# TABLE OF CONTENTS

| Who we are: OSLHA and eHearsay          | 2 |
| In this Issue                           | 3 |
| Laurie M. Sheehy                        |   |

## Research:

| Forging International Collaborations for Sustainable Projects: The ASHA/PAHO Project | 4 |
| Silvia Martinez, Linda I. Rosa-Lugo, Gloria Weddington, Lily Waterston & Armando Vasquez |

| Martine Elie, Jay Lucker, Silvia Martinez & Wihelmina Wright-Harp |

| Learning Styles of Communication Sciences and Disorders Students in a Historically Black College/University | 17 |
| Silvia Martinez, Folasade Falana, and Martine Elie |

| Gender Differences in Spoken Narrative Productions of African American Preschoolers | 29 |
| Tiffany Moody & Amy Wait Hobek |

## Clinical Focus:

| Using African American Literature in the Therapy Setting | 43 |
| Yolanda Feimster Holt |

| Impact of Trauma on Language Development | 51 |
| Kellie Pauley & Janice Wright |

## Viewpoint:

| Power in Communicating Vulnerability | 64 |
| Ken Anderson |

## CEU Questions (directions & worksheet for earning on-line CEU’s) | 66 |

## Guidelines for Submission to eHearsay | 70 |

## Open Call for Papers | 71 |

## In the Next Issue | 72 |
MISSION:
Empowering our members by providing opportunities for professional development, advocacy, and leadership development necessary to foster excellence in the services provided to individuals with communication and related disorders.

HISTORY:
Founded in 1945, the Ohio Speech-Language-Hearing Association (OSLHA) is a professional association representing speech-language pathologists and audiologists throughout Ohio. OSLHA is recognized by the national American Speech-Language-Hearing Association (ASHA) as the official professional organization for Ohio. OSLHA members provide services for the evaluation and rehabilitation of communicative disorders. Members work in a variety of settings including: clinics, health care facilities, hospitals, private practice, schools, and universities. Members must abide by the OSLHA Code of Ethics.

eHearsay, the electronic journal of the Ohio Speech-Language-Hearing Association, is designed to address the professional development needs of the state association. Issues are developed around specific themes and can include invited papers, research articles, review, tutorial, research forum, letter to the editor, clinical focus/forum or viewpoints.

eHearsay is published as a web journal annually. Continuing education credits will be available for each issue.
Welcome to the Summer 2018 issue of eHearsay. It starts off with an article about international collaboration (Martinez, Rosa-Lugo, Weddington, Waterston & Vasquez). The authors reported that “15% of the world population lives with some kind of disability with different degrees of severity”. Speech-language pathologists, audiologists, and other allied health/medical professionals are needed to provide services to these people. Colleges and universities have been incorporating interprofessional educational experiences into the curriculum. This collaborative practice will help our professional members go on to further community, national and international collaborative connections.

Three articles in this issue focus on differences. The article by Elie, Lucker, Martinez & Wright-Harp looks at the hypothesis that dialect (specifically Haitian Creole) can unduly result in an expressive language disorder when it is a linguistic difference. Moody & Hobek examine gender differences in spoken narrative production looking at macrostructure, microstructure and dialectal density in African American preschools. They discovered that gender differences occur in African American English (AAE) dialect in self-generated narratives. The last article by Feimster Holt reminds us that treatment materials are not one size fits all. In order to make a difference in the lives of our clients (regardless of work environment), speech-language pathologists need to incorporate culturally relevant African American literature to engage our students with the learning experience while simultaneously learning about the culture.

A person’s learning style refers to the preferential way in which the individual absorbs, processes, comprehends and retains information. Martinez, Falana & Elie explore learning characteristics shared by students in communication sciences and disorders from a Historically Black College/University (HBCU). They suggested that faculty/teachers should incorporate a problem based learning approach that utilizes case studies, collaborative learning and problem solving with a combination of rote learning (using internal and external strategies), sequential learning (steps in an activity; each step following logically from the prior step), and use of visuals (e.g., virtual models, figures, digital mapping, concept maps, graphic organizers, etc.).

Pauley & Wright discuss the impact that trauma (e.g., living in poverty, abuse/neglect, family violence, living in the foster care system, mental illness) has on language development in children and adolescents. This trauma population requires explicit instruction to use language to advocate for themselves and to problem solve. Teaching them how to be effective communicators helps build self-esteem in students, promotes a positive attitude toward academics, develops higher level thinking skills and develops their oral/social-pragmatic communication skills.

Last but not least, Ken Anderson shares his belief that the people we serve professionally come to us in a vulnerable state. We need to be able to relate to how they are feeling so that we can build honest, trusting relationships and provide more human-centered treatment.

Wishing you love, laughter and many blessings!
Laurie M. Sheehy, eHearsay Journal Editor
Forging International Collaborations for Sustainable Projects: The ASHA/PAHO Project

Silvia Martinez, Linda I. Rosa-Lugo, Gloria Weddington, Lily Waterston & Armando Vasquez

Abstract
In 2013, the American Speech, Language, and Hearing Association (ASHA) entered into a collaborative relationship with the Pan-American Health Organization (PAHO) to address several identified needs in the Americas. The collaboration was charged with enhancing the health of populations in El Salvador, Guyana, and Honduras by carrying out/supporting capacity building projects in the fields of speech and language pathology, and audiology. Recommended international development practices and ethics were embraced to enhance sustainability of the projects. For these purposes, components of the Precede-Proceed planning model guided the integration of environmental, individual, institutional and social, factors during the assessment, action plan development and implementation phases.

Silvia Martinez Ed.D is employed at Howard University.
Financial – Associate Professor at Howard University.
Nonfinancial – Over 35 years’ experience working with inner city, culturally and linguistically diverse children. Is interested in health disparities, particularly prevention. Is engaged in research about Spanish development/dialectology, literacy and technology among urban, immigrant, and international populations. Active in ASHA and National Black Speech and Hearing Association. Awarded the ASHA Fellow Award. Received ASHA Certificate of Recognition for Special Contributions in Multicultural Affairs. Was chair of Ad-Hoc Committee in the ASHA PAHO initiative.

Linda I. Rosa-Lugo Ed.D. is employed at the University of Central Florida.
Financial – Associate Professor at the University of Central Florida. Principal Investigator of a USDDE/OSEP collaborative grant with USF and has been the PI and the Coordinator of two additional USDDE, OSEP Personnel Preparation Grants.
Nonfinancial – Research interests include language and literacy development in Hispanic youngsters who are deaf/hard of hearing, and first and second language acquisition in English learners. Awarded the ASHA Fellow Award. Received ASHA Certificate of Recognition for Special Contributions in Multicultural Affairs. President of ASHA Hispanic Caucus. Was chair of Ad-Hoc Committee in the ASHA PAHO initiative.

Gloria Weddington Ph.D. is retired from San Jose State University.
Financial – Professor Emerita at San Jose State University following 40 years as Chair of Communicative Disorders and Sciences and faculty.

Lilly Waterston M.A. is employed by the American Speech-Language-Hearing Association (ASHA).
Financial – Director of International Programs at ASHA. ASHA National Office advocate and resource for advancing the Association’s International Programs worldwide
Nonfinancial – Member ex officio of the Special Interest Group (SIG) 17 and 4 Ad Hoc Committees for collaboration between ASHA and the Pan American Health Organization - Regional Office for the Americas of the World Health Organization (PAHO/WHO). Consultant to ASHA’s International Issues Board (IIB).

Armando Vasquez M.D. is retired from University of Central Florida
Financial – Retired from the University of Central Florida. Has taught courses in Public Health of the University of Carabobo, Venezuela and in the Post-degree on Physical Medicine and Rehabilitation in the Central University of Venezuela.
Nonfinancial – Pan-American Health Organization Regional Advisor on Rehabilitation and Disability

Learning Objectives
1) Explain the mission of the Pan American Health Organization (PAHO)
2) Describe the Precede-Proceed Model steps as it relates to program planning
3) Summarize accomplishments of the ASHA/PAHO collaboration in El Salvador, Guyana and Honduras

The World Health Organization (WHO) World Report on disability points out that 15% of the world population lives with some kind of disability with different degrees of severity, which represents about one billion people (WHO, 2013). A summary from the Economic Commission for Latin America and the Caribbean (ECLAC) (2012), describes that disability rates range from country to country depending on data collection content and methods. For example, Mexico reports a 5.1% disability prevalence while Brazil reports a 23.9% prevalence rate. In the Caribbean, the reports range between...
Disability issues have been in the forefront of international agencies. For instance, in May 2014 the 67th World Health Assembly (WHO, 2014) adopted a resolution endorsing the WHO Global Disability Action Plan 2014–2021: Better Health for All People with Disability. Shortly thereafter, the 53rd Pan American Health Organization (PAHO) Directing Council (October 2014) adopted a resolution endorsing the Regional Disability and Rehabilitation Action Plan (Pan American Health Organization, 2014). Both action plans are mutually aligned and provide a roadmap for WHO member countries and international partners to collaborate on improving the health and human rights of people with long-term and functional disabilities. Subsequently, in 2015, the WHO developed 17 health-related sustainable goals in order to guide the global course of action to end poverty, promote prosperity and well-being for all individuals, protect the environment, and address climate change. Of the 17 WHO goals, the three following goals, to ensure healthy lives and promote well-being for all at all ages (WHO Goal 3), ensure inclusive and equitable quality education and promote lifelong learning opportunities for all (WHO Goal 4), and, strengthen the means of implementation and revitalize the global partnership for sustainable development (WHO Goal 17) are significant to the ASHA/PAHO project described in this article.

PAHO is the international health agency for the Americas and is comprised of 48 member countries and territories. PAHO serves as the specialized health agency of the Inter-American System and also serves as the Regional Office for the Americas of the World Health Organization (WHO), the specialized health agency of the United Nations. A primary goal of this agency is to improve and protect the health of the people in the region, and to conduct various activities in cooperation with their members to strengthen health systems. Specifically, they promote good health and respond to emergencies, disasters and concerns about communicable and noncommunicable diseases. As part of their technical cooperation they assist ministries of health, government agencies, civil society organizations, international agencies, universities and other partners. The PAHO/WHO Disability and Rehabilitation Program provides technical assistance and cooperation to member states for development or strengthening policies, plans, programs and interventions, in order to ensure health promotion, prevention of disability, rehabilitation and equalization of opportunities for persons with disabilities. Some of the activities carried out by PAHO to address the WHO/PAHO agenda on disabilities include:

- supporting and providing technical assistance to countries in the region to develop policies, plans and programs on disability and rehabilitation.
- promoting health and human functioning, prevention and early intervention of disability.
- health care and comprehensive rehabilitation.
- implementing Community Based Rehabilitation (CBR) and articulating Primary Health Care (PHC).
- collecting data on disability through the use of a health information system
- supporting and offering technical assistance in development of disability prevalence studies.
- supporting and offering technical assistance in the education and training of human resources.
- providing technical assistance for the development of norms in disability prevention and rehabilitation.
- developing and /or strengthening of rehabilitation services by level of complexity, integrated into the health services.
- providing technical assistance for the development of supportive services and technical assistance devices.
- publishing of literature on disability and rehabilitation.
- disseminating information on the use and application of the International Classification of Functioning, Disability and Health (ICF).
- equalizing opportunities for persons with disabilities.
- promoting and supporting inclusive education for children with disabilities.

2.9% (Bahamas) and 6.9% (Aruba). The estimate, states ECLAC, is that approximately 12% of persons live with at least one disability, totaling 66 million. Nevertheless, the Pan-American Health Organization (PAHO) has estimated a larger prevalence rate of 140-180 million people affected by disabilities in the Americas (2012). Of this total, 2% of persons with disabilities experience serious functional difficulties.
• advocating for the implementation and enforcement of the Convention on Rights of Persons with Disabilities.

The ASHA/PAHO Project
The American Speech, Language, and Hearing Association (ASHA) Board of Directors instituted its Strategic Pathway to Excellence with the objective to “Strengthen Strategic Relationships” by engaging with organizations to support ASHA’s mission and expand ASHA’s outreach worldwide. Among the priorities of this strategic objective were to identify opportunities to collaborate with the World Health Organization (WHO). Thus, under the plan of activities of the ASHA International Issues Board (IIB), ASHA and the Pan American Health Organization (PAHO), Regional Office for the Americas of the World Health Organization (PAHO/WHO), launched a joint collaboration for ASHA professionals with various expertise to provide technical assistance on speech-language pathology and audiology in the Americas region.

In 2013 ASHA and PAHO selected three of PAHO’s priority countries for technical cooperation that had expressed a desire to work on specific challenges they had in addressing the needs of populations with communication disorders. These countries were El Salvador, Honduras and Guyana. The ASHA/PAHO on-site assessment teams identified the consulting needs of each country’s specific challenge and recommended offering educational and service delivery technical assistance. To address the goals established by this collaborative project, ASHA established three ad hoc committees. These committees consisted of ASHA member volunteers with expertise in speech-language pathology and/or audiology.

The role of each ad-hoc committee was to support and assist each country with their specific needs and build capacity with a major emphasis on sustainability. The definition of “capacity building” provided by the United Nations Environmental Program’s (2005) closely parallels the mission of the ASHA/PAHO project. Specifically, the UNEP states that sustainable capacity building is predicated on fostering relationships and values that allow individuals, groups and organizations to enhance their performance, accomplish their objectives and sustain individual and organizational change that results in mutual cooperation and partnerships.

The ASHA/PAHO project ascertained the priorities, needs, and systems of each specific country and used these to guide collaborative priorities. Furthermore, this project shared a fundamental commitment to ethical behavior and integrity while fulfilling their roles and responsibilities to the priority countries and the profession.

Precede-Proceed Planning Model
The Precede-Proceed Planning Model (Green and Kreuter, 2005) has been highly recommended by the Department of Health and Human Services, National Institutes of Health (2005) as a good conceptual framework for examining and carrying out sustainable health projects. This “ecological” model recognizes that health issues are contingent upon a multiplicity of factors, and that change happens when individual, environmental, social and behavioral (IESB) factors are considered.

The Precede-Proceed framework has been suggested for use by speech-language pathologists in their work with people with disabilities in indigenous communities (Westby, 2013; Wylie, McAllister, Davidson & Marshall, 2013). They can be used to assist in the development of programs (e.g., PRECEDE components of the model) and to determine the necessary stages for program implementation (e.g., PROCEED). Each of these acronyms consist of clearly defined activities that can result in culturally responsive and appropriate services for persons with communication disorders.

The Precede-Proceed Planning Model consists of the diagnostic phase and the program implementation and evaluation phase. There are a total of nine interactive steps (See Table 1) (Department of Health and Human Services, National Institutes of Health, 2005).
Table 1. Precede-Proceed Model Steps

<table>
<thead>
<tr>
<th>Step</th>
<th>Diagnostic Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Social Assessment</td>
<td>assessing people’s views of needs</td>
</tr>
<tr>
<td>2. Epidemiological Assessment</td>
<td>collecting information to document communities health needs</td>
</tr>
<tr>
<td>3. Behavioral and Environmental Assessment</td>
<td>identifying internal and external factors contributing to health problem</td>
</tr>
<tr>
<td>4. Educational and Ecological Assessment</td>
<td>identifying preceding and reinforcement factors needed for starting and sustaining change</td>
</tr>
<tr>
<td>5. Administrative and Policy Diagnosis</td>
<td>identifying policies, resources and circumstances that help or hinder implementation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Implementation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Implementation</td>
<td>carrying out the plan</td>
</tr>
<tr>
<td>7. Process Evaluation</td>
<td>evaluating how program is carried according to plans</td>
</tr>
<tr>
<td>8. Impact Evaluation</td>
<td>gauging change and how other factors will impact sustainability of change</td>
</tr>
<tr>
<td>9. Outcome Evaluation</td>
<td>assessing how program impacts health indicators</td>
</tr>
</tbody>
</table>


Despite the proposed steps, in general, many countries do not have sufficient infrastructure, time, or resources to realize all of the steps outlined in this model. In the ASHA/PAHO project the various countries initially began in the assessment phase. Each country worked collaboratively with a variety of stakeholders and ASHA professionals to document and prioritize pressing needs. They each developed an action plan with proposed activities to address in the implementation phase and how each would be evaluated. ASHA/PAHO committee members assisted in the execution of the action plan and provided support in program planning and implementation. Although it is beyond the scope of this article to detail the work accomplished in each country, a summary is provided of the priorities that were addressed in each country to provide services to individuals with communication disorders.

**El Salvador ASHA/PAHO Project**

**Background.** El Salvador is the smallest but most densely populated country of Central America with a population estimated at 6.42 million in 2015. The last census in 2007 recorded from 4.0 to 6.6% per cent of the population with a disability (Dirección General de Estadística y Censo, 2007). It is estimated that only 150 clinicians serve individuals with communication disorders (Schuermann, Martínez, Weddington, & Rosa-Lugo, 2014). Often, clinicians receive no formal training, and/or graduate degrees in special education. Often, they learn on the job to work with clients with very complex disorders. El Salvador does not have a program that prepares professionals in communication sciences and disorders (ISRI, 2011). To address the need to improve their capacity to provide speech-language pathology and audiology services the ASHA/PAHO project agreed to provide technical assistance to the Instituto Salvadoreño de Rehabilitación Integral (ISRI) for training and capacity building.

The Instituto Salvadoreño de Rehabilitación Integral (ISRI) is an autonomous institution registered with the Ministry of Health (MOH). It includes the administration of higher education and eight centers for delivery of services for individuals across the life span with varying disabilities. These centers are located in the capital city of El Salvador as well as in outlying rural areas. Specifically, the Center for Hearing and Language (Centro de Audición y Lenguaje [CALE]), in coordination with other agencies, provides rehabilitation services to individuals across the life span with a concerted effort to address the needs of children with hearing loss and their families. Despite the work and accomplishments of CALE, there remain challenges in reaching the institutional objectives due to the paucity of professionals appropriately prepared to meet the needs of individuals with hearing loss in El Salvador.

**ASHA Response.** ASHA and PAHO/WHO conducted a needs assessment trip to El Salvador and identified particular needs, to include, providing technical assistance and developing training programs for different tiers of personnel to work with individuals with hearing loss and to provide technical assistance for the use of audiological equipment. An ad hoc
committee was established and consisted of 5 bilingual professionals with expertise in speech-language pathology and audiology. The El Salvador Ad Hoc Committee was charged to provide technical assistance to the Instituto Salvadoreño de Rehabilitación Integral (ISRI) staff engaged in the rehabilitation of communication disorders in El Salvador. Specifically, ASHA is providing technical assistance to the Center for Hearing and Language (Centro de Audición y Lenguaje [CALE]) for training and capacity building for personnel in speech-language pathology and audiology. This includes the use of equipment and assisting with the development of modules and training programs for different tiers of personnel, to include personnel who (a) do not have professional education in speech pathology and audiology, (b) have speech pathology and audiology professional education, and (c) are in need of training for the use of specialized audiology equipment.

The PRECEDE-PROCESS framework influenced the work of the Ad hoc committee in developing a collaborative action plan with ISRI. The ISRI project consisted of four phases (1) diagnosing, formulating and organizing the project (2) implementation; (3) review of the process and established protocols; and (4) evaluation. Four major focus areas were identified: (a) preparation of professionals in family centered intervention with a focus on listening and spoken language; (b) develop capacity to obtain amplification for newly identified infants with hearing loss and persons without amplification; and, (c) develop assessment and management services in vestibular/tinnitus with a final priority focusing on the (d) development of a training program in communication sciences and disorders.

To address the preparation of professionals in family centered intervention with a focus on listening and spoken language, Ad-hoc committee members prepared resource materials in Spanish to be used to further develop their staff in this area. The ad hoc committee also engaged in several capacity building activities to address the need for amplification for newly identified infants with hearing loss and persons without amplification. Resources were identified to assist ISRI develop a plan/proposal for a lab and to train technicians in making ear molds. Committee members have also researched funding sources for hearing aids. The diagnosis of children with hearing loss continues to increase as well as the need for appropriate amplification. Finally, the development of assessment and management services in the area of vestibular/tinnitus continues to be a work in progress. Although the charge of the ASHA/PAHO project ended in 2015 it is crucial that the needs identified in the action plan and particularly, addressing the needs of individuals with hearing loss across the life span, continues to be a national priority. The implementation of the recommendations to address building capacity and sustainability will require continued collaboration and commitment.

The Guyana ASHA/PAHO Project

Background. Recognizing that disability is both medical and social, the Guyana Ministry of Health (MoH) instituted policies to address individual, social, institutional, and environmental factors that might impact the ability of persons with disabilities to have access to the communities in which they live, work, and participate. The government passed the Persons with Disabilities Act and assembled a National Commission on Disabilities to oversee its implementation. Embedded within the national health strategy is Vision 2020, which projects that between 2014 and 2020, the people of Guyana would be among the healthiest people in the Caribbean through universal health coverage while “incorporating consideration for social determinants of health.”

The number of persons with disabilities was found to be 6.4% in 2002. However, in 2014 the number was projected to be approximately 50,000 individuals who are found frequently at the lowest socioeconomic level, unemployed, over age 65, with poor health. The prevalence of persons with disabilities is increasing in Guyana resulting from more chronic diseases, accidents, and increased longevity. While the census does not isolate communication disorders, it is known that speech, language, and hearing disorders are concomitant as well as a symptom of many disabling conditions.

According to the Ministry of Health Guyana, National Rehabilitation Services Strategy (2014-2020), a primary goal is to improve services to persons with disabilities through strengthening the number of health services providers who would expand service utilization and demand, thus increasing screening and early detection. To this end, the Guyana Ministry of Health (MoH) joined forces with the American Speech-Language-Hearing
Association (ASHA), and the Pan American Health Organization (PAHO) and instituted a partnership for ASHA to provide technical assistance to improve services to persons with communication disorders.

One speech-language clinician and one audiological physician, assisted by paraprofessionals in rehabilitation and audiology, currently provide identification and intervention services for people with disabilities in Guyana. Without a university program that educates professionals in communication disorders, meeting the complex needs of the population is difficult. Sustainable services can be achieved when higher educational programs are available and aimed at recruiting and preparing local individuals.

**ASHA Response.** ASHA established an ad hoc committee to provide technical support to the Guyana MoH. The goal is to assist Guyana to create a sustainable service delivery model by creating a curriculum at the University of Guyana (UG) that is consistent with speech-language pathology & audiology (SLP/A) programs in South America. The UG program offers a bachelor’s degree designed to educate students to deliver services in both speech-language pathology and audiology (SLP/A). Some graduates are expected to eventually teach in the program while others will work in the Ministries of Health and Education.

A Peace Corps Response volunteer coordinates the program at UG and teaches some of the speech-language pathology courses. The audiological physician teaches some of the audiology courses. ASHA volunteers teach courses via videoconference, online, and on-site in Guyana.

A second goal of the ad hoc committee is to recruit volunteers to assist the speech-language pathology and audiologist (SLP/A) with their large caseloads in Guyana and to provide mentoring to the local clinician. In addition, volunteers are recruited to provide training for paraprofessionals and families of people with disabilities. To date, one SLP spent two weeks in August in Guyana assisting the local clinician to conduct assessments, intervention, and training of paraprofessionals and parents.

The Guyana Ad Hoc Committee’s mission ends in January 2017 but ASHA members will continue to provide volunteer teaching at UG and clinical services in MoH in subsequent years as the country continues to educate local professionals.

Sustainability will take time, however, once achieved, people with disabilities in Guyana will benefit as more speech, language, and hearing services become available throughout the country. The partnership of ASHA-PAHO-MoH plays a vital role in the success of this program.

**The Honduras ASHA/PAHO Project**

**Background.** The number of persons with disabilities in Honduras has been estimated to be 800,000 (10 % of the total population) (National Federation of Organizations of Persons with Disabilities of Honduras (NFOPS), 2013). The most prevalent disabilities are physical disabilities of locomotion and skill. Other problems include vision, hearing, language and cognitive delay because of disease (36 %), congenital (27 %), injuries (20 %) and aging (14 %) conditions. The NFOPS (2013) reports that prevalence of disabilities in Honduras presents an interesting picture. For example, eighteen year olds and younger represent 50% of the population, but their disability rate is 23%. Also, individuals 65 and older represent 4% of the population, but their disability rate equals 31%. Service delivery centers and professionals addressing their needs are scarce, accompanied also by a paucity of speech and language service delivery professionals. Currently, there are only fourteen professionals with the majority working in the capital city. Speech-language professionals received their training in other countries since Honduras lacked a university preparation program.

With this profile, the country of Honduras began working with the University of Autónoma de Honduras (UNAH) to build capacity in preparing professionals to serve individuals with speech and language disabilities. Their main goal is to develop a phonoaudiology program to increase the number of professionals in Honduras. They created an action plan that considered and integrated environmental, social and behavioral findings. The Chief of the Rehabilitation Department obtained the support of key university administrators who are integral in policy development and obtaining resources. Internally, the UNAH assessed the educational and ecological factors necessary to implement a phonoaudiology program. Subsequently, representatives from the UNAH, Honduras PAHO, and
the PAHO Regional Office on Disability and Rehabilitation worked collaboratively to obtain information that would support the need for a program, and factors that would increase sustainability.

ASHA Response. Following a needs assessment focusing on the technical support for program development, ASHA charged an ad hoc committee to carry out an action plan. Members of the ad hoc committee reviewed curriculum drafts, course content and sequence, and provided recommendations to UNAH. Face-to-Face meetings were conducted and were useful in reviewing and modifying the curriculum and program content, and integrating UNAH and professional standards into the program sequence. The ad hoc committee developed three course syllabi, and identified assessment and treatment materials that could be used with Spanish-speaking individuals. Finally, the Honduras Ad Hoc Committee were invited to present at the ASHA Annual National Convention, as part of the Action Plan, to disseminate information and recruit professionals who would be interested in teaching at UNAH.

Developing and implementing a pioneer program in Honduras requires commitment and collaboration of key stakeholders. In order to create a sustainable and quality program, stringent higher education requirements must be met. Presently, the program proposal has successfully been accepted by both the UNAH and the Honduran Council on Higher Education.

As part of their future program implementation, the UNAH recruited faculty, who are also part of the Honduras Action Plan team and have been integral to the development of a phonoaudiology program. Nevertheless, concerns about program sustainability remain. There are insufficient faculty to teach all the required courses, particularly the upper level courses scheduled to be taught in several years from now. Therefore, recruitment of faculty continues to be a priority in their action plan. Implementation of recruitment strategies will need to focus on dissemination of information to ASHA members and professional networks/organizations about teaching opportunities either face-to-face or using distance education technology. UNAH are also planning to create professional education courses for faculty who have not taught courses in higher education or in communication disorders.

The ASHA/PAHO project was finalized in 2015. The UNAH continues to work on the implementation phase of their Action Plan. The program has started with 37 students in 2017, having survived a system wide student strike. The UNAH/ASHA relationship continues informally as they address their goals, such as helping them network with ASHA members in recruitment efforts. The sustainability of this program will require continued collaboration and commitment so that persons with disabilities in Honduras will be better served. The action plan will also require a focused evaluation to determine the impact of the program on the services provided to individuals with communication disorders in Honduras.

Conclusion

There is a critical need to provide services to individuals across the lifespan with communication disorders. However, access to clinical services and adequately prepared communication disorder professionals remains a challenge in many countries. The ASHA/PAHO initiative is an example of a joint collaborative responding to the WHO’s focus on populations with disabilities and service delivery efforts worldwide. Specifically, three ad-hoc committees, each assigned to a priority country (El Salvador, Guyana and Honduras), were charged to address the availability and accessibility of speech, language and audiology rehabilitation services with a specific focus on building capacity and sustainability.

A lesson learned in this collaboration is that quality sustainable programs take time, and must be supported by stakeholders who expect assessments of social, environmental, institutional and individual factors to diligently consider the feasibility and rationales of projects. By doing so, unique country specific recommendations were provided to address qualified service provider availability for persons with communication disorders, and the provision of appropriate and culturally responsive services to populations with disabilities. Another lesson learned is that assessments must be continuous in order to assure that the action plan is carried out and the outcomes are being delivered. These assessments, also during implementation steps, also serve to focus on any action plan items that need to be revisited and changed. Finally, using collaborative models to globally increase capacity building activities is effective as demonstrated in the ASHA/PAHO Project. ♦
References


Use of the Preschool Language Scale-4th Edition with Haitian Creole Speakers: Does dialect scoring make a difference?

Martine Elie, Jay Lucker, Silvia Martinez & Wihelmina Wright-Harp

Abstract
The purpose of this study was to investigate if intra-group performance differences exist for child speakers of Haitian Creole (HC) on the Preschool Language Scales when dialect (DIA) scoring versus standard American English (SAE) scoring is utilized. The PLS-4 is a standardized test that is commonly used to determine the presence of a disorder by comparing an individual's performance to SAE speaking peers. While the PLS-4 has been updated like previous editions of this instrument, the new edition also does not have scoring considerations for speakers of HC, a growing population in the United States. The fourth edition of the test was utilized as it was the only available edition at the time this study was completed. However, the findings relate to all versions of this test including the updated PLS-5.

A total of 36 children who are HC speakers living in the United States between the ages of 4;0 and 5;11 months participated in the study. The participants were administered the PLS-4. Paired sample t-tests were conducted to analyze the data. Significant differences were found in the performance of HC speakers on the overall communication and expressive communication subtest of the PLS-4 when DIA versus SAE scoring was utilized. No differences were found on the auditory comprehension subtest.

Learning Objectives
1) Explain the importance of scoring consideration for Haitian Creole (HC) Speakers
2) Describe the differences in performance of HC speakers when dialect versus Standard American English scoring is utilized
3) Summarize how the features of HC affect outcomes on language assessments

The use of culturally and linguistically valid evaluation tools for use with speakers of language variations is a major limitation in the profession of speech-language pathology (SLP). With the ever growing changing demographics and immigrant populations within the United States, it is difficult to accurately assess speech and language skills with the influence of diverse languages on American English (AE) when no universal language measures or scoring considerations exist. As such, SLPs who assess child speakers of American English (AE) run the risk of identifying these speakers’ use of linguistic differences as language disorders when standardized measures are used that do not allow for alternate scoring for students from non-Standard American English (non-SAE) speaking populations.
One commonly used language assessment for young children is the Preschool Language Scale (PLS). This measure is a comprehensive evaluation tool, which provides a dialect (DIA) scoring system for child speakers of AE dialects to increase the likelihood that they are not penalized for utilizing linguistic features consistent with their dialect. The DIA scoring system not only identifies differences between SAE and other variations of AE, but it also allows the clinician to note specific linguistic features and rules that the child uses. The PLS-4 allows for scoring considerations of the following dialects and/or languages: African American English, Southern English, Appalachian English, and English influenced by Spanish or an Asian Language (Zimmerman, Steiner, & Pond, 2002). The updated version of the test, the PLS-5 has one minor change over the previous version (PLS-4) in scoring considerations allowing for the following dialects or languages: African American English, Southern English, Appalachian English, and English influenced by Spanish or English influenced by Chinese (Zimmerman, Steiner, & Pond, 2011). Haitian Creole (HC) is not one of the dialects which has scoring considerations on the PLS.

According to Schulz and Batalov (2017), “The Haitian diaspora in the United States is comprised of approximately 1.1 million individuals who were either born in Haiti or reported Haitian ancestry, according to tabulations from the U.S. Census Bureau ACS 2015”. Between the years 2013-2015, 51,977 Haitians were granted lawful permanent residence into the United States (U.S. Department of Homeland Security, 2017). Furthermore, a total of 137 immigrant Haitian children were adopted U.S. Citizens (U.S. Department of Homeland Security, 2017).

The United States is home to the largest Haitian migrant population, with significant numbers also living in the Dominican Republic (329,000), Canada (93,000), France (74,000), and the Bahamas (28,000) (Schulz and Batalov, 2017). The 2013 US Census reported the largest Haitian populations reside in Florida, New York, Massachusetts, New Jersey, Pennsylvania, Georgia, Connecticut, Maryland, Illinois, and California.

With an estimated 1.1 million individuals who were either born in Haiti or reported Haitian ancestry in the United States, many children are growing up in homes where HC is spoken. According to Schulz and Batalov (2017), “Haitians (ages 5 and older) were about as likely to report limited English proficiency (LEP) as the total foreign born population. Haitian children who acquire HC as their first language, become HC-English bilinguals as they enter the American school system, perhaps as early as their preschool years.” The U.S. Department of Education lists HC among the eleven most commonly reported home languages of English language learner (ELL) students. One can expect a continual increase in the number of HC speakers in the schools as we continue to observe an increase in the reported HC population. This is the case not only for HC speakers but other linguistically diverse groups as well. According to the U.S. Department of Education’s Condition of Education 2017 report, “the percentage of public school students in the United States who were English language learners was higher in school year 2014–15 (9.4 percent, or an estimated 4.6 million students) than in 2004–2005 (9.1 percent, or an estimated 4.3 million students) and 2013–2014 (9.3 percent, or an estimated 4.5 million students).” Of this number 31,428 were reported to be speakers of HC.

Given that no particular guidelines are provided for speakers of HC, the performance of participants who are HC speakers could lead the children to be diagnosed as language impaired when the “errors” made would really be normal aspects of their dialect. Thus, it was decided to see whether evaluating children who are speakers of HC dialect would perform differently (relative to scoring) by comparing their responses on the PLS using both the alternate DIA scoring criteria for speakers of AAE and the standard SAE scoring criteria since similarities exist between HC influenced English and AAE. Outcomes from such a study would help determine whether the use of the AAE DIA scoring is appropriate for use with children who are speakers of HC dialect. Specifically, the aim of this study was to determine if differences in performance exist when standard American English versus dialect scoring were utilized. The following research questions were investigated:

1) Is there a significant difference in the overall scores of speakers of HC on the PLS-4 when dialect (DIA) scoring and SAE scoring are utilized?

2) Is there a significant difference in the expressive communication scores of speakers of HC on the PLS-4 when dialect (DIA) scoring and SAE scoring are utilized?
Methods

Participants
The participants in the present study consisted of children who were speakers of HC. The total participant population was comprised of 36 children (15 males and 21 females) ranging in age from 4; 0 to 5; 11 years. The participants were recruited from a daycare center located in Little Haiti, Florida which serves toddlers and preschoolers primarily of Haitian, African American, and Hispanic descent.

Criteria for inclusion in the study were: a) speakers of Haitian Creole, as determined by the investigator, as reported by the center director, and via review of school records indicating the language spoken, b) chronological age ranging from 4;0 to 5;11, c) normal physical and cognitive development as determined by medical or school records, d) no previous history of special education services as determined by medical or school records, e) no history of language delay or disorder, and, f) no history of cognitive impairment as reported by the director of the school.

Setting
Testing was conducted at a Headstart daycare center in Little Haiti, Florida in a quiet area free from environmental and extraneous noise distractions. All testing was completed by the first author (ME), a native speaker of HC.

Materials
All participants were administered the entire PLS-4, which includes the Auditory Comprehension and Expressive Communication subtests. The PLS-4 is a comprehensive assessment used to identify language disorders in children aged birth to six years. The Auditory Comprehension subtest of the PLS-4 evaluates the comprehension of spoken language whereas, the Expressive Communication subtest evaluates spoken communicative ability.

At the time of this study, the most up-to-date version of the PLS was the fourth edition (i.e., PLS-4). Although a new version (PLS-5) has been released since the time of this investigation, the results of the present study are felt to provide valid evidence for use of dialectal considerations in scoring PLS-5 results for children who speak HC.

Procedures
The PLS-4 was administered to each participant in the quiet area as specified in the examiner’s manual. All responses on the Expressive Communication subtest of the PLS-4 were scored using the SAE scoring criteria then re-scored using the DIA scoring criteria for speakers of AAE. The dialect scoring criteria of the PLS allows the examiner to score as correct certain items on the Expressive Communication subtest which would normally be scored as incorrect for speakers of identified dialects when the expected standard SAE forms are not utilized by the child. The Expressive Communication subtest of the PLS-4 designates six out of 68 items for AAE DIA scoring consideration. After the initial SAE scoring based on the criteria provided in the administration manual, the six designated items were re-scored using the AAE DIA scoring criteria as these morphological features are not found in the HC dialect. The specific items re-calculated included:

1. Test item 31-uses plurals (ages 2:6 to 2:11)
2. Test item 34-uses verb + -ing (ages 2:6 to 2:11)
3. Test item 40-uses possessives (ages 3:0 to 3:5)
4. Test item 54-uses past tense verb forms (ages 4:6 to 4:11)
5. Test item 62-repairs grammatical errors (ages 6:0 to 6:5)
6. Test item 67-uses irregular plurals (ages 6:6 to 6:11)

The auditory comprehension subset of the PLS-4 does not have dialect scoring considerations but was still administered to the children to determine outcomes for this measure.

Reliability
Inter judge reliability was established by having a trained, certified SLP, who is not a speaker of HC, review the test responses for 25% of the total sample coded by the researcher. Out of 36 possible record forms, the judge reviewed nine randomly selected forms. Reliability, point by point agreement, was established at 100%.

Data Analysis
For the research question posed pertaining to performance differences when DIA versus SAE scoring were utilized, a paired sample t-test was conducted to analyze performance differences between these scoring methods. Additionally, a sign test was conducted as post-hoc analyses to further analyze the difference in
the Expressive Communication subtest scores of speakers of HC on the PLS-4 when DIA scoring and SAE scoring was utilized. The following presents the results of these analyses.

**Results**

The purpose of this study was to investigate whether differences exist in the performance of speakers of HC on the PLS-4 when DIA versus SAE scoring are utilized. Results of the t-tests indicated a significant difference in performance of speakers of HC on Overall Communication and on the Expressive Communication subtest of the PLS-4 when DIA versus SAE scoring was utilized, whereas, no differences were found on the Auditory Comprehension subtest of the PLS-4. The mean for the Overall Communication Score for speakers of HC on the PLS-4 when DIA scoring was used was 90.06, with a standard deviation of 13.03. When SAE scoring was used, the mean score of speakers of HC on the PLS-4 was 89.42, with a standard deviation of 13.22. A paired samples t-test yielded a t value of 3.99 with an alpha value of 0.000. A Sign Test was completed as a post-hoc analysis. The results of the Sign Test also indicated a significant difference in Overall Performance of speakers of HC on the PLS-4 when DIA scoring versus SAE scoring was used. The results of the Sign Test indicated that speakers of HC received consistently higher overall communication scores when DIA scoring was used.

The mean for the speakers of HC on the Auditory Comprehension subtest of the PLS-4, when DIA scoring was used, was 87.83 with a standard deviation of 11.08. When SAE scoring was used, the mean score for the speakers of HC on the Auditory Comprehension subtest of the PLS-4 was 87.56, with a standard deviation of 11.07. A paired samples t-test yielded a t value of 1.00 with an alpha value of 0.320. There were no significant differences in the performance of speakers of HC on the Auditory Comprehension subtest of the PLS-4. The mean for the speakers of HC on the Expressive Communication subtest of the PLS-4 was 94.17, with a standard deviation of 13.22. When SAE scoring was used, the mean score was 93.17, with a standard deviation of 13.22. A paired samples t-test yielded a t value of 4.07 with an alpha value of 0.000. The performance of speakers of HC on the Expressive Communication subtest of the PLS-4 was significantly greater when DIA scoring was utilized. A post-hoc analysis via a Sign Test was also completed. The results of the Sign Test indicated a significant difference in the performance of speakers of HC on the Expressive Communication subtest of the PLS-4 when DIA scoring versus SAE scoring was used. Thus, the Sign Test indicated that speakers of HC received consistently higher expressive communication scores when DIA scoring was used.

**Discussion**

Differences were found in the Overall Communication and Expressive Language subtest scores of speakers of HC when DIA versus SAE scoring was used on the PLS-4. This indicates that DIA scoring based on AAE can accommodate for differences in overall performance and expressive communication performance of HC speakers. When the DIA scoring was used, differences were found in the Expressive Communication scores of speakers of HC compared with SAE scoring on the PLS-4. These differences indicate that the Expressive Communication subtest was the reason for the significant difference between DIA versus SAE scoring on Overall Performance score on the PLS-4. Moreover, the difference in performance on the Expressive Communication subtest with the DIA scoring suggests that the use of SAE scoring can negatively affect test performance of HC speakers on the PLS-4 given the absence of scoring considerations for HC speakers.

Results of this present study indicate that dialectal features of speakers of HC may influence their performance on language assessment instruments that have norms based on speakers of SAE. The findings of the present study suggest that scoring considerations should be developed for speakers of HC, although the use of AAE dialectal considerations appeared to be sufficient for the PLS-4. As such, it is possible that the use of AAE dialectal considerations may be appropriate for evaluating expressive language abilities of children who are speakers of HC on other language tests. However, future research should do similar comparisons as completed in the present study for other language measures that have adjustments for speakers of AAE with children who are speakers of HC. If different factors are identified, it would then be important to develop normative data and adjustments for dialect for speakers of HC on all measures of language abilities. However, in the absence of tests that contain scoring considerations for HC speakers, it is important that SLPs use language or dialect sensitive tests with HC speakers to more appropriately assess
their performance as SAE scoring may affect performance outcomes.

Author Correspondence:
Martine Elie
Marelie@howard.edu
(301) 254-4928

References


U.S. Department of Education, National Center for Education Statistics, EDFacts file 141, Data Group 678, extracted May 13, 2016, from the EDFacts Data Warehouse (internal U.S. Department of Education source); Common Core of Data (CCD), "State Nonfiscal Survey of Public Elementary and Secondary Education," 2008-09 through 2013-14. (This table was prepared May 2016.)


Learning Styles of Communication Sciences and Disorders
Students in a Historically Black College/University

Silvia Martinez, Folasade Falana & Martine Elie

Abstract
The present research examined the learning styles (LS) of undergraduate and graduate communication sciences and disorders (CSD) students using The Index of Learning Styles Questionnaire (Felder & Soloman, 1994a). Sixty-three, mostly African American/Black students at a Historically Black College/University (HBCU) participated and were found to be “active”, “sensing”, “visual” and “sequential” learners. No significant differences were found between undergraduate and graduate students. Educational recommendations are offered to address the characteristics of profiled students.

Silvia Martinez Ed.D is employed at Howard University.
Financial – Associate Professor at Howard University.
Nonfinancial – Over 35 years’ experience working with inner city, culturally and linguistically diverse children. Is interested in health disparities, particularly prevention. Is engaged in research about Spanish development/dialectology, literacy and technology among urban, immigrant, and international populations. Active in ASHA and National Black Speech and Hearing Association. Awarded the ASHA Fellow Award. Received ASHA Certificate of Recognition for Special Contributions in Multicultural Affairs. Was chair of Ad-Hoc Committee in the ASHA PAHO initiative.
Folasade Falana M.S. is employed at Piedmont Healthcare.
Nonfinancial – Nothing to disclose.
Martine Elie Ph.D. is employed at Howard University.
Financial – Clinical Director in the Department of Communication Sciences and Disorders at Howard University.
Nonfinancial - Research interests include: communication disorders/child language, Haitian Creole, speech and language development, multicultural issues and clinical management.

Learning Objectives
1) Explain the concepts of learning styles
2) Describe learning styles identified in the research
3) Summarize preferred clinical education techniques

The Measurement of Learning Styles (LS)
Students are heterogeneous, bringing to the learning experience great diversity in preferred ways of gaining knowledge, such as learning styles (LS). LS, also labeled as cognitive styles or learning characteristics, are “characteristic cognitive, affective, and psychological behaviors that serve as relatively stable indicators of how learners perceive, interact with and respond to the learning environment” (Griggs, 1991, para 3; Keefe, 1979). Grasha (1994, p. 41) mentions that LS are the “personal qualities that influence [the] ability to acquire information, to interact with peers...and to otherwise participate in learning experiences”.

LS studies use theoretical models focusing on different aspects such as: a) personality traits, b) information processing skills, c) social interactions, and/or d) instructional and environmental preferences (Claxton & Murrell, 1988). These models purport to explain that differences in learners exist and that these differences should be integrated into traditional and non-traditional education (Palloff & Pratt, 2003). For example, Wetzel (2008) identified that to succeed in distance education (DE) coursework, students must be self-motivated, disciplined, responsible, and comfortable with a variety of communication options. Nevertheless, they add that success also requires that students have realistic expectations of time commitment, and be comfortable using the computer for research purposes through the internet.

Research on learning styles have identified specific characteristics of students by academic majors. While there is a prevalence of thought that there can be correspondence with learning styles and chosen field of study and work, others have stated that these
differences may not be as distinguishable. The main thrust of this study was to identify, if any, any particular characteristics shared by undergraduate and graduate students in communication sciences and disorders from a Historically Black College/University (HBCU). For such purposes the Index of Learning Styles (Felder & Soloman, 1994) was used.

**Gauging Learning Styles**

The most prevalent models defining and identifying LS have been reviewed by Felder and Brent (2005). They include a) Jung’s Theory of Psychological Type, the basis for the Myers Briggs assessment protocol (Myers & McCaulley, 2003), b) Gardner’s Multiple Intelligences (Gardner, 2011), c) Kolb’s experiential learning model (Kolb, 1984), and d) the Felder-Silverman model (Felder & Silverman, 1988) which uses Kolb’s paradigm. The characteristics described in these models are dynamic, reflecting strengths of personal preferences that vary depending on the dimension measured as well as the moment in time the individual was assessed. Therefore, when the characteristics in these models are described and measured, they often make use of scales.

**Jung’s Theory of Psychological Type.** This model is the bases for the Myers-Briggs Type Indicator (MBTI) (Myers & McCaulley, 1985), which is highly used in many fields. Jung’s Theory defines the following dichotomies to identify up to 16 personality types: extraverts (E) vs. introverts (I), sensors (S) vs. intuitors (I), thinkers (T) vs. feelers (F), andjudgers (J) vs. perceivers (P). For example, ESFJs (extraverts, sensors, feelers,judgers) are caregivers who learn well in a structured or formal setting, and respond well to clearly presented information, learn best with others, and prefer hands-on and demonstration activities, while ISFJs (intuitors, sensors, feelers, judgers) are nurturers who prefer factual or practical information, proven ideas and methods, learn best in a systematic, linear fashion, prefer to work towards a clear goal or end- product, and prefer traditional teaching (BSM Consulting, Inc., 2010).

**Multiple Intelligence Model.** Gardner’s (2011) multiple intelligence model identifies intelligences such as: verbal/linguistic, logical/mathematical, visual/spatial, bodily/kinesthetic, musical/rhythmic, intrapersonal, interpersonal, naturalist and existentialist. This model explains, for example, that visual-verbal learners prefer to read information, and visual-spatial learners prefer graphics and diagrams.

**Experiential Learning Model.** A third popular model, Kolb’s experiential learning model (Kolb, 1984) also uses Jung’s paradigm. Kolb classifies students by how they take-in information (concrete experience or abstract conceptualization) and how they process information (active experimentation or abstract observation). The four LS identified through this model are based on the following dichotomies: converger (abstract/active), diverger (concrete/reflective), assimilator (abstract/reflective) and accommodator (concrete/active). In the case of accommodating style, active and concrete learning opportunities are preferred, whereas a converging style prefers active and abstract learning experiences.

**Felder-Silverman Model.** This model uses Kolb’s work to describe a) how students perceive, b) the type of preferred sensory information, c) their information processing style, and d) how students progress in their understanding (Felder and Silverman, 1988). The model describes LS across four planes and eight dimensions: sensory/intuitive, visual/verbal, active/reflective, sequential/global. Sensory learners prefer comprehending facts but intuitive learners seek relationships to understand material. Visual learners comprehend things that they see best and verbal learners best comprehend what is heard or written. Active learners learn best by doing and working in groups while reflective learners learn best by thinking to themselves and working alone. Developing an understanding by following a directed path is the best method for sequential learners, while global learners may understand parts or pieces of a subject then suddenly fully comprehend the material. This particular model serves as the basis for the development of the instrument used in this study.

**Fields of Study and Learning Styles**

Studies about students’ LS and fields of study have presented disparate results. In the case of Threeton and Walter (2009), and Fox and Ronkowski’s (1997), studies with automotive technology students, political science students respectively found great diversity within their participants. However, Felder’s (1988) study found that engineering students were visual, sensing, inductive, active and global learners. Zualkerman, Allert and Qadah (2005) gauged computer
were less Accommodating. Compared to the previous two, education majors "Accommodating" than communica
physical education majors ranked higher as in scales that are not static or absolute, they found that
For example, keeping in mind that the distributions are models, and having time to think things through.
When learning they prefer readings, experi-
are also less interested in practical soundness of ideas. They
interested in ideas and abstractions than people. They reorganize it in logical form, and therefore are more
styles. They are active (testing) and abstract, and find
students are characterized as having “Converging” styles. They are active (testing) and abstract, and find practical uses for ideas and theories. They solve problems and enjoy finding solutions to questions or problems. They favor technical tasks, rather than social and interpersonal issues. When learning, they prefer to experiment with new ideas, simulations, laboratories, etc. Finally, Kolb describes those with “Assimilating” styles, such as law students, as being abstract and reflective/observational. They take information and reorganize it in logical form, and therefore are more interested in ideas and abstractions than people. They are also less interested in practical soundness of ideas. When learning they prefer readings, exploring analytical models, and having time to think things through.

For example, keeping in mind that the distributions are in scales that are not static or absolute, they found that physical education majors ranked higher as “Accommodating”, than communication majors. When compared to the previous two, education majors who were less Accommodating.

Students of Communication Sciences and Disorders
Most of the CSD literature centers on the Jung’s model Myers-Briggs Type Indicator (MTI) (Myers, McCalulley, Quenk & Hammer, 1998) to identify styles in students and professionals. For example, Middleton (1980), and Middleton and Roberts (1981) assessed Speech-Language Pathology graduate students and Speech-Language Pathologists. They found their sampled population to be ENFJ (Extraversion, iNtuitive, Feeling, and Judging). Addressing students, McCaulley (1983), and Craig and Sleight (1990) found that the predominant traits of the students gauged to be NF (iNtuitive and Feeling) and SJ (Sensing and Judging) types. Frass, et al. (2005) also assessed students and found them to be ESFJ (Extraversion, Sensing, Feeling, and Judging), followed by ENFJ (Extraversion, iNtuitive, Feeling, and Judging), and ENFP (Extraversion, iNtuitive, Feeling, and Perceiver). Finally, Baggs (2009) described his sample of students to be ESFJ (Extraversion, Sensing, Feeling and Judging) and, to a lesser degree, ISFJ (Introversion, Sensing, Feeling and Judging).

In summary, these styles point to students who, in their majority, would enjoy and benefit from learning experiences that incorporate some of the following opportunities to address the dichotomous intuitive and sensitive traits identified in the literature:

- Working with others, expressing their feelings and receiving external stimulations. Talking while doing learning experiences (Extraverts).
- Testing out their hunches and their imagination. Learning from the main ideas to facts, and permitting them to attack problems in this manner will enhance their learning (Intuitive).
- Using all their senses and real life experiences such as practical exercises, when being presented materials and when offered the opportunity to solve problems. Because they are more interested in facts, they should learn a process to use facts to arrive at a main idea (Sensing).
- Acquiring knowledge by relying on their values and personal ideas. They also rely on constant communication and expression. They learn by helping others and do not enjoy disagreements (Feeling).
- Experiencing learning activities after their purposes have been explained. They prefer to learn using structured plans and strong organization (Judging).
Table 1. Rank Order of Learning Styles by Educational Specialization (N = 4679)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education</td>
<td>Applied and Fine Arts</td>
<td>Medicine</td>
<td>Health</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>Psychology</td>
<td>Accounting</td>
<td>Business</td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>Social Science</td>
<td></td>
<td>Law</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>Literature</td>
<td></td>
<td>Language</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Humanities</td>
<td></td>
<td>Architecture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Arts Undergraduate</td>
<td></td>
<td>Computer Science</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Engineering</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Math/Science</td>
<td></td>
</tr>
</tbody>
</table>

Adapted from Kolb & Kolb, 2005, p. 27. Note. Includes undergraduate, graduate and adult learners. Top Specializations are closer to the style than those following.

METHOD

Participants. Each participant completed a questionnaire about demographic information, linguistic proficiency information, educational history, and health history. The population (N=63) included 28 undergraduate and 35 graduate CSD students in a historically black university (HBCU). As can be seen in Table 2, the majority of the participants were females (88.9%) and African American/Black (82.5%). The population’s age ranged between 19 and 32. Ninety-six percent of undergraduates were 21 or younger and over 50% of graduates were between 22-24 years. Almost all were native speakers of English (95.2), and over half also spoke African American English (57.1%).

Instrument. Participants completed the Index of Learning Styles Questionnaire (Felder & Soloman, 1994) designed to measure preferences based on the Felder-Silverman Learning Style Model (1988). It contains 44 two-choice questions that is administered independently. This instrument characterizes the LS of respondents using four dichotomous pairs of characteristics: sensory/intuitive, visual/verbal, active/reflective, sequential/global. The strong validity and reliability of this instrument have been addressed in many studies (Felder and Spurlin, 2005; Litzinger, Lee, Wise, and Felder, 2007; Zywno, 2003). This instrument is appropriate because it was created for educational purposes, it incorporates several models addressing LS, the reporting is detailed enough to look at various characteristics, and the modalities are presented in continuums therefore illustrating strengths/weaknesses toward each style preference (Battalio, 2009).

Procedures. The participants completed the consent forms, a demographic questionnaire and the ILS during class time. Once the data was collected and analyzed, the individual results were returned to the students with accompanying handouts containing a description of the styles and strategies (Felder & Soloman, 1994b).

Data Analysis. For statistical analysis of the data, the Statistical Package for Social Sciences (SPSS) version 22.0 was used. Descriptive analyses included means and percentages, while inferential analyses were performed using an ANOVA and z-tests.
RESULTS AND DISCUSSION

The ILS presents four dichotomous learning style scales: Active-Reflective, Sensing-Intuitive, Visual-Verbal, and Sequential-Global. A statistical ANOVA served to verify if there were any significant differences between the educational levels of participants. Because the ILS uses bipolar scales (participants respond to either (a) or (b)), Zywno (2003), and Van Zwanenber, Wilkinson and Anderson (2000) found the use of standard statistical tests difficult. Consequently, they recommend using scales for either sets of responses (a) or (b), with each set of responses comprising eleven items. The analysis in this study, when performing ANOVA computations, follows their recommendations by only using the scores for the following scales: Active, Sensing, Visual and Sequential.

Items (a) were assigned a value of 1 and items (b) were assigned a value of 0. To account for the other scales opposite in polarity (Reflective, Intuitive, Verbal and Global), one must gauge each as a complement of the other. Thus, “If the average Active score is 6.5, the average Reflective score is 4.5” (Zywno, 2003, p3).

The LS of undergraduate students were compared to those of graduate students, as shown on Table 3. There were no statistically significant differences between the two populations in the mean scores on the four areas. The percentage of distributions for all participants is presented in Figure 1. As a group composed of both undergraduate and graduate students, they were identified as being more Active (71.3%), Sensing (63.5%), Visual (74.6%) and Sequential (63.5%).

Table 3. Means, Standard Deviations and ANOVA Results for Comparisons between Undergraduate and Graduate Students

<table>
<thead>
<tr>
<th>Students</th>
<th>Sample</th>
<th>Active</th>
<th>Sensing Score</th>
<th>Visual Score</th>
<th>Sequential Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>Mean</td>
<td>Mean</td>
<td>Mean</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STD</td>
<td>STD</td>
<td>STD</td>
<td>STD</td>
</tr>
<tr>
<td>Undergraduates</td>
<td>28</td>
<td>6.29</td>
<td>2.70</td>
<td>6.5</td>
<td>2.92</td>
</tr>
<tr>
<td>Graduates</td>
<td>35</td>
<td>6.37</td>
<td>2.03</td>
<td>6.17</td>
<td>3.03</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ANOVA Statistics</th>
<th>df= 61</th>
<th>df= 61</th>
<th>df= 61</th>
<th>df= 61</th>
</tr>
</thead>
<tbody>
<tr>
<td>p</td>
<td>0.88592*</td>
<td>0.66585*</td>
<td>0.42022*</td>
<td>0.27717*</td>
</tr>
</tbody>
</table>

* Statistically insignificant at 0.01 and 0.05 level, 2-tailed
In order to determine if there were significant differences between each pair of the LS dichotomies, z-tests were used (Table 4). The percentages obtained were found to be significant for each of the dichotomies: active/reflective (z = 4.141, p = .000), sensitive/intuitive (z = 2.821, p = .004), visual/verbal (z = 5.550, p = .000), and sequential/global (z = 2.173, p = 2.173).

**Discussion**

This study looked at the LS of CSD students who in their majority were African American/Black. The profile points to LS that are “active,” “sensing,” “visual” and “sequential.” Statistically, there were no differences between undergraduate and graduate students. Further, the results of this study are consistent with student profiles presented in CSD literature (Baggs, 2009; Craig and Sleight, 1990; Frass, et al., 2005; McCaulley, 1983; Middleton, 1980; Middleton & Roberts, 1981). In addition, it is important to note that the present study collected data from students in a HBCU, with more than 80% of participants identifying themselves as African American.

Teaching recommendations offered by Felder and Solomon (1993, 1994a, 1994b) and Graf, Viola, Kinshuk & Leo (2002), for this group of students are contained in Figure 2.
Figure 2. Communication Sciences and Disorders Student’s Learning Styles and Recommended Teaching Experiences

<table>
<thead>
<tr>
<th>Learning Style</th>
<th>% of Population</th>
<th>Learning Preference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active</td>
<td>71.3</td>
<td>working actively</td>
</tr>
<tr>
<td></td>
<td></td>
<td>applying the material</td>
</tr>
<tr>
<td></td>
<td></td>
<td>trying things out</td>
</tr>
<tr>
<td></td>
<td></td>
<td>communicating with others</td>
</tr>
<tr>
<td></td>
<td></td>
<td>working in groups</td>
</tr>
<tr>
<td></td>
<td></td>
<td>discussing</td>
</tr>
<tr>
<td>Sensing</td>
<td>63.5</td>
<td>learning facts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>using concrete learning materials</td>
</tr>
<tr>
<td></td>
<td></td>
<td>solving problems</td>
</tr>
<tr>
<td></td>
<td></td>
<td>using standard approaches for solving problems</td>
</tr>
<tr>
<td></td>
<td></td>
<td>patient with details</td>
</tr>
<tr>
<td></td>
<td></td>
<td>using realistic situations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>relating materials to real world</td>
</tr>
<tr>
<td></td>
<td></td>
<td>being practical</td>
</tr>
<tr>
<td>Visual</td>
<td>74.6</td>
<td>remembering things best from what they see</td>
</tr>
<tr>
<td></td>
<td></td>
<td>using charts, diagrams and flow-charts</td>
</tr>
<tr>
<td>Sequential</td>
<td>63.5</td>
<td>learning in small incremental steps</td>
</tr>
<tr>
<td></td>
<td></td>
<td>using linear progressive steps</td>
</tr>
<tr>
<td></td>
<td></td>
<td>using logical steps to problem solving</td>
</tr>
</tbody>
</table>


To meet their needs educators must consider the “active” learners who enjoy discussions, applications, explaining to others, and working in groups. Those who are “sensors” appreciate learning facts, solving problems through well-established methods, details, memorizing, hands-on, and practical applications. Those in the group who are “visual” would best benefit from diagrams, pictures, flow charts, and film demonstrations, while the “sequential learners” would benefit when presented with linear steps, logical paths to solutions, and outlined material.

In CSD training programs there are vast opportunities to incorporate activities appropriate for this group of students in DE and clinical offerings. Below are recommendations that may be used:

**Case Studies.** Also referred to as case reports offer the opportunity to describe, explore or explain the analysis of situations about a single subject, group of participants or events (Yin, 2009). They include looking at systems comprising decisions, periods, projects, policies, institutions holistically, and can be prospective or retrospective (Thomas, 2011). It is research in the form of inquiry which is presented through a case method that requires active participation, thereby giving the students opportunities to make decisions. (Hammond, 1976). Case studies may comprise the following elements as applied to a clinical situation: The problem or the situation (a client presents with stuttering), the client (case history), the process to find the solution (diagnosis), discovery of the solution (diagnostic results), solution (recommendations), implementation of the solution (treatment protocol and application), and results (client outcomes). Case study activities should include clear paths for the analysis and solution of case study themes. They also serve as a mechanism to provide clinicians the ability to role play, gain exposure to a variety of client types, develop ease with clients and their families, as well as, provide a safe environment to work on critical thinking in responding to potential client/families or to problem solve using a client staffing model. Finally, the process must involve student interactions such as grouping students to tackle the whole case or part of the case, or offering on-line chat situations with structured questions.

**Collaborative learning.** This method may also be known as group or peer learning with students teaching each other (Trentin, 2010). Some activities to consider under this method are collaborative writing, group projects, joint problem solving, debates, and study teams (Chiu, 2004, 2008; Mitnik, Recabarren, Nussbaum & Soto, 2009). Tools available include virtual classrooms, chatroom, discussion threads, and application sharing by which the following activities may be carried out: case studies as described above; students presenting challenging questions to each other.
(i.e. observation of treatment or assessment session to gather data, diagnose clients, make behavioral observations, make recommendations, etc.); instructor offering questions for students to analyze, evaluate, or synthesize (i.e. differential diagnosis based on symptoms presented); students trying to change peer opposite views (i.e. controversial topics about auditory discrimination for articulatory treatment); students comparing notes and asking for clarifications (i.e. following a lecture on autism two students compare what they wrote); debating (i.e. nature vs. nurture in language development); teams reviewing each other’s work (i.e. diagnostic reports, resume critiques, client staffings, etc.); and instructors presenting challenging problems to solve (i.e. diagnosing a bilingual client with aphasia) (Cornell Center for Teaching Excellence, 2014).

Rote learning. The instructor may take advantage of visual and auditory senses to help the student remember, perhaps, anatomy and physiology vocabulary or parts of hearing instrumentation.

Students may develop and use flashcards, outlines and mnemonic devices, but instructors may also develop materials to encourage and train the use of rote memory. An instructor can ask students to “chunk” information into specific semantic categories (i.e. front vowels, back vowels); make associations between content and external stimuli (i.e. 25dB related to the age the student got married); chant or sing (i.e. anatomy of the tongue); use mnemonic linking or visualization techniques (i.e. visualizing steps to performing a hearing screening); use the Loci or Journey method (i.e. associating concepts to parts of a location or a journey such as: room door = pina → foyer = ear canal → door = tympanic membrane → living room = middle ear → furniture = malleus, incus, staples); and associating keywords to the sounds in words (i.e. vowel quadrilateral such as back high vowels “two books” = /u/, /o/; front high vowels “see it” = /i/, /I/); and/or creating schema for the clinical treatment process (i.e. the steps in the sessions/therapeutic momentum and antecedents).

Sequence Learning. The instructor is instrumental in presenting the content material by appropriately sequencing the material in ways to make it more meaningful for the student. Clark (2014) has enumerated some techniques and considerations for sequencing material. They include sequencing learning experiences similarly to job task sequences; sequencing from simple to complex; sequencing from less important steps to more important steps; sequencing from known content to more unfamiliar content; sequencing based on scaffolding skills; sequencing based on cause and effect; and sequencing by common elements of the content. They also state that it is desirable to produce learning maps (flowcharts) containing specific objectives. For example, an instructor develops clearly stated objectives tied to measureable outcomes when teaching the assessment of dysphagia:

1) List case history questions relevant to dysphagia;
2) Revise an oral-motor facial evaluation form to include behaviors or deficits to look for in dysphagic clients;
3) Describe what the video-taped clinician was looking for in each assessment activity.
4) Describe the treatment process in a sequential process. This could be utilized with novice clinicians to help them better understand how to work with clients/the sequential order of the treatment process.

Visual Learning. For visual learners, technology offers vast opportunities to present images in different formats. Some opportunities available include virtual models, figures, digital mapping, etc. using numerous formats from videos, DVDs, teleconferencing, etc. Visuals should be directly related to the information relayed to the students, and should present real concepts and representations. Vakos (2003) offers some ideas that may be incorporated into lessons such as: distributing general outlines and/or handouts prior to lectures; writing directions in sequential steps; using power points, charts, maps, movies, filmstrips, timelines, mnemonic devices, group assignments; encouraging students to illustrate learned knowledge (i.e. by developing their own flashcards); using software that accompany textbooks; using concept maps, mind maps, graphic organizers, and webbing, and encourage students to develop their own; using as many visual images representing concepts as possible; encouraging note-taking and sharing to verify content; and providing time for visual learners to think before responding to questions; using simulated virtual clients via software so students have visual/auditory exposure.
Problem Solving. There are many problem solving models. Most include, at a minimum: a) obtaining all relevant information, b) identifying and articulating the problem(s), c) identifying and articulating possible solution(s), d) implementing the solution(s), e) evaluating the solution(s), and finally, f) identifying and articulating any new problems, if applicable. Some techniques for problem solving are: Abstraction (solving the problem in a model before applying to real life); Analogy (using a solution that solves an analogous problem); Brainstorming (suggesting large number of solutions and ideas); Divide and conquer (break down a complex problem into smaller solvable problems); Hypothesis testing (assuming a possible solution and trying it out); Lateral thinking (approaching solutions indirectly and creatively); Means-ends analysis (choosing an action at each step to move closer to the goal); Method of focal objects (synthesizing seemingly non-matching characteristics of different objects into something new); Morphological analysis (assessing the output and interactions of an entire system; Proof (try to prove that the problem cannot be solved); Cause-effect (the point where the proof fails will be the starting point for solving it); Reduction (transforming the problem into another problem for which solutions exist); Research (employing existing ideas or adapting existing solutions to similar problems; Root cause analysis (identifying the cause of a problem); Trial-and-error (testing possible solutions until the right one is found) (http://en.wikipedia.org/wiki/Problem_solving). Problem solving is an ideal mechanism to cover topics related to professionalism, interpersonal communication, interprofessional practice/education (IPP/IPE) to include thinking beyond the clients immediate speech language pathology needs, as well as, as a mechanism for self-reflection/critique to certain problems.

Experiential Learning. Experiential Learning is “a process through which students develop knowledge, skills, and values from direct experiences outside a traditional academic setting.....[which include] internships, service learning, undergraduate research, study abroad, and other creative and professional work experiences [that are] well planned and supervised” (The Center for Experiential Learning at the University of Colorado http://www.ucdenver.edu/life/services/ExperientialLearning/about/Pages/WhatisExperientialLearning.aspx ). Burnard (1989 in Westera, 2005) has described the cycles involved: brief theory input; concrete experience; reflection; generation of new knowledge; and application. For example, students receive an explanation on quantifying dysfluencies using a dysfluency index method; they analyze a video-taped (i.e. through YouTube) language sample to note and calculate types of dysfluency indexes using detailed how-to handouts; they respond to questions about the activity process including how they feel, difficulty of the process, usefulness of handouts, etc.; and finally, they write a short diagnostic paragraph using the information gathered on the client. This can also be used to develop ease of client rapport by doing activities such as gathering case history interviews on friends/assigned individuals, conducting mock counseling sessions, and administering assessment tools to peers or at health fairs.

CONCLUSION
In the population surveyed, 40% (n=14) of graduate students were defined as “intuitive” and 48.2% (n=15) were defined as “global” learners. For intuitive learners, instructors may consider: activities to discover relationships; interpretations or theories that connect practice; activities to create innovations; avoiding memorization and routine calculations; and offering diverse activities to avoid boredom. For global learners, instructors may address their preference by solving complex problems, without asking for explanations, and explaining and putting things together in novel ways, without the need to sequence.

The implementation or knowledge of these diverse formats across academic and clinical programs can be instrumental for changing the approach for overall students, as well as with those students who exhibit difficulty with traditional teaching models as they encompass features unique to each learning style.

Finally, the goal of this paper was to address the match between LS and DE recommendations. Actually, all of the recommendations, as mentioned before, may be incorporated to the traditional education format. Nevertheless, instructors may also want to consider the situation where a mismatch between LS and educational objectives is appropriate (Claxton and Murrell, 1988). Such is the case when “sensors” need to be taught to independently identify sequential steps and procedures for any specific therapy technique. This would present a challenge to these groups of
students given that their preferred mode is to be presented with already pre-determined linear paths and details. Therefore, educators would need to approach these situations with caution.

References


Gender Differences in Spoken Narrative Productions of African American Preschoolers

Tiffany Moody & Amy Wait Hobek

Abstract
This study examined gender differences between African American (AA) preschool boys and girls when producing spoken fictional narratives using self-created picture books. Fourteen African American preschool children produced 59 self-generated fictional narratives during a classroom activity to create their own picture books. Spoken narratives were analyzed for macrostructure, microstructure, and dialect density. Dialect density was the only measure for which there was a statistically significant difference between boys and girls in their narrative productions. Therefore, there were not significant differences found between the narrative measures of microstructure and macrostructure measures between the groups. These results suggest that AA boys may be more at-risk for over-identification of a language disorder due to production of dialect features that could be mistaken for errors in language when assessed exclusively by standardized assessment tools.

Tiffany Moody B.S. is a graduate student at the University of Cincinnati. Financial – Received funding for this research via an undergraduate student summer research fellowship grant from the University of Cincinnati. Nonfinancial – Is a 2nd year Master’s student in Speech-Language Pathology at the University of Cincinnati. She speaks the dialect that this research focused on. Areas of clinical/research interest include preschool and school age language development and disorders and developmental disabilities in urban, underserved populations. Upon graduation, plans to work for a public-school system in an underrepresented population.

Amy Wait Hobek Ph.D. is employed at the University of Cincinnati. Financial – Adjunct Faculty at the University of Cincinnati. Nonfinancial – Experience working in predominantly diverse educational settings as a speech-language pathologist. Teaching, clinical and research interests focus largely on language and literacy development in culturally and linguistically diverse populations.

Learning Objectives

1) Summarize the benefits of narrative analysis with culturally and linguistically diverse children.
2) Summarize prior research regarding gender differences of African American(AA) preschool children’s narrative productions.
3) Discuss the outcomes of this study regarding the gender differences in AA preschool narratives as it relates to prior research in this area.
4) Identify three age/grade level African American texts appropriate for use in therapy.

Many African American (AA) children are facing academic challenges due to the perception of their dialect variations (Genishi & Dyson, 2009; Heath, 1983; Stockman, 2010). These children may speak African American English (AAE), which is different from Standard American English (SAE), the typical and socially acceptable dialect of American culture and schooling. There appears to be an achievement gap between those who speak AAE and those who speak SAE. According to Thompson, Craig and Washington (2004), “children who speak a nonstandard variety of SAE potentially are at a disadvantage when compared to their majority peers because standardized assessment instruments, the curriculum, and instruction are based on SAE vocabulary and linguistic rules” (p. 269). Many of these children are also receiving unwarranted referrals to special education for their presumed language problems, especially when linguistic differences are not recognized (Ford, 2012; Stockman, 2010).

African Americans are overrepresented in U.S. special education programs (Ford, 2012; Harry & Klingner, 2014; National Research Council, 2002) and more specifically, AA boys are placed in special education more often than girls (U.S. Department of Education, 2006). According to Washington and Craig (1998), gender differences occur in the use of AAE in African American (AA) preschool children, as AA boys use significantly more dialectal features than AA girls.
Therefore, AA males may be at particular risk for misdiagnosis when using non-standard dialectal forms during the assessment process. Research indicates that the AAE dialectal features, which are morphosyntactic and phonological in their differences from SAE, may be used at different rates depending on the child’s age, grade and ability to code-switch from one dialect to the other (Craig & Washington, 2004). Therefore, misdiagnosis can begin as early as the preschool years, when AA children are referred for assessment, potentially due to their language difference. Alternative assessments have increasingly become more widely accepted as a culturally sensitive way to accurately identify children with language impairments. Specific to AA children, preliminary research has indicated that language sampling, dynamic assessment and narrative assessment may be useful tools in determining difference versus disorder (Craig & Washington, 2002; Laing & Kamhi, 2003; Terry, Mills, Bingham, Mansour, & Marenclin, 2013). Of these various assessment tools, narrative analysis is often regarded as one of the most comprehensive tools to assess language and literacy development (Catts, Fey, Zhang, & Tomblin, 1999). Researchers have orchestrated studies related to narrative production in AAE speakers (Price, Roberts & Jackson, 2006; Terry et al., 2013) but this research is limited, especially in regards to gender differences. The purpose of this study is to examine the gender differences of self-generated spoken narrative productions of typically developing AA preschool children.

Narratives as Assessment
Narratives are defined as “at least two utterances produced in a temporal order about an event or experience” (Hughes, McGillivray, & Schmidek, 1997, p 358). According to Mills, Watkins and Washington (2013), “Spoken narration is an important window into language ability because it provides an internally complex context for examining children’s language use and reveals the procedures by which children organize, comprehend, and produce language” (p. 211). This demonstrates that narrative analysis is an important tool used to determine where a child stands in regard to their language skills and how they need to progress from that point forward. Research shows that narratives are essential in early language and literacy acquisition of young children because they predict their future literacy skills, as in reading and writing that will contribute to their future success (Hooper, Roberts, Nelson, Zeisel, & Fannin, 2010).

Macrostructure and Microstructure of Narratives
Macrostructure and microstructure are two key elements of narrative analysis. These are the two overarching areas that speech-language pathologists and researchers examine when assessing a child’s language outcomes in a narrative analysis. According to Mills et al. (2013), telling stories with well-formed macro- and microstructure display key language development and are positioned to meet academic standards.

Macrostructure is the organization that shows the progress of the story in chronological order, moving from the beginning, to the introduction of the setting and characters, to the plot that then develops into the resolution and finally the ending (Hughes et al., 1997). Analysis of macrostructure typically focuses on and assesses the inclusion of story grammar components such as statements of time, place, and characters within this structure. Macrostructure can display comprehension and retention of the material being read, for instance in the storybooks.

Microstructure focuses more on the grammatical and syntactic elements of the story and how words and sentences work together to build one cohesive story. Components such as total number of utterances, number of different words, clause density, use of conjunctions, noun phrases and dependent clauses are

| eHearsay • Volume 8 • Issue 1 • Summer 2018 | Page 30 |
measured from the production of narratives (Hughes et al., 1997). These microstructure features tend to be predictors of children’s later language and reading comprehension.

**Self-Generated Narratives**

Consideration of fictional narratives of preschool children is predominant in the research connecting narratives with later literacy development. Researchers often use fictional narratives to evaluate story grammar and structure elements (Hughes et al., 1997; McCabe, Bliss, Barra, & Bennett, 2008); however, research investigating preschool children’s fictional narrative production through wordless picture books and story retellings is more frequently targeted than story generation (Merritt & Liles, 1987; Lever & Sénéchal, 2011). Although picture book elicitations and retellings may provide more sophisticated results in structure, complexity and content (Merritt & Liles, 1989; Lever & Sénéchal, 2011), measures of self-generated stories may capture a more accurate picture of a child’s ability to tell a fictional narrative as opposed to demonstrating memory and comprehension of a story’s elements (Lever & Sénéchal, 2011). Ultimately, when the demands of schooling require children to produce written narratives through composition, they will be required to generate stories on their own.

A limited number of studies have investigated the effects of using self-generated stories in narrative production. Merritt and Liles (1987) investigated the differences between story generation and story retell tasks with school age children with and without language disorders. The children with language disorders produced fewer complete episodes and fewer story grammar elements in both contexts; however, in the story generation task there was not a difference between the total number of main and subordinate clauses whereas there was a difference in the story retell task. This finding indicated that the language impaired children produced less talk (as evidenced through number of clauses) when a story model was given in contrast to when only a story probe was given for generating a story. Swanson, Fey, Mills and Hood (2005) investigated the effects of a narrative-based language intervention with 7-8 year old children with specific language impairment. Based on willingness to participate in the tasks (story retell, story generation, and sentence imitation), the authors concluded that story generation was favored by all of the children because “they could talk about their own experiences, knowledge and interests” and “they did not have a specific story they were supposed to replicate” (p. 139). There is a need for further investigation of the efficacy of engaging young children in the production of self-generated fictional narratives.

**Narratives and African American Children**

There is a large body of research that has been conducted regarding narrative production in preschool aged children but far less has been directed specifically toward African American (AA) children. Although the research regarding AA preschool aged children and narratives is limited, there is evidence that suggestions narratives are culturally and linguistically appropriate assessment tool for this population (Schachter & Craig 2013; Terry et al., 2013; Price et al., 2006).

Some studies have demonstrated that narratives of AA preschoolers were similar to prior research not specific to AA children regarding developmental milestones in spoken narrative productivity (Currenton & Justice, 2004; Price et al., 2006; Terry et al, 2013). For example, Currenton & Justice (2004) investigated the literate language features (elaborated noun phrases, adverbs, conjunctions, and mental/linguistic verbs) in generated narratives from a wordless picture book with Caucasian and AA preschool children. The results of this study indicated that there were no difference between the AA and Caucasian children’s usage of literate language features, as well as the number of Communication Units (C-Units) and Mean Length of Communication Unit (MLCU).

In a study by Terry et al. (2013), the retell narratives of 146 AA preschool children who spoke Nonmainstream American English (NAE) were analyzed. Their results demonstrated that the means for microstructure elements such as number of different words, total number of words and total c-units were within ranges reported for preschool-age children. The authors also compared measures from other studies with the results from their study regarding the narrative outcomes of the narrative assessment protocol (NAP; Pence, Justice, & Gosse, 2007); high point analysis (HPA; McCabe, Bliss, Barra, & Bennett, 2008); and the narrative scoring scheme (NSS; Heilman, Miller & Nockerts, 2010) and found that the AA preschool children in their study scored similarly to children in other research samples.
It has been documented in past studies involving AA children that oral storytelling is a language practice that children are socialized into as active participants of their cultural communities (Heath, 1983; Vernon-Feagans, 1996; Smitherman, 2000). It has been surmised that because of this cultural and historical storytelling background, as well as specific study outcomes, that spoken fictional narratives may be a strength for AA children (Gardner-Neblett, Pungello, and Iruka, 2012; Miller & Sperry, 2010; Sperry & Sperry, 1996; Reece, Leyva, Sparks, & Gronlick, 2010). Some studies investigating the narratives of AA preschool children have found that the AA children perform differently than children representative of other cultural groups. For example, Reece et al. (2010) conducted a study with 41 families that included Black, White or Hispanic mother-child dyads. Their results found that children whose mothers identified as Black had significantly better narrative quality at the end of preschool compared to children from Hispanic or White mothers. Curenton (2011) found that African American children outperformed European American children in comprehending narratives, as they appear to be better at inferring character motives and internal states when asked specific comprehension questions. These studies confirm that narratives are a culturally appropriate tool in the assessment of AA children to discriminate language difference versus language disorder.

**African American English and Narratives**

African American English (AAE) is a dialect that has risen out of African American cultural language usage. In the past, it often carried a negative connotation and was viewed as unintelligible. It was thought to have risen from the enslavement period when African Americans were forbidden to receive an education (Stockman, 2010). Today, it is acknowledged as a legitimate language system with its own rules and structure, but it is not always accepted in school contexts. Many educators still struggle with accepting it as a dialect, causing AA children to be seen as illiterate or unintelligent.

Although AAE has historically been viewed as a “deficit” (Stockman, 2010) and research continues to attempt to connect AAE use with the “achievement gap”, there is some emerging evidence indicating that AAE use may enhance the narrative productions of AAE speaking children (Ross, Oetting & Stapleton, 2004; Schachter & Craig, 2013). For example, Ross et al. (2004) examined the use of the AAE feature “preterite had” (had + verb+ed) in a narrative sample of ninety-three 4-6-year-old children to refer to simple past tense. Their results indicated that half of the AAE speakers (compared to none of the Standard White English (SWE) speakers) produced this form in the complicating action clauses in their narratives, therefore, facilitating a specific narrative function. Further, the authors concluded that those who produced the greatest number of complex narrative sequences also provided the most tokens of preterite had+verb+ed. Schachter & Craig (2003) examined the narratives of AAE speaking kindergarten and first grade children during a wordless storybook generation task. The study results indicated that these AAE children used several individual AAE features that served specific narrative functions, (i.e., preterite had, zero past tense, zero preposition, fitna/sposeta/bouta (abbreviated forms coding imminent action), and double marking features) used to relay complicating actions, initiating events, and consequences within the narratives. This emerging evidence indicates that AAE features may occur with macrostructure narrative elements to influence the trajectory of the narrative. This may imply that AAE features serve to support a young child’s narrative productions. Also notable is that these studies used less structured narrative tasks, such as conversational language samples and self-generated narratives, which may allow for the use of AAE in language assessment which may support more complex language use in the dialect in which the child has more linguistic knowledge. An increase in this field of study, AAE use in narrative production, can provide a better understanding of AAE and what is typical for that dialect so that educators and instructors can be better equipped to properly support and teach these students.

**AA Narratives, Dialect and Gender**

Ethnographic research that explores the language practices of AA communities and individuals suggests that AA children are often socialized into specific gender roles (as are other cultural groups) for language use and productivity (Feagan & Haskins, 1986; Heath, 1983; Sperry & Sperry, 1996). For example, Heath (1983) studied a working class AA community in the south and found that boys were exclusively socialized into narrative performance “on stage” in front of the community, learning how to engage in this social practice, respond to the audience, and adjust their behavior based on this community feedback. Girls participated in this practice by being active audience
members; however, they did not participate in this performative narrative practice. Sperry and Sperry (1996) studied the narrative episodes of AA toddlers ranging from two years old to three and a half years old from video-taped observations in the home. They found that AA boys engaged in “narrative-like” talk three to four times more often than the AA girls, and that boys produced more fictional than temporal (references to realistic events) episodes per hour when compared to girls. The authors suggested that these results may be due to language socialization differences with boys and girls within this cultural community. The researchers report that in interviews that accompanied this study, parents stated “that girls needed to be kept to a higher standard of truth-telling than boys did” (p. 463).

Currently, there is limited information regarding the narratives of AA preschool children, and there is even less research conducted studying the gender differences of the narratives of AA preschool children. For the literature that does exist, there is diversity in the outcomes when studying these narratives. Due to the varying ages of children, elicitation contexts, and narrative elements analyzed, the outcomes of previous research is varied as well.

When eliciting narratives specifically for research purposes, which often employ the same tools that are used in assessments by speech-language pathologists, research has demonstrated contrasting evidence indicating that no differences between AA preschool boys and girls narrative production (i.e., Price et al, 2006; Curenton & Justice, 2004), as well as indicating that there are indeed differences between AA preschool boys and girls narrative production (i.e., Craig and Washington, 2002; Gardner-Neblett & Sideris, 2017). For example, Price et al., (2006) investigated the macrostructure of AA preschooler narratives and found that gender did not predict the scores of narratives analyzed by macrostructure elements. When investigating microstructure elements, Curenton and Justice (2004) found no significant difference in gender of AA preschools in literate language features (syntactical features for decontextualized language structure), number of c-units, and MLU when eliciting self-generated narratives using a wordless picture book with AA preschoolers. Additionally, since there is limited research conducted on the gender differences between AA preschool boys and girls narrative production, it may be useful to look at studies investigating gender differences in language sampling as well. Craig and Washington (1994; 2002) investigated free-play based language samples and found no differences between AA preschool-age and kindergarten boys and girls in the amount of complex syntax (1994) and MLU (mean length of communication unit) (2002) during these analyses.

Although the prior studies discussed above indicate no gender differences, some studies have concluded that gender differences between the narratives of AA preschoolers did exist. Gardner-Neblett & Sideris (2017) investigated the gender differences of 4 year old children via a story generation task using a wordless picture book. The results of this study reveal that AA preschool girls performed significantly better on macrostructure narrative measures than AA preschool boys. Although in the Craig and Washington (2002) study above there was no gender difference in MLU, their results indicated that there was a significant main effect for gender in the number of different words (NDW) measure, with girls producing a statistically significant greater number of different words. Additionally, research regarding gender difference in language sample elicitation contexts is considered as well. Jackson, Graham and Roberts (2001) examined the complex syntax of 3- and 4-year old AA children during a free-play language sample and found that girls use significantly more complex syntax than boys when coding for 10 variations of complex syntax structures.

Finally, a small body of research has also investigated AA preschool gender differences in AAE dialectal feature use (Connor and Craig, 2006; Craig and Washington, 2002; Washington and Craig, 1998; Washington, Craig and Kushmaul, 1998). Connor and Craig (2006) investigated the gender differences in AAE use by AA preschoolers and found that boys used AAE more frequently than girls in a wordless storybook prompt task. Again, language sampling in the context of gender differences were also considered due to the small amount of research on AAE preschool narratives. Washington and Craig (1998), Craig and Washington (2002) and Washington, Craig and Kushmaul (1998) studies all found that AA preschool and kindergarten boys produced more AAE features than girls during free play language samples.

**Summary**
African American English (AAE) dialect poses issues in the mainstream classroom setting for the population who uses it. Children who use AAE are reported as having academic challenges compared to students who speak SAE and may be mistaken for having language disorders. Gender may be a critical factor in AAE speakers, as research indicates boys use more AAE features in their language production. Standardized tests are being used to measure language and literacy abilities, but these tools have been shown to present with cultural and linguistic bias. Researchers have found that narrative assessment is an effective tool to measure language ability and is more culturally and linguistically sensitive to reduce assessment bias. Self-generated narratives are effective in showing the child’s true literacy skills and their own dialect usage without a model for providing examples on how to speak. Although research has been done on narrative production use for assessment, little has been done regarding the narratives and the AAE speaking population, especially as it relates to gender. Additional research is needed in this area to further investigate the narrative characteristics and gender differences of AAE preschool children to develop a more comprehensive data base to enhance understanding of what is considered to be characteristic of this population.

Purpose
The purpose of this study was to examine the difference between macrostructure, microstructure and the number and type of AAE features used by preschool-age boys compared to girls when eliciting spoken narratives using self-created picture books. The following questions were explored:

1.) Is there a difference between preschool African American boys and girls in the macrostructure elements as measured by the Index of Narrative Complexity (INC) (Peterson, Gillam, & Gillam, 2008) when eliciting spoken narratives using self-created picture books?

2.) Is there a difference between preschool African American boys and girls in the microstructure elements of Communication Units (CU), Mean Length of Communication Unit (MLCU), Total Number of Words (TNW) and Number of Different Words (NDW) as measured by the Systematic Analysis of Language Transcription software (SALT) (Miller & Iglesias, 2008) when eliciting spoken narratives using self-created picture books?

3.) Is there a difference between preschool African American boys and girls in the dialect density (DD) when eliciting spoken narratives using self-created picture books?

Methods
The data in this current study was extracted from a prior research study that investigated a language-based approach to early writing in a preschool classroom to promote language and literacy skills. Spoken narrative productions and early writing skills were measured over a 5-month period of time.

Participants
The participants in this study were fourteen African American preschool children who attended a full day classroom in an inner-city Head Start program in the Midwest. Nine girls and five boys participated in the study. The participants were from low income homes as determined by their qualification for enrollment in a federally funded Head Start program for children living in poverty. All of the children were African American. None were receiving speech, language, or other educational services that were documented by an Individual Education Plan (IEP). They all passed Head Start mandated screenings, including speech, language, and hearing, as documented by the Head Start center. The children were between the ages of 3 years, 2 months and 5 years, 3 months of age.

Procedures
In the prior study, two times a month, for five months (a total of 10 sessions) the children created short books during structured writing times in the classroom. Each session was typically 30-60 minutes, which was determined by the children's decisions regarding how long they wanted to work to complete their books. The teacher and the SLP provided individual support and developmentally appropriate instruction (Copple & Bredekamp, 2009) as needed for: topic generation, drawing pictures, writing a message to accompany the pictures, and scaffolding for the development of the narrative of their stories. The teacher assisted half of the children at one table and a speech language pathologist (SLP) assisted the other half at another table. The teacher split up the children differently across each session to ensure spending equal time with them. Both the teacher and SLP provided assistance to the children at varying levels within these tasks,
depending on the child’s age and developmentally appropriate needs.

The teacher and SLP mediated both writing forms and story development through side-by-side interactions with the children. The teacher and SLP began each session moving around the classroom, sitting at the table next to the children and asking starter questions such as, “What are you going to write about today?” and “What is your story going to be about?”. Throughout the process of creating the books, the teacher and SLP continued moving around the classroom and sitting next to the children with the additional prompts such as, “Tell me about your story”, “what is going to happen next?”. After finishing their stories, the children were encouraged to share them with either the teacher or SLP. The books were collected after the story creation setting and children were then asked to come into a quiet room and tell the researcher their story.

Data Collection
One time per month, data was collected from each child’s written product obtained from the classroom instructional session. After the child was finished making the book on that day, an audio recording was obtained in a quiet room with only the child and the researcher present. The child brought his or her book into the room to tell the researcher the completed story. During the audio recording, the researcher used the prompt: “Tell me your story” and used follow-up prompts to encourage the children to tell the story. As the children were telling their stories from the book, the researcher encouraged them to continue by providing responses such as “Uh-huh” or repeating what the children said. According to Peterson and McCabe (1983), responses such as these encourage children to continue their spoken narratives without giving them cues regarding expectations of the narrative structure. The books were then collected from the children for analysis of the written product. See figure 1 for a sample product collected after the book creating session.

Data Analysis
A total of 59 samples from all of the children combined were available for analysis. There were a total of 20 spoken narrative samples elicited, transcribed and analyzed from male participants and 39 samples from female participants.

Narrative macrostructure analysis. The audio-recordings of the narratives were transcribed and coded for macrostructure elements using the Index of Narrative Complexity (INC) (Petersen, et al., 2008). The macrostructure of a narrative includes its overall organizational pattern and its structural characteristics (Hughes et al., 1997). The INC includes categories for measuring complexity such as characters, setting, initiating events, internal responses, plans, action/ attempts, complications, consequences, narrator evaluations, formulaic markers, temporal markers, and

Figure 1. Sample of child’s writing and spoken narrative collected for data analysis from first intervention session (January).
causal adverbial clauses. This system allows for identification of changes in the complexity of narrative skills over a short amount of time. Each category includes a rating scale that begins with 0 and had a maximum score of either 2 or 3. A combined score is calculated to reveal the overall complexity of the narrative. According to Petersen et al. (2008), the INC was found to be a tool that can be scored consistently, can be used across varying elicitation formats, and has high correlations with the Test of Narrative Language (Gillam & Pearson, 2004). Although the preliminary study to assess the reliability and validity of this tool was used for an older range of children, the INC has been used in other studies with minimal modifications to demonstrate progress in preschool children’s retelling skills as a result of spoken narrative intervention (Spencer & Slocum, 2010).

Narrative microstructure analysis. The audio-recordings of the stories were transcribed, segmented into C-units and coded using the SALT computer software (Miller & Iglesias, 2008) as a means of analyzing the microstructure elements of the spoken narratives. The microstructure of a narrative is the syntactic and semantic structure that contributes to its complexity and cohesiveness (Hughes et al., 1997). The analysis included spoken language measures of 1.) Total number of Communication Units (C-units): a measure of productivity in which the narrative is segmented into C-units (each independent clause and its modifiers), and the sum of these units is calculated, 2.) Mean Length of C-units in words (MLCUw): a measure of structural complexity in which the number of words in each independent clause and its modifiers is calculated and averaged, 3.) Number of Different Words (NDW): a measure of lexical diversity in which the total number of different words in the narrative is calculated, 4.) Total Number of Words (TNW): a measure of verbal productivity in which the total number of words in the narrative is calculated. Research indicates measures of spoken narrative microstructure are correlated with children’s language and literacy skills (Justice, Bowles, Kaderavek et al., 2006). Additional research indicates that TNW and NDW are among the most reliable and consistent measures when assessing narratives that are as short as one to three minutes in length (Heilmann, Nockerts, & Miller, 2010).

Dialect density analysis. SALT computer software (Miller & Iglesias, 2008) was also used to code and analyze morphosyntactic dialect features (phonological features were not coded or analyzed) by using a Dialect Density measure (DD). This is a measure of dialect usage which divides the occurrence of AAE features produced in a transcript by the number of words in the transcript to help avoid excessive influence due to variations in sample length and displays how much dialectal feature production characterizes a story (Craig, Washington & Thompson-Porter, 1998).

Results
A total of 59 self-generated narrative samples from 14 different children (5 boys and 9 girls) were included in this analysis. Elements of the self-generated narratives were evaluated to determine if there were statistically significant differences between boys and girls using independent t-test calculations. Six measures were obtained across the following dependent variables: number of communication units (CU), mean length of utterance in communication units in words (MLCUw), number of different words (NDW), total number of words (TNW), Index of Narrative Complexity (INC) (Petersen et al., 2008), and dialect density (DD). Mean and standard deviations for microstructure, macrostructure and dialectal feature are presented in Table 1.

Table 1. Means and Standard deviations for boys and girls measures.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>CU</td>
<td>15.50</td>
<td>4.64</td>
</tr>
<tr>
<td>MLCUw</td>
<td>5.52</td>
<td>1.40</td>
</tr>
<tr>
<td>NDW</td>
<td>34.70</td>
<td>13.04</td>
</tr>
<tr>
<td>TNW</td>
<td>64.85</td>
<td>32.18</td>
</tr>
<tr>
<td>INC</td>
<td>7.55</td>
<td>3.60</td>
</tr>
<tr>
<td>DD</td>
<td>0.06</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Note. CU- communication units, MLCU- mean length of communication utterance, NDW- number of different words, TNW—total number of words, INC- Index of Narrative Complexity, DD- dialect density

Narrative Macrostructure
Independent sample t-tests for scores of the Index of Narrative Complexity (INC) (Petersen et al., 2008) composite comparing narrative macrostructure performance revealed that there were no significant difference between the boys (M=7.55; SD=3.60) and the girls (M=6.87; SD=3.68) for spoken narratives; t(57)=−0.66, p=.25.
Narrative Microstructure
Independent sample t-tests of SALT analysis comparing narrative microstructure performance revealed that there were no significant differences between the boys and girls for narrative microstructure measures for the following measures: 1.) number of communication units (CU): boys (M= 15.50, SD=4.64), girls (M=15.87, SD=6.70); t(57)=-.48, p=.32; 2.) mean length of communication units in words (MLCUw): boys (M=5.52, SD=1.40), girls (M=5.54, SD=1.76); t(57)=.03, p=.49; 3.) total number of words (TNW): boys (M= 64.85, SD=32.18), girls (M=66.15, SD=36.44); t(57)=-13, p=.45; 4.) number of different words (NDW): boys (M=34.70, SD=13.04), girls (M=35.97, SD=18.41); t(57)=-.27, p=.39.

Dialect Density
Independent sample t-tests of Dialect Density (DD) as coded and analyzed via SALT (Miller & Iglesias, 2008) comparing dialect use in narrative performance revealed that there were significant differences between the boys (M=.06, SD=.05) and girls (M=.04, SD=.04) dialect use in spoken narratives t(57)=1.70, p=.05.

Discussion
The purpose of this study was to examine possible gender differences in narrative macrostructure and microstructure and in AAE dialect use in African American preschool children’s self-generated stories. Dialect density (DD) was the only measure for which there was a statistically significant difference between the spoken language measures of boys and girls. This suggests that gender differences occur in AAE dialect use among this group of preschool children for productions of self-generated narratives.

Narrative Performance and Gender
There were no significant differences in gender for macrostructure and microstructure narrative measures (INC, number of CU, MLCUw, TNW and NDW) when narratives were elicited through a task requesting children to produce their own stories via a book creating activity. There is limited research regarding narrative performance of AA preschool children, and even less regarding the differences between AA boys and AA girls in narrative production. However, our results are consistent with prior research that found no difference in gender in SAE speaking young children’s narrative performance (Ely, Gleason, Narasimhan, & McCabe, 1995; Hoff-Ginsberg, 1997; Peterson and McCabe, 1983) and studies that found no difference in gender in AA children’s narrative performance (Price et al., 2006; Curenton & Justice, 2004) or language sample analysis (Craig & Washington, 1994; Washington & Craig, 1998). For example, Price et al. (2006) investigated the macrostructure of AA preschool narratives and found that gender did not predict macrostructure narrative scores. This is consistent with our results which indicated no significant difference in gender on a composite score of macrostructure narrative elements as assessed with the INC (Petersen et al., 2008).

In regard to microstructure, Curenton and Justice (2004) found no significant difference in gender in number of c-units and MLCU when eliciting self-generated narratives using a wordless picture book with AA preschoolers. Additionally, when considering language sampling, Craig and Washington (1994) found no differences between AA preschool-age boys and girls in the amount of complex syntax during free-play based language samples analyzed, and Craig and Washington (2002) found no gender differences in MLCU in the spontaneous play samples of AA preschool and kindergarten children. However, the results of Craig and Washington (2002) contrasted with our results in the measure of NDW. Their study indicated there was a significant main effect for gender in the NDW measure with girls producing a statistically significant greater number of different words (Mean=79.5) than boys (Mean=70.6) in a 50 c-unit sample. Some possible reasons for this variation could be a difference in elicitation context (self-generated narrative versus conversational free-play sample) or narrative length (Craig and Washington, 2002 used 50 c-unit samples and our study samples were shorter in length with a mean of 15.67 c-units). Generally speaking, however, our study results, along with prior research seems to indicate few gender differences in the macrostructure and microstructure elements of AA preschoolers’ spoken language samples, inclusive of narratives.

Dialect Density and Gender
Our results revealed that AA boys used significantly more AAE features than the girls when narratives were elicited through a task requesting children to produce their own stories via a book creating activity. These findings are consistent with prior research that concludes that young (preschool or kindergarten) AA
boys use more AAE features in their spoken language discourse than AA girls (Connor and Craig, 2006; Washington, Craig and Kushmaul, 1998; Craig and Washington, 2002; Washington and Craig, 1998). For example, Craig and Washington (2002) found that when eliciting a language sample during a free-play activity, AA preschool and kindergarten children produced significantly more dialect features (Mean DD=.61) than girls (Mean DD=.036). These measures were similar to our results with the preschool children in our sample: boys (Mean DD=.60) and girls (Mean DD=.40).

Our study provides additional information regarding DD measures of gender differences in AA preschool narratives to add to this body of literature, especially in the area of self-generated narratives. These results are important to consider as AAE speaking boys may be at an increased risk for being identified as having a language impairment if they are not assessed using culturally unbiased evaluation procedures (Craig & Washington, 2002). Our study results indicate that AA preschool boys are using more dialectal features than girls, but all other measures for language performance were similar in narrative productivity between boys and girls. If different assessment measures were used with this sample of preschool children, the elevated dialect density of the boys could demonstrate a language impairment via more traditional means of assessment.

Features that have been demonstrated to be clinical markers of language impairment in SAE may also be produced in AAE (Hendricks & Adlof, 2017; Craig and Washington, 2002). For example, in our study, the most prevalent dialectal feature used by all children was zero copula/auxiliary, subject/verb agreement, and zero past tense, which are also morphological and syntactical features used to identify language disorders. With an increased use of these features by boys compared to girls, these morphosyntactic features of AAE may influence results in over-identifying AAE speaking preschool children with language disorders. Taking into consideration the results from our study and the results of prior research, it is important to note that AAE speaking preschool-age boys are especially at risk for misidentification given their increased use of AAE features in spoken discourse compared to AAE speaking preschool-age girls.

Narratives and AAE Use

This study contributes to the need for additional research in this area regarding narrative production in AAE speakers, as narratives are often deemed as a “gold standard” for assessment, especially with children from culturally and linguistically diverse backgrounds (Catts, Fey, Zhang, & Tomblin, 1999; Schachter & Craig 2013; Terry et al., 2013). Because children’s spoken narratives: 1.) provide a context that allows for the comprehensive examination of language development (Catts, Fey, Zhang, & Tomblin, 1999), 2.) are a less biased context for language assessment of CLD groups (Stockman, 1996; Terry et al., 2013), and 3.) have been found to be a strong predictor of reading outcomes (Sénéchal, 2015); it is important that research continue to be conducted investigating the narratives of AA preschool-age children.

The differences in gender of AAE features in the self-generated narratives of AA preschoolers in our study seem to be consistent with larger bodies of research regarding the discourse of AA children and adults (Chambers, 1992; Washington & Craig, 1998; Wolfram, 1969). This may indicate that this elicitation procedure of self-generated narratives via book making is a viable context that allows for children to access their complete repertoire of linguistic resources for language assessment in which they can use their language system that reflects their home language use in which they have been socialized. Less structured narrative tasks, such as self-generated narratives, may allow for use of AAE in language assessment (Craig and Washington, 1994), as prior research indicates that spoken fictional narratives are a strength for AA children (Gardner-Neblett et al., 2012; Gardner-Neblett & Iruka, 2015; Reese, et al., 2010; Vernon-Feagans, 1996). Although it might seem that a context that elicits less dialectal features would be the desired context for assessing children’s language in school, research indicates that AAE features in a narrative sample may actually facilitate a child’s narrative complexity, as the AAE features serve a particular function within the child’s narrative (Ross et al., 2004; Schachter & Craig, 2013). Allowing children to tell their own stories (as opposed to a story retell) may provide the child with further access to his or her cultural resources in storytelling.
Limitations and Conclusions
There were some limitations of this study that should be considered when interpreting the results. First, there was a small sample size of children (n=14) that participated in this study who produced all the 59 self-generated narrative samples used for analysis. Additionally, there were unequal groups of males and females for this study (male=5, female=9), which provided an unequal number of spoken narrative samples elicited. There were a total of 20 spoken narrative samples elicited, transcribed, and analyzed from male participants and 38 samples from female participants. Although our study results were consistent with prior research results, it remains possible that this disproportionate representation of male versus female narrative samples, from an already small sample of participants, could have influenced the interpretation of the results. Finally, the narratives samples were taken from a larger study in which classroom intervention was implemented over a five-month period of time. Therefore, these outcomes of these narratives, both in narrative measures and dialect use, could have been influenced by the procedures of the intervention. Additional research should be conducted in an elicitation context that promotes the self-generated narratives of AA preschools in a non-intervention context, to additionally assess the measures from this study.

In summary, this study adds to our knowledge about the gender differences of self-generated narrative productions in African American preschool children. Given the recommendations of narratives as a culturally and linguistically less biased assessment tool (than standardized measures), it is important to understand how AA preschool boys and girls perform in varying elicitation contexts. Our study concludes that girls and boys both perform similarly on spoken narrative measures of macrostructure and microstructure; however, the two groups were significantly different in their production of AAE feature use. These findings should provide value to clinicians in determining which tools to use to provide a culturally and linguistically appropriate assessment of the language skills of AA preschool children.

References


Harry, B., & Klingner, J. (2014). *Why are so many minority students in special education?* Teachers College Press.


Using African American Literature in the Therapy Setting

Yolanda Feimster Holt

Abstract
The purpose of this article is to provide culturally relevant alternatives to out of the box therapy tools typically marketed to practicing clinicians. The materials and methods discussed can be fully integrated into the clinician’s repertoire of therapeutic interventions. Literature produced by African American writers encompasses a variety of genres and styles inclusive of historical narratives and folk-tales, dialect inspired poetry and verse, and analytical treatise on the philosophical thought and condition of the African American. Rarely is this wealth of cultural and linguistic knowledge tapped to enhance the therapeutic experience. Previous research has used contrastive analysis to quantify the use of African American English (AAE) and to teach code switching between AAE and General American English (GAE). To date research on the use of African American literature in speech therapy has not been described. This article describes a set of commonly available works by African American writers that can be readily accessed. The works are targeted to three age groups, pre-school, elementary and adolescent. Examples from three texts will be presented along with examples of therapy interventions that can be derived from those texts. After reading this article the SLP will have the beginning knowledge on where and how to gather culturally relevant African American literature to use in therapy.

Learning Objectives

- Describe two therapy interventions that can be created using African American literature
- Describe how African American literature fits into the dialogic reading paradigm
- Identify 3 age/grade level African American texts appropriate for use in therapy

Speech-language pathologists have used shared book reading as a therapy intervention to promote linguistic development in young children. Research has investigated the strategy as a method to scaffold language development and increase vocabulary (Arnold, Lonigan, Whitehurst & Epstein, 1994; Lonigan & Whitehurst, 1998; Whitehurst, Falco, Lonigan, Fischel, DeBaryshe, Valdez-Menchaca & Caulfield 1988; Whitehurst, Arnold, Epstein, Angell, Smith and Fischel, 1994). Limited attention has focused on the use of African American (AA) literature in the therapy setting. Beyond shared story book reading for preschool and early elementary children, AA literature can provide the SLP with an objective document to provide therapeutic intervention within the domains of communication often targeted for (re)habilitation; phonology, morphology, semantics, syntax and pragmatics. Using African American literature allows the SLP working with older elementary, middle and high school students a means to share in the language, ideas and perspectives of African Americans without having to be an expert on AAE or the African American experience. The use of these works in the therapy setting demonstrates an acceptance of and recognition of the value of AA voices as effective and appropriate means of communication, while validating the lives and experiences of African American people as worthy and valid. This paper will briefly describe the research on shared book reading as a pre- and emergent literacy intervention and discuss how AA literature fits into that paradigm. The remainder of the text will identify age/grade appropriate AA texts for use in therapy; describe two therapy interventions that can be created using AA literature and provide examples of those interventions using three texts; I, Too Langston Hughes (1926); Keep ya head up Tupac Shakur (1993); and The Space Traders Derrick Bell (1992). The texts chosen for this article bridge the oral and written traditions of AA literature and culture (Banks-Wallace, 2002; Carter-Black, 2007; Jones, 1991). These works were specifically chosen to highlight the double meanings often present in works by and for African Americans and to show how the SLP can use these works to provide intervention while learning about the culture and language of the AA students being served. Nationally Black students are 2.7
times more likely to be identified as Cognitively Impaired (CI) and Black males are 1.89 times more likely to be identified as Speech-language impaired (SLI) than White peers (Sullivan & Bal, 2013). Consequently, knowledge of the AA literary tradition will provide the SLP a more robust repertoire of materials for clinical intervention.

Shared Book Reading
Research on emergent and early literacy development has defined shared book reading or dialogic reading as an effective language and vocabulary intervention for young children. The frequency of shared picture book reading between adults and children has been positively correlated with better language skills (Mason, 1980; Payne, Whitehurst, & Angell, 1994, Wells, 1985; Wells, Barnes & Wells, 1984), gains in preschool vocabulary development (Jenkins, Stein, & Wysocki, 1984; Sénéchal & Cornell, 1993; Sénéchal, Thomas & Monker, 1995; Vivas, 1996), narrative skill (Harkins, Koch & Michel, 1994; Zevenbergen & Wilson, 1996), and oral language complexity (McNeill, & Fowler, 1999; Valdez-Menchaca & Whitehurst, 1992). The gains in language and literacy have been associated with the specific shared reading technique termed dialogic reading (Whitehurst et al., 1998). Dialogic reading is a child-led, adult-facilitated technique developed for reading with children 2 – 5 years old. In dialogic reading the child holds the book and serves as the story teller while the adult prompts the child by asking open ended questions that are appropriate for the child’s level of comprehension, repeats and gently expands the child’s verbalizations in telling the story, and labels objects, actions and events within the story (Arnold & Whitehurst, 1994). Over time the adult gradually and continually increases the demands on the child’s verbalizations, asking for more complex analysis and association of the text to the child’s environment. These probing questions follow the principles of the zone of proximal development described by Vygotsky (1978), with the adult prompting and guiding the child to perform beyond their actual developmental level to reach and expand their skill to the maximal level of potential development. Important for the current discussion is Vygotsky’s construct that learning is a universal aspect in the process of developing culturally organized understanding (1978, p.90). Social associations, those that fall in the pragmatic domain, tend to precede other aspects of development. The use of AA literature with African American and other young children provides a framework for integrating the aesthetics of AA thought into the learning paradigm of young children. For the African American child and other children, the presence of these images and ideas may serve as a bridge to validate the child’s lived experience in an educational and therapeutic environment devoid of powerful positive images and interactions with African American, people, thoughts and ideas in positions of power and authority; or as Vygotsky (1978) expresses, learning and development are interrelated events and children and their learning partners co-construct knowledge. The sharing of AA literature during therapeutic intervention with African American children and others allows for the simultaneous learning and development of language use, narrative skill and vocabulary while recognizing and validating the presence of the AA experience. Specifically, the use of AA literature asserts that African Americans can be both the subjects and the authors of literature. African Americans are in fact more than objects to be acted upon but have the ability and facility to exist in literature, to be loved and admired and to express and experience the full gamut of human emotion and experience.

African American texts for young children
In recent years the availability of picture books for young children that show the breadth and depth of the AA experience has greatly increased. For very young children books such as Joshua’s Night Whispers by Angela Johnson, Stories Huey Tells, by Cameron and Roberta Smith, Leo can Swim by Anna McQuinn and Rosalind Beardshaw, Marvelous Me: Inside and Out, by Lisa Bullard, and Bloop, Bloop goes the Poop, by Temara Moore and Brian David Isham have joined well known favorites by Ezra Jack Keats such as The Snowy Day, Peter’s Chair, and Whistle for Willie. The availability of these and other texts for African American children and others is believed to provide valuable experiences for readers of the texts. Hefflin and Barksdale-Ladd (2001) report the frequent presence of characters like the readers of the text is likely to help the reader connect with the text, see their lives, problems and experiences in the characters and engender a love for reading.
One third grade child they interviewed stated the following:

“It’s not that I don’t like white people or nothing, but you’re glad because you don’t see a lot of books that have black people in them. And it’s not to be rude to white people, but you can imagine what they’re [black people] thinking of...it might give you a better idea. Again, nothing against white people, but you like to see blacks because [white authors] portray black people like they don’t got no manners or nothing. And white people, they know everything and they get a good education. But, that’s not always true cause the black people, they get a good education too. But they portray us as not having any manners. When you see [black] people like that, [white] people think that we’re stupid.”

(Hefflin and Barksdale-Ladd 2001, p.811)

The most striking aspect of the child’s statement is not that she is interested in seeing herself portrayed positively in the text, but that she has an awareness that people who are not AA view African American’s as ill-mannered and poorly educated. Further she recognizes that the texts she has been exposed to place people who are not African American as the holders of knowledge “And white people, they know everything and they get a good education.” While it would be inappropriate to extrapolate this one child’s view as representative of the experiences of all African American children it is worth noting that she is quite careful and circumspect as she presents her comments “It’s not that I don’t like white people...it’s not to be rude to white people ...Again, nothing against white people.” These comments, taken in context, are quite striking as they indicate this third-grade student feels she must apologize for expressing that she enjoys reading books with positive AA characters. Perhaps we should expect that African American children would enjoy reading texts that feature positive AA characters, and that all children would benefit from exposure to positive African American characters that indicate “they get a good education too.” Included in Appendix A of the current text is a list of books featuring positive AA characters.

**Therapy Interventions using African American literature.**

Beyond the use of dialogic or shared reading tasks with emergent and young readers AA literature can be particularly useful in engaging older elementary, middle and high school students in therapy activities to address multiple domains of language including, phonology, morphology, semantics, syntax, prosody and pragmatics. Three texts will be used to illustrate how AA literature can be used across these domains, *I, Too* (Hughes, 1926); *Keep ya head up* (Shakur, 1993); and an excerpt from *The Space Traders* (Bell, 1992). The first two texts are meant to be shared as spoken word while the third speculative fiction is meant to be read. *The Space Traders* (Bell, 1992) is representative of a relatively new genre of fiction known as Afrofuturism. Afrofuturism is an aesthetic that was first recognized in the 1970’s. It can be observed in the work of recording artists such as Erykah Badu, Missy Elliott and Janelle Monáe and in the writings of Derrick Bell, the late Octavia Butler, Ytasha Womack, and Steven Barnes among many others. The texts presented here provide the SLP with a venue to explore contemporary themes likely to be of interest to older African American therapy students. Importantly this method of indirectly addressing contemporary issues from the viewpoint of positively framed AA protagonists allows the AA therapy student to participate in a discourse that may directly affect the student’s life without placing the burden of having the student be the spokesperson for some group.

Two areas of need frequently identified for students with speech-language impairment are in the form of language (grammar and phonology) and the function of language (pragmatics) (ASHA, 1993). AA students who use African American English (AAE) have knowledge of both AAE and the General American English (GAE) that is used in the text and speech of the educational setting. It may be difficult for the SLP with limited knowledge of the rules of AAE to distinguish where variations in grammar, phonology and pragmatics are the result of dialect variation and where those variations are confounded with a speech and language disorder. Below are some examples of the ways AA literature can be used to explore the form and function of language and provide intervention strategies using that literature. Langston Hughes (1902-1967) is an African American poet that wrote in both AAE and GAE. The poem I, Too Langston Hughes (1926) was written in
GAE. The text is written in first person and describes America from the perspective of a young African American man who has a place in the household of America albeit a quiet and unseen one. The poem provides that the “darker brother” is to be hidden from public view, yet even from his hiding place, the brother can “laugh, ... eat well, ... and grow strong”. The poem provides the SLP several opportunities to explore phonology, morphology, syntax, semantics and pragmatics. The text uses primarily one or two syllable words and the three and four syllable words used are quite common; America, to-morrow, company. Although the words and grammatical structure are not complex the pragmatics are. Hughes (1926) uses an overtly nuanced frame to discuss the place of AA in society. Hughes (1926) work provides the SLP the opportunity to create questions regarding pragmatic and semantic meaning that go beyond the literal text. For example, what does it mean to be sent to the kitchen to eat? Where does everyone else eat? Is it acceptable to be sent away to eat so long as you are adequately fed? Why does the young man in the poem laugh?

Here is the full text.

I, too by Langston Hughes
I, too, sing America.

I am the darker brother.
They send me to eat in the kitchen
When company comes,
But I laugh,
And eat well,
And grow strong.

Tomorrow,
I’ll be at the table
When company comes.
Nobody’ll dare
Say to me,
“Eat in the kitchen,”
Then.

Besides,
They’ll see how beautiful I am
And be ashamed—

I, too, am America.

For therapy students working on phonology or morphology, the poem provides multiple opportunities to practice CV, VC and CVC word shapes in connected speech. There are many open syllable words; too, to, be, the, they, me, say; opportunities to practice stops, nasals and fricatives in syllable initial and syllable final position (/p/, /b/, /t/, /d/, /k/, /ɡ/) e.g., beautiful, too, eat, fricatives (/s/, /z/ /ʃ/ /θ/) say, besides, beautiful, the, they’ll. The /ə/ endings in the words darker and brother provide opportunities to explore how the addition of that phoneme changes word meaning and the opportunity to discuss the circumstances where the segment can be left off or modified without changing word meaning, for example AAE allows for vocalization of the final syllables to /dɑɹkə/ and / bɹʌðə/ but not deletion of the final syllables to /dɑɹk/ and / bɹʌð/.

Similarly, the text from Keep ya head up Tupac Shakur (1993) uses AAE forms to discuss complex issues. In addition to simple sentence structure, Shakur’s work provides a strong rhythmic component in concert with alternations between AAE and GAE morphological variation that allow the SLP to address the prosody of connected speech while contrasting AAE and GAE speech productions. The first two stanzas are presented below.

Some say the blacker the berry, the sweeter the juice
I say the darker the flesh, the deeper the roots
I give a holler to my sisters on welfare
Tupac cares, if don’t nobody else care

And uhh, I know they like to beat ya down a lot
When you come around the block brothas clown a lot
But please don’t cry, dry your eyes, never let up
Forgive but don’t forget, girl keep your head up

As illustrated above, the text contrasts the use of /ə/ with /a/ in the words sisters and brothas. Again, the SLP can use the text to practice final /ə/ production and even to have the student change the productions to sistahs and brothas and discuss how those changes would affect the meaning or message the artist intended. The text contains idioms in the first two lines that can be mined to discuss both the literal and figurative meanings; to identify the intended audience and to explore the deeper meaning in the text. The text has a regular rising and falling stress pattern in the first stanza with the stress peak illustrated in bold italics. Each word in the last line of the first stanza receives relatively equal stress, but the words cares and care are
slightly longer in duration and may be perceived as having greater stress.

The second stanza has a slightly different rhythm, with equal stress on each word; however, the underlined words are produced with greater duration. The text used in Keep ya head up (Shakur, 1993) is dependent on alternating stress patterns which are further dependent on production of VC, CV, CVC, and CVC + /s/ or /Nt/ syllables. The required use of these syllable shapes makes this text ideal for practice with students working on final consonant production, morphological variation and prosodic intonation, including fluency practice.

The Space Traders (Bell, 1992) is a tale of aliens who come to earth and offer to provide solutions for the problems of environmental pollution, unsustainable dirty power sources and the financial insolvency of bankrupt municipal governments. The aliens will trade the means to solve these ills if America will provide in trade “every American categorized as black on birth certificate or other official identification.” The story ends with the African Americans standing on the beach preparing to board the alien space ships, the minerals and machinery to eradicate pollution, provide financial solvency and clean, safe power sitting on the beach as well, glistening in the early morning sunlight.

Unlike the two previous texts, the African Americans in The Space Traders (Bell, 1992) are not so much subjects in the text with free will and the ability to relate their thoughts and feelings, but instead are objects. The African Americans are discussed by people in government, in the media and by the public. When the African Americans attempt to provide input on the trade they are rebuffed and advised to think of the greater good of the country. In The Space Traders (Bell, 1992) the African Americans are written about, talked about and have decisions made for them without their input. This text would be suitable for older teens, perhaps 9th grade and up, who may be disengaged from the therapy process, but may still need to work on higher level skills such as cause and effect relationships, problem solving, planning and appropriate pragmatic responses in new and unfamiliar relationships. Because The Space Traders (Bell, 1992) is a fantastic fiction, it provides students with the opportunity to generate ideas, make predictions, plan, problem solve and discuss ideas using the limited information in the story. The student can create alternative outcomes and expand the ending of the story beyond the text. These interactions in many ways mimic how the older student is required to make life decisions on classes, job training and day to day behavioral responses based on immediate wants and needs and the implications of those decisions for the future. Using a text such as The Space Traders (Bell, 1992) provides the student with an opportunity to make life altering decisions with limited information in quite daunting circumstances with unknown consequences and no risk of failure. These types of thinking activities may prove to motivate students in the therapy setting who are otherwise uninterested in planning for the future. In addition, reading and interacting with this text exposes the students to vocabulary and contemporary problems that may assist the student in developing an appreciation and understanding of concepts discussed in environmental science, civics and government, history and current events.

A portion of the text from The Space Traders (Bell, 1992) is provided below.

And this point constituted the third surprise. Those mammoth vessels carried within their holds treasure of which the United States was in most desperate need: gold, to bail out the almost bankrupt federal, state, and local governments; special chemicals capable of unpolluting the environment, which was becoming daily more toxic, and restoring it to the pristine state it had been before Western explorers set foot on it; and a totally safe nuclear engine and fuel, to relieve the nation’s all but depleted supply of fossil fuel. In return, the visitors wanted only one thing—and that was to take back to their home star all the African Americans who lived in the United States.

The jaw of every one of the welcoming officials dropped, not a word of the many speeches they had prepared suitable for the occasion. As the Americans stood in stupefied silence, the visitors’ leader emphasized that the proposed trade was for the Americans freely to accept or not, that no force would be used. Neither then nor subsequently did the leader or any other of the visitors, whom anchorpersons on that evening’s news shows immediately labeled the “Space Traders,” reveal why they wanted only black people or what plans they had for them.
should the United States be prepared to part with that or any other group of its citizens. The leader only reiterated to his still-dumbfounded audience that, in exchange for the treasure they had brought, they wanted to take away every black man, woman, and child in the nation and leave behind untold treasure. Otherwise, the Space Traders' leader shrugged and glanced around at the oil slick in the water, at the dead gulls on the beach, at the thick shadow of smog that obscured the sky on all but the windiest days. Then the visitors walked back over the waves and returned to their ships. (p.1)

As indicated previously this work is appropriate for students in 9th grade and above. Highlighted in the quoted texts are words and phrases that can be used for building vocabulary and for discussions of word meaning in context. This excerpt is an example of how the text can be used as a conversation starter for current events related to the water crises occurring across the United States, energy policy with respect to coal, oil and gas, issues of global warming and extreme weather events. The text can be mined for a variety of therapeutic interventions.

Conclusions and Future Directions
SLPs have a unique opportunity to positively affect the lives of the students identified for therapeutic intervention. The SLP works with individuals and small groups to provide individualized intervention to meet the unique needs of each child served. The African American child and other children may not have the opportunity to interact with AA characters in literature if the school does not use AA texts as part of the core curriculum. As expressed by the third-grade student quoted earlier in this text, when you see a book with AA in it you’re glad “because you don’t see a lot of books that have black people in them.” The inclusion of AA texts should not be at the exclusion of other authors and again as the wise third-grader stated, “When you see [black] people like that, [white] people think that we’re stupid.” It is important for students to recognize that all groups of people are composed of individuals with all characteristics, both positive and negative. Manners and education are not the exclusive provenance of any group.

The shared reading paradigm has been shown to be effective in developing the vocabulary and language skills of pre, emergent and early readers. Using AA literature with this age group provides the foundation for positive talk about AA characters. For older students who continue to receive special education services and will matriculate to become independent adults, the use of AA literature may be an effective method to engage the student in seeing themselves and people with their perspective engaged in contemporary issues related to science, technology, engineering and math. Derrick Bell’s (1992), The Space Traders addresses these issues in a short tale in the Afrofuturism genre. Finally, the works created during the Harlem Renaissance, as highlighted by I, Too (Hughes, 1926), provide a wealth of material that encompasses every aspect of contemporary political discourse, from the rights of marginalized groups to public policy and beyond. The SLP interested in engaging with older middle and high school students can begin with the writers of the Harlem Renaissance and will find a wealth of materials that has already received nearly one-hundred years of critical analyses and curating. Lastly the genre of rap music as evidenced in the work of Tupac Shakur (1993) Keep ya head up is a resource that can be used to engage African American students and others in the analysis of phonology, morphology, pragmatics and prosody, including fluency. The use of AA literature in the therapy setting can be a powerful tool to engage students, to validate their lived experiences and to provide both the SLP and the student the opportunity to explore AAE and GAE language structures while (re)habilitating communication disorders. ♦

Author Correspondence:
Yolanda Feimster Holt
Email: holty@ecu.edu
References


Sometimes we become frustrated when working with young people. Just remember, everyone, is someone’s baby. And they love their child just as much as your parent’s loved you.
The Impact of Trauma on Language Development in Children and Adolescents

Kellie Pauley & Janice Wright

Abstract

This article will examine how children and adolescents experience trauma as a result of continued poverty, abuse and neglect, which has a significant impact on all forms of language development. This paper will discuss brain development, trauma and language development, assessment of this population and finally treatment. The role of the speech language pathologist is essential in the assessment and treatment of children/adolescents as a result of trauma.

Experiences both positive and negative profoundly influence the development of young children beginning in utero. Perry (2006) identifies three key threats to an infant’s developing brain: trauma in utero (intra-uterine insult); post-birth attachment trauma; and other post-natal trauma - all before the thinking brain (the part of our brain that we use every day to make creative or complex human decisions) comes on line by the age of three. These same children continue to be at risk for trauma due to poverty, abuse, and neglect. Research substantiates exposure to a variety of experiences enriches language and is crucial to expanding vocabulary and improving social language. However, professionals do not always address the adverse childhood experiences (ACEs) that shape the brain’s organization, which, in turn, influences the emotional, social, cognitive, and physiological activities that impact a child’s overall social language development.

Assessing these children/adolescents requires the speech language pathologist (SLP) to view their client through multiple lenses that require a paradigm shift in thinking about how to evaluate and treat this population. Evaluation using one standardized assessment provides the SLP with a narrow view resulting in the development of a treatment plan that is incomplete. Assessment must be dynamic to include a comprehensive review of more than just standardized testing. Evaluating social language or pragmatics is crucial to a well-rounded language-based assessment. Deficits in the development of social language are predominant in this population.

Trauma is a psychologically distressing event that is outside the range of usual human experience often involving a sense of intense fear, terror and helplessness (Perry, 2003). The cause of trauma in children from birth to the age of 18 is varied. However, the most common causes of trauma include experiencing physical and/or emotional abuse and neglect and living in impoverished neighborhoods with illegal drug use. Other factors include living in families that experience violence in the form of incarceration and domestic abuse. Children and adolescents have a greater risk of developing mental illness as a result of trauma and are often the product of living in the foster care system. Types of abuse will be briefly defined in the following paragraph. See table 1.
to interpersonal or community violence is 1 in 4 (Perry, 2003).

Forty-six to ninety percent of children in the child welfare system have experienced multiple and/or adverse traumatic events. After declining more than 20 percent between fiscal years 2006 and 2012 to a low of 397,000, the number of children in foster care increased to 428,000 in the fiscal year 2015. This represents a 3.4 percent increase from fiscal year 2014, when states reported 414,000 children were in foster care (US Department of Health and Human Services, 2016).

Mental illness refers to a wide range of mental health conditions and disorders that affect mood. One in 10 children/adolescents ages 5-16 meet criteria for a diagnosable mental illness. That is equivalent to approximately 3 children in every classroom (Mayo Clinic Staff, 2011). Some examples include, but are not limited to, the following: oppositional defiant disorder (ODD), bipolar disorder, borderline personality disorder, intermittent explosive disorder (IED), etc. All of these factors are cumulative as a result of living with all or most of these traumas inducing conditions from birth, which cause changes in brain development (Mayo Clinic Staff, 2011).

It is important to remember these are children who, for the most part, are born with typically developing brains. Trauma, according to Perry (2004), can affect brain development as it undergoes adaptive changes as the result of trauma. The word adaptive is imperative in the understanding of brain development in children and adolescents who experience trauma. There are three key areas of brain development (frontal lobe, hippocampus and the limbic system) that are reduced or lessened, which contribute to adaptive changes in cognition, affect, behavior, neurophysiology and physiology.

Cognitive changes are the result of the neurobiological effect of trauma and result in reduced brain size, decrease density of neurons, and smaller head circumference. This contributes to the absence of critical organization of experiences at key times during development (Perry, 2004).

The frontal lobe is responsible for the development of executive function and metacognition that helps the child/adolescent to control impulses and to sustain executive function and metacognition that helps the

<table>
<thead>
<tr>
<th>Table 1: Trauma statistics from 2015-2016.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of Trauma</strong></td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td>Living in Poverty</td>
</tr>
<tr>
<td>Abuse &amp; Neglect</td>
</tr>
<tr>
<td>Family Violence</td>
</tr>
<tr>
<td>Foster Care System</td>
</tr>
<tr>
<td>Mental Illness</td>
</tr>
</tbody>
</table>

Physical abuse can be defined as any act intentionally given to a child or an adolescent by a parent or caregiver that results in physical injury such as cuts, bruises, welts, burns, muscle sprains or broken bones (National Child Traumatic Stress Network, 2017).

Neglect is defined by an ongoing pattern of inadequate care that results in poor hygiene, poor medical care, poor weight gain, inadequate nutrition or hydration and frequent absences from school (Psychologytoday.com, 2017). Abuse and neglect statistics report 906,600 cases of child maltreatment reported in the US annually (Hyter, 2007).

- 12.4 per 1,000 children who have been affected by abuse and neglect
- 60% neglected
- 20% physically abused
- 10% sexually abused
- 5% emotionally abused
- 1,500 children who were maltreated died

Family abuse occurs when there is continued domestic violence and behavior from the adults that create a state of fear in a household setting. Domestic abuse is defined by the willful intimidation, physical assault, battery and or sexual assault as part of a systematic pattern of power and control perpetrated by one intimate partner against the another (National Coalition Against Domestic Violence.org, 2017). Approximately 5 million children experience trauma each year as a result of family violence. More than 2 million experience physical and/or sexual abuse and by the time a child reaches 18, the probability of that child being exposed

---

| eHearsay: Electronic Journal of the Ohio Speech-Language Hearing Association | Volume 8 • Issue 1 • Summer 2018 | Page 52 |
attention to task. The ability to link past information to new information is important for being able to adjust new schemata to existing information. This is essential to the formation of metacognitive skills (thinking about ones thinking) for higher levels of cognitive development.

Adaptive changes in behavior and affect are the result of a decrease in the size of the hippocampus, amygdala and reduced frontal lobe activity in children and adolescents who experience trauma (Perry, 2004). The hippocampus is responsible for the activities of the autonomic nervous and neuroendocrine systems. It is also the memory portion of the brain that is important for connecting past experiences to present situations. The amygdala is the heart of the limbic system responsible for processing, interpreting and integration of emotional function. The hippocampus and the amygdala help to regulate stress and emotional processing.

The hypothalamic pituitary adrenal (HPA) axis is our central stress response system. The HPA axis is an eloquent and every-dynamic intertwining of the central nervous system and endocrine system. (Interactive Therapeutics, 2016). Youth exposed to physical abuse demonstrated slower HPA-axis reactivity and had elevated internalizing and externalizing symptoms. Youth exposed to emotional abuse or non-intentional traumatic events demonstrated faster HPA-axis reactivity and had elevated internalizing and externalizing symptoms. Profiles of exaggerated or attenuated HPA-axis reactivity to acute stress may be risk factors for psychopathology in children who faced different stressful social situations (Kuhlman, et al, 2018.) Adaptive changes due to these changes in the HPA axis are exhibited by the inability of the child to demonstrate and interpret nonverbal information. This inability is demonstrated in the incorrect affect produced by children and adolescents who experience trauma, as the correct affect does not always match the situation or circumstances. For example, a child in trauma may show little or no emotion when another person is experiencing pain or sadness. The hippocampus and the amygdala are also important in the processing of reward, punishment and uncertainty.

These adaptive changes in neurophysiology and physiology mean children with prolonged exposure to trauma have difficulties with impulse regulation, self-perception, somatizations, attachment and interpersonal relations, attention and challenges with systems of meaning (Cook, 2006). This contributes to the reason award systems like tokens or stickers have little impact on changing the behavior of these children. The use of reward based reinforcement expects the child to use the pre-frontal lobe/frontal cortex (executive state) to determine, “what can I learn from this.” For children in trauma, the child is unable to use the executive state—often in the area of the brain that is mediating the response in the brain stem (survival state) to determine.” Am I safe?” Figure 1 shows the executive, emotional and the survival parts of the brain.

![Figure 1: Areas of the Brain by Trauma](image-url)

Cerebral Cortex: What am I learning?

Limbic System: Am I loved?

Hindbrain or brainstem: Am I safe?

Children/adolescents in trauma are operating in the brain stem function of the survival state. This primal brain function leads to the “fight or flight” response. This is one of the most overlooked aspects in the neurological reaction these children have after a traumatic event. The phrase “fight or flight” is a common reaction to danger or a perceived threat (Perry, 2002). However, Evans (2004) states that in actuality there are five stages: fight, flight, freeze, flop, and friend (Table 2).
We have all seen children pick fights on the playground because of some perceived slight from someone in the classroom. Any attempt to minimize disruptive behavior ends up with the child yelling at the teacher, bolting from the room or falling on the floor crying unable to self-calm. When threatened, these children often act in an “immature” fashion and this includes language use. Problem solving abilities are mediated by the frontal cortex and are not easily accessed. The child/adolescent will think, act and talk in a very primitive way and therefore academic learning cannot take place (Bruce, 2012). Children and adolescents cannot learn if they do not feel safe.

For these children, the ability to communicate effectively is affected when they are experiencing trauma or the aftermath of a traumatic event. Children experiencing trauma, according to Kernic (2002), are 7 times more likely to be referred to a speech language pathologist because of their lack of impulse control, hyperactivity, lack of executive functioning skills and lack of social communication (social cognition and higher order functions). Kernic (2002) also found these children exhibited delays in grammar, vocabulary comprehension and production in conversational skills. These children have experienced, from birth, a lack of language stimulation because families in trauma do not often have the opportunity to provide the needed language stimulation. A longitudinal study of children ages 1-4 in various socioeconomic strata found children in poverty are exposed to fewer words than children in the other economic levels. Hart and Risley (2002) found not only are these children exposed to fewer words using descriptive phrases, they are exposed, on average, to two prohibitions to every one affirmation they hear (Table 3). An affirmation is a positive statement used to praise or acknowledge a positive action by a child (that was a great job). A prohibition is a negative statement or comment used to inhibit or restrict (stop that).

In addition to the typical language production issues, children in trauma often demonstrate significant deficits with social pragmatic language skills. Often these children are unable to use words or observable nonverbal behaviors that competent communicators use in specific situations to resolve social dilemmas. As discussed earlier, the negative adaptive changes in the frontal lobe of the brain result in these children experiencing difficulty with higher order executive functions such as decision-making and strategic-planning processes. Children in trauma often misinterpret both nonverbal and verbal messages. For example, the teacher is standing in front of the classroom with arms folded and looks at the child as s/he enters the room. A nonverbal message is sent and was not intended to be interpreted as a threat, but children in trauma are always in a hypervigilant state (Atchison, 2007). The message sent by the teacher is misunderstood by the child and the response is one of fight (“Who are you looking at?”), flight (“I’m outta here you disrespected me”), freeze (“I am going to stand right here, you can’t make me move”) or flop (stomps through the room to the chair wiping off items along the way and puts head down once s/he is at the desk). Children in trauma have difficulty with competently using social language in an interpersonally appropriate way to successfully influence people and interpret events. In some ways, deficit social language skills seen in children in trauma mirror the same social language deficits as seen in children with traumatic brain injury. Blosser and DePompei (2003) discuss eight cognitive processes that help to identify children who exhibit a cognitive-communication disorder:

- Impaired attention, perception and/or memory
- Inflexibility, impulsivity, disorganized thinking,
- Difficulty processing complex information,
- Ineffective problem solving and/or judgement
- Inappropriate social behavior (pragmatics)
- Impaired executive functioning.

<table>
<thead>
<tr>
<th>Table 2. Stages of Fear.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fight</strong></td>
</tr>
<tr>
<td><strong>Flight</strong></td>
</tr>
<tr>
<td><strong>Freeze</strong></td>
</tr>
<tr>
<td><strong>Flop</strong></td>
</tr>
<tr>
<td><strong>Friend</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 3: Affirmations and Prohibitions per Economic Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic Group</td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>Welfare/Poverty</td>
</tr>
<tr>
<td>Working Class</td>
</tr>
<tr>
<td>Upper Class/Higher Education</td>
</tr>
</tbody>
</table>
A cognitive-communication disorder as defined by ASHA (2005) is a disorder that results from deficits in linguistic and non-linguistic processes. These processes can be exhibited by children in trauma not because of specific brain injury but because of prolonged exposure to adverse experiences that result in adaptive changes on brain development.

Another area of language that is of concern is the appropriate use of language register (DeVol, Payne, & Smith, 2006). Language register refers to the perceived attitude and level of formality associated with a variety of language (CAPE, 2011). Children/adolescents in trauma do not have the vocabulary or knowledge of sentence structure and syntax to use formal register. Children in trauma often have a difficult time moving from casual register to formal register. We use different registers of language to convey meaning and the meaning is often dependent on the situation. The five levels of language register listed in table 4 are important to understand and to be able to use depending on the situation and your conversational partner. Children in trauma who have only been exposed to frozen, casual or intimate language registers, often get into trouble in school because the educational environment expects the use of consultative and formal registers (table 4).

<table>
<thead>
<tr>
<th>Table 4: Registers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Register</td>
</tr>
<tr>
<td>Frozen</td>
</tr>
<tr>
<td>Formal</td>
</tr>
<tr>
<td>Consultative</td>
</tr>
<tr>
<td>Casual</td>
</tr>
<tr>
<td>Intimate</td>
</tr>
</tbody>
</table>

An additional language issue for children in trauma is the inability to use formal discourse in the telling of a story (Payne, 2003). Formal discourse requires a beginning, a middle and an end and the ability to provide information succinctly and completely. Children move from using casual story structure by replacing the use of filler words and vague terminology to a formal register by the age of 5. Children/adolescents of trauma continue to use the casual register, which interferes with communication as the child becomes an adolescent. The use of casual discourse by an older child or teen often means the message is misinterpreted as a lie by the adult listening to the story.

Children/adolescents who depend upon a random episodic story structure for memory pattern and live in an unpredictable environment may lose the ability to plan and predict (Payne, DeVol, & Smith, 2009). Without these abilities, children in trauma cannot identify cause and effect which interferes with the ability to identify consequences. This directly correlates to the ability to control impulsivity and can lead to an inclination for criminal behavior (Feuerstein, 2014).

Children with language impairments often lack a full range of positive and negative emotions and have difficulty regulating their emotions (Fujiki, 2002). They have difficulty accessing communication and lack the ability to participate fully in social interactions (Brinton, 1999). There is a significant relationship between maltreatment and reduced language skills with emphasis on severe impairments in social language/pragmatic development. Co-occurrence between communication, behavior and emotional problems exist.

Children in trauma have difficulty reading others’ emotions as well as recognizing their own emotion register. The ability to understand emotions in themselves as well as others is called emotional competence (Saarni, 1999). While professionals have been assessing these deficits in children with autism, the trauma population has been ignored. Sifneous (1973) coined the term alexithymia - a psychological phenomenon in which individuals may experience or be aware of strong feelings, but have difficulty expressing their feelings to others. Children in trauma have difficulty in all areas of social/emotional competence (understanding, expression and regulation) which means they are 4 times more likely to be viewed as a behavior problem in the classroom (Bruce, 2006).

A word of caution about emotional competence: cultural differences do exist in the expression of emotion (Ford & Mauss, 2015). It is important for the SLP to understand how culture affects emotion and emotional regulation. Considering culture is necessary for assessment and treatment by determining which behaviors are deemed appropriate and which are not by specifying how one should feel in certain cultural contexts (Camra, 2004). Culture is more than race. A
child’s ethnicity, socioeconomic level, educational level, region, religion and gender are factors that contribute to emotion and emotional regulation.

Considering brain development, language impairments, culture and social/emotional deficits is imperative for the development and use of a multi-factored approach to assessment. It is important to move away from assessment tools that only focus on form and content. It is essential that assessment tools look at function. Children must be able to adequately use their language skills to communicate appropriately. A paradigm shift is needed to focus on mental state, social language, language registers, discourse patterns and story structure as part of a full evaluation.

Standardized assessments to use when looking at evaluating language content and form include: Vineland Adaptive Behavior Scales (VABS; Sparrow, Cicchetti, Saulnier, 2016), Social Language Development Test, Normative Update for adolescents and elementary students (SLDT-NU; Bowers, et.al., 2017) and the School Function Assessment (SFA; Coster, et.al.,1998). Other standardized tests that can be used are the Clinical Evaluation of Language Fundamentals (CELF; Semel, Wigg, Secord, 2003), Oral and Written Language Scales (OWLS; Carrow-Woolfolk, 1996) and the Test of Oral Language Development (TOLD; Newcomer & Hammill, 2008).

The Vineland Adaptive Behavior Scales (VABS) is designed to assess individuals from birth to adulthood in their personal and social functioning. Following Edgar Doll’s original conceptualization of adaptive behavior as multidimensional in structure and his measurement of the behaviors by areas, the VABS is organized around 4 behavior domains: communication, daily living skills, socialization and motor skills. All of these areas need to be assessed as part of a multi-dimensional evaluation.

The Social Language Developmental Test Normative Update (SLDT-NU) for elementary aged children and adolescents assess the language-based skills of social interpretation, recognizing and understanding non-verbal and communication and interaction with friends. These are the skills found to be most predictive of social language development and gives insight into a student’s social understanding and social language competency. In the SLDT-NU manual, error patterns are provided to include further testing for language processing difficulties. For example, if a child or adolescent imitates facial expressions or gestures, then additional language testing is needed to assess expressive language and vocabulary.

The School Function Assessment (SFA; Coster, Deeney, Haltiwanger, &Haley, 1998) measures a student’s performance of functional tasks that support participation in the academic and social aspects of an elementary school program grades K-6. It was designed to facilitate collaborative program planning for students with a variety of physical and cognitive disabilities. Developing a collaborative team of professionals is essential in the treatment of the trauma population.

Additional assessments to include are the Language Register Assessment and the Alexithymia Questionnaire. The Language Registers assessment can be found online: https://quizizz.com/admin/quiz/57b79ede3119b0b248bb4b79. The Alexithymia assessment can also be found online: http://www.troublewithfaces.org/test-yourself-2. Finally, a language sample of both spoken and written language is essential to provide information about the child’s ability to speak and write and provides the examiner insight into both skills and the depth of the impairment(s). It is important for the examiner to consider co-morbid diagnoses when gaining information and how that may impact all levels of assessment results.

A paradigm shift is required when thinking about co-morbid diagnoses. Co-morbidity cannot exist as separate spectrums. For example, an examiner cannot look at autism spectrum disorder (ASD), obsessive compulsive disorder spectrum (OCD), other mental health (OMH) disorders as linear spectrums that are separate from one another. A fluid spectrum that connects the spectrums will provide better understanding of the student being evaluated. The following illustration of the fluid spectrum gives an example of how all diagnoses are connected (figure 2).
Figure 2: The Fluid Spectrum as it relates to ASD, OCD and other mental health disorders (OMD).

The fluid spectrum is in the shape of a triangle that connects the ASD, OCD and other mental health issue spectrum. Other mental health issues include, but are not limited to, ADD, ADHD, Bipolar disorder, personality disorders, oppositional defiant disorder, intermittent explosive disorder, reactive attachment disorder, post-traumatic stress disorder and psychotic disorders. The points on the triangle can move. For example, a student diagnosed with autism can have many shared traits of a student diagnosed with OCD. A student diagnosed with OCD share many traits with a student diagnosed with autism. Any of the diagnoses can have elements of ADD, ADHD, etc. For example, a student diagnosed with autism or OCD can also be bipolar or have post-traumatic stress disorder or be oppositional in nature. This is important to gain a global view of the student rather than a narrow view of one diagnosis. The circle around the triangle demonstrates the shared diagnosis of anxiety all disorders have in common. The level of anxiety differs among all students that are autistic, have OCD, or other mental health issues. For speech language pathologists, the separation of social language or pragmatic disorders from the autism spectrum adds to the fluid spectrum and provides services to more than just the population of individuals with ASD.

The Diagnostic Statistical Manual, 5th edition (American Psychiatric Association, 2013) recognizes diagnostic criteria for Social Pragmatic Communication Disorder with a clear definition of what is included with this diagnosis. Social Pragmatic Communication Disorder has 4 parts to its definition.

First, deficits in using communication for social purposes, such as greeting and sharing information, in a manner that is appropriate for the social context.

The second criteria of the definition is the inability to change communication to match context or the needs of the listener such as speaking differently in the classroom as opposed to the playground, talking differently to a child as opposed to an adult and avoiding the use of overly formal language.

Next, there must be difficulty following rules for conversation and story-telling, such as taking turns in conversation, rephrasing when misunderstood and knowing how to use verbal and nonverbal signs to regulate the interaction.

Finally, difficulties understanding what is not explicitly stated (e.g., making inferences) and non-literal or ambiguous meaning of language (e.g., idioms, humor, metaphors in the environment).

The deficits result in functional limitations in effective communication, social participation, social relationships, academic achievement, or occupational performance, individually or in combination. The onset of the symptoms is in the early developmental period (but deficits may not become fully manifested until social communication demands exceed limited capacities). The symptoms are not attributable to other medical or neurological conditions or to low abilities in the domains of word structure and grammar and are not better explained by autism spectrum disorder, intellectual disability (intellectual developmental disorder) global developmental delay, or another mental disorder. (p.46)

Social Pragmatic Communication Disorder is now a billable diagnosis with an ICD-10 code of F80.89. It is important to complete a comprehension assessment when planning appropriate therapeutic interventions.
One area of therapeutic implication is teaching language registers. All registers need to be directly taught with the casual register recognized as the primary discourse for many children/adolescents. Discourse patterns need to be taught directly with both story structures used as part of the instruction. Use of inappropriate register should be a time for instruction rather than correction. Children, especially adolescents, need to be told how much their use of formal register affects their ability to get a well-paying job.

The second area for therapeutic intervention is in the area of social communication. Children and adolescents need to recognize non-verbal communication includes understanding acial expressions, gestures, body language and tone of voice. The teacher and therapist can model this by pointing out the facial expressions and body language of the students and teacher in the classroom. If a student misinterprets a facial expression of the teacher or therapist, explain what emotion was actually being expressed. For example, the teacher approaches the student with a look of concern and the student accuses the teacher of being angry. Rather than yell at the student for being disrespectful, simply state:

“Oh, you thought I was angry? I am not angry; this is my look of concern. My eyebrows are slightly down and up at the same time. I was not yelling and my tone of voice was neutral. My mouth is also neutral, neither smiling nor clenched in anger. I was concerned I didn’t explain the instructions very well.”

Learning to “read” people and interpret tone of voice correctly is important for the development of taking multiple perspectives.

The third area of treatment and therapeutic intervention is teaching multiple perspectives. This is crucial in the development of understanding there are more perspectives in a given situation than just the student’s perspective. This can be done in a group setting where individuals share experiences and correlate that to the emotions on a 5-point scale. For example, when learning what happiness means, students list their favorite foods, what music they like to listen, favorite books, movies, etc. The individual student learns what makes them happy is different from what may make other group members happy. Listing their physiological responses when they experience happiness is very important. For example, when you are happy, what are your arms, hands, legs, feet, heart rate, and breathing doing and what are you thinking about?. Asking students what they are thinking about for each emotion on a 5-point scale helps develop metacognitive skills. The individual has a deeper understanding of what happiness means to him/herself and multiple perspectives are gained as the group members will have different responses and thoughts for the same emotion. As the therapist moves up a 5-point scale toward negative emotions, the differences in what triggers the negative emotion and the physiological responses to rising stress become very different among group members. Once this is completed, students need to complete a triggers’ checklist. This is a check list of common stress factors in school. The student has to rate the triggers as neutral, causes worry, leads to anger and contributes to a behavioral outburst. Leave room for the students to write additional triggers they experience that are not on the checklist.

The fourth area of therapeutic intervention is teaching nonverbal communication and understanding multiple perspectives in order to bring the student’s ability to converse to a higher level. In addition, students need to learn to use appropriate conversational/discourse skills to understand they need to talk differently to different people. It is important to understand language has to change depending on with whom they are speaking; know your audience. This will contribute to a deeper understanding of registers. Both social conversations and discourse skills can be taught by using a relationship target (do2 learn, 2016) and the relationship target can also be used as a register target. These are visual aids to help the student understand who they are talking to and what register to use when speaking to a particular audience. For the relationship target, the therapist draws a target with the student’s name or picture in the center. The closest ring is labeled family. The next ring is friends, then authority figures, acquaintances and finally strangers. The student has to list people in each “ring.” This gives the student a visual aid to understand who is closest to them, which leads to what topics are discussed among the different “rings.” It also allows the student to know which topics may be shared with some people listed in the “rings” and which topics cannot be shared. Once this is understood, a register target can be constructed as a companion to the relationship target. This again gives the student a visual aid to label the register used for each “ring.”
Practice using the different registers in the therapy room by instructing the correct tone of voice and the language structure needed for each register.

The last therapeutic intervention for social communication is to understand various levels of intensity for each emotion. Students in trauma understand the extreme states of the four basic emotions of happiness, anger, sadness and worry. For example, students in trauma tend to go from being very happy to very angry. There is no in-between emotion. Instruction can be given using a visual emotion color wheel to illustrate the various levels of the four basic emotions of happy, angry, sad and worried (do2learn, 2016). Instruction can be achieved by verbally stating the appropriate intensity level. For example, a teacher or therapist can say, “Oh, you dropped your pencil. That is not a big deal. I understand feeling frustrated when that happens.” This also helps the student develop the ability to gauge situations as to what is a “big deal,” and what is “not a big deal”. The teacher and therapist can model the appropriate intensity level by commenting on their own actions and the actions of other students as well. For example, the teacher drops a book. She or he could say, “I am so clumsy. I become irritated with myself when I do things like that.” Commenting on other students’ emotions lets the student in trauma feel less targeted and provides further instructional opportunities. For example, a student is reading a paragraph from a text book and cannot decode a word correctly. The teacher could say, “I do that myself sometimes and it is a little embarrassing.” Learning to understand nonverbal communication, how to have a social conversation, appropriate discourse skills, establishing multiple perspectives and understanding the various levels of intensity for the four basic emotions will lead to the student’s development of being able to use language to problem solve.

It is important for students to learn to use language to problem solve in social situations and to use language to advocate for themselves. The understanding that therapeutic intervention in the area of voice is necessary in order to avoid power struggles.

The most important aspect to acknowledge is that voice controls the tone of the message. Therapists, teachers and administrators must be aware there are three types of voice used to control the tone of the message: the parent voice, the child voice and the adult voice. The parent voice is filled with words of advice about what others should, could or must do. It is authoritative, directive, judgmental, evaluative, a win-lose mentality, demanding, punitive and sometimes threatening (Payne, 2006). The child voice is defensive, victimized, emotional, whining, a losing attitude, strongly negative and non-verbal. It is the voice of a powerless victim and can be called a whiner voice (Bridges out of Poverty, 2006). The adult voice asks clarifying questions, avoids judgmental statements, is often factual and utilizes a question format. It is free of negative statements and negative non-verbal communication. The adult voice portrays an attitude of respect leading to a win-win situation (Bridges out of Poverty, 2006). Examples (reference) of the three types of voices can be viewed in tables 5 & 6.

<table>
<thead>
<tr>
<th>Table 5. Voice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teacher: Child Voice</strong></td>
</tr>
<tr>
<td><strong>Lose / Win</strong></td>
</tr>
<tr>
<td>Teacher: “I have asked you three times to get to work. Please do as I ask.”</td>
</tr>
<tr>
<td>Student: “I don’t feel like working.”</td>
</tr>
<tr>
<td>Teacher: “I’ve done everything I can to help you, and this is the thanks I get?”</td>
</tr>
<tr>
<td>Student: “Well, maybe you should try harder.”</td>
</tr>
<tr>
<td>Teacher: “You just don’t appreciate anything anybody does for you.”</td>
</tr>
<tr>
<td>Student: “Well, maybe you have to actually do something before I can appreciate it.”</td>
</tr>
</tbody>
</table>

(Slocumb, 2004, p.67)
A team approach to treatment must include many professionals from various educational and administrative backgrounds. The team must include speech language pathologists, teachers, principals, counselors, mental health professionals, parents and students (especially adolescent students). The team meets to develop a treatment plan, develop behavior plans and to plan an appropriate schedule for the student. This is important to allow communication between professionals. The team can meet every 4-6 weeks to review progress and adjust the plan as needed. The adolescent student must be permitted to participate in all levels of planning. This gives the student a sense of control and lessens anxiety about others planning their future.

Communication with difficult behaviors means professionals must become bulletproof. In other words, don’t take the comments of a student personally. The team needs to create a hierarchy of behavior expectations. Targeting all behaviors at one time will lead to frustration and often results in failure. Target the first 3-5 behaviors to create success in the beginning of treatment. Once the 3-5 behaviors are mastered, move on to the other three behaviors. Success can be defined as building rapport and creating trust with the student with the understanding the student is going to continue to have moments of anger or stress. The adult or professional working with the trauma population must become the student’s emotion barometer and model correct communication.

Never be confrontational with a student in trauma. This may trigger one of the five stages of fear. Don’t talk or yell when a student is experiencing a full meltdown. A full meltdown is when a student may begin to throw objects, threatening to do harm to themselves or others, begin screaming using short guttural utterances or very simple phrases such as “leave me alone” or “don’t touch me” when no one is near them. Give them time to calm down without external stimuli which keeps them in a heightened state.

Baiting is knowingly provoking a students’ triggers. It is intentional with the purpose of eliciting an undesirable behavior. Baiting can be both verbal and nonverbal (DeVol, Payne & Smith, 2006). Examples of verbal baiting include: tone of voice, using, “put-downs,” avoiding social conventions and only focusing verbally on the negative. Nonverbal baiting is using facial expressions, gestures and body proximity with the purpose to intimidate. Facial expressions include rolling eyes, scowling or avoiding eye contact when a student is speaking. Intruding on a student’s personal space,

<table>
<thead>
<tr>
<th>Table 6. Voice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal: Parent Voice</td>
</tr>
<tr>
<td>Child: Parent Voice</td>
</tr>
<tr>
<td><strong>Lose / Lose</strong></td>
</tr>
<tr>
<td>Principal: “You have worn your hood for 3 days, and when you leave this room you cannot wear it anymore. That is the rule.”</td>
</tr>
<tr>
<td>Student: “I will wear it all I want”</td>
</tr>
<tr>
<td>Principal: “Then you will pay the consequences.”</td>
</tr>
<tr>
<td>Student: “I don’t care.”</td>
</tr>
<tr>
<td><strong>Win / Lose</strong></td>
</tr>
<tr>
<td>Teacher: “I’m not telling you again, get to work.”</td>
</tr>
<tr>
<td>Student: “I don’t understand what you want me to do.”</td>
</tr>
<tr>
<td>Teacher: “if you had been listening instead of talking, you would know what to do.”</td>
</tr>
<tr>
<td>Student: “You just don’t like me.”</td>
</tr>
<tr>
<td>Teacher: “I don’t like your attitude.”</td>
</tr>
<tr>
<td>Student: “You just don’t want me in your class.”</td>
</tr>
</tbody>
</table>

(Slocumb, 2004, p. 65)

Along with the appropriate use of voice, the appropriate attitude, or behavior, is necessary for the treatment of the trauma population. There are three types of attitudes used by professionals when communicating. Professionals can either choose to be a brick wall, a jellyfish or choose to have a backbone when communicating to children/adolescents in trauma. The brick wall attitude is characterized by both parties remaining in an immovable state. There is no flexibility in thinking or attitude. No discussion or compromise is used when the brick wall attitude is present. The jellyfish attitude is the victim stance used by both adults and students. It is giving in to the demands of others in order to keep the peace or to remain stuck in a belief system where there are no other options. The backbone attitude is one that is flexible. It allows for questions, compromise, discussion and clarification (Slocumb, 2004).

Once the tone of voice and an appropriate attitude is recognized and understood by professionals, the team approach to treatment can begin.

A team approach to treatment must include many professionals from various educational and administrative backgrounds. The team must include speech language pathologists, teachers, principals,
using an annoyed stance by crossing arms or hands on hips is the way professionals use their body to bait a student. Using inappropriate touch can trigger a meltdown or a blow up in some students in trauma (DeVol, Payne & Smith, 2006).

Professionals should remember that trauma or mental illness cannot be “punished out” of a student, just as one cannot “punish” diabetes out of a student. It is important to understand children who have experienced prolonged trauma need more than medication and behavior management as the only forms of treatment. They need to gain the appropriate vocabulary and language abilities to recognize and talk about emotions in themselves and in others. The trauma population needs to understand verbal and nonverbal social cues, the conventions of conversation, registers, multiple perspectives, intensity levels of emotion that are part of treatment involving the speech language pathologist as a vital team member. Modeling all forms of language gives the student in trauma a consistent foundation to build upon throughout treatment. The trauma population requires instruction to use language to advocate for themselves and to problem solve. This will have a direct effect on the student’s social and academic success.

References


Language registers (2016). Retrieved from [https://quizizz.com/admin/quiz/57b79ede3119b0b248bb4b79](https://quizizz.com/admin/quiz/57b79ede3119b0b248bb4b79)


Remember: Everyone in the classroom has a story that leads to misbehavior or defiance. Nine times out of ten, the story behind the misbehavior won’t make you angry. It will break your heart.

~ Annette Breaux
Power in Communicating Vulnerability

Ken Anderson

In Brené Brown’s captivating TED talk, The Power of Vulnerability, the researcher/storyteller explores the human desire to feel connected and to belong. She suggests that true authenticity and vulnerability are cornerstones of connection. However, vulnerability is not what is traditionally taught to young boys, myself included. As boys we were are told to be strong, tough, and not to cry. Once, as a kid, I stepped on a nail and while on the verge of tears my father came over, pulled it out and went right back to his work. I hobbled inside the house and was comforted by my mother who took care of the wound. It wasn’t that my father didn’t care, but rather a generational difference in how men communicate.

As a male speech-language pathologist I’ve wondered about the role of vulnerability in my own clinical practice and its relevance. More than ever, I feel the world needs better male role-models and more positive communicators. I work in the high school setting, an environment quite literally resembling the jungle. One wrong move and these students will eat you alive. However, as crazy as some days can be I wouldn’t change it for anything. Teenagers are rough, but the world today is a difficult place to grow up in. So, I’ve tried my best to communicate authenticity and vulnerability with my students.

One of the most tricky aspects of therapy in the high school setting has always been getting teenagers to show up and get invested in the therapeutic process. The problem is that I do not hold a letter-grade over their head and after years of speech services many have given up. To counteract this plateau of complacency I connect with them as human beings.

I once had an incoming freshman with an articulation disorder he just didn’t want to work on anymore. I could totally relate. I dug into my own past struggles with articulating the /r/ phoneme and told him a bunch of embarrassing stories I had with misarticulation. He laughed and seemed pleased at the idea that I was not just the articulation expert, but a comrade fighting with him in the war against those awful Rs.

It wasn’t always a communication connection that helped me bond with my students. When another student mentioned he was struggling with weight issues, I showed him a picture of me in the 8th grade when I was really heavy. The look of total shock on his face was hilarious. “No way! That can’t be you” he exclaimed. I assured him it really was me. “How did you lose it all?” he asked. “I ate kale for dinner and smelled roses for dessert” I replied. We laughed because of course that wasn’t true, but from then on I helped him become more aware of what he was eating and how to make smarter nutritional choices. In return, he regularly showed up for speech.

One of the most meaningful moments occurred when a student unexpectedly showed up to my office and then began crying. “Sorry, I tried to keep it in until I got here” he sobbed. The fact that he knew as soon as he was in my office he was free to let all his inhibitions and feelings go was truly
touching. “It’s okay to cry dude, I cry too sometimes” I replied. I try to remind myself that sometimes talking about life and the problems we face can be more important for students than making sure I get several rounds of grammatically correct sentences recorded on my data sheet.

When I first began working as an SLP I tried to gain authoritative respect because I was a well-educated professional. I’ve now learned that even though I do have some impressive degrees that respect, even as an adult, is something that is earned. I cannot just expect students to hold me in high regard simply because I am a grownup. The fact is that many of these students have been let down by adults and they rightfully feel apprehensive in opening up to another. However, when an authentic connection is made, amazing things can happen. Surprisingly, being vulnerable didn’t result in me losing respect, as I feared it would. Rather, the opposite happened.

As SLPs we must remember that anyone we work with professionally has come to us because they are in a vulnerable state. Whether it is a communication issue post TBI, feeding difficulties after a stroke, troubles with stuttering, or a kid who can’t articulate an /r/, the clients and families we serve need us to be more than just the expert communicators. They need us to be humans who have struggles of our own and who can relate to how they’re feeling. In communicating vulnerability we connect to others and provide a more human-centered treatment.

Author Correspondence:
Ken Anderson, MS, CCC-SLP
Follow me on Instagram @slpken
slpken.sp@gmail.com

“Daring greatly means the courage to BE VULNERABLE. It means to show up and be seen. To ask for what you need. To talk about how you’re feeling. To have the hard conversations.”

~ Brene Brown
**Continuing Education Questions**

**Directions:** Choose the best answer for each question as you read each article. Then return to the [Member Continuing Education Page](#) for a link to answer the online assessment questions. A certificate of completion or ASHA continuing education units (CEUs) are available for a limited time.

**Forging International Collaborations**

12. The Pan American Health Organization assists
   a. Ministries of health and government agencies through technical cooperation agreements.
   b. Ministries of health and government agencies in recruiting, hiring and overseeing health professionals through cooperative agreements.
   c. Health professionals to obtain jobs in ministries of health and government agencies and establishes cooperation contracts with them.
   d. Health professionals to develop and obtain cooperation contracts with ministries of health and government agencies.

13. The ASHA/PAHO responded to
   a. The requests of several universities for assistance in capacity building of communication professionals in their countries.
   b. ASHA SIG 17 Global Affairs objectives to strengthen strategic relationships with organizations interested in world health in the Americas.
   c. The ASHA Board of Directors’ interest in searching out collaborative work with the World Health Organization.
   d. The Pan American Health Organization’s interest in establishing relationships with professional organizations addressing communication disorders in the Americas.

14. The ASHA/PAHO project
   a. Created two university programs in communication disorders and trained professionals in a government agency.
   b. Offered capacity building technical assistance to two universities and one government agency.
   c. Developed capacity building for professors in two universities and for professionals in a government agency.
   d. Offered assistance to students in two university programs and to professionals training in a government agency.

15. The Precede-Proceed Planning Model by Green and Kreuter (2005) recognizes that program planning
   a. Should be based on “ecological” factors that impact health.
   b. Depends on the administrative diagnosis above all.
   c. Should be gauged by the program’s implementation instead of its evaluation.
   d. Cannot be carried out unless all of the ecological factors are fully evaluated.

**Preschool Language Scale-4th edition and Haitian Creole Speakers**

16. When using the Preschool Language Scale with Haitian Creole speakers it is best to
   a. Use the test as is.
   b. Use the Haitian Creole test norms.
   c. Use the dialectal norms for African American English (AAE) Speakers.
   d. Use another test as this test is not valid for Haitian Creole speakers.
17. Haitian Creole speakers were found to have differences with the following morphological marker
   a. Plural (-s) marker.
   b. Third person regular.
   c. Articles.
   d. Contractible copula.

18. Which of the following syntactic features are different from SAE for Haitian Creole Speakers
   a. Pronouns.
   b. Present progressive (-ing) verbs.
   c. Articulation.
   d. Auditory Comprehension.

19. Dialect scoring applies to
   a. Overall communication.
   b. Auditory comprehension.
   c. Expressive communication.
   d. Articulation.

**Learning Styles of Communication Sciences and Disorders Students in a Historically Black College or University**

20. The Felder-Silverman Model defines the following dimensions to describe students:
   b. Sensory/intuitive, visual/verbal, active/reflective, and sequential/global.
   c. Verbal/linguistic, intrapersonal/interpersonal, logical/mathematical, and visual/spatial.

21. The results of Kolb’s 2005 research
   a. Proved that it is not possible to group students by major and learning style.
   b. Compared medical students to psychology students and found them to be the same.
   c. Proved that student traits are static.
   d. Demonstrated that psychology students are imaginative and emotional.

22. The results in this study
   a. Found that the majority of the students were reflective and intuitive.
   b. Recommend that clinical education mainly focus on the activities that are more reflective in nature.
   c. Did not find differences in learning styles between undergraduate and graduate students.
   d. Point to undergraduates being significantly more verbal than graduate students.

23. Students who are characterized as possessing a “sensing” trait would benefit from clinical education activities that
   a. Offer opportunities to try things out.
   b. Facilitate by using charts.
   c. Require learning many facts.
   d. Encourage discussion in groups.
Gender Differences in Spoken Narrative Production of African American Preschoolers

24. What is a key feature of macrostructure analysis of narratives?
   a. Mean length of utterance.
   b. Story grammar elements.
   c. Number of different words.
   d. Total number of C-units.

25. What information might self-generated narratives give us that may be different than story retell narratives?
   a. Ability to memorize story elements.
   b. Ability to recall specific events from a story.
   c. Ability to develop elements of a fictional narrative.
   d. Ability to produce more sophisticated syntactic structure.

26. What were the predominant outcomes of this study?
   a. There were no gender differences.
   b. There were gender differences in macrostructure only.
   c. There were gender differences in microstructure only.
   d. There were gender differences in dialect density only.

27. What is a given conclusion of the results of this study?
   a. African American preschool students should be assessed by standardized measures.
   b. African American preschool boys may be at greater risk for misidentification of language disorders.
   c. African American preschool girls are more proficient at producing fictional self-generated narratives.
   d. African American preschoolers should only use SAE in assessment procedures.

Using African American Literature

28. The purpose of this article is which of the following:
   a. Provide African American students with reading material.
   b. Provide culturally relevant alternatives to out of the box therapy tools.
   c. Provide a framework for SLPs to learn about African American culture.
   d. Provide alternative means to evaluate African American English (AAE) use.

29. Research indicates that African American males are:
   a. Three to five times more likely to be identified as Speech Language Impaired (SLI).
   b. Three to five times more likely to be identified as Cognitively Impaired.
   c. Less than 50% likely to receive appropriate diagnosis and treatment for communication disorders.
   d. Between 1 and 2 times more likely to be identified as Speech Language Impaired (SLI).

30. The following statement is NOT true regarding Vygotsky’s (1978) principles of the zone of proximal development:
   a. Children should never be guided to perform beyond their developmental level.
   b. Adults should guide and expand the child’s understanding.
   c. Children should be allowed to lead in their learning processes.
   d. Learning is a culturally organized way of understanding the world.
31. The Space Traders (Bell, 1992) is appropriate for:
   a. Students in 9th grade and older.
   b. Students in all grades.
   c. Pre-emergent readers.
   d. Only African American teenage students.

**Impact of Trauma on Language Development**

32. Children and adolescents experiencing trauma need the ability to use language to:
   a. Advocate for themselves and to problem solve.
   b. Improve social language to make friends.
   c. Improve communication with family members.
   d. Effectively greet acquaintances.

33. The brain has made adaptive changes as the result of:
   a. Trauma.
   b. Birth defects.
   c. Genetic factors.
   d. Premature birth.

34. Which part of the brain is responsible for emotional processing and emotional regulation?
   a. Frontal lobe.
   b. Hippocampus.
   c. Amygdala.
   d. Answers b & c.

35. The primary part of the brain most active in children and adolescents in trauma is:
   a. Brainstem.
   b. Midbrain.
   c. Frontal lobe.
   d. Temporal Lobe.
Guidelines for Submission to eHearsay

eHEARSAY, the electronic journal of the Ohio Speech-Language Hearing Association, is designed to address the professional development needs of the members of the state association.


Types of Manuscripts

Contributed manuscripts may take any of the following forms:

- **Research Article**: Full-length articles presenting important new research results. Research articles include an abstract, introduction, methods and results sections, discussion, and relevant citations. These are typically limited to 40 manuscript pages including citations, tables, and figures. Large data sets and other supplementary materials are welcome for inclusion in the online publication.

- **Review**: A comprehensive overview of an area of speech, language, or hearing sciences and/or disorders (i.e., systematic review or meta-analysis). Reviews should be accessible to knowledgeable readers not expert in the subject area. They should be prepared with the same rigor as a research article reporting specific results. These are typically limited to 40 manuscript pages including citations, tables, and figures.

- **Tutorial**: Educational expositions covering recent literature on topics of interest to clinicians and other scholars. These are typically limited to 40 manuscript pages including citations, tables, and figures.

- **Research Forum**: The purpose of a research forum (RF) is to provide a concentrated focus on a special topic deemed to be of high interest to the readership. An RF contains a series of empirical studies centering on a key aspect of speech, language, hearing, or swallowing science and/or disorders. RFs may also comprise a set of scholarly papers presented at a scientific conference.
  - A proposal for an RF must be approved for consideration by the journal editor prior to forum development. Pre-approval by an editor does not guarantee that any or all manuscripts submitted will be accepted for publication. The proposal should (1) provide a forum summary, (2) outline the probable manuscript titles and author lists, (3) state whether a prologue and/or epilogue is planned, and (4) designate one person, a forum coordinator, as the point of contact and coordinator of communications with forum authors.

- **Letter to the Editor**: Opinions about material previously published in the journal or views on topics of current relevance. A letter relating to work published in the journal will ordinarily be referred to the author(s) of the original item for a response, which may be published along with the letter. Letters are typically limited to 15 manuscript pages, including citations, tables, and figures.

- **Clinical Focus**: Articles that may be of primary clinical interest but may not have a traditional research format. Case studies, descriptions of clinical programs, and innovative clinical services and activities are among the possibilities.

- **Viewpoint**: Scholarly based opinion(s) on an issue of clinical relevance that currently may be neglected, controversial, related to future legislation, or could serve to update the readership on current thinking in an area.
Manuscript Style and Requirements

Style Manual
Authors are expected to follow the style specified in the *Publication Manual of the American Psychological Association* (6th edition).

Language Policies
OSLHA policy requires the use of nonsexist and person-first language in preparing manuscripts.

Page Limit
A guideline of 40 pages (including title page, abstract, text, acknowledgments, references, appendices, tables, and figures) is suggested as an upper limit for manuscript length. Longer manuscripts, particularly for critical reviews and extended data-based reports, will not be excluded from review, but the author(s) should be prepared to justify the length of the manuscript if requested to do so.

Peer Review
All manuscripts are peer reviewed, typically by at least two reviewers with relevant expertise, an issue editor (if applicable), and the journal editor. Correspondence between authors and editors is expected to be professional in tone. If correspondence is not conducted in a professional manner, an editor has the option to bring the matter before the OSLHA Directory of Technology and Publications and/or OSLHA’s Executive Council. After consultation with the Directory of Technology and Publications, the editor may terminate the peer review process for that submission. The author has the right to appeal to the OSLHA Directory of Technology and Publications and/or OSLHA’s Executive Council.

Authorship & Author Disclosures
During manuscript submission, answers to a number of disclosures will be required. The corresponding author:

- Affirms that all of the authors listed in the byline have made contributions appropriate for assumption of authorship, have consented to the byline order, and have agreed to submission of the manuscript in its current form
- Affirms that all applicable research adheres to basic ethical considerations for the protection of human or animal participants in research
- Affirms that there is no copyrighted material in the manuscript or includes a copy of the permission granted to reproduce or adapt any copyrighted material in the paper
- Affirms that the manuscript has not been previously published in the same, or essentially the same, form
- Affirms that the manuscript is not currently under review elsewhere. OSLHA prefers to publish previously unpublished material
- Discloses information about any previous public presentation of the data reported in the submitted manuscript, including at a scientific meeting or in conference proceedings, book chapters, websites, or related media
- Discloses any real or potential conflicts of interest that could be seen as having an influence on the research (e.g., financial interests in a test or procedure, funding by an equipment or materials manufacturer for efficacy research)

**CALL FOR PAPERS**
Submit your manuscript at any time by sending it to the Journal Editor: Laurie.sheehy@utoledo.edu or the Business Office oslhaoffice@ohioslha.org
Dear OSLHA Members,

I hope you enjoyed the articles that were in this issue of eHearsay.

As I look to what is ahead in 2018-2019, I’m really excited about our upcoming issues and the wonderful people who have volunteered to act as Guest Editor(s).

Here is a list (in no particular order) of what will be published and the name/email of the Guest Editor (just in case YOU would like to contribute):

- **Feeding/Swallowing** – Donna Edwards  
  donnaedwards15@icloud.com
- **Audiology** - Maggie Kettler & Dora Murphy  
  Margaret.Kettler@cchmc.org  
  Dora.Murphy@thechristhospital.com
- **Supervision &/or University Issues** – Monica Gordon-Pershey  
  m.pershey@csuohio.edu

I’d also love to hear from YOU. eHearsay is a peer reviewed journal and is a great way to get your feet wet (so to speak) in publishing.

Never stop learning because life never stops teaching. Be passionately curious. Make a difference in your world.

\[\text{Laurie M. Sheehy} \]
\[\text{eHearsay Journal Editor}\]