PROFESSIONAL WRITING IN SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY

Second Edition

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“If you didn’t document it, you didn’t do it.” Competent professional writing is a necessity, not a luxury. Third-party payers, such as insurance companies, may deny payment if the documentation for professional services is incorrect or incomplete. Medical chart notes, diagnostic evaluations, progress reports, and discharge summaries are all legal documents that may be used in court. The Code of Ethics of the American Speech-Language-Hearing Association (ASHA, 2010) states that individuals shall provide all services competently, and that includes documentation of services rendered.

The authors were motivated to write the present book to address writing problems exhibited by undergraduate and graduate students in communication sciences and disorders (CSD), lax documentation by clinicians, and general slovenliness in professional discourse. The Second Edition combines our earlier Plural Publishing books on Professional Writing in Speech-Language Pathology and Audiology (2009) and Professional Writing in Speech-Language Pathology and Audiology Workbook (2011), and expands on and updates both. We now include the more accessible website instead of a bundled CD for additional materials. In January 2013, RG ran a Professional Writing Boot Camp at Adelphi University that led to some changes and adjustments in the present volume. Guidelines for instituting writing boot camps at other colleges and universities appear in the website. Finally, in April–May 2013, RG field tested portions of the second edition as a Fulbright Senior Specialist in Linguistics in Bogota, Colombia. The graduate TEFL students attended advanced research methods and academic writing courses taught in English, and provided valuable feedback regarding both English and Spanish materials provided in the courses.

In the past few years, we have had our issues about professional writing shared by site visitors from the National Council for Accreditation of Teacher Education programs (NCATE), the Council of Academic Accreditation (CAA) evaluators of our graduate program in speech-language pathology, the CAA site visitors of our consortial doctor of audiology program, and the CAA teams that joined RG on site visits to other colleges and universities. In all cases, we were assured that the decline in professional writing was a national concern.

At a recent meeting of the Council of Academic Programs in Communication Sciences and Disorders, we were eager to learn how professional writing was improved in other programs. We learned that while some programs denied admission to students applying for matriculation in graduate degree programs based on poor professional writing, other programs ignored professional writing, and one was honest enough to admit, unofficially, that writing requirements were “dumbed down” to give the program a perceived competitive advantage in recruitment. All programs lamented the lack of a resource for professional writing that was comprehensive and scholarly.

In our research for the present book, we have discovered some fine style manuals for research reports and professional writing, as well as workbooks focusing on drill work. In this volume, we hope to provide reasons and explanations for the suggestions we make, and to support our claims with relevant professional citations. We do not think our students need to attend “remedial graduate school,” nor do we doubt that every CSD student and professional practitioner can learn to write competently. We also think that learning to be a better professional writer does not have to be drudgery and have attempted to leaven our instruction with humor and stories.

Chapter 1 is new to the second edition, and includes an overview of English mechanics underlying syntax. In addition to a review of parts of
speech, the chapter includes information about sentence structure, syntactic development, and disorders of syntax.

In Chapter 2, we describe language as our favorite toy, where even punctuation can be funny. Other topics include the alphabet soup of abbreviations that we use professionally; the mutability of language, especially among young adult users; and such thorny issues as gender neutrality and cultural differences. There are examples of correct and incorrect forms of usage throughout the chapter, as well as exercises at the end that review some of the themes. We have included many exercises and worksheets to address common errors in written expression; a list of common abbreviations that we use in professional writing; and have added to the website sections on strong language, “Mondegreens,” and a game to use Shakespeare’s insults to improve vocabulary. When students ask why there is so much professional jargon in our disciplines, we sometimes give the flip answer, “So you can charge more.” The reality is that every trade and professional group uses jargon, whether it’s “Adam and Eve on a raft” (two sunny-side up eggs on toast) in a local diner, or the contents of a legal document.

The focus of Chapter 3, evidence-based writing, is to provide the reader with strategies to answer the “why” questions about professional writing. While most student clinicians and professional practitioners do a fine job of explaining what they are doing and how they are doing it, there are persistent problems in differentiating science from pseudoscience and the scientific method from “common sense.” We include an annotated sample of students’ evidence based writing. We take you through the stages of writing a journal article. Our goal for most readers is to help them become educated consumers of research, not necessarily producers of research. We would also like to foster a cognitive shift away from the educational model in preparing therapy plans and reporting treatment to one where the clinician is testing hypotheses. After all, if you are following a curriculum, you may continue with it even if it doesn’t seem to be working, whereas, if your hypothesis is falsified, you can begin testing another one.

As noted above, the ASHA Code of Ethics requires that we discharge our duties honorably and document our services appropriately. In Chapter 4, we review the Principles of Ethics that relate to professional writing, the constraints imposed by the Health Insurance Portability and Accountability Act of 1996 (HIPAA), and the guidelines for writing a successful research proposal to an Institutional Review Board. Since 2000, anyone seeking federal grant support is required to have a current certificate indicating a passing grade (currently 80%) on the Web-based training program on the protection of human research participants administered through the National Institutes of Health. Students and professionals in communication sciences and disorders are obliged to learn ASHA’s code of ethics. There are many other Web sites related to ethics, and we provide the links for instruction about ethics in areas related to CSD.

Using library resources, discussed in Chapter 5, begins with a history of the library, followed by a discussion of collections and services. Those of us who enjoy the musty smell of the stacks can still indulge in this activity, but we also need to know how to conduct electronic searches. As the course pack is often used to supplement or substitute for a traditional textbook, we considered it worth noting, as well as serving as a transition to sections on copyright and plagiarism. We would like a field trip to a college or university library to be part of the requirements for Chapter 5. Although we can access most of what the library has to offer through a desktop computer at home, we find the “bricks-and-mortar” experience of being in the building to be stimulating and informative. There is an extended set of exercises in correct use of APA style for referencing.

As we say in Chapter 6, on using Internet resources, welcome to the new way of doing business, meeting your life partner, succeeding in academia, and conducting your clinical practice. The syntax, semantics, and jargon associated with the Internet today may appear out of date and even quaint by the time this chapter gets to the reader, but the section on uses and abuses of the Internet should remain relevant. We continue the dis-
cussion about research. We recommend Internet resources to use, as well as those to avoid; explain the peer-review process for both print and electronic media; and recommend sites and strategies for database searches.

We have not seen a section on writing for oral presentation, which is covered in Chapter 7 in the current volume, in other professional writing books. Preparing an oral presentation is a topic of importance in basic books on rhetoric and public address, and is included here to show how to develop a speech and to outline the presentation. In delivering the oral presentation, particularly one that includes computer-generated visual aids, we differentiate what should appear on the slides compared to what should be included in effective speech delivery. An oral report in class, a demonstration of a diagnostic test in clinical practice, and a short course at ASHA are all based on written preparation. As the poster presentation is popular as an assignment for demonstrating evidenced-based practice in university clinics, as well as for disseminating research findings at professional conventions, we devote considerable attention to preparing a poster, and include examples on the accompanying website.

The diagnostic report, Chapter 8, is one of the lengthier sections of the book, divided into two parts. The first part specifies and describes five rules for diagnosis. For example, the second rule, *Be an Educated Consumer of Tests and Measures*, is addressed to all audiologists and speech-language pathologists, who must understand research methodology even if they do not actively produce research. The guidelines for writing diagnostic reports in speech-language pathology and audiology, in the second part of the chapter, include specific instructions and examples for diagnostic protocols and report formats. Exercises start with the building block of phonetic transcription, which includes solving and writing a crossword puzzle in phonetics. Following that are original and edited diagnostic reports in speech-language pathology and audiology, and exercises for editing reports.

Chapter 9, clinical goals, reports and referrals, includes templates and samples of a treatment plan, progress report, and chart note, as well as forms of professional correspondence. We review issues in clinical writing related to terminology, ethics, and software. Exercises include writing cover letters for professional reports, writing letters as reports, completing an audiometric profile, and entering log notes in medical charts. We take you through the step-by-step process of evaluating background information, including test results, and making recommendations.

We end the book with Chapter 10 on writing for professional advancement. The graduating student seeking a clinical fellowship, and the seasoned professional moving forward in a rewarding career, need strategies for developing professional documents. The chapter concludes with an analysis of multiple-choice tests, those used in the Praxis II exam as well as those prepared by course instructors. Exercises include developing a personal resume, preparing a professional cover letter, and developing a professional portfolio.

In recognizing the many people who helped us with this project, we want to pay a special tribute to the late Dr. Sadanand Singh, the founder of Plural Publishing, Inc. Singh (no disrespect intended; that is how he asked many of us to address him) also indicated that, although he could not read through all manuscripts submitted or published, he did read our earlier one, and enjoyed it very much.

We are grateful for the assistance of Professor Suzy Lederer and Dr. Bonnie Soman in providing some of the clinic forms used in this book. Our editors at Plural Publishing, Inc.—Stephanie Meissner, Scott Barbour, and Valerie Johns—have provided encouragement, cheerleading, and welcome deadlines throughout the projects. Terry Gozdziewski has field-tested both first-edition books in her writing classes and has offered valuable suggestions. Our graduate research assistant, Rebecca Kaufman, painstakingly checked all chapters for clarity, ease of flow, and accuracy. Another graduate student, Monica Fernandes, corrected the Spanish version of the book that *Google Translate* yielded to produce a coherent Spanish version of the chapters used in Bogota. Our students' excellent work has inspired us, and their not-quite-so-excellent writing has motivated
us, in preparing composite examples of diagnostic and treatment reports.

To Shelley and Elizabeth Goldfarb and Matt Simon; and to Andreas, Marie, and Ariana Serpanos—we love you madly.

We invite comments and suggestions from readers to be sent to us by e-mail at:

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The Diagnostic Report

The diagnostic report represents a comprehensive written account of the clinical assessment/evaluation and serves two general purposes. First, the report is a professional document (and thus a legal document; see discussion below) and written evidence of the clinical service. Second, the diagnostic report is often sent to other professionals involved with the case, as the source of or for referral. As such, diagnostic reports, although they may differ among clinics, are generally written in formal, professional language. We begin this chapter with rules for diagnosis and end with strategies for writing the diagnostic report, with guidelines specific to speech-language pathology or audiology.

Diagnostic Labeling

A recent article in *The New York Times* (Carey, 2007) reported a 40-fold increase in the number of American children and adolescents who were treated for bipolar disorder in the decade from 1994 to 2003. Almost certainly, the number has increased further since then. There is little concern about the likelihood of a vast increase in incidence of bipolar disorder, as the consensus is that doctors currently use the diagnosis more aggressively than before. The startling magnitude of the increase in diagnosis intensifies the debate over the validity and reliability of the diagnosis. If the term *bipolar disorder* is applied as a catchall for any child exhibiting explosive or aggressive behaviors, then far too many children are being treated with powerful psychoactive drugs with few demonstrable benefits and many potentially serious side effects.

The field of communication sciences and disorders is hardly exempt from faddish behavior in applying diagnostic labels. The term *cluttering* was widely used in the 1960s and 1970s to describe rapid-fire, indistinct speech with some word-finding difficulty and lack of awareness of difficulty by the speaker. This may be seen as a result of adopting the theories of Deso Weiss (1964), but the term subsequently fell into disuse. It may be reviving currently, in part because of new research efforts (see, for example, St. Louis & Myers, 2007).

Similarly, the term *central auditory processing disorder* (CAPD) has frequently been misused to label individuals, particularly children, who present with listening problems in the absence of apparent hearing loss. Though true CAPD is a deficit of the auditory modality, comparable listening difficulties may be noted in children with attention deficit hyperactivity disorder (ADHD), language impairment, or learning disability, rendering a possible misdiagnosis of CAPD. Following decades of inconsistency on the definition, assessment, and remediation of CAPD, ASHA organized a Task Force on Central Auditory Processing in 1993, which arrived at consensus on the issues (ASHA, 1996; 2005).
Threats to Accurate Diagnosis

Problems in written diagnostic reports may be traced to the following two threats:

- **Polytypicality:** Schwartz (1984) noted shortcomings in the descriptors for aphasia. She noted that adults with aphasia commonly display language characteristics that cross diagnostic boundaries. That is, they are polytypic in nature. It is not unusual for a patient with Broca's aphasia, for example, to have difficulty in auditory comprehension, an impairment listed among the principal diagnostic characteristics of Wernicke's aphasia. As noted in Diagnostic Rule 1 below, it is appropriate to write about the speech, language, and hearing characteristics of the individual, rather than merely assigning a label, especially if the diagnostic category is not obvious.

- **Dumping it in the chocolate:** One of the authors (RG) supported himself through college by working in an ice cream factory. As an interesting aside, he had firsthand experience with homeostasis, or the body’s tendency to maintain itself in an essentially healthy state. Alternating half-hour shifts in the ice box, where the temperature was −42°, with half-hour shifts outside, where the temperature was as high as 90° in the summer, his internal temperature stayed at 98.6°. Occasionally, at the end of the workday there was excess ice cream mix. The next day’s run would start with chocolate, and the excess mix would be blended in. Chocolate was strong enough in flavor and color to absorb the leftover.

There are frequent instances in our professions where we metaphorically dump the diagnosis in the chocolate (Goldfarb, 2012). Some gratuitous examples occur in the diagnosis of "quirky" children. Catch-all terms begin at birth, where the diagnosis of FLK (for *funny-looking kid*; see Chapter 2) has only recently been discontinued. Children whose language impairment is presented in the absence of other disorders are classified as having specific language impairment (SLI). Not so many years ago, *aphasia in children* was the preferred classification. In the Middle Ages, the medical diagnosis for quirky children was *humors of the liver;* more recently, the children were diagnosed with brain fever, minimum brain damage, and minimal cerebral dysfunction. Currently, the chocolate into which these children’s problems are dumped is the reticulo-limbic complex.

Rules for Diagnosis

**Rule 1**

*Say what the client does, not what the client is.* In other words, report behaviors and limit the number of diagnostic labels.

Nobody likes to read an overlong diagnostic report. Efforts at brevity are laudable, and a particular strategy for summarizing case history information appears later in this chapter. However, a haphazard use of diagnostic labels often does more harm than good. A general application of Rule 1 is to follow any diagnostic label with the phrase, *characterized by...* Although this rule may seem similar to the signing statements of a U.S. President, indicating the applications and limitations of a new law (which may or may not be constitutional), the rule addresses the need of school districts and third-party payers for a diagnostic label, and summarizes the areas of deficit to be addressed in therapy.

A diagnostic report is a legal document. In the following trial transcriptions, the first author was employed by the defense as an expert witness, to counteract claims put forth by the plaintiff that were supported by a speech-language pathologist. Although trial transcriptions are a matter of public record, names and identifying information were changed here. Certifying a witness as an expert allows that individual to offer opinions; a witness who is not certified as an expert can offer only facts. Certification as an expert may be based on academic standing (a rank of full professor, not adjunct instructor), publications (which have
been peer-reviewed), or experience (many years in positions of high responsibility).

The judge is indicated as the court; the first author is the witness.

The Court: In your opinion, using these two documents [Exhibit H and Exhibit RR], has Ms. B been misdiagnosed?

The Witness: Yes. Let me give two examples in the speech-language evaluation report where Ms. B was misdiagnosed.

The first diagnostic term that was used in error was paragrammatism. That is on page 2. Here we have, “Paragrammatisms and superfluous words were noted in writing and speech.” We have as an example that sentence beginning, “Lee Atwater was a tumor.”

The definition of paragrammatism is that it occurs in Wernicke’s aphasia, and that it is characterized by substitutions of functors. A functor is what might be called a helping word as opposed to a substantive or a lexical word. So under functors we look at things like prepositions, articles, conjunctions, auxiliary verbs. And what I am interpreting here is that the justification for the diagnosis of paragrammatism is the word “was” after “Lee Atwater” when the word should have been “had.” “Lee Atwater had a tumor,” as opposed to, “Lee Atwater was a tumor.”

The problem is that paragrammatism, as I said, occurs in posterior aphasia. There was no evidence and no claim in this diagnostic report that the patient had any kind of posterior aphasia. To the contrary, there is significant evidence that the aphasia was an anterior type, that is, the kind of aphasia that is characterized by halting, effortful speech, by problems with articulation. For example, the apraxias that are referred to do not accompany posterior aphasias or Wernicke’s aphasia. These apraxias accompany anterior or Broca’s aphasia, as it was referred to here.

So the problem that I see with paragrammatism is that it doesn’t belong as a diagnostic classification with this kind of patient.

Furthermore, the one example here, the word “was” which follows “Lee Atwater,” was an example of a functor substitution. However, if we can look for a moment at Exhibit RR—I am going to try and find it; this is another large document here—we have an example where a paragrammatism was described—if I don’t find it, let me explain it to you—where a paragrammatism was described, and the example given was the substitution of a substantive word rather than a functor word.

What I am saying is that a paragrammatism has to be a grammatical or a syntactic error. The example which had something to do with the organization of the government in the City of New York, I believe it was on 6/8—I am just not getting it here—the example was one of a semantic error rather than a syntactic error.

So the term “paragrammatism” was used incorrectly and was also used to describe a symptom that would occur in a different kind of aphasia.

The other misdiagnosis has to do with, again, going back to Exhibit H, the bottom of page 2: “Impression. Presenting persistent aphasia is Broca and conduction in type.” Let me speak to that.

This cannot be. The aphasia cannot be Broca and conduction in type. Broca’s aphasia is nonfluent aphasia. Conduction aphasia is fluent aphasia. A person can’t be fluent and nonfluent at the same time.

Conduction aphasia is characterized by, among other things, a disproportionately large number of errors in repetition, as opposed to other language modalities tested.

Now, the references to repetition, again in Exhibit H, top of the page, page 2,
“Repetition (sentences) was impaired and variable.” Going back, bottom of the page under “Impression,” we have “manifested and mildly impaired repetition.”

Repetition, according to these notes, even if it was mildly impaired, was not impaired in a disproportionately significant way to other modalities tested.

Furthermore, in Exhibit RR, the first page, dated 5/14, we have a note: “Repetition intact.”

The last thing I want to say about conduction aphasia is that classically Broca’s area, if Ms. A was following the model of the localizationist, Broca’s area is classically associated with the third frontal convolution on the left side of the brain, and Broca’s aphasia then would presumably follow a lesion in that area. Conduction aphasia would presumably follow a lesion in the arcuate fasciculus, which is the neural pathway connecting Wernicke’s area to Broca’s area. There was no evidence and no claim that there was any damage to the arcuate fasciculus.

What I am troubled by is the tendency to form diagnostic categories or label diagnostic categories based on skimpy evidence and done in an illogical manner.

As a final note to Rule 1, all of the above criticisms might have been avoided if the speech-language pathologist, Ms. A, had described the characteristics of Ms. B’s language disorder rather than the labels that she used in error. There is no shame in using the term nonfluent aphasia if you are not sure of such terms as Broca’s aphasia, conduction aphasia, or paragrammatism. In fact, describing aphasia as nonfluent is probably more useful, because it describes an aspect of the communication disorder that needs to be addressed in therapy.

Rule 2

Be an educated consumer of tests and measures. Although the doctorate is generally seen as the degree associated with the production of research, all audiologists and speech-language pathologists must understand research methodology.

The authors recall discussions with the late Ira Ventry when he was developing ideas for a book on research methods in communication sciences and disorders. The current edition of the book (Schiavetti & Metz, 2006) provides the basis for the information that follows.

Reliability means precision of measurement. It is assessed by examining the consistency or stability of a test or measure. Validity means generalizability of the data. It means the degree to which a test measures what it purports to measure. It means truth or correctness or reality of measurement. A butcher’s scale may consistently and precisely weigh meat at $\frac{1}{2}$ pound over the true or correct weight. It is reliable, but not valid. On the other hand, it is not possible for a test to be valid without being reliable.

There are three ways to check reliability of a test or measurement.

1. Test-retest reliability: Completely repeat the test. If the test is repeated with the same client after a latency period (to avoid the practice effect or learning to learn), but within a reasonable period of time (to avoid effects of maturation or spontaneous recovery), the score should be pretty much the same as it was in the first administration of the test.
2. Parallel or equivalent form: Examine consistency of the results across the two equivalent forms. These forms are used when testing two different modalities or two different conditions (see, for example, time-altered word association tests by Goldfarb & Halpern, 2013).
3. Split-half: Subdivide the test or measure into two equivalent parts (usually odd-even) to examine consistency of these parts. This is similar to parallel or equivalent forms, where one half may be used at the beginning of therapy as a baseline measure, and the other half at the end of therapy for baseline recovery.
Another type of reliability, called inter-rater or interscorer reliability, is used in experimental research, to ensure that there are no significant differences in scores assigned, and is based only on how people score the data.

There are also three ways to establish the validity of a test or measure.

1. **Content validity**: Logically or rationally evaluate items on a test to see how well they reflect what the tester wishes to measure, using subjective procedures.

2. **Criterion validity**: See how well the test or measure correlates with some outside validating criterion. There are two types of criterion validity.
   a. **Concurrent validity**: Administer a test or measure and an outside validating criterion at the same time. For example, the first edition of the *Peabody Picture Vocabulary Test* used an IQ test as a measure of concurrent validity, and indicated an equivalent IQ score based solely on this test of receptive vocabulary. (It no longer has a space to report an IQ score.) A key concept is that an outside validating criterion is used. Hildred Schuell (1966, 1973) assessed concurrent validity using two versions of the same test (the short and long forms of the *Minnesota Test for Differential Diagnosis of Aphasia* [MTDDA]), a questionable strategy also used to compare the third and fourth editions of the *Clinical Evaluation of Language Functioning*. However, Schuell determined that the short form of the MTDDA was not valid.
   b. **Predictive validity**: Use a test or measure to predict some future behavior. Administer the test, allow time to elapse, and then administer the criterion measure. For example, use the *Boston Naming Test* (BNT) as a baseline measure and the *Porch Index of Communicative Ability* (PICA) to predict word retrieval following therapy for aphasia, and then give the BNT at the final therapy session. See how the differences in the BNT correspond to the “HOAP slope” (high overall prediction method) predicted on the PICA. Note that IQ tests, such as the *Stanford-Binet* or the *Wechsler Intelligence Scale for Children*, are predictive tests. An IQ score is properly used to predict how well a child may be expected to perform in school.

3. **Construct validity**: Assess the degree to which a test or measure reflects some theory or explanation of the characteristic to be measured. The test or measure should confirm the theory if the test is valid and if the theory is correct. For example, a theory might predict that post-stroke and typical adults might use vocabulary differently. If the test or measure confirmed this, then the measure would have construct validity with respect to that aspect of the theory. However, if the theory has been discredited, as has Osgood’s notion that language is based on the sum of a set of specific abilities, then no manner of validity in the content of the *Illinois Test of Psycholinguistic Ability* (short of attempting to confirm another theory) will yield construct validity.

**Rule 3**

*Beware of “clinicese.”* Clients may exhibit behaviors in the clinic that they do not generalize outside of the speech and hearing center.

Young children, particularly those with disfluencies, may present dramatically different patterns of communication disorders, depending on context. For example, a child may stutter more when evaluated by “Dr. Goldfarb,” who is wearing a tie and a lab coat, than when “Bob” conducts the same evaluation wearing casual clothing.

Yaruss, LaSalle, and Conture (1998) recommended a three-part evaluation to determine quantitative and qualitative differences in arriving at a diagnosis of stuttering:

1. Conversational interaction between child and caregiver(s) (20 to 30 minutes);
2. Evaluation of the child’s speech, language, and related behaviors (60 to 90 minutes); and