Chapter 11
Development

OUTLINE OF RESOURCES

I. PRENATALITY: A WOMB WITH A VIEW

Lecture Suggestion 11.1: Guest Lecturer: Registered Childbirth Educator (p. 11-7)
Lecture Suggestion 11.2: The Endless Advance of Technology (p. 11-7)
Classroom Exercise 11.1: Modeling Development (p. 11-8)
Classroom Exercise 11.2: Hello Mudduh, Hello Fadduh (p. 11-9)

Multimedia Suggestions

Interactive Presentation Slides for Introductory Psychology:
  5.1 Prenatal, Newborn, and Childhood Development
  5.2 Cognitive and Social Development in Infancy and Childhood

PsychSim 5 Tutorials: Conception to Birth

Worth Video Series:
  Video Anthology for Introductory Psychology: Developing Through the Life Span – Prenatal Animation
  Scientific American Introductory Psychology Videos: Prenatal Development

II. INFANCY AND CHILDHOOD: BECOMING A PERSON

Lecture Suggestion 11.3: Cagey Behavior (p. 11-10)
Lecture Suggestion 11.4: Our Fast-Paced World (p. 11-12)
Lecture Suggestion 11.5: Too Big for One’s Britches and Other Accessories (p. 11-12)
Classroom Exercise 11.3: Goldilocks, Snow White, and Other Men (p. 11-13)
Classroom Exercise 11.4: Using Children’s Books to Illustrate Developmental Concepts (p. 11-14)
Classroom Exercise 11.5: (Playing) Field Research (p. 11-15)
Classroom Exercise 11.6: Demonstrating Formal Operational Thought (p. 11-15)
Multimedia Suggestions

Feature Film: *The Sandlot* (1993, 101 min, rated PG) (p. 11-16)

Interactive Presentation Slides for Introductory Psychology: 5.2 Cognitive and Social Development in Infancy and Childhood

PsychInvestigator: How Children Think

PsychSim 5 Tutorials: Cognitive Development

Worth Video Series:

- Video Anthology for Introductory Psychology: Developing Through the Life Span – Theory of Mind: Taking the Perspective of Others
- Video Anthology for Introductory Psychology: Developing Through the Life Span – Piaget’s Conservation Experiments
- Video Anthology for Introductory Psychology: Developing Through the Life Span – The Two Faces of Autism
- Video Anthology for Introductory Psychology: Developing Through the Life Span – Today’s Overscheduled Children
- Video Anthology for Introductory Psychology: Developing Through the Life Span – Morelli’s Strange-Situation Test
- Video Anthology for Introductory Psychology: Developing Through the Life Span – Harlow’s Studies on Dependency in Monkeys
- Video Anthology for Introductory Psychology: Developing Through the Life Span – Testing Competency in the Newborn
- Video Anthology for Introductory Psychology: Developing Through the Life Span – Reflexes in Newborns
- Video Anthology for Introductory Psychology: Developing Through the Life Span – Object Permanence
- Video Anthology for Introductory Psychology: Developing Through the Life Span – Stranger Anxiety
- Video Anthology for Introductory Psychology: Developing Through the Life Span – Body Part Counting System
- Video Anthology for Introductory Psychology: Developing Through the Life Span – The Strange Situation and Attachment
III. ADOLESCENCE: MINDING THE GAP

Lecture Suggestion 11.6: Space Monkey (p. 11-18)

Lecture Suggestion 11.7: Kids Packing Heat (p. 11-18)

Lecture Suggestion 11.8: Guest Lecturer: Adult Relationships (p. 11-20)

Classroom Exercise 11.7: The Spirit of Radio (p. 11-20)

Multimedia Suggestions

Feature Films:

  *Gummo* (1997, 89 min, rated NC-17) (p. 11-21)

  *Kids* (1995, 91 min, rated NC-17) (p. 11-21)

  *Thirteen* (2003, 100 min, rated R) (p. 11-21)

  *Juno* (2007, 96 min, rated PG-13) (p. 11-22)

  *Ghost World* (2001, 111 min, rated R) (p. 11-22)

Interactive Presentation Slides for Introductory Psychology: 5.3 Adolescence and Adulthood

PsychSim 5 Tutorials: Who Am I?

Worth Video Series:

  *Video Anthology for Introductory Psychology: Nature, Nurture, and Human Diversity – Sexual Identity Goes Awry*

  *Video Anthology for Introductory Psychology: Developing Through the Life Span – Do Adolescents Lack Empathy?*

  *Video Anthology for Introductory Psychology: Developing Through the Life Span – Teen Boys: Emerging Sexuality*
Video Anthology for Introductory Psychology: Developing Through the Life Span – Teen Girls: Emerging Sexuality

*Scientific American Introductory Psychology Videos* OR Video Anthology for Introductory Psychology: Nature, Nurture, and Human Diversity – Gender Development

Video Anthology for Introductory Psychology: Motivation and Work – Sexual Orientation and Activity

IV. ADULTHOOD: CHANGE WE CAN’T BELIEVE IN

Lecture Suggestion 11.9: Oscar the Death Cat (p. 11-23)

Lecture Suggestion 11.10: Theories of Physical Aging (p. 11-24)

Classroom Exercise 11.8: Stereotyping the Elderly (p. 11-25)

Classroom Exercise 11.9: Shuffling Off This Mortal Coil (p. 11-26)

Classroom Exercise 11.10: Creating For the Future (p. 11-28)

*Multimedia Suggestions*

**Feature Films:**

*Harold and Maude* (1971, 91 min, rated PG) (p. 11-29)

*Sideways* (2004, 126 min, rated R) (p. 11-29)

*The Bucket List* (2007, 97 min, rated PG) (p. 11-29)

*Away from Her* (2006, 110 min, rated PG-13) (p. 11-29)

*Amour* (2012, 127 min, rated PG-13) (p. 11-30)

Interactive Presentation Slides for Introductory Psychology: 5.3 Adolescence and Adulthood

PsychSim 5 Tutorials: Signs of Aging

Worth Video Series:

Video Anthology for Introductory Psychology: Developing Through the Life Span – Echo Boomers: Understanding Today’s College Students

Video Anthology for Introductory Psychology: Developing Through the Life Span – Old Age: Thinking and Moving at the Same Time
Chapter Objectives

After studying this chapter, students should be able to:

1. Offer a definition of developmental psychology that encompasses the notions of continuity and change.

2. Outline the stages of development that take place prenatally, including the zygote, germinal stage, embryonic stage, and fetal stage.

3. Discuss how teratogens and conditions such as fetal alcohol syndrome can affect a developing fetus.

4. Describe the perceptual and motor development that occurs in infancy, noting how habituation often is used as an index of visual perception, and explaining the cephalocaudal and proximodistal rules of motor development.

5. Outline Jean Piaget’s four stages of cognitive development, noting the major milestones that characterize each stage, and recent qualifications of his theory.

6. Compare the processes of assimilation and accommodation.

7. Explain the principle of conservation, and provide two examples of how a child in the preoperational stage might fail to grasp this principle.

8. Describe how children make the cognitive journey from egocentrism to developing a theory of mind. How is the process the same or different for children with autism or deafness?

9. Discuss how culture influences cognitive development, and describe three fundamental skills that allow the ability to learn from others.

10. Describe Harry Harlow’s research on raising rhesus monkeys in social isolation for the first six months of life.
11. Describe the four different attachment styles that can develop between an infant and a primary caregiver, how these styles correspond to different internal working models of relationships, how this internal model is a product of both infant temperament and caregiver behavior, and what impact attachment style has on later life outcomes.

12. Contrast Jean Piaget’s view of moral development with Lawrence Kohlberg’s view of moral development.

13. Contrast the moral intuitionist perspective with the idea that immoral actions produce negative emotions, and discuss how some moral intuitions develop early in childhood.

14. Discuss the primary and secondary sex characteristics that girls and boys evidence during adolescence, and describe changes in brain synaptic density that occur during this period.

15. Consider some of the myths and realities associated with protracted adolescence, such as the onset of puberty, moody teenagers, and raging hormones.

16. Describe some of the issues surrounding sexuality among adolescents, particularly noting the role that sex education can play in informing adolescents about the causes and consequences of sexual activity.

17. Discuss some of the explanations for the development of sexual orientation.

18. Comment on the relative influence of parents and peers on adolescent development and the formation of an adult identity.

19. List the abilities that decline during adulthood, and comment on how adults compensate for these declining abilities.

20. Discuss socioemotional selectivity theory and the idea that our orientation shifts from useful information to information that produces emotional satisfaction as we age, and how this shift impacts life satisfaction.

21. Consider whether events that most people think will make them happy as adults, such as marriage or having children, actually contribute to psychological well-being.

I. Prenatality: A Womb with a View

(Chapter Objectives 1–3)

Developmental psychology studies continuity and change across the life span. The prenatal stage of development begins when a sperm fertilizes an egg, producing a zygote. The zygote, which contains chromosomes from both the egg and sperm, develops into an embryo at two weeks and then a fetus at eight weeks. The fetal environment has important physical and psychological influences on the fetus. In addition to the food a pregnant woman eats, teratogens, or agents that impair fetal development, can affect the
fetus. Some of the most common teratogens are tobacco and alcohol. Although the fetus cannot see much in the womb, it can hear sounds and become familiar with those it hears often, such as its mother’s voice.

**Lecture Suggestion 11.1**

Guest Lecturer: Registered Childbirth Educator

Invite a registered childbirth educator to your class to talk about prenatal development. These professionals are experts in the field and can often present terrific slides or video (including, for example, pictures of a fetus at various stages, models of the uterus, etc.) and are also likely to share interesting anecdotes from their own experiences. Check the local yellow pages (under childbirth education, clinics, hospitals, or birthing centers) for a qualified speaker. In addition to describing the stages of prenatal development, he or she can talk about a variety of important issues in pregnancy and childbirth, such as the effects of drugs and toxins on the unborn baby (e.g., fetal alcohol syndrome, smoking and pregnancy), the importance of proper nutrition on development, options in reproductive technology, uses of prenatal screening tests (e.g., ultrasound, amniocentesis), and the merits of breast versus bottle feeding. Students—many of whom will be future parents (if they are not parents already)—are likely to appreciate this lively and entertaining presentation.

**Lecture Suggestion 11.2**

The Endless Advance of Technology

In 1983, Swedish photographer Lennart Nilsson used intrauterine photography to create the first filmed record of human conception. Produced by Swedish Television and WGBH Boston, *The Miracle of Life* was the most popular NOVA program on PBS of all time. In 2001 the subject was revisited when Nilsson created *Life’s Greatest Miracle*, documenting the entire developmental process from conception to newborn, again from a womb’s-eye view.

The majority of the students in your introductory psychology class were born after 1983, so this kind of technology must seem quite pedestrian to them. But many will not have seen a film of sperm and egg meeting in real time, let alone clear images of a human embryo as it develops. The 30 years since Nilsson’s pioneering work have seen astonishing advances in our ability to look into the prenatal world. For example, an MRI can be used to check on the progress of fetal development, especially in cases where developmental abnormalities are suspected. Similarly, ultrasound, which used to produce grainy images of blobby shapes that looked like potential babies only to the doctors examining them, has given way to three-dimensional ultrasound, in which detailed features of a developing child can be clearly seen. All of this is a far cry from amniocentesis, enhanced alphafetaprotein tests, or echocardiograms. Certainly those techniques still have many appropriate uses and have undergone refinements over the years. But the ability to peek into the embryo’s world has enjoyed incredible advances in a relatively short period of time.
You might want to illustrate these observations with some images produced by the different techniques. Showing a traditional ultrasound next to a three-dimensional ultrasound, for example, ought to bring home the point that we’ve been able to see clearly what fetuses look like only recently. Many of Nilsson’s images remain compelling for the clarity and detail they afford. The sources listed below offer some avenues to exploring these and related topics.

Sources:

http://www.birthpsychology.com/
http://www.lennartnilsson.com
http://www.ob-ultrasound.net/
http://www.paternityangel.com/PicsAndPhotos/FoetalDevelop/1stTrimester.htm
http://www.pbs.org/wgbh/nova/body/life-greatest-miracle.html
http://www.pbs.org/wgbh/nova/odyssey/nilsson.html
http://www.pregnancy.org/pregnancy/fetaldevelopment1.php
http://www.unborn.com/
http://www.wpclinic.org/parenting/fetal-development/

**Classroom Exercise 11.1**

Modeling Development

A minimal investment in Play-Doh or other modeling clay can help you produce a demonstration with maximal informativeness.

Kathleen Kleiner suggests illustrating the process of embryogenesis with a 3D model.

- Start with three flat disks of clay, each about 9 inches in diameter: one blue, one yellow, and one red.

- Tell your students that the blastocyst starts as a solid disk of cells that will eventually form into the embryo. Hold the blue disk up to illustrate this.

- Next, explain that the inner cells differentiate into the ectoderm and the endoderm; hold the yellow disk (endoderm) underneath and near (but not smashed into) the blue disk (ectoderm) to show this. Eventually, a layer of mesoderm forms, which is represented by the red disk squashed between the blue and yellow ones.

- Now that all three layers are fused, they can form the neural tube. You can show this by grooving the blue disk to represent the tube that develops.
Finally, bend the edges of the disk down (blue on top, yellow on the bottom) to illustrate the embryonic body that will form. One opening of the tube will be the mouth, and the other opening will be the anus.

You can continue the process of prenatal development by bending the tube into a C-shape, with a larger opening at the top (where the head will be) and a smaller opening at the bottom. Pinch little forearm buds where the arms will develop and little hindlimb buds where the legs will be.

Depending on your skill, you could then sculpt a human figure.

By showing in action what students typically only see in static two-dimensional illustrations, you can provide a bit more clarity about how a tiny bundle of cells eventually becomes a person sitting at a desk in a college classroom.

Source:

Classroom Exercise 11.2
Hello Mudduh, Hello Fadduh

This simple demonstration, taken from the Teaching in Psychology (TIPS) computer bulletin board, gives you an opportunity to discuss with your students sex role stereotypes, gender roles, and some issues of early adulthood.

Ask your students two simple questions:

- “What does it mean to father a child?”
- “What does it mean to mother a child?” Discussion:

  On average, responses to the first question focus on the biological aspects of reproduction like “being a sperm donor,” “impregnating a woman,” or “having sex,” whereas responses to the second question typically emphasize nurturance or prolonged commitment such as “raising a child,” “showing attention,” or “being supportive.” Discuss with your students why they hold these views and why they responded to the questions differently. There may be no difference in your students’ responses to the two questions, depending on how sophisticated their thinking tends to be. If that is the case, discuss what led to their egalitarian outlooks or why other people might respond differently.

Multimedia Suggestions

See the Preface for product information on the following items:
Interactive Presentation Slides for Introductory Psychology

5.1 Prenatal, Newborn, and Childhood Development

5.2 Cognitive and Social Development in Infancy and Childhood

PsychSim 5 Tutorials Conception to Birth

Worth Video Series

Video Anthology for Introductory Psychology: Developing Through the Life Span – Prenatal Animation

Scientific American Introductory Psychology Videos: Prenatal Development

II. Infancy and Childhood: Becoming a Person

(Chapter Objectives 4–13)

Infants have a limited range of vision, but they can see and remember objects that appear within it. Their control of their bodies develops from the top down and the center out. Infants slowly develop theories about how the world works. Piaget believed that these theories developed through four stages, in which children learn basic facts about the world, such as the fact that objects continue to exist even when they are out of sight and the fact that objects have enduring properties that are not changed by superficial transformations. Children also learn that their minds represent objects, hence objects may not be as they appear and others may not see them as the child does. Cognitive development also comes about through social interactions in which children are given tools for understanding that have been developed over millennia by members of their cultures.

At a very early age, human beings develop strong emotional ties to their primary caregivers. The quality of these ties is determined both by the caregiver’s behavior and the child’s temperament. People get along by learning and obeying moral principles. Children’s reasoning about right and wrong is initially based on an action’s consequences; but as they mature, children begin to consider the actor’s intentions as well as the extent to which the action obeys abstract moral principles. Moral intuitions may also be derived from one’s emotional reactions to events, such as the suffering of others.

Lecture Suggestion 11.3

Cagey Behavior

“We love our children very much, and we will continue to do everything possible to get them home.” These are the words of Michael and Sharen Gravelle, an Ohio couple who adopted 11 children with a wide range of health and behavioral problems. This is quite noble and speaks of a generous heart and caring attitude. The only problem, it seems (and the reason why the Gravelles want their children back), is that nine of the children were
routinely made to sleep in homemade wooden cages without pillows or blankets, something the local authorities frowned upon.

This story would seem sick and cruel if it stopped here—another tale of a scheming couple trying to bilk the adoption system in some way. (The Gravelles received $500 a month to care for these special needs children.) But by all reports, the children are polite, well-fed, well-behaved, and well-dressed. In fact, Judge Timothy Cardwell ruled in 2005 that the children lacked proper care, but dismissed allegations of neglect. What’s more, the Gravelles claim that a psychiatrist recommended keeping the children in cages at night to protect them from one another and from themselves. The children, aged 1 to 15 years, have disorders such as Prader-Willi syndrome, fetal alcohol syndrome, autism, and other behavioral disruptions that were potentially dangerous. After a lengthy court case, however, the children were eventually removed from the home, the parents were granted supervised visitation rights (but also handed a 2-year sentence for their actions), and the social worker initially handling their case was charged with failure to report the conditions in the first place.

You can find a wealth of information about the Gravelles and their actions on the Internet, and you might consider making this case the starting point for larger issues related to developmental psychology. For example, who should have ultimate authority over raising children, their parents or the state? Most reasonable people would reply “both,” as seems applicable in this case: Parents should be free to exercise their judgment as appropriate, but if evidence suggests a child is being neglected, abused, or harmed in some way, the state has a right to step in. So perhaps this suggests there should be some kind of screening procedure for parents . . . which there certainly is for potential adopters and foster parents. But what about a young couple who simply wants to start a family? Should there be some kind of test or permission granted? The idea is not that far-fetched: For close to 100 years people with all kinds of credentials, valid or not, have suggested the idea of licensing parents. Most people need a license to do a lot of important things, such as drive a car, operate heavy equipment, get married, or catch fish; should raising children be treated differently? Should experts take over? The Gravelles indicated that they were following the advice of a mental health professional when caging their children. Should poor parenting choices that result from the suggestions of experts be punishable?

There’s plainly a wealth of questions stemming from this case that you and your students can consider. Spark some lively debate in your classroom and see where it leads.

Sources:


http://www.childrenintherapy.org/victims/gravelle.html

http://www.msnbc.msn.com/id/16056985/

Lecture Suggestion 11.4

Our Fast-Paced World

Here’s good news for parents on the go. In these heady, fast-paced, results-oriented times in which we live, elimination communication, or “infant potty training,” suggests that children as young as 3 weeks old can be successfully potty trained. Christine Gross-Loh, one of the founders of the movement, trained her son Daniel to be diaper-free by 18 months. The secret is timing, signaling, and cueing. Infants tend to urinate every 10 to 20 minutes, which makes timing their needs a bit more predictable (although the elimination of feces varies quite a bit from child to child). Children also exhibit signals, such as facial expressions or vocal cues, when the need to eliminate arises. Parents can be taught to recognize these signals, and when the child is a bit older, she or he can communicate these states verbally. Parents should also provide children with cues to appropriate elimination, such as being near a toilet. Making a sound or waving a particular toy can help build an association between elimination and the presence of a particular cue.

Does this all sound a bit odd? Many proponents of elimination communication note that the practice is common in other parts of the world; moreover, their recommendations have been endorsed by groups such as La Leche League. The average age at which children move from diapers to underwear has increased by about a year and a half over the past century, as disposable diapers and the advice of parenting books has led many a parent to delay toilet training. The sight of a 5-year-old in diapers might make other options seem less peculiar.

Sources:


http://diaperfreebaby.org/

http://www.bornpottytrained.com/

Lecture Suggestion 11.5

Too Big for One’s Britches and Other Accessories

Children are getting heavier at earlier and earlier ages. Overweight and obesity among increasingly younger children present a range of health, behavior, and social problems that demand attention. In the United States, children are getting sicker, thicker, and ickier because of their weight.
There’s another problem that’s been growing along with body proportions. Overweight and obese children can’t fit in their car seats anymore. The American Association of Pediatrics offers clear guidelines for when, how, and how long car seats should be used. The evidence for the effectiveness of car seats in protecting children is also indisputable. When a 3-year-old is feeling constrained by the straps and struggles to fit in the seat, however, what can be done? It’s not comfortable, to be sure, but it’s unsafe to abandon the restraints and take one’s chances. Plus-size seats are an alternative, and preferable to moving a child to a booster seat prematurely. But none of this comes cheap. Deluxe models of car seats can be pricey and difficult to find, leading parents to shrug their shoulders and cross their fingers. The recent finding that over 280,000 children in the United States would have difficulties using an appropriate car seat because of their age and weight provides a stark reminder of the problem.

Sources:


http://www.aap.org/obesity/ObesityCarSeatSafety.html

**Classroom Exercise 11.3**

Goldilocks, Snow White, and Other Men

Many studies have documented the gender stereotypes conveyed in children’s books. This exercise highlights the point.

- Divide students into small groups.
- Give each group a children’s book to examine.
- Ask students to analyze the characters and plot of the book and to look for the following:
  - Frequency of female and male characters
  - Active versus passive behavior of female and male characters
  - Occupations or social roles of female and male characters

The analysis should take 10 to 15 minutes, with additional time for discussing the findings. Many books, even recent ones, convey gender-typing by showing fewer female characters, placing male characters in more active roles, and portraying male and female characters in gender-typed occupations or roles (females are mothers and princesses, males are doctors and cowboys). In particular, students will probably find few fathers and
many mothers portrayed in children’s books, a fact that certainly conveys a particular attitude about the appropriate behavior of men and women.

As a variation on this activity, consider incorporating some findings from a simple but elegant study conducted by Judy DeLoache and her colleagues. The researchers observed mothers reading to their 18- to 38-month-old children and recorded the frequency with which the caregivers used masculine versus feminine descriptors for characters of indeterminate gender. (A story about a fox and a cat, for example, might not make clear—or purposely leave ambiguous—the sex of the main characters.) The mothers referred to 95% of such characters as male. Before you tell students about this finding:

■ Ask your students to read (in their groups) a children’s story featuring such characters.

■ Then ask them to summarize it, either aloud to the class or in a few brief paragraphs.

Is there evidence that your college students have the same tendency to see the world through masculine eyes?

Source:

**Classroom Exercise 11.4**

Using Children’s Books to Illustrate Developmental Concepts

As a variation on the above assignment:

■ Have students examine a variety of children’s books for developmental principles displayed within the stories. Children’s books make excellent teaching tools because they apply a tremendous range of principles in developmental psychology and outline important lessons aimed at strengthening children’s development in some way. Many books include topics on moral development (e.g., lying, stealing), coping with adversity and stress (e.g., death, divorce), techniques to advance cognitive and intellectual skills, issues of identity development and self-esteem, physical development and change (e.g., toilet training), social and relationship issues (e.g., how to share, how to get along with others), coping with fears (e.g., of the dark), tolerance of diversity (e.g., racial, gender, and religious differences), gender role development, and so on.

■ You can describe a few books to the class and solicit student comments as you go through them. (For the instructor with several books to use in class, divide your students into small groups and distribute two or three books to each group, having the students identify the relevant developmental concepts applicable to each book.)
Have each group make short presentations and solicit student comments and questions.

**Classroom Exercise 11.5**

*(Playing) Field Research*

Once students have learned the theories of development:

- Ask them to observe children at play while staying in the background. Observations should occur while children are involved in a variety of activities in natural environments. Potentially rich settings include classrooms, day-care centers or preschools, churches, parks, Little League baseball games, playgrounds, video arcades, and shopping malls. (Note that student observers should be unobtrusive so they don’t unintentionally influence children’s behavior, and they should secure permission if they are observing on private property.)

- Have students write about their observations in a 2- to 4-page paper. Be sure to have them include a discussion of how principles from the text and lecture apply to their observations.

- For best results, students need to narrow their focus by identifying their primary goals and expectations prior to observation. For example, are they going to explore variation in physical ability and motor development? Will they focus on evidence of cognitive development (in terms of Piaget’s stages)? Will they examine issues related to social development (play in groups, sharing, competition, same versus mixed-sex play)?

- If student observers are able to get within hearing distance, they might also relate principles of language development to children’s conversations (e.g., identifying babbling, holophrases, use of intonations, overgeneralizations, motherese).

**Classroom Exercise 11.6**

*Demonstrating Formal Operational Thought*

For this demonstration you will need to bring to class two jars of jelly beans, each jar containing a different color jelly bean—your school colors can be a good choice—and a serving spoon or scooper. Present this task to your class after you have discussed Piaget’s stages of cognitive development and the principles of conservation. Describe the task as a demonstration of testing formal operational thought. Place the jars in front of the class and tell them the following:

Each of these jars holds exactly 200 jelly beans. This jar holds 200 white jelly beans and this jar holds 200 red jelly beans. This scooper (show the spoon) will hold exactly seven jelly beans. I will now take a spoonful of 7 white jelly beans and add them to the jar of red jelly beans and then shake the jar to randomly distribute the jelly beans (do this). I will now take a spoonful of 7 jelly beans from the jar containing mostly red
jelly beans and put them in the jar with white jelly beans (do this and shake to mix). Will the number of red jelly beans in the jar that originally held only white jelly beans be the same as the number of white jelly beans in the jar that once only had red jelly beans?

Record student answers and their logic on the board. While the correct answer is that there will be equal numbers of opposite colored jelly beans in each jar, a large number of students will not solve the problem correctly. This demonstration can serve as a starting point for discussing several points: Piaget has been criticized for overestimating adults’ cognitive abilities while at the same time underestimating children’s abilities. Some 40%–60% of adults will have difficulty completing formal operations tasks like this one. Individuals perform better on familiar tasks as opposed to unfamiliar tasks. How might that have led some students to solve the problem correctly while others did not? Point out that how a conservation task is presented can influence a subject’s ability to complete the task. Were there aspects of the task presentation that were confusing to students? Might children in Piaget’s original studies have had similar problems?

Source:


**Multimedia Suggestions**

**Feature Film:** The Sandlot (*1993, 101 min, rated PG*) Scotty Smalls wants to learn how to play baseball and to fit in with the kids in his new neighborhood. To accomplish both goals, he borrows his stepfather’s autographed Babe Ruth ball, blissfully unaware of what he has and marches off to the sandlot for the afternoon. Hijinks, bonding, and encounters with a gigantic dog ensue.

See the Preface for product information on the following items:

**Interactive Presentation Slides for Introductory Psychology** 5.2 Cognitive and Social Development in Infancy and Childhood

**PsychInvestigator** How Children Think

**PsychSim 5 Tutorials** Cognitive Development

**Worth Video Series**

Video Anthology for Introductory Psychology: Developing Through the Life Span – Theory of Mind: Taking the Perspective of Others

Video Anthology for Introductory Psychology: Developing Through the Life Span – Piaget’s Conservation Experiments
Video Anthology for Introductory Psychology: Developing Through the Life Span –
The Two Faces of Autism

Video Anthology for Introductory Psychology: Developing Through the Life Span –
Today’s Overscheduled Children

Video Anthology for Introductory Psychology: Developing Through the Life Span –
Morelli’s Strange-Situation Test

Video Anthology for Introductory Psychology: Developing Through the Life Span –
Harlow’s Studies on Dependency in Monkeys

Video Anthology for Introductory Psychology: Developing Through the Life Span –
Testing Competency in the Newborn

Video Anthology for Introductory Psychology: Developing Through the Life Span –
Reflexes in Newborns

Video Anthology for Introductory Psychology: Developing Through the Life Span –
Object Permanence

Video Anthology for Introductory Psychology: Developing Through the Life Span –
Stranger Anxiety

Video Anthology for Introductory Psychology: Developing Through the Life Span –
Piaget’s Conservation Experiments

Video Anthology for Introductory Psychology: Developing Through the Life Span –
Body Part Counting System

Video Anthology for Introductory Psychology: Developing Through the Life Span –
The Strange Situation and Attachment

Video Anthology for Introductory Psychology: Developing Through the Life Span –
Erikson’s Stages of Psychosocial Development—Trust Versus Mistrust

*Scientific American Introductory Psychology Videos: Cognitive Development*

*Scientific American Introductory Psychology Videos OR Video Anthology for Introductory Psychology: Nature, Nurture, and Human Diversity – Gender Development*

**III. Adolescence: Minding the Gap**

(Chapter Objectives 14–18)

*Adolescence* begins with a growth spurt and with *puberty*, the onset of sexual maturity of the human body. Puberty is occurring earlier than ever before, and the entrance of
young people into adult society is occurring later. During this in-between stage, adolescents are somewhat more prone to do things that are risky or illegal, but they rarely inflict serious or enduring harm on themselves or others. During adolescence, sexual interest intensifies, and in some cultures, sexual activity begins. Although most people are attracted to members of the opposite sex, some are not, and research suggests that biology plays a key role in determining a person’s sexual orientation. As adolescents seek to develop their adult identities, they seek increasing autonomy from their parents and become more peer-oriented, forming single-sex cliques, followed by mixed-sex cliques, and finally pairing off as couples.

Lecture Suggestion 11.6

Space Monkey

An alarming recent teen phenomenon is self-choking.

Teenagers are engaging in a practice known by a variety of names: Airplaning, Black Out Game, Breathing the Zoo, Choking Game, Grandma’s Boy, Halloween, Indian Headrush, Space Monkey, Suffocation Roulette, Wall-Hit, or, most simply, strangulation. No matter what it’s called, it involves choking oneself (or having a partner do so) just until consciousness starts to wane, followed by a loosened grip which supposedly accompanies a quick head rush. It’s a cheap high; the price of a belt or other ligature is less than that of even Carbona or model glue. But like any practice that involves cutting off oxygen to the brain, it can have terrible consequences. Reports of adolescents left brain-damaged or dead are mounting.

Colin Russell, a 13-year-old from Tacoma, WA, was one of the unlucky ones: He died from self-strangulation. His obituary lists the cause of death as “an accident,” and indeed it was. Far from a case of suicide, the choking game is seen as a recreational pursuit. It’s not even the same as autoerotic asphyxiation, in which the practitioner seeks enhanced pleasure from cutting the oxygen supply during an orgasm. The choking game is thought of among teens as a fairly innocent and drug-free high, perhaps a step up from the “let’s all inhale helium and talk funny” days.

Sources:


Lecture Suggestion 11.7

Kids Packing Heat

Virginia Tech. Columbine. The University of Texas at Austin. Jonesboro. Northern Illinois University. These educational institutions share an unwanted bond: Each has been
the scene of a shooting rampage, in which students, teachers, and onlookers lost their lives.

School violence makes the news, and when the violence includes students shooting other students, it raises a national debate about what to do to combat it. Karen S. Johnson, Republican state senator from Mesa, Arizona, has a suggestion: Give more guns to more students. Johnson has sponsored a bill in the Arizona Senate that would allow concealed weapons to be carried on school grounds. “Concealed weapons” refers to weapons carried by those who have a concealed carry weapon permit. “School grounds,” as originally proposed in the bill, means just what it says: anything from kindergartens to colleges. The bill was later revised to apply only to higher education institutions, much to the dismay of its sponsor. “It’s not the bill that I wanted because I still feel our little kindergartners are sitting there as sitting ducks,” said Johnson. John Wentling, vice president of the gun-rights group Arizona Citizens Defense League, also expressed disappointment: “By limiting the bill to colleges and universities, it says that school-age children aren’t as valuable as college students.”

Johnson claims the purpose of the bill is to give concealed weapons holders the chance to intercept active school shooters in crisis situations. This same logic has been applied to allowing concealed handguns on airplanes, in restaurants, movie theaters, and pretty much anywhere else where violence might break out, which, when you think about it, is pretty much anywhere. Law enforcement officials often take a different view. John Pickens, the Arizona State University chief of police, said that in an active shooter situation, more people carrying guns would cause confusion and prevent officers from stopping the shooter efficiently. “I think our job is difficult enough,” Pickens said. “I don’t believe that more weapons on campus is the solution. How are we going to determine who is the real target?”

Developmental psychology might have a perspective to offer on all this, and you might enlist your students’ help defining it. Given what we know about cognitive, moral, social, and physical development, there’s probably a right answer to the questions surrounding gun control on campuses. No one’s proposing letting 5-year-olds carry .22 caliber automatic weapons, largely because it seems obvious, even to lawmakers, that 5-year-olds lack the moral and cognitive development necessary to use those weapons. But are 21-year-olds any different? Sure, the physical development is there, but can the same be said for sound thinking, moral reasoning, or social connection? Seung-Hui Cho, the 23-year-old shooter at Virginia Tech, murdered 32 people and wounded 25 others in a few hours’ time. By all reports, his moral judgment and social development were stunted in pathological ways, but what can be said about his concealed-carry-weapon-permit-eligible classmates? Criminal checks, background checks, and other safeguards are involved in the issuance of handguns and permits, but there is growing research that indicates judgment and reasoning are still developing well into a person’s 20s. In short, individuals who are just past the age of adolescence might not be the best candidates for carrying guns.

Karen Johnson’s official Web site notes that she has 11 children and 26 grandchildren, who presumably range across a wide span of ages. Her bill would no doubt equip a good
dozen or so of her own kin with guns. Is this a good idea? Is this even going to happen? One state’s elected officials have it in their power to answer those questions. But please bear this in mind as well; 15 other states have similar legislation in the works.

Source:


**Lecture Suggestion 11.8**

Guest Lecturer: Adult Relationships

This activity will give students an opportunity to ask questions and gather information about long-term relationships at various stages of development. Bring into the classroom a variety of couples who have lived together for various lengths of time who are willing to discuss their relationships. For example, try to find and invite a newlywed pair, a gay couple, a middle-aged couple, and a couple married more than 25 years. Ask questions such as: What types of problems arose in their relationship and how did they deal with them? In what ways have their partners been important to them during the relationship? What are their goals for the future? What other developmental issues have they faced together? Encourage any married students in your class to participate as well.

Be sure to spend time planning this activity, keeping in mind the following: (1) Plan ahead by securing which couples will participate well in advance of the presentation. Be sure to let the couples know what relevant issues might be discussed and how their presentation may best fit in with your course. (2) Include both women and men from a variety of backgrounds and occupations, if possible. (3) Allot plenty of time for questions: consider having the couples tell their personal stories at the beginning of the session and then use the rest of the time for questions and discussion.

**Classroom Exercise 11.7**

The Spirit of Radio

The Internet has provided an unprecedented opportunity to learn about the lives of total strangers. From bios to blogs, people feel compelled to tell their stories to anyone who’ll listen, which, in the anonymity of cyberspace, could be just about anyone.

Examining people’s lives in this way provides a basis for understanding human development. For this exercise:

- Ask your students to write a reflection paper incorporating themes from developmental psychology, based on information they find online. For example, National Public Radio with its *Radio Diaries* series has for many years been documenting the lives of people who might not otherwise have an opportunity to have their stories told. Teens, prisoners, and older adults write about their lives, and these stories can be read by anyone with an Internet connection (http://www.radiodiaries.org/about/). Any of these stories could form the basis for
applying concepts from developmental psychology. Similarly, there are numerous blogs for and by teenagers that can yield insights into developmental issues such as social interaction, sexuality, identity, moral choices, and so on. Even sites such as YouTube, with its proliferation of people recording their own lives and thoughts, offer material to be analyzed, as do MySpace and Facebook.

- You can decide the parameters of this assignment to suit the abilities and interests of your students. For example, students might simply code and catalog the types of issues that arise in the anecdotes of a particular age group (e.g., teens versus older adults on Radio Diaries). Within an age group (e.g., teen blogs), students might compare the current concerns of people who differ by age, geography, or other life circumstances.

- You might ask students to share their general impressions or specifically focus on some area of development (e.g., social development, moral reasoning, physical maturation).

Students ought to like this assignment, as chances are good they may have contributed data themselves at some point; it’s been reported that 90% of people with blogs are between the ages of 13 and 29, with a full 51% between the ages of 13 and 19.

Sources:


http://www.blogcatalog.com/explore/posts/teenage

http://www.radiodiaries.org/about/

**Multimedia Suggestions**

**Feature Film: Gummo (1997, 89 min, rated NC-17)** Sniffing glue, killing cats, having sex, and listening to Norwegian black metal are just some of the activities of the teenage residents of Xenia, Ohio. Definitely a useful film for illustrating what happens when adolescence goes wrong.

**Feature Film: Kids (1995, 91 min, rated NC-17)** *Kids* garnered a lot of media attention for its documentary style, its downbeat subject matter, and its launch of stars such as Chloë Sevigny and Rosario Dawson. As teenagers drift aimlessly between meaningless sexual encounters, the music of Daniel Johnston and Folk Implosion propels the story.

**Feature Film: Thirteen (2003, 100 min, rated R)** Consider sharing portions of *Thirteen* with your students. Evan Rachel Wood and Holly Hunter star in this story of what
happens when a typical girl reaches a milestone age: Honest, scary, and realistic are words that come immediately to mind to describe this film.

**Feature Film: Juno (2007, 96 min, rated PG-13)** Diablo Cody won an Academy Award for her screenplay about a teenage girl who becomes unexpectedly pregnant and must decide what to do with the baby. Ellen Page plays Juno, a smart, sassy girl who’s unsure whether she loves Paulie, the boy who fathered her child. Paulie wants to do what’s right, but ultimately it’s Juno’s decision. That decision involves an unhappily married couple, rock music, gore videos, and an all-important chair.

**Feature Film: Ghost World (2001, 111 min, rated R)** Scarlett Johansson and Thora Birch star in Terry Zwigoff’s film of Daniel Clowes’s comic book. What’s this movie about? Teenage alienation, record collecting, social isolation, identity crises . . . the usual things that characterize the transition into adulthood.

See the Preface for product information on the following items:

**Interactive Presentation Slides for Introductory Psychology** 5.3 Adolescence and Adulthood

**PsychSim 5 Tutorials** Who Am I?

**Worth Video Series**

- Video Anthology for Introductory Psychology: Nature, Nurture, and Human Diversity – Sexual Identity Goes Awry
- Video Anthology for Introductory Psychology: Developing Through the Life Span – Do Adolescents Lack Empathy?
- Video Anthology for Introductory Psychology: Developing Through the Life Span – Teen Boys: Emerging Sexuality
- Video Anthology for Introductory Psychology: Developing Through the Life Span – Teen Girls: Emerging Sexuality
- *Scientific American Introductory Psychology Videos* OR Video Anthology for Introductory Psychology: Nature, Nurture, and Human Diversity – Gender Development
- Video Anthology for Introductory Psychology: Motivation and Work – Sexual Orientation and Activity
IV. Adulthood: Change We Can’t Believe In

(Chapter Objectives 19–21)

Older adults show declines in working memory, episodic memory, and retrieval tasks, but they often develop strategies to compensate. Gradual physical decline begins early in adulthood and has clear psychological consequences, some of which are offset by increases in skill and expertise. Older people are more oriented toward emotionally satisfying information, which influences their basic cognitive performance, the size and structure of their social networks, and their general happiness. For most people, adulthood means leaving home, getting married, and having children. People who get married are typically happier, but children and the responsibilities that parenthood entails present a significant challenge, especially for women.

Lecture Suggestion 11.9

Oscar the Death Cat

Thinking about buying a pet? Here’s a catchy name: “Oscar the Death Cat.”

Oscar lives at the Steere House Nursing and Rehabilitation Center, Dementia Unit, 3rd floor, where, like most cats, he has the run of his home. But unlike most cats, Oscar has shown an uncanny ability to predict death. In 25 cases to date, Oscar has curled up beside patients who typically die within the next four hours. This doesn’t seem to be dumb luck; Oscar roams from room to room like a doctor on rounds, sniffing and inspecting the patients on a daily basis. Those to whom he gravitates on a given day are the—perhaps—unlucky ones. The people he chooses might be considered fairly unlucky to begin with; they typically suffer from Alzheimer’s disease and other forms of dementia that have left them in long-term care. And let’s be clear; the cat isn’t causing these deaths. This is not the cat-sucking-the-breath-from-the-baby’s-lungs in an urban myth, nor the subject of a Stephen King short story. No, Oscar seems to have a knack for foretelling death, plain and simple.

You’d think the families of the patients at Steere House would be aghast to have their own version of the Grim Reaper pawing about, but most take some measure of comfort. By noting Oscar’s pattern of movements, staff at the center have ample time to contact a patient’s loved ones and advise them of an impending demise. What’s more, the patients themselves have a nonjudgmental, soft, purring, warm body brimming with contact comfort with whom to spend their final hours. In fact, a local hospice agency presented the center with a citation in Oscar’s name: “For his compassionate hospice care, this plaque is awarded to Oscar the Cat.”

In an odd twist to this tale, consider this: Neither Oscar nor the patients realize what’s going on. The patients have usually reached a state of minimal understanding of their surroundings, so much so that they’re unaware of the presence or meaning of a cat on a hospital ward. And for Oscar’s part . . . well, he’s a cat, so it’s doubtful he has a lot of high-level cognition about what he’s doing. It’s kind of nice that all of that is immaterial.
Oscar does what he does, the patients pass on quietly, and science has another mystery to unravel.

Sources:


Lecture Suggestion 11.10

Theories of Physical Aging

To the expression, “Nothing is certain but death and taxes,” we can add “aging with time.” Growing old certainly beats the alternative in the great majority of cases; and although aging is inevitable, at least the mechanisms of aging can be understood with some degree of certainty.

Wear and Tear Theories

According to this general class of theories, the human body is analogous to a machine: our parts begin to wear down and malfunction as they age. This theory, although making sense as it applies to certain body parts and systems (e.g., elbow or knee problems experienced by athletes), does not explain why the body’s systems are continuously engaged in repairing and replacing damaged tissue, nor why continued use or exertion of body systems, such as that associated with routine exercise, actually improves functioning.

Accumulation Theories

This group of theories focuses on explanations of aging caused by cellular processes and the problems that result. For example, one accumulation theory attributes aging to an accumulation of cellular reproduction errors; the aging of the skin, for instance, may be the result of increasing errors in cellular reproduction due to damage in cellular DNA from exposure to the sun and other toxic substances. Another accumulation theory, the metabolic waste theory, holds that aging results from the accumulation of undisposed waste products in the cells. Waste accumulation, however, seems to result from changes in the body’s ability to remove waste and thus may be more of a symptom of aging than a cause. A third accumulation theory attributes aging to the loss of fibrous proteins (collagen and elastin) in the body, which is associated with wrinkles and sagging skin.

Immune System Malfunction

Another theory suggests that immune system functioning contributes to aging. Research has demonstrated that the immune system’s ability to produce antibodies begins to decline after adolescence. Some studies suggest that the immune system may lose its ability to detect and destroy slightly mutated cells, allowing them to reproduce and
accumulate in the body, whereas the autoimmune theory of aging holds that the immune system loses its ability to differentiate between normal and abnormal cells, resulting in the destruction of healthy cells.

*Genetic Clock*

This approach suggests that cells have a “shelf life,” that they are preprogrammed to survive and reproduce for a specific period, after which they begin to degenerate and die. From studies of human cell regeneration limits, researchers estimate that the maximum human life span would be between 110 and 120 years.

Sources:


**Classroom Exercise 11.8**

Stereotyping the Elderly

Many an aging actor has feared being passed over by Hollywood. The stories of gifted thespians who get offered only certain types of roles later in life are myriad. This is especially true for women; “spinster aunt” or “Earth-mother-type” seem to clog their resumes after age 40.

This is unfortunate for people who earn their living on the silver screen, and equally unfortunate for those of us in the audience. The media portrayals of older adults often trade on the worst of stereotypes. Movies, advertisements, television commercials, and programs show us a world of frail victims, doddering dunces, and incontinent imbeciles as our revered senior citizens.

- Ask your students to weigh in on these issues by collecting examples of the elderly in popular media.

- You can structure the assignment with a substantial degree of latitude, depending on your tastes. For example, you might assign one or two groups of students to look at print advertisements, and within that, examples from a range of magazines (i.e., *Tiger Beat, Smithsonian, AARP, The Magazine, Time, Reader’s Digest*).

- What types of portrayals do they find, and do these differ reliably with the type of magazine examined?

- Are there differences in the portrayals of older women versus older men?
Are there differences in the portrayal of the “young old” (60s) versus the “old old” (80s)?

Another group might focus on visual media, such as television programs or television advertisements.

You might want the groups to compare portrayals on television versus in popular theatrical releases, or in print media versus visual media.

No matter how you decide to parcel out the assignment, focus on having students gather specific examples and generating some hard data. It’s not sufficient to say, “Yeah, the old people looked senile in the ads for Metamucil”; rather, frequencies of active versus passive portrayals, or stereotypic versus nonstereotypic portrayals, or ridiculed versus reverential portrayals, and so on, should be collected. In the process of paying closer attention to how the elderly are depicted, students may begin to understand their own biases and stereotypes about aging.

Sources:


Classroom Exercise 11.9

Shuffling Off This Mortal Coil

Ask your students a simple question: How old is “old?” Chances are the answer depends on how old the respondent is. When you’re 6, 15 seems pretty old, but when you’re 40, “old” doesn’t start until you’re 80! To many college-age people, somewhere around 30 probably seems old, with 40 definitely falling in the “clearly old” range. Fifty? Forget it! Ancient!
To give some perspective on this question:

- Invite your students to visit the Web site http://www.deadoraliveinfo.com or consider showing it in class. On the site you’ll find a wealth of information about the mortality status of well-known people. It’s not that unfamous people aren’t important; it’s just that most of us have never heard of them . . . because they’re not famous. Although the focus is on celebrity life and death, the information is nonetheless intriguing.

- For example, students can see who they’ve already outlived and whose age they’re approaching. An 18-year-old born in 1993, for instance, has already outlived Richie Valens, who died at 17. But before he died Valens had a substantial impact on the world of music; what have your students contributed so far? The site also lists people who lived into their 100s (such as Rose Kennedy, Grandma Moses, Bob Hope, and Albert Hoffman, who is still alive) or who died before age 30 (such as Buddy Holly, Notorious B.I.G., Lee Harvey Oswald, or River Phoenix), and offers a “guess the age” game for celebrities in sports, entertainment, politics, and other fields.

There’s a lot of other information about the living and the dead, much of it applicable to remarks such as, “Wow, I didn’t know so-and-so was still alive.”

Another site, with a somewhat grimmer demeanor, is http://www.death-clock.org. At this site:

- Have students estimate when they’re likely to die on the basis of actuarial data. Someone born in 1963, let’s say, is likely to die in the year 2037, whereas someone born in 1990 might live until 2064. Projections can be made pessimistically (resulting in a short death clock), optimistically (resulting in a best-case death clock), or realistically.

Discussion:

The point of sharing these sites is not to be ghoulish, but to raise some larger issues worthy of reflection.

1. First, death is inevitable, and whether a person thinks 30, 40, 50, 80, or 90 is “young” or “old” really doesn’t matter. Some people die at a young age, others die at an older age, but the amount of years they had on the planet is the amount of years they had on the planet. What gets done, how life gets lived, and how we treat one another probably matter more than the absolute number of days we were alive.

2. Second, sites such as http://www.death-clock.org are driven by health-related considerations. There are links to ways to quit smoking, improve diet, and curb obesity and to other behaviors that can promote a healthy lifestyle and a longer life. For some people, a stark prediction that they’re likely to die sooner than they thought can provide an impetus to change their ways.

3. Finally, your students can contemplate some of the achievements of the well-known folks they encounter and relate these achievements to what they’re learning about
human development. For example, some actors are highly regarded for their roles across their life span; Marlon Brando received acclaim as a young man and as a much more seasoned veteran of the screen. Many athletes make a name for themselves early in life, then fade to obscurity; Bobby Fischer fit this mold to some extent. Some politicians, activists, or musicians might not become famous until relatively later in life.

How do these observations fit with what your students are learning about cognitive abilities or physical abilities across the life span? How might genetics or the environment that some of these long-lived folks were exposed to have contributed to their achievements or sheer longevity itself? Considering these points needn’t be a lengthy or formal activity; perhaps a brief discussion in class will suffice. In any event, contemplating our inevitable mortality can be an exercise in realistic thinking.

**Classroom Exercise 11.10**

Creating for the Future

Most students find it difficult to imagine what their particular lives will be like “when they’re 64” . . . or older. Their best estimates may come from inspecting the lives of friends and relatives who are more seasoned, and using those observations to form their own judgments.

To provide further insight, consider two exercises suggested by Lisa McGuire and Melissa Zwahr.

Ask students to design a living community that would be appropriate for people over the age of 65, incorporating all aspects of developmental needs: social, economic, cognitive, emotional, physical, and so on.

- For example, many older people live on fixed incomes; what should be done with building materials, rents, access to shopping, energy consumption, and related factors to address this?

- Older people’s physical abilities may be in decline. How should stairs, bathrooms, recreational activities, signage, and so forth be modified?

- Many older people live quite active, healthy lives; what opportunities will there be for golf courses, swimming pools, weight rooms, and physical intimacy?

- Should there be special dietary options available?

- Should there be medical professionals on call?

- How should communal spaces be designed?
As students start laying out the possibilities for this fictitious community, they should begin to appreciate the myriad challenges that older people face living in an environment not conducive to their capabilities.

To address those challenges, you might consider an additional exercise.

- Ask your students to design something useful for an older person. The directions should be about as vague as that, to encourage creativity in the invention process. Your students have no doubt seen products such as The Clapper, elevated toilet seats, magnifiers for reading, or amplified telephones.

- How can they stretch their creative muscles to either improve the design of an existing product or fashion a new one?

The end result of this exercise should be up for grabs as well. Some students may progress to detailed renderings of their ideas, whereas others might have the ability to create functioning prototypes. Throughout the process, you might remind them that many a successful and wealthy inventor started with an idea to improve the quality of someone’s life.

Source:

**Multimedia Suggestions**

**Feature Film: Harold and Maude (1971, 91 min, rated PG)** This is the kind of film that you either love or hate. A lot of people love it, especially slightly odd people who watch it repeatedly and quote dialogue from it. Bud Cort and Ruth Gordon star in this tale of mismatched lovers—one’s 20, the other’s 80—who teach each other a thing or two about life, death, and everything in between.

**Feature Film: Sideways (2004, 126 min, rated R)** *Sideways* tells the story of two middle-aged men doing middle-aged things. One (played by Paul Giamatti) is still reeling from a long-enough-ago divorce, the other (played by Thomas Haden Church) is facing an impending marriage. They decide to drink a lot of wine, meet some interesting people, and soak up life in the process.

**Feature Film: The Bucket List (2007, 97 min, rated PG)** Rob Reiner directed Jack Nicholson and Morgan Freeman in this tale of two terminally ill men who escape their cancer ward in search of fulfilling their dreams. A predictable story, perhaps, but good acting and themes of aging, accomplishment, and death give this potential for the classroom.

**Feature Film: Away from Her (2006, 110 min, rated PG-13)** Alice Munro’s short story, *The Bear Came over the Mountain*, has been adapted by actress Sarah Polley into this feature film starring Julie Christie, Michael Murphy, Gordon Pinsent, and Olympia
Dukakis. The film offers a compelling look at a woman’s descent into the darkness of Alzheimer’s disease and how her loved ones cope with the changes in all of their lives.

**Feature Film: Amour (2012, 127 min, rated PG-13)** This film won the Academy Award for Best Foreign Language Film. It is a beautiful and moving depiction of the relationship between two octogenarians. Their love is put to the test when the wife suffers a stroke that paralyzes half of her body. Jean-Louis Trintignant and Emmanuelle Riva are amazing in their roles of Georges and Anne, and Emmanuelle Riva became the oldest woman nominated for an Oscar for Best Actress.

See the Preface for product information on the following items:

*Interactive Presentation Slides for Introductory Psychology* 5.3 Adolescence and Adulthood

*PsychSim 5 Tutorials* Signs of Aging

**Worth Video Series**

- Video Anthology for Introductory Psychology: Developing Through the Life Span – Echo Boomers: Understanding Today’s College Students
- Video Anthology for Introductory Psychology: Developing Through the Life Span – Old Age: Thinking and Moving at the Same Time
- Video Anthology for Introductory Psychology: Developing Through the Life Span – Healthy Aging: The Power of Positive Thinking
- Video Anthology for Introductory Psychology: Developing Through the Life Span – Alzheimer’s Disease
- Video Anthology for Introductory Psychology: Developing Through the Life Span – Alzheimer’s Family Case Study
- Video Anthology for Introductory Psychology: Nature, Nurture, and Human Diversity – 100 Years Old and Counting: Psychological and Biological Factors

**OTHER FILM SOURCES**

*7 Up; 14 Up; 21 Up; 28 Up; 35 Up; 42 Up; 49 Up; 56 Up* (various years; PBS). Noted director Michael Apted has followed the lives of two groups of British schoolchildren, upper middle class and working class. Starting from age 7 (in 1964) and continuing through adulthood (in 2013), we glimpse the changes their lives have undergone. Later films contain clips from earlier films.

*7 Up in the Soviet Union* (1990, 68 min, IM). Like the Michael Apted films mentioned above, this video presents a portrait of life for 20 seven-year-olds in the former Soviet Union.
Adolescent Cognition: Thinking in a New Key (2004, 30 min, IM). Moody adolescents may seem inscrutable, but there’s a lot going on. David Elkind comments on how adolescents think.

Aging: What an Autopsy Reveals (2006, 49 min, FHS). Most of us don’t really give a lot of thought to how aging affects us internally; this video provides that perspective.

Alzheimer’s Disease: A New Hope through Understanding (2004, 40 min, DF). Advances in understanding Alzheimer’s disease have been slow but fairly steady; we certainly know more now than we did a decade ago. This video summarizes some of the major recent findings.

American Adolescence (1999, 30 min, FHS). Violent video games, drugs, teenage pregnancy, TV, pornography, and stalkers on the Internet . . . there’s a lot of scary stuff associated with being a teenager in the modern world. Fortunately, it’s not all bad, and this program offers suggestions for overcoming some of these hurdles and temptations.

The Baby Human: To Talk (2003, 52 min, IM). Cooing gives way to words gives way to sentences gives way to “Mother, I need to borrow the car NOW!” How in the world does that happen? Watch and find out.

The Baby Human: To Think (2003, 52 min, IM). Short experiments are used to illustrate developmental achievements in logic, deduction, and other cognitive tasks.

Baby’s First Year (2000, 21 min, FHS). Part of the Beginning the Journey series, this video looks at the remarkable developments that take place in a child’s first year of life.

The Becoming Years: Adolescence to Older Adults (2006, 30 min, IM). Social and cognitive development continue throughout the life span, which is what most older adults would tell you. Adolescents probably think people start getting pretty useless around 40 or so. Get the real story with this video.

Birth Order and Its Effects (1997, 18 min, FHS). Birth-order effects: serious predictor of behavior, or a bunch of nonsense? This film adopts the former position as it examines how the staggering of children in a family affects their development.

Character Formation in Different Cultures (8-part series, PENN). Based on the work of Margaret Mead and Gregory Bateson, several parts of the series examine an aspect of the relationship between culture and personality development in Bali and New Guinea. Segments include Bathing Babies in Three Cultures (11 min), Childhood Rivalry in Bali and New Guinea (17 min), First Days in the Life of a New Guinea Baby (20 min), Karba’s First Years: A Study of Balinese Childhood (21 min), and A Balinese Family (20 min).

The Child from 1 to 3 (2000, 20 min, FHS). Kids between the ages of 1 and 3 learn to do a lot of important things. This video, part of the Beginning the Journey series, identifies and describes what these are.
The Child from 4 to 6 (2001, 22 min, FHS). The ages of 4 to 6 usually signal a transition to formal education and the cognitive, motor, social, and emotional tasks that accompany that shift. This video looks at some of the issues surrounding this stage in a child’s life.

The Child from 7 to 12 (2001, 20 min, FHS). Just when kids seem calm and sweet, along comes Miley Cyrus to get them all riled up. How to deal with a 7- to 12-year-old? This video might have some suggestions.

Child’s Play: How Having Fun Turns Kids into Adults (2004, 23 min, IM). Playing is fun; just ask any kid. But playing also helps shape a child’s view of cooperation, fairness, and other important concepts that prove useful in adulthood.

Childhood Nutrition: Preventing Obesity (2005, 2 parts, 42 min total, FHS). Ronald McDonald is seen by many as an evil menace. Junk food has turned us into an obese nation, and its effects can be seen in those least capable of resisting it: children.

Conservation Problems (1996, 6 min, IM). This is a short film about young children who have trouble filling glasses of water.


Different Developmental Paths (2003, 30 min, IM). We can’t all take “the road less taken”; otherwise it wouldn’t be called that. But some children do, developmentally, through disability or birth defect. This video examines the lives of three remarkable children who might be considered “different” by some.

Different Strokes: Nurture and Human Diversity (2006, 30 min, IM). This video looks at how nature and nurture interact to influence development.


Encouraging Moral Development in Children (2006, 14 min, IM). The title sounds like a delightful idea. Who wants a callous little monster when you could have a considerate, principled citizen of the world? This short film offers a quick how-to.

Families and Households (2005, 39 min, IM). Seems like everybody’s got a view of what a “family” is, from Marxists to feminists to sociologists to developmental psychologists. Hear what they have to say in this video.

Family Matters: Family Types (2005, 30 min, IM). Sometimes it seems that the traditional nuclear family has exploded. Is that a good thing or a bad thing? This video suggests that the answer might not be that simple, as many types of families can exist just fine.
Fatherhood: The Influence in the First Two Years (2003, 30 min, IM). Has the role of the father eroded in childhood development? That depends on who you ask. This video offers some perspectives on that question.

The First 365 Days in the Life of a Child (Thirteen 28 min programs, FHS). A 13-part series examining developmental milestones for the newborn and at the end of each of the child’s first 12 months. The first segment on the newborn may be particularly useful as a supplement for the discussion in this chapter.

First Year Milestones (2006, 60 min, IM). A lot happens in the first year of a baby’s life. When those things don’t happen, parents, physicians, and psychologists sometimes get worried. Check out the milestones that characterize a baby’s first 365 days.

Fitting In: Socialization (2005, 30 min, IM). Charity begins at home. So does culture. Families, schools, peers, and the media all contribute to a child’s socialization, as this video points out.

Gender and Relationships: Male-Female Differences in Love and Marriage (2002, 42 min, UCMEDIA). Most people who enter adulthood form pair bonds with a significant other. Many of your students will no doubt find themselves in a similar position in a few years, if they haven’t already. This video looks at that process in full.

Growing Old (2006, 74 min, FHS). Growing old may seem like a remote possibility to your college-age students, but it will happen to the best of them. Gently foreshadow what’s to come with this video.

Growing Up in a Video World: Media and the Developing Child (2000, 24 min, IM). Is this media about media? Yes, it is. But it’s also media about media’s effects on people too young to fully understand media’s effects on themselves.

The Growing Years: Conception to Childhood (2006, 30 min, IM). Conception to childhood is a big jump, psychologically speaking. Trace what happens from sperm meeting egg to a first-grader adding 2 plus 2.


How We Study Children: Observation and Experimentation (1994, 25 min, FHS). A little of this, a little of that; there are many ways to study children’s behavior, and this video advocates most of them.

Importance of Play (2002, 10 min, FHS). Play is important. A short film.

John Bowlby: Attachment Theory across Generations (2007, 40 min, DF). Bowlby, a British psychiatrist, worked with Mary Ainsworth to develop the ideas of attachment theory.
Late Adulthood: Death, Dying and Bereavement, and Widowhood (2001, 29 min, IM). Death: It happens to the best of us. Not everyone deals with it the same way, from those going through it to those watching it happen. This video explores what we know about it.

The Little Scientists: The First Two Years of Cognitive Development (2003, 30 min, IM). Two years is a blip to most adults; gone before you know it. Two years is a long time to a kid, and the first two years of life are some of the most important, in terms of developing cognitive skills.

Love and Work (2003, 30 min, IM). Death and taxes, love and work . . . as most people progress from adolescence to adulthood, these are the kinds of things on their minds.

Mary Ainsworth: Attachment and the Growth of Love (2005, 38 min, DF). Mary Salter Ainsworth found herself in a strange situation: how to sell people on the ideas of attachment theory. This video looks at how she did it.

Monsters in the Closet: Childhood Fears (1997, 17 min, FHS). This film looks at childhood fears and how the presence of such fears sheds light on childhood cognitive development.

Morality: Judgments and Action (2002, 31 min, DF). The study of moral development has ping-ponged a bit, from Kohlberg’s stages to sophisticated moral reasoning in little brains. Take a look at some of the central arguments in understanding moral judgments in this film.

The Newborn: Development and Discovery (2005, 29 min, IM). Brain development is the focus here, but extensions to motor, cognitive, and reflex development are also made.

Older Brains, New Connections: A Conversation with Marian Diamond at 73 (2000, 30 min, DF). Diamond is well known for her research in neuroscience; she knows a thing or two about keeping one’s brain sharp as the years accumulate.

Our Child Is Out of Control! (2004, 46 min, FHS). This Discovery Channel production enlists the help of John and Julie Gottman in explaining the dysfunctional family dynamics that contribute to a household in chaos.

Perspectives on the Family (2007, 30 min, IM). Researchers and therapists use a variety of models to understand family dynamics. This video presents an overview of these approaches.

Playing House (2004, 75 min, UCMEDIA). The Fay School is the oldest junior boarding school in America. If you’re interested in sending your 11- to 13-year-old there, tuition and boarding currently runs about $40,000 a year. If you’d like to see what life there for girls is like, watch this video.

Prenatal Development (2001, 21 min, FHS). A lot of developing takes place before a baby is even delivered. This video, part of the Beginning the Journey series, examines how and why that takes place.
*Prenatal Development: A Life in the Making* (2005, 26 min, IM). The journey from zygote to human is a relatively short one—just about nine months, usually. What happens along the way is a result of maternal, paternal, and environmental influences.


*Preschoolers: Social and Emotional Development* (2008, 25 min, IM). There’s a lot to master in preschool: sharing, cooperation, conflict resolution, who’s friends with whom. These social and emotional tasks are the focus of this film.

*The Problem with Boys: Falling Behind in School and Life* (2004, 38 min, FHS). The title sounds rather grim, although it seems that boys are increasingly at odds with current modes of education. This video examines the issue of gender differences and the educational process.

*The Role of Gender* (2007, 30 min, IM). We learn about gender roles, gender expectations, and gender stereotypes in lots of ways fairly early on in life. How and why that occurs is the focus of this presentation.

*Secrets and Dangers: The World of Today’s Teens* (2006, 40 min, FHS). Violent video games, drugs, teenage pregnancy, TV, pornography, and stalkers on the Internet . . . there’s a lot of scary stuff associated with being a teenager in the modern world. Fortunately, it’s not all bad, and this program offers suggestions for overcoming some of these hurdles and temptations.

*Teen Dreams* (2001, 46 min, FHS). The minds and bodies of teenagers get a thorough review in this Discovery Channel program. There’s a lot going on there, not all of which is easy to deal with for someone in the throes of adolescence.

*Teen Sex* (2004, 46 min, FHS). It’s hard enough being a teen, without having to worry about raging hormones, STDs, birth control, pregnancy, and the range of other concerns connected with being sexually active. This video looks at ways to help teens and their parents deal with these kinds of issues.

*Teenage Mind and Body* (1992, 30 min, IM). Focuses on adolescent cognitive and physical development, including discussions of formal operational thought and moral development.

*Teens Hooked on Porn* (2007, 57 min, FHS). This video looks at a growing social phenomenon spurred by the Internet. Is the search for sex, in any available form, simply an expression of a basic human motive?

*Vygotsky’s Developmental Theory: An Introduction* (1994, 28 min, DF). This film provides a brief look at the theories and research inspired by Lev Vygotsky.
*Wedding Advice: Speak Now or Forever Hold Your Peace* (2003, 57 min, UCMEDIA). Here’s a question dating couples often face: “Why should we get married? What’s a piece of paper got to do with love?” Here’s an alternative question to consider: “Why *shouldn’t* we get married?” This video considers answers to both types of questions.

*You Don’t Know Dick* (1997, 58 min, UCMEDIA). This film looks at the lives of six men who used to be women. Their journeys from female to male challenge us all to examine our notions of gender, sexuality, and identity.

*Due to loss of formatting, Handouts are only available in PDF format.*