

The Practitioner's Path in Speech-Language Pathology

The Art of School-Based Practice

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Wendy Papir-Bernstein, MS, CCC-SLP





5521 Ruffin Road
San Diego, CA 92123

e-mail: info@pluralpublishing.com
Website: <http://www.pluralpublishing.com>

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Typeset in 11/13 Adobe Garamond by Flanagan's Publishing Services, Inc.
Printed in the United States of America by McNaughton & Gunn

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Library of Congress Cataloging-in-Publication Data:

Names: Papir-Bernstein, Wendy, author.
Title: The practitioner's path in speech-language pathology : the art of school-based practice / Wendy Papir-Bernstein.
Description: San Diego, CA : Plural, [2018] | Includes bibliographical references and index.
Identifiers: LCCN 2017045293 | ISBN 9781944883454 (alk. paper) | ISBN 1944883452 (alk. paper)
Subjects: | MESH: Speech-Language Pathology | Evidence-Based Practice | Schools
Classification: LCC RC424.7 | NLM WL 21 | DDC 616.85/5--dc23
LC record available at <https://lcn.loc.gov/2017045293>

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Preface

We are part of an immense field of practice, with new practitioner roles and client populations emerging as we speak. Technology has enabled us to change the way we think, and perhaps even the way we sometimes provide our services. As someone who has survived and thrived within decades of change in our field, and helped thousands of students and practitioners do the same, I offer up a new perspective. We are on the *practitioner's path*, and we must *build it, support it, follow it, and ultimately become it*. That is what this book is about.

In describing this textbook, I borrow a term from the field of architecture: *parti*. A *parti* is the overriding concept of a building, and the departure point for its design (Roth, 1992). It demands professing a particular belief that permeates every aspect of the design; however, it is far from being solely intellectual. *Parti* derives from understandings that are more transcendent than mere architecture, and must be cultivated before design can be born (Frederick, 2007). The *parti* manifests the true essence of a design, and the essence needs to be “felt” and experienced rather than intellectually figured out. It gives order, meaning, and rationale to an architectural project, and becomes the design philosophy.

This textbook has a definitive *parti*. Its purpose is to bridge the gap and lesson the divide between theoretical research and practice. It emphasizes the importance of integrating practice-based evidence along with evidence-based practice, and highlights the artistry of our field along with the science. It is built on *guiding principles and recurring themes* that flourished in different centuries and parts of the world, across fields and throughout the ages, and that seem to transcend time and culture. My hope for this book is to offer the

reader a professionally balanced perspective, helping to neutralize the pendulum swings, and give greater functionality to the scientific practices we all must adhere to.

This book takes a critical look at areas related to our own professional wellness, and the necessity of sustaining both the personal self and the professional self. It challenges us to consider our own perceptions about the nature of professional practice, and facilitates the development of four necessary attitudes that can have a profound impact on both clinical success and professional satisfaction: *a scientific attitude, a therapeutic attitude, a professional attitude, and a leadership attitude* (Cornett & Chabon, 1988). It contains a blend of clinical evidence and research, practitioner views, common sense, philosophical stances, and historical overviews. It examines each area through a perspective of interdisciplinary research, in addition to personal stories or narratives illustrating key principles and strategies. The stories—emanating from years of field experience, academic leadership, and professional judgment—are used to investigate a variety of larger questions and clinical issues, with the goal being to encourage reflection about our choices and the reasons they make sense. The clinical principles are discussed through a multitude of experiential lenses: that of clinician, staff development specialist, educator, supervisor, and professor. They comprise the narratives or *autobiographical reflective tales* (A.R.T.) woven through most of the chapters, much like a mosaic of practice-based evidence.

The *first section* of the book takes us from data to wisdom. It helps us understand the importance of *building* a foundation for our *clinical path* through a discussion about the

necessary *pillars of practice* and underpinnings of a *scientific attitude*—scientific and evidence-based principles, different types of knowledge systems, and development of *wisdom*. Some of the topics include translational research, knowledge management, the place of science, the significance of storytelling, the heart and soul of our work, and the value of intuition.

The *second section of the book* helps us understand the importance of *supporting* our foundation through an introduction to the *philosophical and therapeutic pillars of practice*: reflection, counsel and care, balance and harmony, growth and detachment. Each *pillar of practice* becomes the context for discussing specific principles that sometimes get overlooked in traditional academic textbooks, such as becoming a reflexive practitioner, mindfulness, nonverbal communication, counseling, using feedback, clinical reasoning, prompts, and termination from service. The *philosophical pillars of practice* provide the underpinnings of the *therapeutic attitude*.

The *third section of the book* helps us understand the importance of *following* specific *guideposts and stepping-stones* on the path to clinical effectiveness and professional fulfillment. It serves as a kind of field-guide for the development of a *professional attitude*, and includes chapters that serve as *pillars of practice*: organizational frameworks, materials and activities, measuring progress, best practices, and the importance of community. Principles from assessment and intervention practices are highlighted, such as learning theories, activity analysis, the hidden curriculum, client adherence, ethnographic research, therapeutic alliances, and universal themes.

The *fourth and final section of the book* helps us understand the ultimate purpose of this path we have chosen, to sustain and grow our profession through an *attitude of leadership*. It includes discussions about *ownership and self-direction*, the creation and implementation of a *learning organization* and the development of *leadership practices*. This sec-

tion highlights shared vision, clinical expertise, emotional intelligence, leadership trends, the scholarship of teaching and learning, and research dissemination.

This is a book with a particular philosophy about our field, and it contains concepts that may be ancient, but align well with current principles related to client-centered practices, holistic views, interdisciplinary practice, and inter-professional education. I believe that the path to an enlightened future in our field begins with understanding the wisdom of the past. One of my goals in writing this book is to make the *process and practice of therapy* more explicit so that we may sustain our personal self as well as our professional self. A second goal is to support and *engender the mindset and attitudes* necessary to become *reflective practitioners*.

This is a textbook designed for students and practitioners who are actively involved with the process of knowledge acquisition, and it targets issues related to the excellence behind and scholarship within teaching and learning. By weaving together personal stories and clinical narratives, I have created a compendium of experiences that narrate the arc of my career. It is my hope that this book, along with its real life scenarios, will help students, as well as new or seasoned practitioners assimilate, integrate, and synthesize knowledge into a more meaningful and integrative gestalt.

This book has many layers. It may send you searching for additional information about a particular topic, or entice you to rethink some prior knowledge. It is for students and practitioners alike. I think of myself as a weaver who loves to synthesize different textured threads into a single cloth. I have brought together ideas that may not traditionally appear in speech pathology textbooks, but those which are all related to the holistic nature of our work. As you consider the ideas from this book, I invite you to tap into your deeper experiences with life and academic knowledge. Slow down, reflect, listen to your inner wisdom, and attend to what emerges.

REFERENCES

- Cornett, B. S., & Chabon, S. (1988). *The clinical practice of speech-language pathology*. Columbus, OH: Merrill.
- Frederick, M. (2007). *101 things I learned in architecture school*. Cambridge, MA: The MIT Press.
- Roth, L. M. (1992). *Understanding architecture*. New York, NY: HarperCollins.

Acknowledgments

I acknowledge the following people who inspired me on *The Practitioner's Path*:

My husband Peter, for his endless love and support; *my family and friends* for giving me the time and space to get this done.

Rhoda Ribner, for being my work mom, best mentor and most supportive speech therapy supervisor ever; *Joanna Doster*, for boosting my morale at every bend and fork in the road; and *Bob Goldfarb*, for inviting me to contribute to his book and then encouraging me to write my own.

New York City Department of Education (NYCDOE) District 75 *speech supervisors, staff developers*, and every *member of my curriculum, assessment, and intervention committees* for the opportunity to have worked together.

And finally, the *clients, students, and practitioners* with whom I have worked, taught, supervised, and who continue to be my muses and provide motivation for my life's work.

Reviewers

Plural Publishing, Inc. and the author would like to thank the following reviewers for taking the time to provide their valuable feedback during the development process:

Perry Flynn, MEd, CCC-SLP

Professor
Department of Communication Sciences
and Disorders
University of North Carolina Greensboro
Greensboro, North Carolina

Stephanie Meehan, MA, CCC-SLP

Clinical Assistant Professor
Department of Speech-Language-Hearing
University of Kansas
Lawrence, Kansas

CHAPTER 10

Implementing Materials and Activities

1. MATERIALS VERSUS ACTIVITIES

What Is the Difference Between a Material and an Activity?

Many seasoned practitioners do not consider the difference between materials and activities. As a supervisor and professor, I explain it in a simple way: think of one material and 10 different activities to do with that same material. As long as you are including a verb, it is probably an activity. So if the material is a picture card, activities might include naming, placing in a sentence, pointing, describing, rhyming, and so forth. The more specific you are, the more activities you can come up with. Then, think of one activity and 10 different materials you might use. That type of reflection forces flexibility and creativity. If you go through it once, it will help you for years to come.

What are the overall differences between a material and an activity? A material can be thought of as a *noun*, and an activity as an *action verb*. Another way of thinking about it is that a material is *a thing*, and an activity is *what you can do* with that thing. An activity refers to any kind of *purposeful therapeutic procedure* that involves learners doing something that relates to the goals of the session. Companies generally *sell materials*, many of

which come with a set *activity*. For example, the game Monopoly is a material, and the “natural” activity that is described in the game directions would be the activity of *playing that game*.

Keep the Game, Change the Activity

Games are often used exactly the way they were designed. That is unfortunate because of the lost opportunities for new and exciting activities. Here are some guidelines for using games differently than the purpose for which they were designed:

- Children, if familiar with the game, will probably want to play it according to the rules. All you have to do is tell them you have a new way of playing, and most children will be open to that.
- Make up your own set of rules, and have the children contribute.
- Ask them what they like or didn't like about the original game.
- Nobody says that you must finish the game. Children do like to complete activities, however if you explain “the rules” before you get started, they will know when it is time to stop playing. Activities should have discrete end points, and timers help the process (Goldberg, 1987).

- Use parts of games that the children like from other activities.
- Always remind the children *why* you are playing that game/activity, and what you are practicing. That is important for obvious reasons, but it may also help “script” an alternative answer to that age-old question, “What did you do in speech today?”

A.R.T.: Spinners and Dice

As a young practitioner, I noticed that many of my students loved dice and spinners. I decided one day to rev up my activities by incorporating one of those in a variety of ways. My students loved the idea, and it didn't much matter what activities we were doing as long as they could throw the dice or spin that spinner. Those materials provided both motivation and reinforcement, so what could have been better?

Why Is That Difference Important?

It is important for many reasons. First, it is about *economics*. In 1952, an article was written describing the basic essentials of a “medicine bag” of materials and supplies for our work, which was then called “speech correction” (Bell & Pross). One of my early professors in undergraduate school used to say that the only materials we needed were a pencil and paper. That's a big responsibility, because it all rests with us. In those years, we didn't have all of the vendor companies that we now do so there was nobody to blame if the students were “bored.”

When I began working, I had a few boxes of DLM cards (Developmental Learning Materials is a company long gone), a tape recorder, some “lick and stick” colored shapes of different sizes, index cards, and colored mark-

ers. I had this incredible sense of joy when I bought a new material, even if it was a new colored marker. I used everything I had, and got very creative thinking of new possibilities for my work with the students.

A second reason it is important is that it encourages us to be *practice-based, interdisciplinary and translational* with our approach. When we are less rigid about what we use and how we use it, we look for and find innovative materials and activities in highly unusual places.

A.R.T.: “This Is Not Speech Therapy”

In 1970, my first professional supervisor came back from a theatre arts staff development workshop, and her description of that workshop became my first memorable translational experience. It was at this training session that I learned theatre games such as *mirroring* and *vocal symphony*. My job was to figure out how to integrate these techniques with articulatory placements, repetitive production, and bombardment. No one talked about the research; we were imaginative, we were creative, and our enthusiasm sold success.

I continued to use these and other “unusual” activities in my speech therapy program. One day a student looked up at me with a brace-filled smile and in all of his lateral emission glory spurted out, “I don't know what this is, but it's *not* speech therapy.” This student grew up to become a world-famous comedic film actor, lisp-less of course. And I was hooked on the glories of implementing research and discovering techniques with demonstrated success from other disciplines (Papir-Bernstein, 2012, pp. 51–52).

A third and probably most important reason that we need to think about the material-activity distinction pertains to our

to do it. Play is not a luxury, but rather a necessity.

The newest studies about “active learning” show that children act a lot like scientists doing experiments when they play with toys (Gopnik, 2002). They naturally chose to play with toys that teach them the most, and play with them in a way that gives them the most information about the world and how people act in the world (Gopnik, 2016). Although most children will gladly and effectively imitate what parents and teachers show them, their own manipulations are more conducive for creative innovation. In fact, imitation often runs counter to innovation. The most effective learning, especially for young children, happens when we engineer the environment and let them learn through their own manipulative play.

3. MATERIAL SELECTION

General Guidelines for Selection

Whenever possible, give *children* the opportunity to *choose* the materials and activities through which therapy will be provided. Responsibility and choice go hand in hand. By allowing them to make their own choices and then comply with circumstances, self-responsibility is nurtured (Goldberg, 1997).

Materials for young adolescents may involve similar games and activities used with children; however, they will be reluctant to engage if the similarities are too obvious. We tend to use more conversational discourse when working with older children and adults. The sources for content include music, TV shows, technology, sports, clubs, relationships with family, work, current events, politics, and leisure activities (Florsheim & Herr, 1990; Goldberg, 1997; Zarbatany, Ghesquiere, & Mohr, 1992). One source of information is

an “interest inventory,” listing all types of possible activities and materials for consideration.

Most of the materials and activities you chose will hopefully meet the following suggested guidelines (Oregon Department of Education, 1995): contains activities that can be adapted to student-proficiency; appeals to a variety of learning styles; actively engages students in meaningful, interactive communication; allows for open-ended and creative use of language; requires higher order thinking skills; promotes a variety of language functions; and includes visuals of both genders, varied ages, and are representative of ethnic, racial, cultural, and ability diversities.

Interest Inventories

The purpose of an interest inventory is to identify the student’s preferences, values, and interests and then match them with materials and activities during the therapy sessions. The information may be obtained in one of three different ways: have the student complete the inventory, interview the student directly, or obtain the information from parents, caregivers, or other staff members. In each case, the carrier phrase would be changed accordingly (do you/does your child/does the student). The following types of questions were used to gather interests for a speech therapy curriculum guide called *Activity-Based Language Experiences*, or ABLE (Papir-Bernstein, 1992):

- . . . watch a lot of TV? Which shows?
- . . . spend time on a digital device? Doing what?
- . . . have any hobbies? What are they?
- . . . play or watch sports? Which ones?
- . . . help with chores around the house? Which ones?
- . . . have a job? What kind?
- . . . like to read? What?
- . . . like to listen to or play music? What kinds?

- . . . like to work with hands? What activities?
- . . . enjoy going shopping? For what?
- . . . collection anything? What types of things?
- Is there anything your child would like to learn to do?
- Is there anything you would like your child to be able to do that she or he presently cannot?

Using Materials and Activities With Purpose

Everything we do with our clients is purposeful and should have a clear direction for us and for them. Our sessions usually need to begin by telling our client the purpose of the activity, how the activity is to be carried out, and why the activity is being done (Goldberg, 1997). These are called organizing statements. These very directed statements about *the what, the how, and the why* of our work will help our clients develop a sense of focus and purpose, both of which facilitate the learning and retention processes (Balluerka, 1995).

Research has shown that when we provide organizing statements before an activity, the *response time* between the presentation of the stimulus and the response diminishes (Goldberg, 1997). We also know that organizing statements increase the *success rate* for both easier and more difficult cognitive tasks (Snapp & Glover, 1990). In addition, direction and focus increases the *general retention* of information and the specific retention of items the client's attention is directed to (Goldberg, 1997).

Types of Materials

The choice of what to use in therapy is often dictated by what is available, what is easily accessible, what is motivating, and what is simple to set up. The following materials and activities are age appropriate, student directed,

functional, and naturalistic (all principles of best practices, which will be further discussed in a later chapter). Practitioners under my supervision working in elementary, middle, and high school programs commonly and often used them. Just recently, before writing this chapter, I found a blog listing many of these same materials (Eisenberg, 2014, 2015a, 2015b).

1. *Newspapers* target literacy, interrogatives, leisure and sport activities, and current events. They provide realistic content for most areas of communication remediation.
2. *Comic strips* receive special mention. They can be found in newspapers or comic books can be laminated, placed on index cards, and used over and over again. They can be used for expanding vocabulary, learning about semantic transformations and different types of humor, conversational turn-taking, literacy, and facial expressions and body language (Gray, 2015; Gray & Garand, 1993).
3. *Magazines* are always surprising for their articles and pictures.

A.R.T.: Collages

One activity done at the beginning of the school year was the *creation of collages*. Students would get to bring in *magazines* from home, and identify favorite pictures from specific vocabulary categories that helped define their preferences and personalities. Some of these vocabulary categories were foods, activities, places, clothing, and so forth. One young man grabbed magazines from a pile at home, and had probably not looked closely at what he had chosen until he was back for his next speech therapy session. Imagine the looks on the faces of the six 12- to 13-year-old young children, when he held up a copy of *Good Housekeeping* and *Playboy*!

4. *Grocery circulars* are wonderful for categorization, sequencing, and vocabulary. We also used them to make up shopping lists for community intervention, or speech therapy in the community.
5. *Store catalogs* serve the same purpose. Different students can bring in catalogs that cater to their individual interests: home décor, electronics, clothing, and so forth.
6. *Public transportation maps* are also free and functional for work on travel training, vocational training, problem solving, and literacy.
7. *Menus* are not only functional, but serve so many therapeutic purposes. You can work on vocabulary, categorization, problem solving (how do you even begin to find what you want?), sequencing, quantity concepts (math), attribution (adjectives and descriptive language), pragmatics, and literacy (just to name a few).
8. *Television show and cable guide listings* can be used for descriptions, interrogatives, and general literacy.
9. *Employment applications* provide excellent opportunity for building basic knowledge about personal information, memory work, and writing skills.
10. *Playing cards* can be used for matching, sentence building, turn-taking, memory work, making and following rules, and so forth.

Places to Find Materials

Listed below are categories of activities that can be used to generate ideas for *activity-based language experiences*, all linkable to curriculum standards: arts and crafts, shopping trips, hobbies, music and movement, sports, play and leisure, work, grooming and personal hygiene, fashion, history, and current events. The specific activities within each category are in Appendix A. Most of the activities are

motivating, fun to perform, and appeal to a wide variety of students with diverse interests, ages, developmental abilities, and cultural backgrounds. Each one of them has been field-tested by professionals working under my supervision (Papir-Bernstein, 1992).

Two of the most common ways to accumulate materials are to visit flea markets and ask for donations. The following is a partial list of the types of materials available, usually free, just for asking (Papir-Bernstein, 1987; Schwartz & Miller, 1996): *carpet stores*: carpet samples and scraps for floors, mobiles, and so forth; *fabric stores*: sewing notions, patches, remnants; *grocery stores*: boxes, cartons, displays, circulars; *garage sales*: toys, books, games, art supplies; *lumber yards*: wood scraps, building supplies; *paint stores*: paint color cards; *paper and greeting card companies*: damaged or outdated items; and *wallpaper stores*: outdated sample books, paper swatches.

A.R.T.: String Art

In my work supervising speech therapy programs for students with severe and profound disabilities, one very difficult setting was a high school program for students with severe emotional disabilities. Student motivation to attend school in general was at an all time low, and my team of practitioners was close to burned out. After attending a speech workshop on the use of *craft materials*, and a second one on *culturally diversifying* their therapy programs and their creative juices began to flow they came up with a fabulous project that became the model for many others like it. Using a world map and string art, students were able to track their countries of origin and construct national flags to attach to the string. Of course, it all connected with social studies and geography standards and later became one of the widely used multicultural themes in the entire district.

Art Experiences

Art experiences for children can focus on process, on product, or on both. When we focus on both, the benefits are overwhelming (Richards, 2015):

- There is no right or wrong way.
- The art is unique and original.
- The experience is relaxing and joyful.
- The art is in the child's individual voice
- The art is focused on exploration of tools and materials.
- There may be instructions and sequential steps to follow.
- There may be a visual sample to follow.
- There may be a product in mind.

Open ended, creative art experiences can be directed through the use of the following types of activities and materials (Bongiorno, 2004; Edwards, 2010): finger painting, use of a variety of discarded *household tools*, such as or potato mashers, exploring with clay and play dough, creating spin art with common objects, stringing beads or shells, making collages out of craft elements, such as pompoms, and creating string art.

A.R.T.: Pompoms

Pompoms hold a very special place in my heart, and I still wake me up giggling at 3:00 AM when I think of this story. Our staff development unit developed an interest in the use of craft materials, and so we ordered many different types for use in the field. We were an organization of over 500 speech practitioners, and our orders were quite large. An error had been made with the pompom order, and so instead of 500 bags we wound up with 500 dozen bags (with 150 pompoms in each bag). Because the product was on sale, no returns were accepted.

We all became very creative with our use of pompoms, and to this day I shy away from that aisle in craft stores.

Critical Activity Features

What are critical features? For the student, they are the essential components that make the material worth paying attention to. For the practitioner, they help distinguish what is critical from what is unimportant or irrelevant. There are six critical features in materials and activities that children respond to (Goldberg, 1987). They are mobility, construction and destruction, material and activity movement, completion, flexibility, and surprise. Each material or activity you use should have at least one critical feature. The more of these features that an activity or material contain, the more likely will the child have a positive response to it (Goldberg, 1987; Kuhaneck et al., 2010).

1. *Mobility*, such as moving about the therapy space, reduces mental fatigue and improves engagement. Mobility also includes moving parts of the body. Children seem to stay on task longer when we alternate between cognitive and physical tasks, or combine them (Dunchan, Hewitt, & Sonnenmeier, 1994).
2. *Construction and destruction*, such as building or taking apart, adds a dimension of temporal progression and control. Construction is a natural activity for children, and putting things together to create something new is both exciting and intriguing. The opposite of construction is destruction, or taking apart, and affords children a sense of control (Piaget, 1972).
3. *Material and activity movement*, such as movable pieces in a game, engages the child and adds a dimension of forward