PROFESSIONAL ISSUES in Speech-Language Pathology and Audiology

Fifth Edition

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Foreword

In 1994, I returned to an academic environment at the University of Minnesota after a six-year hiatus in a setting where I was a researcher and clinical service provider. I was assigned to co-teach a revised version of a class called *Professional Issues* with a speech-language pathology colleague, Dr. Leslie Glaze. We had never met before, but we were united in the love of our two professions and one discipline. Previously we had taught as "subject-matter experts" in the areas of developmental and rehabilitative audiology and voice. From our own academic and clinical experiences, we knew that this more recent focus on the framework of being a professional in our disciplines was critical for our students as we prepared them for their future practice. We were very fortunate to use a new textbook edited by Rosemary Lubinski and Carol Frattali entitled *Professional Issues in Speech-Language Pathology and Audiology*. It guided our lectures, discussions, and writing assignments. I continued to teach that class for several more years, convinced more each time that this area was foundational for new (and not so new) practitioners.

It is with great pleasure that 25 years later, as I retire from the University of Minnesota, I have been asked to write this foreword for the fifth edition of *Professional Issues in Speech-Language Pathology and Audiology*, edited by Melanie Hudson and Mark DeRuiter. This volume reflects the fact that the impact and maturity of a discipline and, in our case, two professions cannot be measured by disciplinary expertise in speech-language pathology and audiology alone. Rather, the context in which we practice is just as important as what we practice. In fact, we cannot practice or do clinical research effectively without understanding the demands of culture, law, global influences, and the values and ethics of our own and other professions.

This volume contains 30 chapters written by 45 authors organized into four main sections—overview of the professions, employment issues, setting-specific issues, and working productively. This is a rare book, serving to enlighten students as they become professionals and to allow even experienced practitioners to learn about new trends in, and external pressures to, the discipline. It can be both a beginning textbook and a complex resource for individuals and groups as they grapple with professional practice and translational research in the twenty-first century. This volume contains the collective wisdom and experience of expert clinicians, scholars, and administrators from every practice setting, the academy, and professional associations. These authors have held a variety of national, state, and local leadership positions. I have worked with many of them directly and have listened to their thoughtful presentations. Seeing this volume today makes me want to teach *Professional Issues* again. There is no doubt that readers will have the highest quality experience that will assist them every day in their professions.

—Arlene Earley Carney, PhD, CCC-A

Arlene Earley Carney, PhD, CCC-A, is a Professor Emeritus in the Department of Speech-Language-Hearing Sciences at the University of Minnesota–Twin Cities. She has taught coursework in diagnostic and pediatric audiology, rehabilitative audiology, cochlear implants, and professional issues

at Purdue University, University of Illinois at Urbana-Champaign, and the University of Minnesota. In addition, she had research and clinical appointments at Mailman Center for Child Development and Boys Town National Research Hospital. Currently, Arlene is the Vice President for Standards and Ethics in Audiology for the American Speech-Language-Hearing Association (ASHA), having served as editor for Hearing for the *Journal of Speech-Language-Hearing Research,* chair of the Standards Council and the Board of Ethics, and a member of the Council for Academic Accreditation. She is an ASHA Fellow and received the Honors of ASHA in 2015.

Reference

Lubinski, R., & Frattali, C. (Eds.) (1994). *Professional issues in speech-language pathology and audiology: A textbook*. San Diego, CA: Singular Publishing.

Preface

Welcome to the fifth edition of *Professional Issues in Speech-Language Pathology and Audiology*! Since the publication of the first edition over 25 years ago, the professions of audiology and speech-language pathology have continued to evolve. Our scopes of practice are regularly updated to reflect the dynamic growth and increasing complexity of our roles and responsibilities within our varied work settings. Our caseloads are more diverse than ever, and we must keep abreast of evidence-supported knowledge and skills that define best practices in our professions. Audiologists and speech-language pathologists continue to remain challenged and motivated to meet the demands of their professional environment.

This fifth edition of *Professional Issues in Speech-Language Pathology and Audiology* is intended to be a primary text for students and a resource for faculty and practicing clinicians seeking a comprehensive introduction to contemporary issues that influence our professions and our service delivery across settings. We aim to provide our readers with a better understanding that day-to-day clinical work, as well as personal professional growth and development, is influenced by political, social, educational, health care, and economic concerns. Your professional identity is enhanced when you understand the range of factors that define what you do, with whom, for how long, and at what cost. With this big-picture view of your profession, you will be better prepared to make informed decisions as you provide services, engage in advocacy efforts, and plan your career as an audiologist or speech-language pathologist.

How to Use This Text

This text is widely used in Communication Sciences and Disorders (CSD) programs, typically in professional issues courses or capstone seminars, but also as a general reference tool for faculty and practitioners. Table A provides a matrix of chapter content relevant to the Council for Clinical Certification (CFCC) standards for the ASHA Certificate of Clinical Competence (CCC). You should notice that certain topics are repeated in this table, as many are relevant to more than just one chapter's content. For instance, documentation is relevant to all work settings, as is ethical practice and technology, each warranting its own chapter. Evidence-based practice informs what we do as effective clinicians and is another persistent theme throughout the text, a topic also worthy of its own chapter, but referenced throughout the text.

This text should continue to serve as an excellent desk reference even after you complete your graduate education. Important topics such as the job search (and keeping your job!), ethical practice, accountability and documentation, leadership, cultural competence, economic issues, technology, research, and setting-specific issues will continue to be relevant as you grow professionally.

New to the Fifth Edition

The success of the first four editions of this text is attributed to the insightful and cutting-edge contributions made by each of the chapter authors, recognized experts in their respective subject areas. This fifth edition continues that tradition by including previous authors who have updated their chapters

to reflect new issues and trends in audiology and speech-language pathology within their topic areas. In addition, there are several new chapters in this edition, including "Professional Accountability," by Shelly Chabon and Becky Cornett. This chapter discusses organizing and delivering superior health care services that are focused on effectiveness and efficiency. The reader is also reminded of the ethical commitments required to enable outcomes supporting communication and hearing. In "Safety in the Workplace," Donna Smiley and Cynthia Richburg address identification of threats and hazards, as well as the implementation of controls and policies to counter those threats/hazards in various work settings, including infection control and workplace violence.

Interprofessional education and interprofessional practice have become a major focus in graduate education programs and practice settings. Alex Johnson provides a rich overview of this topic that supports increasing the value of health care by providing evidence-based patient-centered care as part of an interdisciplinary team.

In Chapter 28, "Counseling," Michael Flahive provides a detailed discussion of the roles of audiologists and speech-language pathologists in supporting patients and family members who are dealing with some of the more challenging issues associated with communication and hearing disorders.

Tommie Robinson, a former ASHA President, and Janet Deppe, Director of State Affairs at ASHA, offer a dynamic discussion of how audiologists and speech-language pathologists may support advocacy efforts within their individual work settings and local communities and at the state and national levels.

This fifth edition also has new authors adding their expertise to the book, including Mark DeRuiter (also the co-editor), at the University of Arizona; Tricia Ashby, at the Washington Audiology and Imaging Center; Bob Augustine, Council of Graduate Schools; Stacy K. Betz, at Purdue University; Cathy DeRuiter, at Children's Clinics, Tucson; Robin Edge, at Jacksonville University; Mary Sue Fino-Szumski at Vanderbilt University; Susan Felsenfeld, at Buffalo State University; Liza Finestack, at University of Minnesota; Carolyn Higdon, at University of Mississippi; Kelly M. Holland, Associate Director for International Partnerships, Global Experiences; Shirley Huang, at University of Colorado; Susan Ingram, at James Madison University; Marie Ireland, at Virginia Department of Education; Jeffrey Johnson, at VA Pittsburgh Healthcare System; Pui Fong Kan at University of Colorado; Lemmietta McNeilly, Chief Staff Officer for SLP at ASHA; Lissa Power de Fur, at Longwood University; Jeff Regan, Director of Government Affairs and Public Policy at ASHA; Gail Richard, former ASHA President; Steve Ritch, Manager of Associates Program at ASHA; Lisa Scott, at Florida State University, and Tina K. Veale, at Lewis University.

We have also updated the list of acronyms to include those that are referred to throughout this edition. This list is provided at the front of the book to use as a quick reference.

Professional issues always provide the basis for lively discussions among students and practitioners alike. As in past editions, we have included Critical Thinking questions at the end of each chapter to encourage discussion and reflection on the topics covered in that chapter.

Companion Website

PowerPoint lecture slides for each chapter have been made available for instructors on a PluralPlus companion website. Instructors can customize the slides to meet their needs. Please see the inside front cover of the text for access information.

A Final Thought

We hope that by reading this text, participating in class discussions, and engaging in critical reflection you will be motivated and inspired to explore more learning opportunities, become involved in your professional associations, and advocate for your professions and those you serve.

About the Editors

Melanie W. Hudson, MA, received her BS from James Madison University (VA) and her MA from George Washington University, with post-graduate studies at George Washington University and the University of Virginia. She is an ASHA Fellow, and Distinguished Fellow of National Academies of Practice (NAP). She served on ASHA's Board of Directors as Chair of the Speech-Language Pathology Advisory Council (2016-2018), the Board of Ethics, and the Board of Special Interest Group Coordinators. Melanie's publications include *Professional Issues in Speech-Language Pathology and Audiology, Fourth Edition* (Lubinski & Hudson; Delmar, Cengage Learning, 2013; Plural Publishing, 2018), and chapter author for "The Clinical Education and Supervisory Process in Speech-Language Pathology and Audiology," (McCrea & Brasseur, Slack, Inc., 2019). She served as President of the Georgia Speech-Language and Hearing Association and currently serves on the Georgia Board of Examiners for Speech-Language Pathology and Audiology. She worked as an SLP in Arlington (VA) Public Schools, in private practice, and as adjunct faculty. She is the National Director at EBS Healthcare and a frequent guest lecturer at universities and professional conferences.

Mark DeRuiter, PhD, MBA, is Clinical Professor and Associate Department Head for Clinical Education in the Department of Speech, Language, and Hearing Sciences at the University of Arizona. Mark earned his PhD and MBA degrees at the University of Minnesota and Augsburg University, respectively. Mark holds national certificates of clinical competence in audiology and speech-language pathology from the American Speech-Language-Hearing Association (ASHA). He is also a Fellow of ASHA and the American Academy of Audiology. Mark has a long history of service to the discipline. He has served ASHA as the Vice Chair for Speech-Language Pathology on their Council for Clinical Certification, chaired the national Speech-Language Pathology Scope of Practice document, and is a site visitor for ASHA's Council on Academic Accreditation. He has also served as President of the Council of Academic Programs in Communication Sciences and Disorders where he has held additional roles of Treasurer and Vice President for Professional Development.

1

Professions for the Twenty-First Century

Melanie W. Hudson, MA, and Mark DeRuiter, PhD, MBA

Introduction

You have chosen a dynamic profession, with substantial growth expected to continue in the coming years. According to the U.S. Department of Labor, the need for services provided by audiologists is expected to increase by 21 percent from 2016 to 2026, while the need for speech-language pathologists (SLPs) is expected to increase by 18 percent during the same time period (U.S. Bureau of Labor Statistics, n.d.). Even as we are writing this introductory chapter, there are changes occurring along with our growing numbers that will significantly impact the professions of audiology and speech-language pathology. As the demand for our services continues to grow, what are some of the major trends and issues impacting our professions?

Many factors have come into play in recent years that are transforming how we plan and carry out our work. Rapidly advancing technology, legislation in health care and education, demographic shifts that include an aging population and increasing levels of diversity, global economic changes, and new research are influencing how we deliver services. Even the influence of climate change is playing a role in how audiologists and SLPs make career decisions. Faced with these and other changes, how do we ensure that our clinical skills are state-of-the art, incorporating the latest technological advances? How do we provide services that are of the highest quality, yet cost-effective? What are the ripple effects of global economic changes and demographic shifts on our professional practice? And finally, what role does evidence play in our clinical decision making?

This chapter provides an overview of some of the most important trends and issues that are likely to affect your professional practice in the coming years: technology; trends in health care and education; economic influences; demographic shifts and globalization; and evidence-based practice. Each of these areas is addressed more fully in chapters specific to the topic, and within the appropriate context throughout the rest of the book. The information in this chapter will set the stage for advanced critical thinking and constructive dialogue. In this rapidly evolving professional climate, it is not enough to be performing only competently as a clinician. Today's audiologists and SLPs also need to be using analytical thinking and engaging in critical reflection when making decisions that affect the lives of others.

As you read this chapter, consider the scopes of practice in audiology and speech-language pathology. (See Appendix 1–A and 1–B at the end of the chapter for the current scopes of practice in audiology and speech-language pathology.) Remember that each of these practices is well defined and dynamic. Take time to reflect on how the trends and issues presented in this chapter influence your own decisions and plans for the future as we complete the first quarter of the twenty-first century.

Trends in Technology and the Digital Revolution

> *The future is an inevitable reality, . . . which we either adapt to or resist, but that we have the power to "envisage and take action to build alternative and desirable futures."* (Facer & Sandford, 2010)

We are living in what is known as the Digital Revolution, also known as the Third Industrial Revolution, the change from mechanical and electronic technology to digital technology. Analogous to the Agricultural Revolution and Industrial Revolution, the Digital Revolution marked the beginning of the Information Age (Digital Revolution, 2019). Those born during the twenty-first century would not be able to imagine a world without computers, the internet, and personal electronic devices such as smartphones that enable instant communication with anyone, anywhere, any time. By 2015, around 50% of the world had constant internet connection, and ownership rates of smartphones and tablets has nearly surpassed those of home computers (Pariona, 2016).

These digital advances have made globalization possible, allowing businesses to operate more efficiently with increased opportunities to find and share information. We hold virtual meetings instead of traveling to conduct face-to-face business, and some of us even work from home as telecommuters. These advances have also had a significant impact on our individual lifestyles and daily routines. Instead of going to the shopping mall, or even the grocery store, we buy our goods from online retail merchants and order services from a company's online website. As a student reading this text, you may even have taken some, if not all, of your courses through an online university program. Advanced classroom technologies have enhanced learning opportunities for all students. Where digital technology saves us time and helps us stay connected and in touch, many people find it increasingly difficult to keep their personal and professional lives separate. This can lead to digital overload, causing stress and job burnout.

The advancing technological contributions to science are continually growing, notably in the areas of artificial intelligence and robot design. The evolution of three-dimensional (3D) printing and ongoing developments in computer design, such as Digital Twin (Newman, 2019), where providers and manufacturers can test the impact of potential change on the performance of a health care procedure by experimenting on a virtual version of the system (person or device), continue to change the landscape of the industrial sector.

As mentioned previously, artificial intelligence (AI) will play a major role in the health care industry due to the availability of big data and the drive to lower health care costs. Research firm Markets and Markets predicts that AI in health care will grow from $2.1 billion today to a $36 billion industry globally by 2025 (2019: Changes and Trends in Health Care, n.d.). Implications for practicing SLPs and audiologists include chat-based digital services in which users have a conversation with a chat-bot, software designed to understand and respond to natural language inputs. Through the use of coaching conversations, clinicians can provide an opportunity to apply their knowledge and skills together with AI to engage patients in meaningful conversations about their health.

The medical industry has also been impacted by the Digital Revolution. Genomic medicine, the use of genetic information for personalized treatment plans, will have long-lasting implications in the provision of health care. The use of simulated patients, virtual reality and augmented reality (VR/AR) to train health care professionals, the delivery of health care services through telepractice, and keeping sensitive information secure will certainly play important roles in the training of future health care providers.

New devices for hearing amplification and augmentative communication will be of special interest to SLPs and audiologists. Currently, audiologists are expressing concern regarding the future of the discipline as more hearing technologies are available to the public through smartphones and retail outlets. Although our patients may have increased access to better communication, there is a general concern that some patients may be at risk without the advice of a trained professional. The same is true for augmentative and alternative communication options that are readily available to patients and families on smartphone and tablet devices. What expertise is needed to guide these families? How can we be assured that they are being maximally used? What responsibility do we have as a profession to shape these various technologies and their availability? These are challenging times!

The positive and negative aspects of the impact of the Digital Revolution on human lives will continue to be discussed, explored, and analyzed as we move into the future. As audiologists and SLPs facing such chal-

lenges, we need to be well prepared to engage in critical thinking that supports our decision-making ability in a world of rapid technological advancement. Technology is discussed in more depth in Chapter 27.

Twenty-First Century Trends and Issues

Trends in Health Care

Health care in the United States is undergoing rapid transformation, a result of a range of reasons—political, demographic, and technological being among the key drivers. Recent health care legislation and regulation have created a shift in reimbursement policy, moving away from provider-centered payment models toward patient-centered models, with Medicare, Medicaid, and private health insurance being most relevant to practicing SLPs and audiologists. In addition, provider shortages, increasing costs paired with a lack of affordability, even for those with good insurance, and an aging population are changing the face of health care as we know it.

The costs associated with health care continue to increase while both public and private insurance reimbursement rates for providers fall below the actual cost of providing services. Many physicians view audiology and speech-language pathology as low priority services as they attempt to conserve limited financial resources. As a result, referrals and authorizations for evaluations and treatment are decreasing and jobs in physicians' offices and other health care facilities may be eliminated or reduced to an as-needed basis. See Chapter 19 for further discussion of access to services.

Another factor influencing reimbursement for health care services is that the age-old concept that "more care means better care" is no longer an accepted tenet in the evolving health care industry. The trend is moving in the direction of value-based reimbursement where quality of service is favored versus fee for service, which only rewards volume. Patient satisfaction surveys have more and more influence on insurance reimbursement and this has important implications for practitioners.

The number of health professionals working in home health care will continue to grow as the demand for treatment outside the traditional doctor's office is on the rise. A 2018 survey conducted by the Price Waterhouse Coopers Health Research Institute showed that 54 percent of respondents would prefer "hospital care at home if it cost less than the traditional option" (Price Waterhouse Coopers, n.d.). With the rise of home health care organizations, there is a corresponding decline in the occupancy of skilled nursing facilities (SNFs). In addition, providers and payers are pressuring SNFs to reduce lengths of patient stays, so SNFs are looking at other services such as assisted living and adult day care, so that they can admit more clinically complex (therefore, more profitable) patients to increase their occupancy (2019: Changes and Trends in Healthcare, n.d.). These growing trends are changing job opportunities for service providers, including audiologists and SLPs.

Health information technologies (HITs) and electronic health records (EHRs) are other changes in health care that continue to shape what we do as audiologists and SLPs. Currently, there is a proliferation of different EHR and HIT options. Even though these systems are designed to increase reliability of access to records and clinician productivity, they can pose barriers as well. One challenge is the way we serve our patients. Many of us have experienced a health care provider who has spent more time looking at a computer screen than interacting with the patient. Additionally, records are not easily transferred across different EHR platforms, posing roadblocks to patients as they seek care, particularly from specialty providers.

One of our most important tasks as SLPs and audiologists is to ensure that our services are mandated and maintained at reasonable rates. As the population ages, we also need to ensure that our practices enable and prolong independent living, support access to needed services, support our patients' participation in decision making regarding their lives and care, and help them maintain a positive quality of life for as long as possible. We need to be not only skilled and knowledgeable clinicians but also ready to employ our skills as advocates on behalf of our patients. Chapters 15 and 19 provide further discussion of services in health care.

Trends in Education

The educational landscape continues to transform, with political influences and demographic shifts as major drivers. Federal, state, and local funding for schools influence the quantity and quality of services provided by school-based SLPs and audiologists. Government-mandated accountability with an emphasis on standardized testing to measure student achievement has provided data for important decision making, including systems used for teacher evaluations.

The paperwork burden and the demands that come with ever-increasing caseloads and responsibilities assigned to school-based service providers continue to be hot buttons and are the focus of advocacy efforts by professional organizations such as the American-Speech-Language Hearing Association (ASHA, n.d.-a). The use of multi-tiered systems of supports, such as Response to Intervention (RTI), the importance of using a variety of service delivery models, incorporating evidence-based

practice (EBP), and engaging in interprofessional collaboration in the diagnosis and treatment of school-aged children have been noteworthy initiatives in the evolution of school-based services in recent years.

Many school districts have increased the hiring and use of paraprofessionals to ease the caseload burden and to support the work of school-based service providers. SLPs and audiologists will need to develop their knowledge and skills in supervision, particularly in the area of ethical accountability as they work with speech-language pathology assistants (SLPAs) and audiology assistants. You will find further discussion of support personnel in Chapter 13.

As in health care, technology continues to play a major role in education for SLPs and audiologists working in schools. Software programs designed specifically for special education documentation and record-keeping have become the norm. Technology tools that support oral, audio, and written skills allow students of all ages to express themselves beyond the capacity of their writing abilities. Much work with critical thinking can also be done in this manner when tools such as Seesaw blogs (https://web.seesaw.me/blogs/) and flipgrid (https://info.flipgrid.com/) are used to support learning.

Issues related to school safety and information and training on trauma-informed practices will continue to increase as education professionals seek resources for responding to traumatic events that affect children of all ages. Recent studies show that 25% of children under the age of 16 have experienced trauma in their lives (2019, National Child Traumatic Stress Network). Children bring their outside personal experiences with them to school, and educators are learning to adapt classroom management strategies, instructional supports, and school climate to support children who have experienced trauma to help them achieve success. Chapters 22 (Safety in the Workplace) and 28 (Counseling) will explore these issues more fully.

Audiologists and SLPs in the schools continue to play a major role in helping educators adopt more inclusive practices in education. Such practices are designed to enable special education students at all grade levels and with a wide range of needs to be involved in and make progress in the least restrictive environment (LRE). To that end, service delivery models that place an emphasis on working with students in their natural environment, in addition to interprofessional collaboration, are gradually taking the place of the more traditional medical (pull-out) model.

As educational trends continue to evolve, SLPs and audiologists will need evidence-based studies that demonstrate the quantitative and qualitative differences we make in students' lives. Practices that help students improve their ability to participate productively in education and employment will continue to be the focus of school-based service providers as we move into the coming years. See Chapter 16 for further discussion of policy and service delivery in education.

Economic Trends

The United States is a highly developed nation, with the world's biggest economy in terms of gross domestic product (GDP), representing around one-fourth of the global GDP. At the time of this writing, economic indicators show that U.S. GDP growth will continue to slow from 2.1% in 2019 to 1.9% in 2020 and 1.8% in 2021. The projected slowdown in 2019 and beyond is a side effect of the trade war, a key component of the current administration's economic policies (Amadeo, 2019).

We have been experiencing a gradual economic recovery since the Great Recession of 2007–2009. The 2019 unemployment rate is 3.7% and is expected to be 3% in 2020 and 3.9% in 2021. It is of note that these statistics reflect a unique trait to this recovery, the fact that our basic structural unemployment has actually increased. Many workers are part-time but would prefer full-time work, and some have been out of work for so long that it is unlikely they will be able to return to the high-paying jobs they held previously. It led some workers to delay retirement or to come out of retirement and rejoin the labor force, while others retired earlier than planned (Bosworth & Burtless, 2016). In addition, most job growth is in low-paying retail and food service industries as opposed to the professional sector. As the labor force aged 55 to 64 is approaching retirement, their unemployment status can affect the financial security of future retirees, and this is an important consideration for those entering the workforce in the near future.

Inflation is 1.8% in 2019 and is expected to rise to 2% in 2020 and 2021 and is not considered to be a serious threat to the economy at the time of this writing (Amadeo, 2019).

In its occupational outlook report, the Bureau of Labor Statistics (BLS) predicts a full recovery from the recession in 2020, with 88% of all occupations expected to experience growth. A significant part of the growth is expected to occur in health care, and professions related to social assistance as the American population ages. Substantial increases are also expected to occur in education, technical, and scientific consulting, among others (U.S. Bureau of Labor Statistics, n.d.).

Employment prospects for SLPs and audiologists in all settings are excellent. According to the BLS, jobs for SLPs are expected to grow 18% from 2016 to 2026, while jobs for audiologists are expected to grow 21%. The average growth rate for all occupations is 7%. In 2018, the median pay for SLPs was $77,510 per year, or $37.26 per hour. For audiologists, it was $75,920 per year, or $36.50 per hour (U.S. Bureau of Labor

Statistics, n.d.). Chapters 10, 11 and 12 provide more detail on issues related to employment for audiologists and SLPs.

Demographic Trends and Globalization

The world's population is over 7 billion, with the largest populations in China and India (Current World Population, n.d.). The United States ranks third and its population continues to grow, in large part due to immigration. With an increase of 8.976 million in the past 5 years, the 2019 estimated population of the United States is 329.6712 million. According to a 2015 report, 8.5% of people worldwide (617 million) are aged 65 and over, and this group continues to grow at an unprecedented rate. This percentage is projected to jump to nearly 17% of the world's population (1.6 billion) by 2050 (He, Goodkind, & Kowal, 2016), outpacing the growth of the younger population over the next 35 years. In 2015, one in six people in the world lived in a more developed country, with more than a third of the world population aged 65 and older and over half of the world population aged 85 and older living in these countries. Among these older groups, there was a higher number of women than men.

Population aging, while due primarily to lower fertility rates, has created many new challenges, particularly in the health care arena. How many years can older people expect to live in good health? What are the chronic diseases that they may have to deal with? How long can they live independently? How many of them are still working? Will they have sufficient economic resources to last their lifetimes? Can they afford health care costs? (An Aging World, 2015).

Audiologists and SLPs working with this growing population will need to be prepared to face these challenges as they apply to their practice settings. As with all populations, providing the highest quality services that support hearing, communication, and swallowing will need to be the focus of continuing education as trends in best practices continue to evolve with this group. Finally, new graduates will need to be mindful of some of these challenges as they contemplate their own retirement years in planning their career paths.

The Census Report predicts that the foreign-born segment of the population of the United States will represent a substantial share of the general population growth, achieving 19% by 2060 (U.S. Population 2019, n.d.). English is the most commonly spoken language (83%), while 12% of the population speak Spanish and 0.69% speak Chinese. Growth of the Hispanic and Asian populations are expected to almost triple in the next 40 years. Additionally, according to the National Center for Education Statistics, bilingual/multilingual populations have a proportionately greater need for speech and language diagnostic and intervention services. (National Center for Education Statistics, 2015).

As our population becomes increasingly diverse in terms of age, spoken languages, race, ethnicity, religion, education, gender, sexual orientation, gender identity, and socio-economic factors, it is imperative that we demonstrate cultural competence in meeting the needs of those we serve. See Chapter 25, "Working with Culturally and Linguistically Diverse Populations," for further discussion.

Evidence-Based Practice

The foundations of best practices in audiology and speech-language pathology are rooted in evidence. EBP is the integration of: (a) clinical expertise/expert opinion, (b) external scientific evidence, and (c) client/patient/caregiver perspectives (ASHA n.d.-b). What does this mean to the new clinician who wants to ensure the highest quality of services, yet lives in a world where "facts" are questioned, and empirical data is politicized?

The policymakers in both the insurance industry and government have implemented EBP requirements for reimbursement, making research in communication sciences and disorders (CSD) all the more important. Audiologists and SLPs can access sources for EBP guidance including bibliographies, evidence maps, and summaries of treatment efficacy in a wide range of clinical areas from ASHA (https://www.asha.org/) and the Academy of Neurologic Communication Disorders and Sciences (ANCDS; https://ancds.org), among others. ASHA and other organizations continue to build resources for professionals as the demands evolve for accountability and quality. See Chapter 8 for more discussion of EBP.

Summary

The professions of speech-language pathology and audiology are dynamic and diverse much like the patients that we work with. This chapter discussed some of the most dynamic changes, trends, and issues that are likely to affect your practices. Included in this discussion was information on technology and the digital revolution, trends in health care and education, economic influences, demographic shifts and globalization warranting cultural sensitivity and competency, and evidence-based practice needs. Knowledge of these topics is essential for applying analytical and critical reflection when making decisions that affect the lives of those we serve. It is the intention of this chapter and book, much like the overall goal of SLPs and audiologists to "optimally communicate" the present and projected practices that will shape our expertise and professional necessity long into the future.

Critical Thinking

1. Twenty-five years from now, what will professional historians say about the professions of audiology or speech-language pathology? What factors do you think will affect our development and our provision of services across settings and client groups?
2. Think about the geographical area in which you work or are likely to work. What comprises the demographics of this area? How have the demographics changed in the past 10 years? How should you prepare to work with the variety of client groups in your geographic area?
3. What technology do you use now in your clinical practice? How does it facilitate the quality and efficiency of what you do? What advances would you like to see in technology to help you provide better science for our professions or service to our clients?
4. How should our pre-professional and continuing education focus on social and economic changes in our society? How does knowledge about these areas improve your delivery of speech-language, swallowing, or hearing services?
5. What opportunities have you had for serving clients from diverse backgrounds? How well prepared do you feel to do this? What can you do to enhance your skills?
6. Why does keeping up on both domestic and worldwide current events help you as a professional audiologist or SLP?
7. How does globalization affect you as a clinician? What opportunities have you had to interact with professionals around the world? What might you do to develop such interactions?

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