

Chapter 1: Introduction

Learning Goals

Learning Goal 1: Discuss the distinctive features of a life-span perspective on development.

Learning Goal 2: Identify the most important processes, periods, and issues in development.

Learning Goal 3: Describe the main theories of human development.

Learning Goal 4: Explain how research on life-span development is conducted.

Overview of Resources

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Questions and Suggestions for Helping Students Answer Them
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Resources

🔊Lecture Suggestions

Lecture Suggestion 1: Traditional Versus Life-Span Approach to the Study of Development

Learning Goal 1: Discuss the distinctive features of a life-span perspective on development.

The purpose of this lecture is to explore the *traditional approach* to the study of development as compared to the *life-span approach* and to help students recognize the value of examining changes that occur in adulthood. Using information found in Figure 1 (“Human Life Expectancy at Birth From Prehistoric to Contemporary Times”) of the text, present the average life expectancies of two individuals: one who was born in 1900 and one who was born in 2015. Discuss, in general, the changes in these individuals’ lives that would be emphasized using the traditional approach to studying development. Contrast this with the life-span approach. Point out that childhood and adolescence cover approximately one half of the life of the individual born in 1900 versus only one quarter of the life of the individual born in 2015. Introduce the characteristics of the life-span perspective.

Using the following work of K. Warner Schaie, a pioneering psychologist who helped to create the life-span perspective, highlight the fact that development does not cease in adulthood:

Thought and Cognition

Adolescence	Acquisition	Knowledge, skills, and information are gained with minimal concern for importance or direct application.
Young Adulthood	Achievement	Knowledge, skills, and information are used to achieve specific goals. Thought and cognition tend to be focused and intense.
Middle Adulthood	Responsibility	Thoughts and cognition broaden to encompass long-range goals for both the individual and the family

		unit.
Late Adulthood	Reintegration	Thoughts and cognition are used to search for meaning in one's life.

Lecture Suggestion 2: The Concept of Development and Interaction

Learning Goal 2: Identify the most important processes, periods, and issues in development.

One of the ways in which life-span development psychology is distinct from other areas in psychology is its focus on a special kind of behavioral and psychological change. Developmental change is said to be different from other types of change such as learning and maturation. To introduce this topic and stimulate discussion regarding this issue, have students generate ideas about what development involves. Use these ideas to demonstrate the difference between development, learning, change, and maturation.

Give a lecture that explores the nature of developmental change, its causes, and what distinguishes it from other types of change. Although there are different views about what characterizes developmental change, consider these four features: (1) it is orderly, (2) it is relatively long-lasting, (3) it produces something that is new or qualitatively different from what was present earlier, and (4) it results in superior functioning. Elaborate and exemplify each of these points with brief descriptions of material that you will cover in the course. Motor development is an excellent vehicle, as are Piaget's theory and material on language development.

After characterizing development, discuss some causes of development. Consider these possibilities: (a) heredity, (b) biological maturation, (c) psychological change, and (d) environmental forces. Then, address the question of whether any one of these causes is more important than any other. Introduce the concept of interaction as a way to understand development. Useful examples include phenylketonuria, language development, Vygotsky's theory of the zone of proximal development, the concept of critical period, and gene interactions—in fact, virtually any developmental topic.

Lecture Suggestion 3: The Concept of Stage in Life-Span Development Psychology

Learning Goal 3: Describe the main theories of human development.

Developmental psychology uses the term life-span development to encompass all of the development that occurs from birth throughout life. Life-span development covers all stages of development and progress from the birth of a person to their death and is studied in a variety of ways. However, development can be broken down into three major components that can overlap at times:

Biological—development of body, the processes and changes that occur

Cognitive—mental processes and developments that occur, including problem-solving, logic, reason, and imagination/creativity

Socioemotional—development and changes in emotions, personality, and social interactions

The concept of stage has long been used in life-span development psychology. It appears in the earliest developmental theories and continues to be used in modern theories. However, the concept is frequently misunderstood and misused and is often the subject of controversy and debate. For example, Piaget's theory has been criticized on the grounds that cognitive development at all levels proceeds more continuously than his theory suggests. Give a lecture that begins with an overview of the historical uses of the concept of stage. A starting point might be Hall's idea that the stages of development represent various stages of evolution. This can be followed by a brief description of the stages identified by Gesell. These examples will clearly establish the strongest meanings of the concept and probably also provide clear criticisms of the concept. Next, distinguish various uses of the concept. These might include (a) description, or a handy way to summarize developmental events typical of given points in the Life Span; (b) metaphor, which chiefly involves applying analogies (which may be misleading) to periods of life ("adolescence is the spring of life"); and (c) genuine theoretical statements, which indicate that there are definite periods of development characterized by the emergence of qualitatively different types of thinking or behaving.

Flavell (1971) stated that four criteria are essential to the concept of a developmental stage. Briefly, they are (a) qualitative change, (b) that movement from one stage to the next involves simultaneous changes in multiple aspects of the child's behavior, (c) that the transition between stages is rapid once it begins to occur, and (d) that the changes (e.g., behavioral and physical changes) that indicate the next stage form a coherent pattern. After discussing this, give examples of contemporary uses of the stage concept (e.g., Kohlberg's stages of moral reasoning). You may want to draw on various theories of social cognition that extensively use the concept. Other possibilities include stages of motor development, emotional development, or newer theories of cognitive development. If time permits, you may wish to examine the extent to which a particular theory meets or violates Flavell's criteria or exemplifies one of the three ways in which the stage concept is used.

Sources:

Flavell, J. H. (1971). Stage-related properties of cognitive development. *Cognitive Psychology*, 2, 241–453.

Lumen: Introduction to Psychology. (n.d.). *What is lifespan development?*

<https://courses.lumenlearning.com/wmopen-psychology/chapter/what-is-lifespan-development/>

Ross, D. (1972). *Stanley Hall: The psychologist as prophet*. University of Chicago Press.

Thelen, E., & Adolph, K. E. (1992). Arnold L. Gesell: The paradox of nature and nurture. *Developmental Psychology*, 28, 368–380.

Lecture Suggestion 4: Applying Urie Bronfenbrenner's Theory

Learning Goal 3: Describe the main theories of human development.

Explain Urie Bronfenbrenner's ecological theory and engage students in a discussion about how victims of the 2011 earthquake off the Pacific coast of Tōhoku would be impacted in their

development. This was an undersea earthquake of 9.0 magnitude which took place off the coast of Japan on March 11, 2011.

Begin by explaining the various systems—microsystem, mesosystem, exosystem, macrosystem, and chronosystem. Then, apply examples of those systems to the 2011 Tōhoku earthquake. Ask students for their input and try to apply the theory to different socioeconomic groups.

For instance, the microsystem, the setting in which the victims live is, for all, Tōhoku. The earthquake triggered powerful tsunami waves in Miyako in Tōhoku's Iwate Prefecture. The earthquake moved Honshu east and shifted the Earth on its axis. There was extensive structural damage in northeastern Japan, including heavy damage to roads and railways, fires in many areas, and a dam collapse. Three nuclear reactors in the Fukushima Daiichi Nuclear Power Plant complex suffered Level 7 meltdowns, causing the evacuation of hundreds of thousands of nearby residents.

For the macrosystem, the culture in which they live is a factor in resilience of the earthquake victims. How will living in that culture impact their development?

The chronosystem, the time in which people live and the sociohistorical circumstances, is central to a discussion of the earthquake victims. In dealing with the chronosystem, discuss how long the effects of the earthquake will last. Will this be something people get over in a couple of years? The answer to that depends, too, on the microsystem as well as individual factors.

The Internet has numerous resources for your use to research the earthquake and its aftermath.

Sources:

2011 Tōhoku earthquake and tsunami. (2020, June 2). *Wikipedia*.

https://en.wikipedia.org/wiki/2011_Tōhoku_earthquake_and_tsunami

Nagasaki Archive. (n.d.). *The East Japan earthquake archive*.

<http://e.nagasaki.mapping.jp/p/japan-earthquake.html>

Lecture Suggestion 5: Understanding Correlational Research

Learning Goal 4: Explain how research on life-span development is conducted.

Give a lecture on correlational research, as students often misunderstand the important concepts. It is beneficial to provide numerous examples.

- Correlation does not equate to causation. For example, exercise is associated with less severe depression. However, it would be a mistake to conclude that exercise causes less severe depression (severely depressed people may not have the energy to exercise). It could be that some third variable affects the other two variables (interacting with others during exercise may affect depression, not exercise per se).

- Define *correlation coefficient* (a statistic that provides a numerical description of the extent of the relatedness of two variables and the direction of the relationship).
- Values of this coefficient may range from -1.0 to $+1.0$. Thus, each correlation coefficient indicates the direction of the relationship and the strength of the relationship.
- Direction of the relationship:
 - A positive relationship is indicated by a correlation value that falls between 0 and 1.0.
 - A positive relationship means that as one variable increases, the other variable increases (the more a student studies, the higher their grades).
 - A negative relationship is indicated by a correlation that is between 0 and -1.0 .
 - A negative relationship means that as one variable increases, the other variable decreases (the more television a student watches, the lower their grades).
- Strength of the relationship:
 - Zero indicates no relationship between the two variables; they do not vary together.
 - The closer the number is to 0, regardless of the direction of the relationship (positive or negative), the weaker the relationship is between the two variables.
 - The closer the number is to 1.0 or -1.0 , regardless of the direction of the relationship (positive or negative), the stronger the relationship is between the two variables.

Complete this lecture by providing an example of a correlational research study. Specifically, you could:

1. Use a published correlation study as your example. If desired, students could be asked to read the study or a study summary prior to class.
2. Conduct a simple correlational study by collecting data from your students. On the first day of class, have students fill out a brief, anonymous survey. Ask basic questions that will provide quantitative (numerical) answers that can be used to calculate correlations (e.g., How many siblings do you have? What is your shoe size? How tall are you?). Use the data provided by students to calculate the correlation coefficients between some of the variables and create scatterplots. If possible, calculate at least three coefficients—one positive, one negative, and one close to zero. For example, shoe size and height are very strongly positively correlated (taller students tend to have bigger feet), whereas shoe size and number of siblings are generally uncorrelated. As you teach about correlations, present these various findings to students as your examples. Students often connect more with this topic (which they often find difficult) when it directly relates to them; if you show them the scatterplots for the correlations, you can note that each point is one of them. Additionally, you could use this as an opportunity to talk about survey research.

The instructor could further discuss some of the concepts given in the following link:

<https://www.verywell.com/correlational-research-2795774>

Classroom Activities

Classroom Activity 1: Ice Breaker

Learning Goal 2: Identify the most important processes, periods, and issues in development.

The purpose of this activity is to break the ice and to introduce various concepts that will be presented throughout the course. Bring in several objects from your home or office that might represent various periods of development. Examples may include a wedding picture, baby bottle, backpack, briefcase, obituary, map, memory book, rattle, or college brochure. Randomly pass out each object to students in your class. Ask the students with the objects to consider what period of life the object might represent (e.g., a baby bottle may represent infancy). However, use the opportunity to get students to think more broadly. For example, the baby bottle may represent young adults having their first child, a new grandparent, a single mom, or a teenage brother who has a new baby stepsister at home. Students should begin to realize how each period of life is difficult to examine in isolation.

Logistics:

- Materials: at least 10 objects representing various periods of development
- Group size: individual, then full class
- Approximate time: 5 min to pass out objects and allow time to think, then 10–15 min for full-class discussion

Classroom Activity 2: Life-Span Development Myths

Learning Goal 1: Discuss the distinctive features of a life-span perspective on development.

Learning Goal 2: Identify the most important processes, periods, and issues in development.

The two primary objectives of this activity are to introduce ideas and concepts that you will address during the course and to illustrate the relationship between research and everyday life. Often, students get frustrated in college courses because they fail to see a connection between research and their lives.

First, present the excerpted selection of life-span development myths commonly espoused by parents, teachers, and others (see **Handout 1** at the end of this chapter). Have the students think of more such myths and express their ideas about each belief. You might want to have the students get into groups of three or four to discuss their thoughts. Second, lead a discussion of relevant research evidence that contradicts these long-held beliefs. This will help initiate more discussion and help the students get acquainted with each other and with the central topics of developmental psychology.

Instructions for students: You, no doubt, already have many beliefs about life-span development. You may have adopted these beliefs from parents, friends, relatives, books, and/or television programs. Some of these sources may not be accurate. Traditionally, the beliefs passed down from one generation to the next were based on anecdotal evidence, because people did not have access to developmental research findings. Today, scientific data are more readily available. Parents may be able to apply evidence from research in developing their ideas regarding human

development. For each statement on the handout, indicate whether you agree or disagree with the statement, and write down your ideas regarding the statement.

Notes and Resources to Aid Classroom Discussion:

1. My baby started walking and talking earlier than other babies. I know my baby will be smart.
 - Infant behavior, in general (and specifically, the timing of walking and language), is not predictive of later intelligence. Some infant developmental tests (e.g., Bayley Scales of Infant Development) are helpful to assess developmental delays or advancement. If delays are noted, enrichment may be necessary. Basically, infant “intelligence” tests measure different types of behaviors (sensorimotor and social abilities) compared with adult intelligence tests (spatial and verbal). Habituation and dishabituation procedures have been found to be more predictive of later intelligence (less attention in habituation phase and more attention in dishabituation phase). (Chapter 3, “Sensory and Perceptual Development”)
2. I pick up my baby as soon as they start to cry. My friend thinks I am going to spoil the baby.
 - Crying is one way infants communicate their needs. In the early months, crying is not an attempt to manipulate caregivers; thus, quick responses will not spoil the infant. Mary Ainsworth’s attachment research has found that more sensitive, responsive caregiving is related to more secure attachments, more independence, more exploration of environment, and less crying. (Chapter 4, “Emotional Development”)
3. I only want to have one child, but my partner thinks that only children have problems relating to other children.
 - Research on only children suggests that they are achievement-oriented, bright, successful, and popular individuals with good personalities. They are less likely to join organizations, and they have fewer friends than children who have siblings. Yet, if they do join a group, only children are more likely to be the leader of that group. (Chapter 6, “Sibling Relationships and Birth Order”)
4. I think that in order to raise a well-disciplined child, I will have to use physical discipline.
 - Children disciplined with physical means are more likely to be angry, aggressive, fearful of the individual who gives the punishment, and violent. (Chapter 6, “Parenting”)

Logistics:

- Materials: Handout 1 (Development Quiz)
- Group size: small groups (five) to discuss the myths, and then full class for a large-group discussion
- Approximate time: 10–20 min for small groups, then 20–40 min for full-class discussion

Source:

Excerpted from Segal, J. (1989, July). 10 Myths about child development. *Parents*, 81–84, 87.

Classroom Activity 3: Theoretical Perspectives

Learning Goal 3: Describe the main theories of human development.

This activity introduces various theoretical perspectives and also allows students to determine how much of the material they already know. As an instructor, you will learn the students' strengths as well as the theoretical perspectives that need the most class coverage. This activity works best if most of the class has taken at least a general psychology class.

List each of the following perspectives (you may use fewer or modify labels to fit how you cover the course material), leaving room below each to add comments. Then, have students contribute terms, ideas, and “great psychologists” associated with each. By the end of the exercise, they will be able to see some similarities and dissimilarities for each group. In an online or blended class, you could have students contribute their ideas/terms/psychologists to a shared wiki or discussion post for each perspective.

Here is an example of this exercise from one class:

- Psychoanalytic: Freud, Adler, id, ego, superego, sex, early childhood, psychosexual stages, “mom’s fault,” Erik Erikson, unconscious, defense mechanisms, dreams, Jung, Oedipal complex, birth order, sibling rivalry, inferiority, libido
- Cognitive: Piaget, Vygotsky, Ellis, memory, information processing, Binet, Terman, intelligence tests, accommodation, assimilation, language, development, moral development, Kohlberg
- Behavioral/Social Cognitive: Skinner, Pavlov, reinforcement, punishment, imitation, Bandura, classical conditioning, operant conditioning, modeling, delay of gratification, Watson, token economy, systematic desensitization, behavioral modification, mazes, mechanistic
- Ethological: Lorenz, Bowlby, split-brain, neurotransmitter, dopamine, genetics, heredity versus environment, central nervous system, instinct, critical periods, pregnancy, genes, genetic counseling, DNA, autonomic nervous system, stress
- Ecological: Environment, culture, ethnicity, Bronfenbrenner

Logistics:

- Group size: full-class discussion
- Approximate time: 30 min

Source:

Irwin, D. B., & Simons, J. A. (1984). *Theoretical perspectives class activity*. Des Moines Area Community College.

Classroom Activity 4: Psychological Theories and Methods and Everyday Information

Learning Goal 3: Describe the main theories of human development.

This activity helps students see the relationship between psychological theories and methods and everyday reading material and information. Students should find two or three articles on human development from parenting or other popular magazines. They should bring the magazine issue or copies of the specific articles to class. In small groups, students can discuss their answers to the following questions: Who is the audience for the article (e.g., parents, teachers, or adolescents)? What is the topic of the article? What are some examples of information provided? Does the article emphasize heredity (nature) or environment (nurture)? What theoretical perspective does the author seem to use (e.g., psychoanalytic, behavioral, humanistic, biological, cognitive, or ecological)? Does the article rely on scientific findings, expert opinion, or case example? Do the conclusions of the article seem valid?

Also, have the students consider all of the magazine articles that their group has collected. Which theoretical perspectives seem to be most popular? What topics are getting the most coverage? Are most articles well-done and useful?

Logistics:

- Materials: popular magazine articles gathered by students
- Group size: individual, small group, and full-class discussion
- Approximate time: individual (1 hr), small group (15 min), and full-class discussion (30 min)

Sources:

- Paul, R. P., & Elder, L. (2007). Template for analyzing the logic of articles and textbooks. In *The miniature guide to critical thinking concepts and tools* (p. 13). Foundation for Critical Thinking Press.
- Simons, J. A. (1990). *Evaluating psychological value of magazine articles*. Central Iowa Psychological Services.

Classroom Activity 5: Comparing Research Methods

Learning Goal 4: Explain how research on life-span development is conducted.

Label the whiteboard (or use large Post-it notes or easels) with each of the different research methods discussed in the text (e.g., case study, observation). As a class, discuss the benefits and drawbacks of each method—write these on the board underneath the label as students provide their input. Once you have done this for each method, then you can begin thinking about how each method might be used.

Next, present the class with hypothetical research scenarios (see below or create your own) and have them decide which method(s) would be the best way to approach the question and why. Also, discuss why other methods might not be ideal in the given situation.

Example Research Scenarios:

1. You want to study the political beliefs held by adults in your state.

2. You wonder if children in small classes perform better in school than students in large classes.
3. You want to discover which parenting style is most common in your community.

Logistics:

- Materials: whiteboard and marker
- Group size: full-class discussion
- Approximate time: 30 min

Classroom Activity 6: Design an Experiment

Learning Goal 4: Explain how research on life-span development is conducted.

The purpose of this activity is to take students, step by step, through the basic processes of designing a research experiment. Given the number of new concepts (such as independent and dependent variables and random selection), the most effective way for students to understand what they are and how they are used is to see them implemented.

Choose a very basic study, such as one based on the question, “Does watching violent television increase aggressive behavior in children?” Begin by identifying the independent variables (What will your “violent” show be? Might you have a passive, nonviolent show too? Will there be a control group who watches nothing?) and dependent variables (How are you going to measure “aggression”? Determining both this and what constitutes a “violent” program should prompt an explanation of operationalizing.). Determine the age of subjects you wish to study (have students determine this and explain *why* they think that it is a valid/useful age group to focus on). Go through the process of how and where you might obtain subjects, and how you will assign them to the various groups. Develop a procedure for carrying out the experiment—where the participants will watch the show, what they will do following the viewing so that you may observe behavior to assess aggressiveness (playground, room with toys, problem-solving activity). Consider whether the study needs to be blind or double blind and the importance and logistics of both. Then, create some results and discuss possible interpretations, making sure to include consideration of any confounding variables or methodological limitations. To go even further, demonstrate how a write-up of this study would conform to the standard professional journal format.

Logistics:

- Group size: full-class discussion
- Approximate time: 45 min

Classroom Activity 7: Observations—Easier Said Than Done

Learning Goal 4: Explain how research on life-span development is conducted.

Have students watch 5 min of a popular cartoon that is likely to contain action that could be construed as aggressive behavior. (Adult-oriented cartoons on *ComedyCentral*, *AdultSwim*, or series aired after 10 p.m. on regular network and cable stations will fit the bill here.)

First, ask students to count the number of aggressive acts they see in the video clip. At the end of the segment, write down the range of counts that students recorded (it is likely the counts will vary widely). Discuss the reasons the students' data on aggressive acts varied so widely

Next, ask students to watch for a more specifically defined behavior (e.g., physical aggression that involves physical contact between two characters) and record the counts. Discuss the range of data gathered.

Discuss observer bias (Do they really *like* that cartoon?), cultural issues (perhaps “slapping five” would be considered aggressive in some cultures but not others), how the observer might factor in “intention” (e.g., Did one character actually mean to hit another character in the head, or was it an accident?), and so on.

Discuss reliability and validity issues in observations, and have students write a half-page about what they learned from the activity.

Logistics:

- Materials: video clip
- Group size: full class
- Approximate time: 10–15 min for watching video, 15–20 min for discussion

Classroom Activity 8: Critical-Thinking Essay Questions and Suggestions for Helping Students Answer Them

Learning Goal 1: Discuss the distinctive features of a life-span perspective on development.

Learning Goal 2: Identify the most important processes, periods, and issues in development.

Discuss the answers to the critical-thinking essay questions. The purpose of **Handout 2** is threefold. First, answering the essay questions will further facilitate the students' understanding of concepts introduced in Chapter 1. Second, this type of essay question affords the students an opportunity to apply the concepts to their own lives, which will facilitate their retention of the material. Third, the essay format also gives students practice expressing themselves in written form. Ideas to help students answer the critical-thinking essay questions are provided in **Handout 3**.

This activity can be modified based on how much time you have. Students could be asked to answer a subset of the questions or questions could be divided up among the class. Additionally, you could add a small-group component to the activity and have students answer the questions individually and then in groups before returning to the full-class discussion.

Logistics:

- Materials: Handout 2 (Essay Questions) and Handout 3 (Ideas to Help Answer)
- Group size: individual, then full class
- Approximate time: varied

† Personal Applications

Personal Application 1: Who Are You?

Learning Goal 1: Discuss the distinctive features of a life-span perspective on development.

Learning Goal 2: Identify the most important processes, periods, and issues in development.

The purpose of this exercise is to get students think about, and interested in, human development by focusing on themselves and their experiences. When we think about human development, we often do so in terms of a person's life story, such as those of Ted Kaczynski and Alice Walker presented at the beginning of the chapter. When we read the summary of others' experiences, it creates an image of who they are and of the road they traveled to get where they are. Our interest in human behavior is generated by the history each one of us has and the role it has played in creating the individuals we are.

Instructions for students: Write your own profile in the style of those presented in the text and begin your journey into the realm of life-span development with a description of your own life's journey. How would *you* be written up to this point in your life? What is your background, and what have you experienced that would tell the story of who you have become?

Use in the classroom: This can also be a classroom activity if students are willing to share. Ask for volunteers to present some events/aspects of their life that they feel have had a significant impact on who they are. As students share their stories, ask for reasons they believe certain aspects of their life have influenced who they are. Also, ask them if they experienced any major events/experiences that they *don't* think impacted the person they have become. To what do they attribute their strengths? Their weaknesses? If you are in an online class, this can be done as a discussion board topic. For additional impact and interest, share your own life story and the influences on your development.

Personal Application 2: What Do You Want to Know?

Learning Goal 1: Discuss the distinctive features of a life-span perspective on development.

Learning Goal 2: Identify the most important processes, periods, and issues in development.

The purpose of this exercise is to get students to focus on what they want to get out of the class as well as to expose them to the variety of topics addressed in the course. One of the unique aspects of taking a course in life-span development is that everyone can relate to it! The required material focuses on aspects of everyone's life, whether they have experienced it themselves or have a relationship with an older person who has. Certainly, there are new concepts, theories, and research findings to learn, but at their core are the fundamental developmental milestones that make up our life's journey and the results of those experiences.

Instructions for students: Make a list of what you want to learn from this course. Do you want practical information for parenting purposes? Do you have aspects of your own life that you are curious about? What behaviors have you observed in people around you that you would like to understand better?

Use in the classroom: Help students understand some of the practical applications of this course. Illustrate how, although it involves a great many theories and new concepts, the information they will learn has real-life implications and can provide insights into many of the behaviors and issues that they encounter daily. Specifically acknowledge students who are taking the course simply to fill a degree requirement. Challenge them to find something that interests them about life-span development. Keep careful note of your students' responses. This will guide you in planning your course, enabling you to spend additional time focusing on what your students are particularly motivated to learn.

Another option is to have students share their interests in class, at which time you can respond with some introductory "teasers" (a brief anecdote about an area of study or a particularly amazing research finding) regarding their areas of interest. This will assure them that their interests will be addressed at some point during the course, and it will whet their appetite for all the material to come. If you are in an online class, this can be done as a discussion board topic.

Personal Application 3: The Influence of Nature Versus Nurture in Your Own Life

Learning Goal 2: Identify the most important processes, periods, and issues in development.

After describing the concepts of nature versus nurture, give students **Handout 4** and have them answer the questions to facilitate their thinking about the influences of nature and nurture in their own lives.

Logistics:

- Materials: Handout 4 (Nature Versus Nurture in Your Life)
- Group size: individual, then full class
- Approximate time: individual (10 min), full-class discussion (5–10 min)

Personal Application 4: Erik Erikson and You

Learning Goal 3: Describe the main theories of human development.

The purpose of this exercise is for students to consider their own lives and the lives of their friends and family in terms of Erikson's psychosocial stages of development. Erikson viewed behavior as the manifestation of an individual's progressive responses to social "dilemmas" that present themselves throughout the life span. The direction that people take in dealing with the dilemma at each stage provides the perspective from which they will approach subsequent stages. Examining one's current behavior can indicate which stage of Erikson's theory an individual is experiencing, as well as provide some insight into how they may have responded to previous stages.

Instructions for students: What stage of Erikson's psychosocial theory are you currently in? In what stage are your friends? Your parents? Provide evidence to support your reasoning.

Use in the classroom: Demonstrate how to think through behavior with regard to Erikson's theory by using yourself as an example. Discuss the current stage of your life, behaviors that reflect your response to the dilemma posed by that stage as well as memories from past stages and relevant behavioral manifestations.

Personal Application 5: Do I Look Like a Pigeon?

Learning Goal 3: Describe the main theories of human development.

Learning Goal 4: Explain how research on life-span development is conducted.

The purpose of this exercise is to get students to understand the process of operant conditioning by employing it themselves. The processes identified by learning theorists are constantly occurring in our everyday lives. We do not realize how much of our behavior is followed by some kind of reinforcement. The impact of many of these consequences usually affects us only at a subconscious level, but if we are tuned in to their occurrence, the results become very clear. Bandura acknowledged that we are cognitive beings and that not only do we have the ability to self-reward and self-punish, but we do so regularly.

Instructions for students: Design an operant conditioning experiment to shape someone's behavior (yours, your roommate's, or your partner's). Identify either a bad habit that you would like to break or a good new one that you would like to establish. Describe how you would use reinforcement to change the behavior. Make sure to identify the reinforcement schedule and your expected results.

Use in the classroom: Have students brainstorm the behavior(s) they would like to tackle prior to starting the experiment. Provide your own example of something you would like to change about yourself or your spouse or partner, and how you might go about accomplishing it. Once they

have established their plan of action, tell them you will compare the results of all experiments in class at the end of the time period allotted.

Personal Application 6: Correlational Reflection

Learning Goal 4: Explain how research on life-span development is conducted.

This is a reiteration of the experiment described in “Lecture Suggestion 5: Understanding Correlational Research.” Conduct a simple correlational study by collecting data from your students. On the first day of class, have students fill out a brief, anonymous survey. Ask basic questions that will provide quantitative (numerical) answers that can be used to calculate correlations (e.g., How many siblings do you have? What is your shoe size? How tall are you?). Use the data provided by students to calculate the correlation coefficients between some of the variables and create scatterplots. If possible, calculate at least three coefficients—one positive, one negative, and one close to zero. For example, shoe size and height are very strongly positively correlated (taller students tend to have bigger feet), whereas shoe size and number of siblings are generally uncorrelated. Present these various findings to students. If you show them the scatterplots for the correlations, you can note that each point is one of them.

Instructions for students: Take a couple moments to review the data. Which things did you expect to be related? Which were a surprise? What do you think would explain some of the strong correlations such as shoe size and height?

Use in the classroom: Prepare the data ahead of time. Give students time in smaller groups to hypothesize which data they think will have a strong relationship. You could assign points for correct guesses and allow the groups to compete. Encourage discussion afterward.

¶ Research Project Ideas

Research Project 1: Answering Questions About Development

Learning Goal 1: Discuss the distinctive features of a life-span perspective on development.

The goal of this research project is to have students conduct research on a topic they find interesting in developmental psychology (**Handout 5**). Once students have been initially exposed to the field of developmental psychology (after several lectures and/or after they have read Chapter 1 of the text), have them write down one or two questions they would like to have answered by the end of the course. Presumably, they are interested in at least one aspect of development and have specific questions they would like to have answered (e.g., Does bilingualism influence cognitive development?). Direct the students to the library or library website where they should find at least two relevant and current journal articles. You will want to specify what journals you consider appropriate. Have the students write a brief report that addresses the questions listed in **Handout 5** for each article. Many universities offer library instruction; if your class is small enough, you may want to contact the library to schedule an instructional time slot so the students know how to find articles according to your specifications.

Use in the classroom: Have students present the question they have researched and the results of their investigation. If possible, organize these presentations so that students present their questions when you are discussing the chapter that is most relevant to their topic. A second option is to ask each student to answer the question they have researched as part of the final exam. This will mean that each student will be answering a different question on the final exam.

Research Project 2: Monitoring Contemporary Concerns in the Media

Learning Goal 1: Discuss the distinctive features of a life-span perspective on development.

Chapter 1 highlights life-span development topics, such as health and well-being, parenting and education, sociocultural contexts, and social policy, which are issues that receive frequent media attention. Have students monitor a newspaper, Internet news source, public radio news program, or television news program for a week and keep a record of stories that reflect each of these concerns (**Handout 6**). When they are done, they should tally the number of stories that reflect each concern. The students should then write a brief report in which they answer the questions listed in **Handout 6**.

Use in the classroom: Discuss students' answers to these questions. Find out what the dominant concerns are, what kinds of stories express these concerns, and whether the stories are examples of the life-span perspective. Be on the lookout for how well students appear to understand text material by noting the answers they provide and use their answers as opportunities to affirm their understanding or to amend it.

To introduce the importance of rigorous, systematic inquiry for understanding life-span development, contrast media presentations with textbook presentations. Have students compare and contrast topics they have found in the media with similar material in the textbook and see what they identify as important differences in the respective treatments.

Research Project 3: Using Technology to Enhance Out-of-Class Learning

Learning Goal 2: Identify the most important processes, periods, and issues in development.

Have students choose one of the following activities. If desired, students could write a brief reflection based on their experience.

Developing Websites for Specific Populations—Students should design a website that targets a specific population and provides information and services that *are guided by research, theory, and course material*. Thus, students should have some background information on the population before they tackle this assignment. The students can actually mount the activity on a computer server or create “paper” sites. If students mount the site on a server, there should be some disclaimer posted that the site is for a class project and does not offer real services (students

could link curious visitors to a more well-established site). We suggest reserving this activity for students who already know how to design web pages.

Discussion Groups—Many different online communities are devoted to just about every topic and developmental population. These groups provide a valuable opportunity for students to observe the current issues regarding the topic/population, and they allow students to compare and contrast the data with the course material. In addition, students can post some sample questions, start a topical thread, and note replies. Urge students to guard their privacy carefully in these online settings, however.

“Virtual Tours”—There are many organizations that provide information and services related to topics relevant to developmental psychology. Students can visit these sites and note how the information provided at each site relates to the class material. Recommend sites that are reputable and relate to the material presented in class. Be sure the sites are still active and the web addresses remain current.

Online Newspapers—Many major newspapers (e.g., *The Washington Post* and *The New York Times*) offer access to a limited number of online articles on their sites, but students can certainly access these publications through your institution’s library. These newspapers routinely publish articles and research reports involving topics and populations covered in developmental psychology classes. Encourage students to visit these sites periodically and compare and contrast the information with material presented in class. This activity could continue over an entire semester, with students keeping a weekly journal or diary of their observations.

Student Discussion Groups—Institutions often offer local applications (e.g., Blackboard, Web Board, D2L) that allow instructors to set up online student discussion groups. The better discussion groups almost function as support groups in the sense that students can get information, discuss course material, and share anxieties. However, it can be overwhelming for every student in a class to post messages and replies for a given topic. We suggest that instructors randomly assign four to five students to secured (or locked) discussion groups for the semester. In addition, instructors should routinely post “conferences” or topics that augment the course material. Students can craft brief reaction papers regarding their experiences over the course of the semester and append sample postings/replies. (Note: Data regarding individual student logins, login duration, number of posts, and so on may be inaccurate if the student is participating in discussion groups in other classes.)

Source:

Jarvis, P., & Creasey, G. (2002). *In-class activities for lifespan developmental psychology courses: An instructor’s manual*. McGraw Hill.

Research Project 4: Journal Article Critique

Learning Goal 4: Explain how research on life-span development is conducted.

Part of conducting psychological research is reviewing and understanding published research studies. In this research project (**Handout 7**), students will choose one of the topics that will be covered in this course (e.g., play, gender roles, moral development, effects of television, or memory and aging) and find a research report on the chosen topic in a development journal.

They should read the article and write a report about it. Request that they enclose a copy of the research article with their report. In addition to including the main points of the study, they should give their personal reactions to the research findings and address the questions in **Handout 7**.

Use in the classroom: Possible modifications of the project are to (1) assign specific articles to students; (2) have students choose articles all on one topic; (3) have students choose articles from only one journal; (4) have students read two different articles on the same topic; (5) have students read research articles that address a current social issue—for example, abortion, teenage pregnancy, racial prejudice—and decide what the research findings would suggest for social policy; and (6) have students compare journal reading to textbook reading and magazine reading. Which sections were difficult to understand? Which sections of their articles were easy to comprehend? How did the article compare with their expectations? Were their articles based on basic or applied research? What did the students see as the value of their articles?

Research Project 5: Poster Session

Learning Goal 3: Describe the main theories of human development.

Have each student select one of the theories and create a poster appropriate for a scientific conference explaining it. Posters should ideally be 36" tall × 48" wide. The posters can be printed in a local copy shop or through an online printer. If printed on a single sheet of paper, the poster can be somewhat costly (\$50–\$90). If cost is a concern, students could tile individual 8.5" × 11" sheets of paper or cut out sections and glue them neatly on to a poster board. Hang the posters on the walls of the classroom and give students time to browse the presentations.

Online Resources:

<https://guides.nyu.edu/posters>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1876493/>

<https://www.posterpresentations.com/free-poster-templates.html>

Use in the classroom: Possible modifications of the project are to (1) assign particular theories to different students for an equal distribution; (2) have students prepare a 1- to 2-min oral summary of their poster to present to the class; (3) post the posters as digital documents online; (4) present the posters to a more novice group such as a high school class or a local parenting group; (5) if the display space is available, have the class select at least one of each theory to leave up during the remainder of the class; and (6) ask students to consider the selection of posters as a whole. Which theories were the most popular? Why do the students think these were chosen? Which theories seemed likely to encourage explaining via diagrams? What other sorts of visual aids

were useful? Which theories were described using lists? How did the lists help make things clear? Which theories were easiest to summarize? Which posters were their favorites? Why? What was the hardest part of preparing the presentation?

Videos and Feature Films

Center on the Developing Child: Harvard University

<http://developingchild.harvard.edu/>

This is an online resource that involves video as well as current research clips for use in the developmental psychology classroom, created specifically for instructors. You can customize classroom presentations by embedding some of the clips into your PowerPoints or assigning students to various activities or clips.

The World According to Garp (1982)

Starring Robin Williams, Mary Beth Hurt, Glenn Close, John Lithgow, and Mark Soper.
Directed by George Roy Hill.

Based on the novel by John Irving, this film chronicles the life of writer T. S. Garp and his mother, Jenny Fields. The characters take the viewer on a roller-coaster ride from birth to death, with many life-altering and life-affecting events in between.

Awakenings (1990)

Starring Robert De Niro, Robin Williams, Julie Kavner, and John Heard.
Directed by Penny Marshall.

This film is based on a true story about neurologist Oliver Sacks, who has a ward full of comatose patients who have been in this state for decades. When Sacks finds a possible chemical cure, one patient bravely takes a leap of faith. The patient is now an adult, having gone into a coma in his early teens. The film delights in the new awareness experienced by the patients and then the upsets that come when the doctor and his patients must face the consequences of the drug's possible failure, both physically and emotionally.

Website Suggestions

At the time of publication, all sites were current and active; however, please be advised that you may occasionally encounter a dead link.

Adele Diamond

<http://www.devcogneuro.com/AdeleDiamond.html>

American Psychological Association (APA)

<http://www.apa.org/>

Association for Psychological Science (APS)

<http://www.psychologicalscience.org/>

Center on the Developing Child

<http://developingchild.harvard.edu/>

Children's Defense Fund

<http://www.childrensdefense.org/>

The Future of Children

<https://futureofchildren.princeton.edu/>

Office for Human Research Protections (Ethics for Human Research)

<http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.html>

Research Methods and Statistics

<http://psych.athabascau.ca/html/aupr/tools.shtml>

Resilience Research in Children

<https://ppc.sas.upenn.edu/research/resilience-children>

Handout 1 (CA 2)

Development Quiz

For each of the following statements, indicate whether you agree or disagree, and why.

- My baby started walking and talking earlier than other babies. I know my baby will be smart.
- I pick up my baby as soon as they start to cry. My friend thinks I am going to spoil the baby.
- I want to have only one child, but my partner thinks that only children have problems relating to other children.
- I think that in order to raise a well-disciplined child, I will have to use physical discipline.

Source:

Excerpted from Segal, J. (1989, July). 10 Myths about child development. *Parents*, 81–84, 87.

Handout 2 (CA 8)

Critical-Thinking Essay Questions

Your answers to these kinds of questions demonstrate an ability to comprehend and apply ideas discussed in this chapter.

1. Explain the eight basic characteristics of the life-span perspective in your own terms.
2. The textbook provides current and comprehensive coverage of four contemporary concerns in life-span development: health and well-being, parenting and education, sociocultural contexts and diversity, and social policy. In your own words, explain the nature and importance of each of these four contemporary concerns. For each concern, also provide one example from your own life and times that illustrates how it relates to you personally.
3. Explain the meaning of (a) nature and nurture, (b) continuity and discontinuity, and (c) stability and change. Also, explain why current life-span developmentalists do not adopt extreme positions on the three issues.
4. Compare and contrast the psychoanalytic theories of Freud and Erikson. Also, explain whether Erikson changed psychoanalytic theory in a fundamental way.
5. Compare and contrast the Piagetian and information-processing approaches to cognitive development. Which approach appears to be more “developmental”? Defend your answer using the characteristics of life-span development outlined in Chapter 1.
6. Think about your life during the past 24 hr from the perspective of behavioral and social cognitive theories. Provide at least two examples of how (a) rewards, (b) punishments, and (c) observational learning have influenced your behavior during this time frame.
7. Explain and evaluate ethological theory by indicating its strengths and limitations, and the aspects of development that are not explained by this approach to life-span development.
8. Define and distinguish the five systems in Bronfenbrenner’s ecological theory. Provide at least two examples of each system by citing aspects from your own personal life.
9. What are the strengths and weaknesses of the cross-sectional and longitudinal approaches to research? In what ways do cross-sectional and longitudinal designs differ from experimental strategies? What kinds of conclusions can you draw from each?
10. What precautions must be taken to safeguard the rights and welfare of a child who might be a psychological subject? In your answer, relate each precaution to a specific ethical concern. In addition, discuss at least two examples of other types of subjects who pose similar ethical difficulties for researchers.

Handout 3 (CA 8)

Ideas to Help You Answer Critical-Thinking Essay Questions

1. Consider examples from your own life for each of the seven characteristics of the life-span perspective. For example, for the characteristic that development is multidimensional, you may reflect on the ways in which you have changed physically (growing larger and increased hair growth during puberty), cognitively (changing music preferences from simple children's tunes to an appreciation for adult music with deeper, more substantial meaning), and socioemotionally (changes in the relationship with parents over time).
2. Keep in mind that the *nature* of something refers to what it is—the characteristics which define it. The *importance* of something refers to the impact that it has in the context in which it occurs or functions. As you think and write about each of the four contemporary concerns in life-span development and consider them in terms of your own life, combine your consideration of their nature and importance on the particular *influence* they have on growing and developing human beings.
3. After you explain the issues of nature and nurture, continuity and discontinuity, and stability and change, think about an *extreme* position for each. Work through the process of disproving such drastic viewpoints with reasoning and examples and present your explanation as to why such extremes are not supported by life-span developmentalists.
4. Start by separately listing characteristics of each theory in a column. Then, match up the concepts that appear in both columns to delineate the similarities. After you have completed the similarities, note the characteristics that appear in only one of the columns to delineate the differences.
5. Begin by reviewing the main themes of development outlined in Chapter 1 and create a table of the two approaches regarding each theme. You will then be able to visualize the areas in which they converge and differ, and depending on what you find, you can more easily draw your conclusion about their “developmentalness.”
6. Our own lives are rich with demonstrations of the processes of behavioral and social cognitive theories. When you identify your own personal experiences with them, you ensure that you both understand and remember the basic tenets of these approaches to behavior. Keep in mind when thinking about the last 24 hr of your life that your example does not necessarily have to include your actual *experiencing* of the learning process, but rather much behavior reflects the *manifestation* or results of that process. Also, always check with your instructor that your personal examples are correct. Cognitive theories and processes can be tricky, and if your example is not quite right, it can mislead you.
7. Review the main themes of development outlined in Chapter 1. Create a chart of the themes and note where ethological theory falls with regard to each. This will provide you with the

basis for identifying its strengths and weaknesses, which in turn will provide you with the answer for what may be missing from this approach.

8. Examples of concepts and phenomena are not separate and distinct entities from the concepts themselves. Sometimes, to understand something, we must incorporate the example as part of the explanation; this gives us the ability not only to recognize the nature of the concept itself but to identify its importance and contextual impact. Use your examples to guide you in your definitions and delineation of Bronfenbrenner's systems for a more comprehensive coverage of the ecological theory.
9. Choose a behavior you would like to study developmentally. Approach it both longitudinally and using a cross-sectional design. Where would you have challenges with each? What would you gain from each approach? How might you decide which one ultimately to use? Answers to these questions will enlighten you on the strengths, weaknesses, and useful contexts of each design.
10. As you read through each ethical concern for life-span developmentalists, consider its relevance to subjects of all ages. Do those ethical concerns relate and apply to all potential age groups that are studied or are they only relevant to individuals of a particular age? Are there ethical concerns that are only valid for certain ages but would not be an issue with others? Which concerns cover all age groups, thus indicating a greater issue of general unethical methodology? By familiarizing yourself with these aspects of research design, you will gain a greater understanding of issues life-span developmentalists must consider when studying human behavior.

Handout 4 (PA 3)

Nature Versus Nurture in Your Life

1. Are you more a product of your environment or of your genetics? Why?
2. Place an *X* on the lines below to indicate where you would place yourself on the nature/nurture continuum on these issues:

Physical looks (hair, eyes, skin, height)

NATURE NURTURE

Weight or build

NATURE NURTURE

Intelligence

NATURE NURTURE

Personality

NATURE NURTURE

Recreational Interests and Hobbies

NATURE NURTURE

Career Interests and Goals

NATURE NURTURE

Spirituality or Religious Beliefs

NATURE NURTURE

3. What evidence is there in your family for the NATURE point of view?

4. What evidence is there in your family for the NURTURE point of view?

Handout 5 (RP 1)

Answering Questions About Development

The goal of this research project is to conduct research on a topic you find interesting in developmental psychology. You were asked to write down one or two questions that you would like to have answered by the end of this course (e.g., Does bilingualism influence cognitive development?). Investigate the topic by going to the library or searching an appropriate online database and finding **at least two relevant journal articles**. Write a brief report that incorporates the following information:

- What is the question you are investigating?
- Why is this question interesting to you?
- How did you go about determining the answer to your question?
- Describe the information you located to address your question.
- What questions has this new information stimulated you to ask?

Handout 6 (RP 2)**Monitoring Contemporary Concerns in the Media**

Chapter 1 highlights life-span developmental topics, such as health and well-being, parenting and education, sociocultural contexts and diversity, and social policy, which are issues that receive frequent media attention. Monitor a newspaper, radio news program, or television news program for a week, and keep a record of stories that reflect each of these concerns. Search the paper for news items or listen to news broadcasts and make a record of stories that reflect these concerns. When you are done, tally the number of stories that reflect each concern. Note that a story may reflect more than one of the topics. Then, write a brief report in which you answer the following questions:

- What was the most frequently expressed concern?
- Were the concerns you encountered in each category focused on one particular kind of story? Or, were there a number of different kinds of news items that reflected a variety of concerns within each category? Explain your answer.
- Did the stories reflect a life-span perspective? Or, did they reflect some other way of viewing the contemporary concerns? Explain your answer.
- Can you find information in this chapter that is related to one story from each topic and that helps you to understand it better? Explain your answer.
- What information do you wish you had in order to understand the story better?

Handout 7 (RP 4)

Journal Article Critique

Part of conducting psychological research is reviewing and understanding published research studies. In this research project, you will choose a topic covered in this course (e.g., play, gender roles, moral development, effects of television, memory, and aging) and find a research report in a journal (e.g., *Adolescence*, *Child Development*, *Developmental Psychology*, *Family Therapy*, and *Journal of Marriage and the Family*) on the chosen topic. Read the article and write a report about the article. Enclose a copy of the research article with your report. In addition to including the main points of the study, give your personal reactions to the research findings.

Questions:

- Can you use the title of the study to identify the independent and dependent variables? (Many titles are in this format: “The Effects of IV on the DV.”)
- What did you learn from the Introduction section? What is the historical background of the research topic? Which earlier research findings are presented as most relevant to the current study? What theoretical explanations are emphasized in this section? What is the hypothesis of the present study?
- What did you learn from the Methods section? Who were the subjects? What procedures (e.g., apparatus, directions, assessment tools) were used?
- What did you learn from the Results section? What kinds of statistical procedures were used? What did you learn from charts, frequency tables, and bar graphs? What results did the authors say were statistically significant?
- What did you learn from the Discussion section? How did the authors interpret their results? Did they provide alternative explanations? Did they talk about the limitations of the present research study? What future research studies were suggested?
- What kinds of ideas did this article make you think about? Can you design a similar study on this topic?