

PHASE-UP: Preschool Hearing And Speech Education – University of Pittsburgh

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Introduction

Preschool Hearing and Speech Education – University of Pittsburgh (PHASE-UP) provides no-cost, speech, language, and hearing screenings to over 35 preschools in and around the city of Pittsburgh. This program has been active for over two decades.

PHASE-UP is part of the Doctor of Audiology (AuD) and Master of Arts/Master of Science Speech-Language-Pathology (MA/MS-SLP) curricula. It is housed within a 1-credit course in Year 1 of the AuD and MA/MS-SLP programs.

Graduate students perform speech, language, and hearing screenings under the instruction of an ASHA-certified audiologist and speech-language pathologist.

On average, PHASE-UP provides speech, language, and hearing screenings to 800-1,000 preschool children each academic year. Many of these children are from underrepresented and/or marginalized communities. Over 50% of the preschools have certified PreK Counts and/or Early Head Start programs.

This poster will focus on the basic components of the PHASE-UP program, which includes the following: course learning objectives; program coordination; graduate student training; equipment; screening protocols; data management; and outcomes.

Course Learning Objectives

The 1-credit course learning objectives are as follows:

1. Demonstrate effective communication skills with children, parents, and teachers using patient friendly and culturally competent language.
2. Use evidence-based screening protocols and reasoning in clinical decision making to identify children at risk for auditory and/or communication impairment.
3. Accurately complete screening documentation on screening record forms including identifying information, results, and recommendations.
4. Make appropriate judgements of speech, language, and hearing screening results to generate appropriate audiologic, speech-language pathology, and/or medical referrals.
5. Demonstrate the use of universal precautions (e.g., use of hand sanitizer, cloth headphone covers, disposable tips) to prevent the spread of infectious and contagious diseases.
6. Describe practice that is consistent with the professional code of ethics.
7. Conduct patient confidentiality in accordance with the requirements of the Health Insurance Portability and Accountability Act (HIPAA) and the Family Educational Rights and Privacy Act (FERPA).
8. Complete self-reflections on the clinical process and methods of screening for communication disorders to enhance clinical practice and reasoning skills.
9. Create a prevention document to educate others regarding the importance of hearing, communication, and communication disorders in the preschool years.

Program Coordination

Three clinic instructors, a departmental staff member dedicated to clinical education, and Year-1 graduate students are all involved in program coordination. Details of program coordination are provided below.

Table 1. Timeline of Program Coordination

Time	Task
May	Initiate contact with schools to schedule*
June	Send confirmation emails
August	Round 1 of reminder emails to <u>all</u> schools <ul style="list-style-type: none"> • Include consent form & flyer
1 st of each month	Round 2 of reminder emails to schools scheduled that month
1 week prior to screening	Graduate student confirms screening with school, verifies consent forms were distributed to families, and answers questions

***The following information is collected, confirmed, and updated with each school upon initial contact:**

- School name
- Director name
- Address and phone number
- Total # of children enrolled
 - 3-, 4-, 5-, and 6-year-olds
- Total # of days to screen
- Screening start time
- Location of screening rooms
- Parking information
- Special requests



Student Training

A full day of AuD and MA/MS-SLP Program Orientation is dedicated to a PHASE-UP Training Bootcamp broken into didactic and practicum sessions:

Morning Session

- Syllabus
- Hearing screening protocol
- Speech-language screening protocol
- Screening schedule
- Equipment transport
- Communication/coordination protocol
 - Microsoft Teams, Canvas



Afternoon Session

- Hands-on training with equipment

Screening Protocols

1. Hearing Screening
 - a. Tympanometry and/or Otoscopy
 - b. Screening DPOAEs (2000, 3000, 4000 & 5000 Hz)
 - c. Pure-Tone Sweep (20 dB HL at 1000, 2000, & 4000 Hz) using conditioned play and/or behavioral audiometry
2. Speech-Language Screening
 - a. Preschool Language Scales-Edition 5 (PLS-5) Screening
 - b. Brief screening (<10 min) of language, articulation, fluency, voice, & social/interpersonal communication skills

Speech and Hearing Screening Equipment

Students are responsible for checking screening equipment in and out of the department during designated days and times. Checklists are utilized to monitor inventory.

Hearing Screening Equipment

1. Sentiero Desktop & Handheld Screeners
2. Welch Allyn Otoscope
3. PPE Supplies (wipes, face masks)
4. CPA toys
5. Misc. Supplies
 - ear tips, specula, earphone covers, stickers
6. Paperwork (Data Collection Sheet, Results Letter, Cover Letter)



Speech-Language Screening Equipment

1. PLS-5 Screening Test
2. Paperwork (PLS-5 Score Sheet, Results Letter,)



Data Management

The following data are documented after each school screening:

Hearing	Speech--Language
<ul style="list-style-type: none"> • Number of children screened • Number of children who refused screening • Number of children who passed both ears • Number of children receiving each of the following referral types: <ul style="list-style-type: none"> • Medical • Audiological • Medical and audiological 	<ul style="list-style-type: none"> • Number of children screened • Number of children who refused screening • Number of children who passed speech, language, or both • Number of children who failed voice or fluency • Number of children referred for a full speech-language evaluation • Number of children for whom English is their second language



Outcome Data

- >15,000 preschoolers have received speech, language, and hearing screenings through the PHASE-UP program over the 25 years it has been in existence
- Provides pediatric clinical experience for 45-60 AuD and MA/MS-SLP students in their first year of the academic programs
- During the first full academic year of the COVID-19 pandemic (2020-2021), PHASE-UP provided 927 hearing screenings and 738 speech-language screenings to preschool children
- In the 2020-2021 academic year, Year-1 AuD and MA/MS-SLP students accrued a total of 870 clinical practicum hours through the PHASE-UP program
- 35 total school/preschool sites were scheduled for the 2021-2022 academic year
 - 51% of the sites include school populations composed of 70-100% underrepresented minorities
 - 66% of the sites have certified PreK Counts &/or Head Start Programs

Student Feedback on PHASE-UP

Below is a representative sample of student responses to the following question from the OMET Teaching Survey Report: What was most helpful to your learning in this course?

- "I loved this course! Instructors were so helpful. I really liked how I was independent, but I knew I could easily ask for help. Instructors provided great feedback as well."
- "Student feedback forms were helpful for helping me understand how I was doing, and areas I could improve upon."
- "Hands on training."
- "Doing in person screenings were a great way to gain skills & confidence."
- "Self-reflections from a clinic, supplemental learning material in Canvas"

References

ASHA Childhood Hearing Screening Guidelines
 AAA Childhood Hearing Screening Guidelines
 Joint Committee on Infant Hearing (JCIH) 2019 Position Statement

Acknowledgements

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