LANGUAGE DISORDERS IN CHILDREN

Fundamental Concepts of Assessment and Intervention

Third Edition

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PREFACE

Welcome to the third edition of *Language Disorders in Children: Fundamental Concepts in Assessment and Intervention*. I'm most pleased to introduce my coauthor for this edition, Dr. Victoria Henbest. She brings expertise, energy, and commitment to this new edition; we share a passion for creating a textbook to help instructors create a dynamic learning experience for their students. We also share the goal of providing information that sometimes is *not* shared—the rationale, reasoning, and thinking that master practitioners use when developing and implementing assessments and interventions.

Below, Dr. Henbest will spotlight content areas that are her particular areas of concentration in this edition. First, however, I will begin by focusing on four areas of content. One area of concentration is entirely new, one is carried over from previous editions, and two areas are now updated to make this text even more user-friendly for instructors and students.

Unique to this edition, we present a model, presented by way of a "story" (an allegory), to explain the dimensions to consider when developing or choosing interventions. In previous editions, we used the simple continuum of "adult directed" versus "child directed" to explain the different categories of intervention (and we used the term "hybrid" to describe methods that incorporated both intervention categories). While practitioners continue to use these techniques, classifying interventions as (a) adult directed, (b) child directed, or (c) hybrid is not sufficient to capture the nuanced decision making currently on our professional radar. I am speaking specifically about interventions for children with autism and some of the newer approaches used in morphosyntactical interventions. Now clinicians deliberately move in and out of intervention stances drawing from both the "child-directed" and "adult-directed" side of the continuum. In our analogy, the student must choose between a naturalistic setting or a structured context to learn a complex process. They also must consider the guides they would like to help them in this learning process. Will they learn from an "experienced-but-academically-untrained" individual (via implicit learning) or will the information be more explicitly presented to them via a trained expert? The "setup" for this problem is embodied in the analogy. Through this storytelling experience, the instructor engages students in a thought experiment that guides students to consider the context (naturalistic versus structured) and type of guidance (explicit versus implicit) needed to learn complex information and to connect this analogy to children who need assistance in the language-learning process. Once students integrate this analogy, all the interventions in the textbook—used across disorder categories, contexts (spoken language versus written language), early-development versus later-complex-language-learning stages can be considered and reflected upon using this model of intervention.

The second area of focus was introduced in earlier editions of the textbook—the five communication subdomains. Again, the goal has always been to take complex information and present it in a way that is meaningful to students. The subdomain model also provides a metacognitive

technique allowing students to see how experienced clinicians systematically consider different aspects of communication (moving from prelinguistic communication to complex sentences) during the decision-making process. An exciting affirmation is when experienced practitioners first read this approach and say, "You know I was doing this all along, but I didn't know I was doing it!"

Next, I want to briefly discuss two (related) areas that are reimagined for this third edition. They are the (a) emphasis, threaded throughout the text, on developing students' critical thinking skills and (b) presenting discussion questions, reflective activities, case studies, and suggestions for videos that can serve as a catalyst for discussion and decision making.

Our profession continues to work to identify the role of critical thinking in shaping future professionals and to understand how best to foster critical thinking skills. I was heartened to see a recent exploration of students' critical thinking skills in graduate school in a recent ASHA journal. The authors stated,

> There have been some students who struggle to integrate information from the traditional academic classroom into clinical practice. *Perhaps, these students' previous undergraduate educational experiences have focused primarily on rote memorization and retention of factual information . . . rather than on crucial manipulation and integration into a clinical setting.* These students may not have had opportunities to learn how to think critically or practice applying critical thinking skills. Importantly, critical thinking skills can be taught and improved. (Hurley et al., 2023, p. 15)

One step to building students' critical thinking skills is to more clearly explain the rationale for focusing on the metacognitive problem-solving behaviors underlying effective clinical decision making. In Chapter 4, we work to "make our case to students" and then provide meaningful opportunities within the chapter and throughout the book for students to "flex their critical thinking muscles." This text emphasizes case studies and critical thinking activities. We have additionally included three new appendices to this book that are designed to help instructors include in-depth classroom activities with multiple opportunities for learning in teams/groups and class discussion.

Finally, we are excited to help instructors by providing two different options for classroom design available via the instructor's manual. There will be the traditional lecture-style outlines (PowerPoint slides), but we also provide the tools to foster higher-level thinking and problem solving. This second format suggests requiring students to read the chapters prior to the discussion (brief, but low-stakes weekly quizzes will motivate students to read the text prior to the class discussion), provides activities to foster high-level thinking, and then provides outlines for brief mini-lectures (to sum up the "big ideas" for each chapter). The goal is to provide students more time to work in small groups or independently on engaging activities, to encourage students to "take chances," form hypotheses, explain their rationale and thinking, listen and engage with others' ideas, and contrast and discuss differences in ideas and rationales.

If you are reading this as the instructor, we believe we have created a text that allows you to focus your attention on promoting high-level thinking and discussion. As a student, we hope you see this course as an opportunity to take an exciting first step in becoming an outstanding clinician and professional problem solver.

I now turn this introduction over to my coauthor, Dr. Victoria Henbest. . . .

I am most privileged to coauthor the third edition of this textbook with Dr. Joan Kaderavek and am sincerely grateful to have the opportunity to contribute to a textbook

that I have found to be so instrumental in my own teaching. I adopted the second edition of this textbook in my first year of teaching, upon the recommendation of a colleague—"get the Kaderavek text, it's an 'authority' and written in a way that is so digestible for students—I used and loved it when I taught that course." As a newcomer with relatively little teaching experience or training, and little time to begin preparing to teach, I took her recommendation and set out to teach my first child language disorders course—in a traditional lecture style. Within that first semester, however, my teaching style shifted. I became less of a lecturer and more of a guide-on-the-side. I began assigning the application activities at the end of the textbook chapters for students to complete during class and reduced my lecture time while also embedding the case studies and discussion questions provided with the textbook into my lectures.

Today, if you were to walk by my classroom, you might find me delivering a short lecture to clarify terminology or modeling certain clinical concepts, but most likely you will find students "teaching" one another about intervention approaches (and even offering a rationale for their selection!). You might hear them role-playing as a client and clinician, explaining to a hypothetical parent the results of an evaluation, or describing graphed data representing a child's communicative progress from baseline to intervention. I share these examples with you because we believe you, the instructor, will find that the application activities, discussion questions, and cases provided in this text will transform the way you teach. In this third edition, we have taken extra care in developing even more activities, opportunities for discussion, and cases for clinical problem solving. I echo Dr. Kaderavek, in that our goal with this text is to help students, early in their education, flex their clinical thinking skills. We think you'll be pleasantly surprised with some of the thoughtful discussions and application of course content that will come from students engaging with this textbook.

I want to highlight some of the ways in which we have updated the content in this textbook—new content that I helped to design. First, in the third edition, we have prioritized the role of the culturally responsive clinician in assessment and treatment of child language disorders. In keeping with the second edition, multicultural considerations are interwoven throughout the chapters within the text. Now, in this third edition, there is even more! We think students and instructors will find real value in how we challenge students to think about how they approach clinical scenarios for children and families whose cultures and languages may be different from their own. We also have repackaged how we present the principles of evidence-based practice (EBP) in a way that we believe is palatable for both students and instructors. In particular, we emphasize the role of single-case research design in our field and through application activities, we invite students to explore quality factors related to research so that they may begin to develop their skills for becoming good consumers of science, without being bogged down (at this point in their training) with excessive research details. Lastly, in Chapter 10, we are particularly enthusiastic about the stronger emphasis on assessment and treatment for conventional literacy skills for school-age children, prioritizing the interconnections between spoken and written language and the role of morphological awareness and spelling in literacy instruction.

We are happy to reintroduce our contributing authors for the following chapters in Part II of the textbook: Chapter 7, "Children With Hearing Loss," written by Dr. Lori A. Pakulski and Dr. Erika Squires; Chapter 9, "Autism," written by Dr. Angela B. Anthony; and Chapter 11, "Augmentative and Alternative Communication," written by Dr. Julia M. Fischer and Dr. Pamela Terrell. These authors bring an invaluable wealth of knowledge and updates to their respective chapters and we are most grateful for their contributions, which are written in keeping with the goal of this textbook. We are grateful for their sincere and thoughtful contributions and the ways in which they seamlessly present challenging topics within their relative areas of expertise.

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PART I

Foundations of Assessment and Intervention in Language Disorders

In Part I of this textbook, we present fundamental concepts related to assessment and intervention for children with language disorders. These concepts are the "necessities." That is, they make up the general framework from which we, as clinicians, complete evaluations and provide treatment services for all individuals with language disorders. The principles presented in Part I are essential to understand the information in Part II.

To get started, it is important to let you know that this book's goal is not to teach you facts that can be learned and (sometimes, as we well know from personal experience) forgotten. We hope that you read this book as if it is a conversation we are having together. We encourage you to take your time and think about the prompts and contemplate the questions posed in the many case examples and problem-solving activities. We spent time thinking about how to present new information in ways that are accessible and engaging.

With that perspective, here is a brief summary of what we hope to achieve in each chapter. In Chapter 1, we frame this current coursework in relationship to your overall already completed communication disorders coursework (i.e., the speech chain). When starting out on a new venture, it is helpful to know where you've been and where you are going. Next, we present the fundamental principles underlying evidence-based practice (EBP). We provide you with an "EBP starter's manual" and some suggestions to take the sting out of tackling scientific research. And, yes, "scanning" a few research articles is allowed and even encouraged. We will continue throughout Part II to point out how clinicians use EBP to guide clinical decision making.

Chapter 2 is a pivotal chapter in this textbook because here we present a unique-to-this-textbook approach that helps guide beginning clinicians in their developing decision making. We call the model the communication subdomains. This model is an accessible, tried-and-true approach that has been field tested by our many years of teaching this coursework to students just like you. This model helps students understand (a) what aspects (i.e., subdomains) of language will be produced by children (b) in what order and (c) how to use the model to guide assessment and intervention decision making. We provide many examples of conversations that occur in the therapy room, examples of therapy goals, and scenarios to make this an engaging, rather than a rote-learning, experience. We also intertwine this information with (a little) language theory so that communication subdomains are framed within familiar language theories.

Chapter 3 covers the principles of assessment. We frame our assessment guidelines by continuing to emphasize how different levels of development, different language disorders, and different life experiences (e.g., children who come from nonmajority cultures) call for flexible perspectives.

In Chapter 4, we say the quiet part out loud. We want YOU to begin to practice making clinical decisions. Thinking and problem solving in "not real-life" circumstances is the best way to develop the fundamental skills you will need in the field of communication disorders. We explain why higher-level thinking is a requirement for future professionals and we present a series of clinical situations and decision-making prompts to practice these skills. To practice this decision making, we use examples from the perspective of a school-based professional. We present a variety of situations such as (a) decisions impacting a child's ability to be included in the general education classrooms, (b) methods to increase students' motivation to engage in language interventions, and (c) issues that emerge when we work with families. Developing clinical decision-making skills is another major theme that will reappear in Part II of this book.

In Chapter 5, we present intervention principles used in clinical programs regardless of a child's communication disorder. Continuing our theme of engaging and enticing you to use your higher-level thinking skills, we tell you a story to help you in this process. The story is an analogy to clarify how clinicians use different learning situations and varying levels of instructional support within intervention approaches. This story makes complex information easy to learn and easy to remember and draws upon your developing clinical decision making. Finally, throughout Chapters 1 to 5, we emphasize the multicultural considerations that will impact and guide your thinking and clinical practice.

CHAPTER 1

The Foundations of Language and Clinical Practice

CHAPTER OVERVIEW QUESTIONS

- What are the differences between the following terms: developmental language disorder, language difference, and late language emergence?
- What are the three levels of communication described within the speech chain? Which level is the focus of this book?
- What are examples of communication behaviors that represent form, content, and use?
- What differentiates Level I, Level II, Level III, and Level IV research in evidence-based practice (EBP)? How might we use information from different levels of evidence to guide intervention?
- Define culturally responsive practice. Why do communication professionals need to be aware of factors that might influence interactions or treatment of children and families?

Welcome to this book about language disorders. The language disorders course in which you are now enrolled is probably your first course focusing on children with communication deficits. Up to this point, your training has concentrated on communication development in children who are developing typically. It is an exciting professional turning point when you begin to consider how to guide assessment and interventions for individuals with communication disorders.

This book's goal is to help you think like a practitioner. We focus on underlying theories and fundamental principles guiding clinical decision making. The ability to synthesize information, weigh scientific evidence, and see connections between basic principles will prepare you to work with children who have language impairments. However, one book on language disorders cannot teach you everything you need to know to be a successful speech-language pathologist (SLP), special educator, or communication specialist. This book does not try to teach you everything! Instead, we have chosen to (a) emphasize basic principles and then (b) discuss selected assessment and intervention protocols as illustrative examples. We believe at this early point in your professional training, it is better to provide more extensive information and examples for some exemplary assessment and intervention approaches (and clarify why they are exemplary) in contrast to briefly describing many different approaches.

To help you become a decision maker, we include many examples, case studies, and opportunities for you to practice problem solving. By working through the examples, you will learn important analytic processes. In this chapter, we introduce important cornerstones of the profession, including (a) definitions and background on language and language disorders, (b) a model of communication (i.e., the speech chain model), (c) the language domains of form content and use, (d) a clinical decision-making model called evidence-based practice, and (e) introductory information about cultural and linguistic diversity.

DEFINITIONS AND BACKGROUND INFORMATION: LANGUAGE DISORDERS

Understanding the difference between definitions is an important component of communication disorders; specifically, there are differences between the terms of language, speech, and communication. **Language** is a complex and dynamic system of conventional symbols used for thought and expression. Language can be expressed orally, through writing or pictured symbols, or manually (e.g., sign language). Language refers to the words or symbols we use and how we use them to share ideas and get what we want.

Speech is not the same thing as language. **Speech** is how we say sounds and words. While language involves a symbol system, speech is the articulation and the rate (i.e., fluency) of speech sounds and quality of an individual's voice. **Communication**, in contrast, includes sharing information via symbolic and nonsymbolic information (i.e., facial expressions, body language, gestures, etc.). As an example, if we frown and cross our arms, although we are not using symbolic communication, we are communicating.

A communication disorder may be evident in the process of hearing, language, speech, or in a combination of all three processes. Approximately 19% of school-age students in the United States receiving special education qualify under the category of speech or language impaired. This is approximately 1.1 million students (National Center for Education Statistics [NCES], 2022). In 2022, 90% of school-based SLPs served students with language disorders (American Speech-Language-Hearing Association [ASHA], 2022b); this group of children will be a large component of your caseload as a school practitioner.

A subgroup of this special education category are children with **developmental language disorder (DLD)**; this is one of the most frequently diagnosed language disorders (approximately 7.5% of schoolchildren). You will learn more about DLD in Chapter 6; in general, DLD is diagnosed when

an individual has difficulty understanding and using language in the absence of brain damage, hearing loss, or intellectual disability. Practitioners in schools also serve children who have learning disabilities (33%), autism (12%), intellectual and developmental disabilities (6%), multiple disabilities (2%), and hearing loss (1% of schoolchildren; NCES, 2022). Children identified with such disabilities also demonstrate language challenges.

A **language disorder** is impaired comprehension and/or use of spoken, written, and/or other symbol systems. A language disorder can represent a deficit in receptive language, expressive language, or a combined expressive-receptive deficit. **Receptive language** refers to an individual's ability to understand and process language; **expressive language** refers to an individual's ability to express and communicate meaning with language. Typically, an individual's receptive language abilities are better than his or her expressive language ability.

Late language emergence (LLE) is a delay in language onset in very young children (under the age of 3) with no other diagnosed disabilities or developmental delays in other cognitive or motor domains. LLE is diagnosed when language development trajectories are below age expectations. Toddlers who exhibit LLE have also been referred to as "late talkers," "late language learners," or "late bloomers." It is challenging to determine which toddlers will catch up to their peers and which children will have persistent language impairments. Approximately 40% of children with LLE as toddlers will continue to have delays throughout childhood; between 20% and 40% are later diagnosed with developmental language disorder (Bishop, 2017).

An individual with a language disorder is different from someone with a language difference. **Language difference** results from a variation in communication used by a group of individuals that reflects and is determined by shared regional, social, or cultural/ethnic factors. A child with a language difference may speak a nonmajority dialect of American English or may be learning English as a second language. It is essential that professionals distinguish language differences as compared to true disorders in speech and language. For example, a teacher may say to her students, "*I've got y'all's assignments here*." This is a form of dialect associated with the southern United States; although it may be an unfamiliar expression to some U.S. speakers, it does not represent a language disorder. Information regarding language differences associated with dialect use is presented throughout this book.

As a final important point, we want to underscore that much of what you will learn about language disorders applies across disability categories. Rather than focusing on a child's diagnostic category (e.g., autism, specific learning disability), skilled practitioners use a descriptive-developmental framework to guide intervention. A **descriptive-developmental approach** focuses on a student's language development and function (e.g., pragmatics, morphosyntax, semantics) within a general developmental framework and believes that describing this functioning is more important than applying a diagnostic label. A practitioner who uses a descriptive-developmental approach works to understand the individual's communication strengths and limitations, work with an individual at his developmental capacity, and supports an individual's developmental progress. Describing a child's functioning within naturalistic contexts is more important than applying a diagnostic label. This approach will be clarified in later chapters, when we discuss the language subdomains and think about how practitioners make clinical decisions regarding assessment and intervention.

As practitioners implement the developmental-descriptive model, they also consider an individual's cultural and linguistic background. Information regarding cultural and linguistic diversity (CLD) will be threaded throughout this textbook. To get started regarding CLD considerations, read Focus 1–1 in this chapter.

Keeping the developmental-descriptive approach at the forefront is particularly important because we have organized subsequent chapters in this book by disability category. There is, for example, a chapter on autism, a chapter on intellectual and developmental disabilities, and so forth. We organize chapters

Focus 1–1. Multicultural Considerations

Cultural and Linguistic Diversity

We will be discussing factors related to cultural and linguistic diversity (CLD) throughout this book. In its narrow definition, CLD is used to describe speakers who are non-English proficient or who have limited English proficiency (sometimes referred to as dual-language learners, English learners, or **English language learners [ELLs]**). In its broader interpretation, CLD considers a range of variables, including language, age, disability, national origin, immigration status, culture/values/belief systems, ethnicity/race, geography, family type, and gender identity (ASHA, 2017).

A major challenge to the speech-language pathology field is that as of 2020, 91% of the members of ASHA identified as White. This is in contrast to the general population of the United States where 57.8% of the population is White, 18.7% are Hispanic and Latino Americans, and 12.1% are Black or African Americans (U.S. Census Bureau, 2020). Furthermore, the diversity of the student population served by clinicians in schools has increased, with half of the students now being children of color (NCES, 2022). With growing diversity, clinicians need to be aware of, sensitive to, and responsive to cultural differences across diverse populations (Hopf et al., 2021).

In order to minimize the impact of racial disparity between the professionals who provide services and the individuals requiring services, practitioners must prioritize being culturally responsive in their clinical practice. **Culturally responsive practice (CRP)** means that when making assessment and treatment decisions, the practitioner considers each client's language variation, opinions, values, and belief system (Hyter & Salas-Provance, 2023).

In the past, clinicians were encouraged to strive for cultural competence. More recently, however, **cultural responsiveness** is the preferred term to reflect the idea that "competence" is not an achievable goal. Rather, our skill at supporting and interacting with clients from a variety of linguistic and cultural backgrounds is a dynamic, complex, and ongoing process; it is important to acknowledge our responsiveness will vary depending on the context and our own experience and is "a work in progress."

Our goal in working toward CRP requires ongoing self-assessment, cultural education, openness to others' values and beliefs, and implementation of evidence-based practice. In order to become a culturally responsive clinician, we embrace the concepts of **cultural humility** and increasing our **cultural self-awareness**. Cultural humility and self-awareness refer to the understanding that one must begin with a personal examination of one's own beliefs and cultural identities to better understand the beliefs and cultural identities of others. We are open to learning from others whose culture is different from our own and use self-reflection to understand how society and one's own experiences influence our belief systems. ASHA offers clinical reflection tools to support practicing clinicians in increasing their cultural self-awareness regarding culturally responsive practice.

As an initial opportunity in the journey of cultural self-awareness, your instructor may suggest that you read Appendix A in this book and complete the survey included in the appendix. From this foundation, you can begin to critically examine factors potentially influencing your interactions and communication with others. This exercise can be an important first step in fulfilling ASHA's ethical requirement that clinicians be aware of their own race, language variety, cultural norms, and abilities, as well as how their biases may influence interactions with clients (ASHA, 2017; O'Fallon & Garcia, 2023).

by disability categories because—in our teaching experience—beginning practitioners learn most easily with this organizational strategy. However, to counterbalance our organizational strategy, we continually clarify descriptive and developmental similarities between disability groups and highlight the clinical decision making that underscores the connections between intervention approaches across disability types. Read more about categorical versus descriptive approaches in Focus 1–2.

Focus 1–2. Learning More

Categorical Versus Descriptive Models of Language Disorders

The categorical model organizes language disorders on the basis of an individual's syndromes of behavior; it is fundamentally a medical model. Its advantages are that it (a) is easily understandable, (b) often is necessary to qualify a child for educational services, and (c) provides a basic explanation of how a particular child may be different from other children. The limitations of the categorical model are the following:

- There is not always a cause-effect relationship between an individual's diagnosis and the language impairment. Does a hearing loss mean that a child will automatically have a language delay? (You will read more about this in Chapter 7.)
- Children with different diagnostic labels may be quite similar. A child with a pragmatic disorder may be classified as being on the autism spectrum, having an intellectual and/or developmental disability, or having a developmental language disorder.
- Children's degree of involvement may vary dramatically within a diagnostic category. For example, a child on the autism spectrum may only require minimal support in the classroom; the diagnostic label may unfairly prejudice teachers or communication partners with regard to the child's abilities.
- Knowing a child's diagnostic classification may not be very helpful in planning an intervention program. Practitioners instead use a decision-making process based on an individual's communication strengths and limitations.

THE SPEECH CHAIN

The **speech chain model** is a basic model of communication used to explain the processes of communication from the speaker's production of words, through transmission of sound, to the listener's perception of what has been said (Denes & Pinson, 2001). We present this model to point out how language fits into an individual's communication system. The speech chain model is visually presented in Figure 1–1.

The first point we want to emphasize is that the speech chain model reminds us that language has both a receptive and an expressive component. The speaker/listener role is visually represented in Figure 1–1 with the left-to-right nature of the diagram. A good communicator speaks and listens. Within a conversation, a person alternates between listening (using receptive language) and speaking (using expressive language). A competent communicator effortlessly monitors the listener and produces meaningful language output. Remember that language output can be represented by spoken language, writing, picture symbols, or manual communication (i.e., sign language).

The second point about the speech chain is that the communication system requires a number of mechanisms to occur. Acoustic information must be transferred (Level 1 in Figure 1–1), motor activity must take place (Level 2), and the brain is activated at Level 3 to create meaningful symbolic (i.e., linguistic) information. All three levels of the system must be operating effectively for communication to occur. We elaborate on each of the three levels below.

Level 1 represents the acoustic level of communication: the external or environmental system. This level describes how physical energy is transferred between communication partners. In its simplistic form, Level 1 represents the molecular vibration forming sound waves and transferring physical energy from the speaker to the listener. It is very likely you studied the external physical component of communication in a course called Speech Science or Physics of Sound.

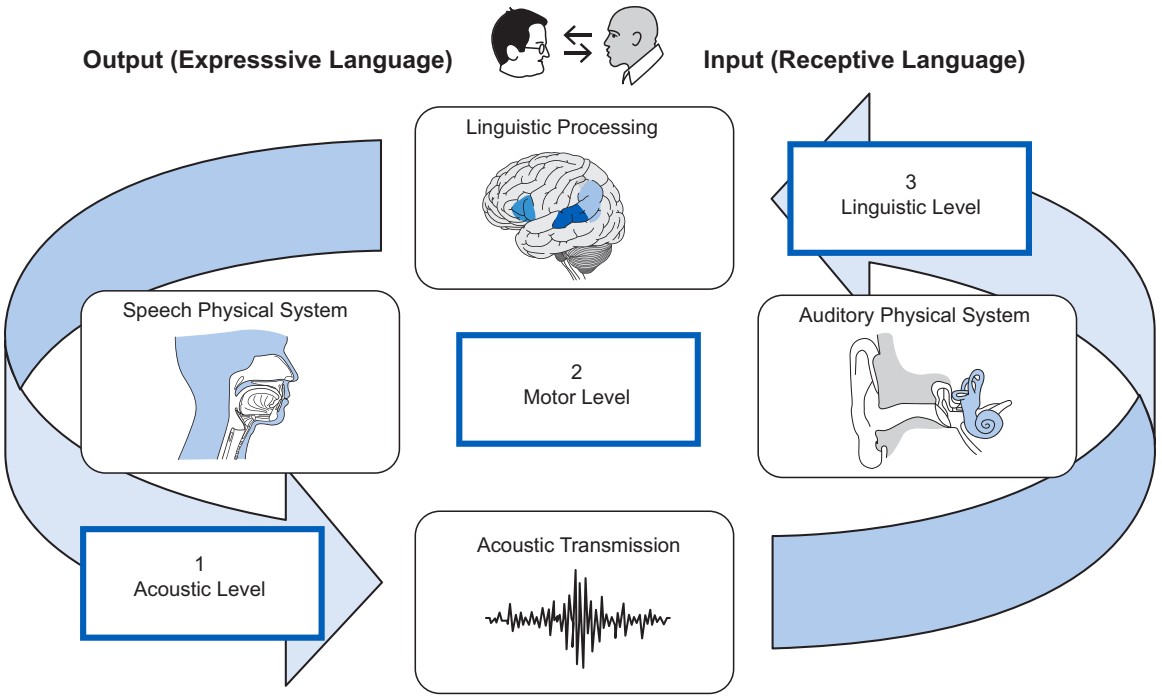

FIGURE 1–1. The speech chain model.

Level 2 represents the internal physical/motor system required for communication. In the listener, the physical system consists of the hearing mechanism and the transfer of neural messages to the brain's language center. In the speaker, Level 2 represents the speech system, including respiration, articulation, and phonation. The physical speech systems must be coordinated to produce intelligible speech. It is likely that you studied aspects of Level 2 motor communication in a course called Anatomy and Physiology. You will learn about disorders occurring in the speech system in coursework covering articulation disorders, motor-speech disorders, and voice disorders. You will learn more about Level 2 (i.e., physical) hearing problems in your audiology coursework.

Level 3 of the speech chain model represents the linguistic component of communication. Level 3, the linguistic component, is the focus of this book. The linguistic level is the ability of the listener to receive incoming Level 2 energy (i.e., neural signals) and turn the neural signals into meaningful information via receptive language. The speaker initiates meaningful linguistic information at Level 3.

The speech chain model emphasizes the complexity of the communication system and helps you integrate what you are learning in this course with other coursework. As you progress through your professional training program, continue to frame new knowledge within this basic model of communication functioning.

Let's now move beyond the speech chain model and consider the three fundamental language domains of form, content, and use.

FORM, CONTENT, AND USE: THE CORNERSTONES OF LANGUAGE

To become an effective linguistic communicator, a speaker must master three language areas: the form of the message, the content of the message, and the message use or function. **Language form** includes **phonology**, **morphology**, and **syntax** (i.e., the structure of language). **Language content** consists of **semantics** (i.e., meaning of language); **language use** (function) consists of **pragmatics** (i.e., how language is used within social contexts). See Table 1–1 for formal definitions and examples of each of these terms.