f) Gifts in three categories - forms of nature, forms of knowledge, forms of beauty
   g) Before kindergarten, children under 7 didn’t go to school
   h) Kindergarten should satisfy a child’s need for
      a. physical movement,
      b. the development of senses and manual dexterity,
      c. creativity
      d. knowledge
      e. child’s tendency to care for others
      f. music
      g. being part of a community
      h. finding the reason behind things
      i. objective work – work with meaning

   a) Movement towards child-centered education – Lab school at University of Chicago
b) Children need assistance from teachers in learning, and not just a “free for all” where children dictate everything. Children need to be lead to learning experiences, where they then can experience them on their own.

c) Teachers decide on curriculum based on children’s abilities and knowledge – decide what is safe and appropriate for them to learn

d) Problem solving and critical thinking

e) Organic experience between personal and educational experience

f) Makes a case for observing and documenting in depth in order to plan to where children are

g) Understand the meaning of experiences for children

h) Education and experience related but not equal

Questions educators should ask:
  How does this expand on what children already know?
  How will this experience help children grow?
  What skills are being developed?
  How will this activity help children know more about their world?
  How does this activity help the children to live more fully?

Experience is educational if:
  Based on children’s interests and grows out of their existing knowledge and experience.
  Supports children’s development
  Helps develop new skills
  Adds to understanding of the world
  Prepares children to live more fully

5. Arnold Gesell (1880-1961, Wisconsin)
   a) Maturationist theory
   b) Developed one of the first infant intelligence tests - Goal was to establish universal developmental norms beginning at birth
   c) Development is biological and occurs naturally and is predictable over time – all development can happen at different rates but will happen in the same sequence - novel way of thinking about growth at the time
   d) Children will acquire knowledge as they grow, provided they are healthy
   e) If a child is not ready for kindergarten, keep them back until they are ready - not ok to teach children things before they are ready
   f) Each child is unique and the environment should teach to this uniqueness
   g) Developed standards for adoption of children
   h) Developed tests to discover how close mentally a child is to their calendar age – they are still used today

Wrap up, questions, and homework (30 minutes of total)

1. Go over the homework assignment with the participants.
   - Ask them to complete 3 separate observations. They can use the “Observation worksheet” (handout) if they would like to. These observations can be done in writing, by tape recording, or video recording (with parent permission). Before
offering the video option, make sure you will be able to have a TV/VCR at the next class to watch the footage.

2. Talk with participants about how to complete an observation. Remind them to protect confidentiality of the children.

   a) Hand out the article “To See Each Child with Wisdom, Humor, and Heart” by Sally Cartwright (find it in the articles document).
   b) Ask participants to read the observation made on the first page (begins with the time) as a refresher.
   c) They can also refer to this article if they have questions about observing and recording before the next class.
Class 2 – Observation Discussion and Appropriate Use of Technology (2 hours total)

1. **Observation Discussion (30 minutes):** Hand out “Child Development Theories at a Glance” (2 page handout). You could also recreate this document on a flip chart or other large format to display during discussion. Ask participants to share their observations, and as a group, talk about what theory or theories support the observations. For example, if a provider puts a favorite teething toy just out of reach of a crawling infant to encourage the infant to crawl toward the toy, then that would support Vygotsky’s Zone of Proximal Development.

2. **Personal Philosophy (50 minutes):** After you wrap up the observation discussion, it is a good time in the workshop to see the theory/theories that participants are beginning to connect with personally, as well as the ones that they question. Ask the participants to begin writing a draft of their philosophy. After about 15 minutes (more if needed), lead the participants into a discussion about this personal philosophy.

3. Short Break (5 minutes)

**Theory in Practice: Appropriate use of technology (55 minutes)**

1. **Group Discussion (15 minutes):** Pose the following questions to the whole group by writing them on the chalkboard or chart paper. Give each table or pair some time to answer the questions before opening up the discussion to the group as a whole:

   We are moving between two topics that may not seem connected, but are interrelated. How do child development and the theories previously discussed have bearing on the use of technology with toddlers and preschoolers? What would the theorists think/say about the use of technology? Why is the concept of the appropriate use of technology important?

2. **Technology use – fact sharing (10 minutes):** Before taking a few minutes to share with participants the research around young children and technology, ask them when they use computers/TV/music in their centers and home, and why. Read some of the facts listed below regarding computers, TV, and music:

**Computers**

Studies have made it clear that children under 3 years of age should not be on the computer (see *Failure to Connect: How Computers Affect Our Children’s Minds – For Better and Worse* by Jane M. Healy), as there are no programs that will benefit the learning of children in these early years. Between the ages of 3-6 when computers are used in the appropriate manner (connected with curriculum, time spent on teaching games and discussion around those games, used along with manipulatives...), it can enhance a child’s social and cognitive learning. Since young children learn through play and discovery, computers should be one of many other choices offered during a free time, with a time limit.

For this age [3-6] the value of the computer is in its open-ended use, not in creating a product (Davidson & Wright, 1994). The teacher's role is to create an environment in which children become aware and explore, and then act to support their exploration and inquiry in many different ways. Software programs for this age group should be limited in number and appropriate for children's skill level and the intended use.
Habits formed by software can be dangerous – lack of impulse control, guessing over thoughtful problem solving. For great software review for children 3 years and older:

a)  [http://www.learningvillage.com/index.html](http://www.learningvillage.com/index.html)


**Television**
The Vermont Early Childhood Program Licensing Regulations state that TV viewing – including videos and DVD’s - should not exceed 5 hours a week, although it is preferred that the TV is not turned on. In knowing that there may be times that TV is still used, it is important to note:

 Caregivers are the most important factor in brain development. Time in front of a TV or computer takes away from important interaction and play time, which are both crucial to brain development.

 Studies suggest that children under the age of 2 should not watch TV - see “How TV Effects Your Child” at:  

 The time being used to watch TV is less time that a child is at play. Consider that essentially everything a child between 0-6 does is play and learn through that play.

Viewing of television in early childhood causes attention disorders for older children (see study preformed at [http://pediatrics.aappublications.org/cgi/content/full/113/4/708#SEC2](http://pediatrics.aappublications.org/cgi/content/full/113/4/708#SEC2)). ADHD affects 12 percent of US school children and has increased dramatically over the past 50 years

**Music**
Also considered a form of media (but not in terms of “screen time”), music is an excellent way to get children up and moving or calm and quiet. Depending on the situation, music can be used during many aspects of the day.

“Mozart Effect” – a term coined by the media in relation to studies performed by Dr. Gordon Shaw and Dr. Frances Rauscher based on listening to Mozart’s music. While it is important that the benefits of listening to music are studied, the effects of listening to Mozart are inconclusive. See *Keeping Mozart in Mind* by Dr. Shaw, to understand the theories and implications behind the musical study.

Please hand out:

- “Tips for Choosing Software” from *Failure to Connect: How Computers Affect our Children’s Minds – For Better and For Worse* by Jane M. Healy, PhD (in articles document)
- Technology and Young Children: Ages 3 through 8 – NAEYC’s position statement, download from:  
[http://www.naeyc.org/about/positions/pdf/PSTECH98.PDF](http://www.naeyc.org/about/positions/pdf/PSTECH98.PDF)
• Media/Technology Suggestion List (handout).
• “Musical Resources for Children” from Zero to Three (in articles document)

3. **So What Can You Do Instead? (10 minutes)**: Use these 10 minutes in the class to discuss alternatives to TV watching and computer use. Begin by asking the question to the group: Does anyone have ideas of what you can do instead of using TV or computers to quietly engage children?

Begin to make a list of ideas on your chalkboard or chart paper. Ask people to share recipes, craft ideas, and book titles. Encourage them to exchange phone #’s to share information...

Some ideas for you to share:
Max and Adam’s Favorite Things-To-Do List (from [http://www.limitv.org/alternat.htm](http://www.limitv.org/alternat.htm)) (These boys are 4 and 2 years-of-age.)

1. Play outside
2. Homemade playdough
3. Duplo blocks
4. Dance wildly
5. Make personal pizzas
6. Glue *anything* to paper (pasta, glitter, scraps, leaves)
7. String and unstring beads
8. Make believe with household objects (straws, crackers, clean plastic bottles from the recycling bin, curlers)

4. **Conclusions and evaluations (10 minutes)**
Handout: **JEAN PIAGET**

**Time period**  
Lived 1896-1980; Switzerland and France

**Time of influence**  
1950s-1990s and beyond

**Main ideas**  
4 stages of cognitive development:  
1. Sensorimotor (birth-2): Children experience and learn through their senses  
2. Preoperational (2-7 years): Develop ability to represent and imagine  
3. Concrete operational (7-11 years): Children think logically about concrete events  
4. Formal operational (after 11 years): Develop abstract reasoning

**Other ideas:**  
- There is a fixed sequence in development with individual variations in pace. Cognitive development is tied to physical development.  
- The environment and the people in a child’s world also influence how and what the child learns and the pace of the child’s development.  
- Children think about the world very differently than adults do.  
- Children’s knowledge is created through action and interaction; they build and construct their own higher levels of learning.  
- Children learn best when something is “moderately novel”, that is not too new and not too familiar.  
- Children are thinkers; children are scientists.  
- Intellectual development is fostered by social interaction with peers and adults.  
- Language alone doesn’t represent a child’s knowledge and understanding.  
- **Object permanence**: a baby comes to realize that something exists even when she can’t see it (I miss mommy even when I can’t see her). This is the basis for separation anxiety as well as more complex learning.  
- **Assimilation/accommodation**: assimilation is when a child fits experiences into an existing reaction; accommodation is when a child changes her reaction to meet new experiences (i.e. sucking on a nipple can be transferred to a pacifier (assimilation); sucking on a blanket, baby learns that the blanket does not produce the same sensation (accommodation.).  
- Young children are “egocentric”: they are focused only on their point of view. For example, two preschoolers talking to each other can have two different conversations at the same time.

**Kind of theory**  
Constructivist: *Learning occurs when children interact with both the environment and people around them. Children are active participants in their own learning.*

**Main criticisms/weaknesses**  
Some of his fundamental assumptions about cognition may have been incorrect, and he may have underestimated the abilities of children in early childhood. Critics say his theory doesn’t include enough about the influence of children’s feelings and social relationships.
**Handout: Erik Erikson**

<table>
<thead>
<tr>
<th>Time period</th>
<th>Lived 1902-1994</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time of influence</td>
<td>Twentieth century to present</td>
</tr>
</tbody>
</table>
| Main ideas | - Development happens throughout human life, through adulthood.  
- Early stages of development build the foundation for later stages of development.  
- Eight stages of social-emotional development across the life span; each is marked by a specific identity crisis. First four stages:  
  Stage 1: (birth to 1): trust vs. mistrust  
  Stage 2: (1-2 years): autonomy vs. doubt  
  Stage 3: (3-6 years): initiative vs. guilt  
  Stage 4: (6-12 years): industry vs. isolation  
- Personality strengths or weaknesses are formed based on the resolution of the crisis during each stage.  
- It is possible to go back and re-negotiate issues from a previous stage.  
- Trust, the foundational task of stage one has two parts: external (belief that others will be there for you) and internal (belief in her own power to effect change and cope). This is developed when babies, needs are responded to consistently by their caregivers, and when babies develop the skills to self-calm (suck their thumb, close their eyes to shut out distractions…)  
- Autonomy, the task of stage two, can result in a sense of independence and strong sense of self. This is demonstrated when you hear toddlers say, “Me do it!” and through the process of learning to use the toilet.  
- Initiative, the task of stage three, can result in a sense of purpose and confidence. Success in this stage allows the child to make choices, meet reasonable expectations and transition to kindergarten with excitement. |
| Kind of theory | Maturationist: *Development is biological and occurs naturally in predictable sequences over time.* |
| Main criticisms/weaknesses | Ideas based on psychoanalysis and other assumptions of Freud that are often questioned. Developmental stages may not be as rigid/defined as he described. |
Handout: MARIA MONTESSORI

Time period | Lived 1870-1952, Italy

Time of influence | Twentieth century to present

Main ideas
- Contributed new ideas and practices for teaching children, including creating new play materials.
- There are different certified Montessori programs around the world (including American Montessori) and her ideas are also used in other early childhood programs.
- All children can learn.

Hallmarks of the Montessori classroom include:
- Children are responsible for their own learning. They learn by doing, and make experiences their own by practicing them over and over.
- Children learn best through sensory experiences and self–correcting (auto-didactic) materials (for example nesting cups).
- Math concepts (such as categorizing, sequencing, sorting) and daily skills (setting the table, gardening) are emphasized activities.
- Environment includes place as well as other people. The adult helps the child, and the child helps the adult.
- The children’s space is set up so that each child can work independently and everything is accessible. Materials are displayed on trays so that each child gets the materials for an activity and puts them away when done.
- Large blocks of time for exploration and use of materials everyday.
- Children’s competence is supported by child-size furniture and tools, at their viewing level.
- Tools are “real” – real scissors, knives, hammers, pitchers, rulers, etc. so they work.
- The environment is beautiful and orderly so children learn orderliness.

Kind of theory | Constructivist: Learning occurs when children interact with both the environment and people around them. Children are active participants in their own learning.

Main criticisms/weaknesses
- Social cooperation and interactive play not as highly valued
- Little emphasis on creativity, imagination, or language
- Materials limited in their range of uses; tasks created for children to practice skills (such as sweeping marbles)
- Too individualistic with its emphasis on auto-education and self-correcting materials
Handout: **LEV VYGOTSKY**

**Time period**
Lived 1896-1934, Soviet Russia

**Time of influence**
1980s-present
Influenced by Freud, Marx, Piaget and Montessori

**Main ideas**
- Learning leads development forward.
- We need words to develop our thoughts. Language is a way that children think out loud. Overtime, much of this thinking becomes internal dialogue. When we need will power, we again talk out loud to ourselves.
- After age two, the growth of the mind is highly influenced by the child’s culture.
- When a child tackles new tasks, just beyond their development level, they are in the **Zone of Proximal Development (ZPD)**.
- In play children often behave beyond their average age; play is a major source of development. To master and remember these new skills the child needs assistance.
- **Scaffolding** is how an adult or another child can assist the learner by asking questions, posing problems, modeling or offering new materials that move the child to a new level of learning.
- Children don’t just learn from teachers; they learn from each other as well as from their family and community.
- Social interactions, language and play work together; they build on each other to enhance a child’s development.
- Careful observation of children should be used to gain information and therefore support their learning.
- Curriculum should be planned based on regular observations of children.

**Kind of theory**
Constructivist: *Learning occurs when children interact with both the environment and people around them. Children are active participants in their own learning.*

Cultural context theory: *Biology and experience play equal roles and development occurs as a child interacts with the environment.*

**Main criticisms/weaknesses**
The development of his ideas were cut short by his early death and some are controversial:
- The role of culture in how children develop is still being debated.
- His ideas about development of internal language and use of language to direct ourselves is not confirmed
Handout: Reggio Emilia Approach

<table>
<thead>
<tr>
<th>Time period</th>
<th>1960s-present, from the town of Reggio Emilia, Italy (Loris Malaguzzi, influential director)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time of influence</td>
<td>Present; influenced by Montessori, Vygotsky, Erikson, and Piaget</td>
</tr>
</tbody>
</table>
| Main ideas              | • A public, municipal system of full-day pre-primary and infant schools, which is a model world-wide.  
                             • Collaborative, problem solving approach to learning among children, teachers and the community. Learning is a joint exploration.  
                             • School’s philosophy is to learn from the children, from families and from events; a “construction in motion”, continuously adjusting itself.  
                             • Children learn from doing activities and from the resources provided, not necessarily from what is taught.  
                             • Children’s intellectual development is fostered by helping them explore their environment and represent their ideas over and over in many different ways. Using “a hundred natural languages” including words, movement, drawing, building, dramatic play, music and more, children develop their symbolic skills and creativity. When children are researchers and discoverers they are also motivated to inquire more. One topic is explored in depth over a year or more.  
                             • Children are competent; the curriculum comes from them and follows their interests. Child-child interaction is valued over teacher-child interaction.  
                             • Environment as the third teacher: the space is carefully and beautifully laid out to invite exploration and reflection. It includes the natural world, the community, the children and their work.  
                             • Teachers are researchers and collaborators with children. Teachers guide children and partner with them in making discoveries.  
                             • Teachers use ongoing observation of and reflection about the children’s work to support their learning and plan next steps in the exploration.  
                             • Teachers create detailed documentation of the children’s work and ideas. These serve as a memory of what was done, as a tool for research, reflection, and communication by the teachers, children and families.  
                             • Parents and other community members participate in and contribute to the discovery process with the children as well as the governance of the school.  
                             • Teacher collaboration is important. The Atelierista and the Pedagogista have special roles in the staff.  
                             • Rights of students, parents, and teachers were created and published. |
<p>| Kind of theory          | Constructivist: Learning occurs when children interact with both the environment and people around them. Children are active participants in their own learning. |
| Main criticisms/weaknesses | Still exploring how these ideas and practices translate or need to be adapted to be successful in other cultures and countries. |</p>
<table>
<thead>
<tr>
<th>Bandura</th>
<th>Dewey</th>
<th>Erikson</th>
<th>Freud</th>
<th>Froebel</th>
<th>Gesell</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmentalist</td>
<td>Constructivist</td>
<td>Student of Freud</td>
<td>Humans are motivated by</td>
<td>Constructivist</td>
<td>Maturationist</td>
</tr>
<tr>
<td>theory</td>
<td></td>
<td></td>
<td>biological influences</td>
<td>Created Kindergarten – A “Garden</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bobo doll</td>
<td></td>
<td>(the desire to reproduce,</td>
<td>of Children”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>experiment</td>
<td></td>
<td>thirst, hunger)</td>
<td>Established “gifts”</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Eight stages of life- 3 for</td>
<td>Kindergarten should satisfy</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>early childhood:</td>
<td>eight major themes of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Violent behavior</td>
<td></td>
<td>Stage 1: trust vs. mistrust</td>
<td>childhood</td>
<td></td>
</tr>
<tr>
<td></td>
<td>taught through</td>
<td></td>
<td>Stage 2: Autonomy vs. doubt</td>
<td>Use of tools more reliance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>modeling – children can learn aggressive behavior through the media</td>
<td></td>
<td>Stage 3: Initiative vs. guilt</td>
<td>on books</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Four influences on a child following the witness of a violent act: attention, retention, motor reproduction, reinforcement</td>
<td></td>
<td></td>
<td>Mastery of one gift before moving on to the next</td>
<td></td>
</tr>
</tbody>
</table>

**Constructivist**  
Learning occurs when children interact with both the environment and people around them. Children are active participants in their own learning.

**Cultural-Context Theory**  
Biology and experience play equal roles and development occurs as a child acts on the environment.

**Environmentalist**  
Environment shapes learning and behavior.

**Maturationist**  
Development is biological and occurs naturally and in predictable sequences over time.
<table>
<thead>
<tr>
<th>Montessori</th>
<th>Pestalozzi</th>
<th>Piaget</th>
<th>Reggio Emilia Approach</th>
<th>Steiner</th>
<th>Vygotsky</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constructivist</td>
<td>Early constructivist</td>
<td>“Father” of constructivist movement</td>
<td>Philosophy of teaching - constructivist</td>
<td>Children go through 3 seven year stages</td>
<td>Constructivist</td>
</tr>
<tr>
<td>Created school to keep children off the street</td>
<td>Followed Rousseau’s teachings</td>
<td>Knowledge created through action</td>
<td>Based in Italy</td>
<td>No academics taught until seven</td>
<td>Zone of Proximal Development</td>
</tr>
<tr>
<td>Created child sized tools</td>
<td>Children should be hands on</td>
<td>Sensorimotor and preoperational stages of development</td>
<td>Influenced by Montessori, Vygotsky, Erikson, and Piaget</td>
<td>relation of humans to nature and natural rhythms</td>
<td>Scaffolding</td>
</tr>
<tr>
<td>Children learn best through sensory experiences</td>
<td>“Pestalozzi Method”</td>
<td></td>
<td>Published rights of students, parents, and teachers</td>
<td>Developed eurhythmity</td>
<td>Design curriculum to “push” children</td>
</tr>
<tr>
<td>Environment includes place as well as other people</td>
<td></td>
<td></td>
<td>Documentation of learning fundamental to program</td>
<td></td>
<td>Development is interactive</td>
</tr>
<tr>
<td>Large blocks of time</td>
<td></td>
<td></td>
<td>In depth studies on topics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children can get the materials they need as well as put them away</td>
<td></td>
<td></td>
<td>Follows children’s interests</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Homework: Observation Worksheet

Between now and the next class, you are to complete three observations to bring to class with you. These can be brief, with close attention to detail. Make sure you record your information as an objective observer, without opinion, keeping the child anonymous.

Pay attention to the last question (Which theories does your observation support?) to make at least three connections to theories that you learned about in the workshop.

We will use your observations in the next class for discussion.

Observation #___ (1, 2, or 3)

Date: ____________________
Time: ____________________
Location: ____________________
Observer: ____________________

Anecdotal:

Question to think about/Analysis: Which theories does your observation support?
Handout: Media/Technology Suggestion List – A Place to Start

**Video/TV**

If it is necessary to use television, use commercial-free educational programs. In a family child care situation, providers may “disguise” their television by covering it up. Children will be much less likely to ask to watch TV if it is out of sight.

Videos – educational videos or videos that have the children up and moving. Suggestions include:

- Blues Big Musical Movie (3-4 year olds)
- Barney (2-3)
- Blues Clues Show (2-4)
- Dora the Explorer (2-3)
- Muppet Show (4+)
- The Wiggles (2+)
- Eyewitness series (3+)
- Magic School Bus (4+)
- Math Monsters Series (5+)
- Microcosmos (4+)

You can access [http://www.tvturnoff.org/facts.htm](http://www.tvturnoff.org/facts.htm) for facts about television and television watching.

**Computer**

Just because children like it doesn’t mean it’s good or educational (think candy or junk food); habits formed by software can be dangerous – excessive impulses, guessing over thoughtful problem solving…

[http://www.learningvillage.com/index.html](http://www.learningvillage.com/index.html) is a great website for software review for children 3 years and older.


**Music**

Considered a form of media (but not in terms of “screen time”), music is an excellent way to get children up and moving or calm and quiet. Depending on the situation, music can be used during many aspects of the day. Listening to any music helps children in daily life. Just note that the music should be appropriate for age and situation.

Music suggestions include

- a) Tom Chapin
- b) Putumayo multi cultural series
- c) Ella Jenkins
- d) Trout Fishing in America
- e) Classical – Mozart, Beethoven, Bach…(Beethoven Lives Upstairs as a companion CD to the book)
- f) “Oldies” music
- g) For the Kids – Various Artists
- h) For the Kids Too – Various Artists
- i) Laurie Berkner
- j) The Alphabet Album by They Might Be Giants
- k) Ralph's World
- l) The Playground by Tony Bennet

You can also read the article “Musical Resources for Children”, which offers ideas of CD’s, music videos, and musical toys.
Before the session,

1. My knowledge of major theories and theorists of child development was
   - High
   - Medium
   - Low

2. The development of my personal philosophy of child development was
   - High
   - Medium
   - Low

3. My knowledge and skills for using technology in appropriate and meaningful ways were
   - High
   - Medium
   - Low

After the session,

4. My knowledge of major theories and theorists of child development is now
   - High
   - Medium
   - Low

5. The development of my personal philosophy of child development is now
   - High
   - Medium
   - Low

6. My knowledge and skills for using technology in appropriate and meaningful ways are now
   - High
   - Medium
   - Low

7. One new idea or fact that I learned in this training are

8. One new strategy that I will use at work after today’s training is

9. A suggestion for improving this training is

10. Something that I really liked about this training is
**Books/Articles**


**Internet**


Children's Software Review  
http://www.childrenssoftwarereview.com


Software review
