Train the Trainers Manual: The Cleft Palate Speech and Feeding Course Catherine Crowley, J.D., Ph.D., CCC-SLP Teachers College, Columbia University

Purpose of this manual

The purpose of this manual is to provide an outline for individuals who will hold trainings on how to perform cleft palate speech therapy for patients post-palate repair. This manual contains the information necessary for organizing this type of course, including a list of materials, an appropriate order for presenting the materials, and teaching tips to ensure that the course objectives are met during the trainings.

Case-based activities

Throughout the course, there will be indications in the PowerPoint presentations to present a hands-on activity. By including case-based and other hands-on exercises in the course, the participants will be required to apply their knowledge in a meaningful way. The purpose of the activities is to enhance the participants' comprehension of the most essential concepts. The trainer should encourage participants to work in pairs or small groups to answer clinical questions, role play, and practice therapy strategies while actively walking around the room to check for understanding. Explicit instructions and activities are provided in the PowerPoint slides.

Daily quizzes

The trainer will administer a daily quiz at the beginning of each class (after the first). The purpose of the daily quizzes is to evaluate the participants' knowledge of course content covered the previous day. After each quiz, as the trainer goes over the answers, participants should correct a partner's quiz, marking responses as "correct" with a check, incorrect with an "x", or a question mark (if they are unsure if the answer is correct). It is best to mix up the partners in order to pair a strong student with a student who needs more support during this process. This helps reduce the evening preparation time for the trainer (grading all the quizzes can take several hours each night) and also it is another time for the students to learn and review the information and fill in any gaps in their knowledge.

Videos

There is a set of videos that the trainer will play throughout the course. The videos should be downloaded by the trainer prior to the start of the training and will be played at designated points in the course, indicated in the PowerPoint slides.

Objective of this training

"The Teachers College, Columbia University Cleft Palate Speech and Feeding Course" is a 5-day program that is intended to provide speech pathologists and other professionals with essential information and strategies to improve the speech of children with cleft palate.

The objective of this course is to provide strategies and techniques to improve the speech of individuals with cleft palate. Upon completion, students or "trainees" of this course should demonstrate the knowledge, skills, and ability to provide therapy to improve the speech of individuals in this population.

This course covers a wide range of learning objectives relating to the speech issues commonly associated with having a cleft palate. It discusses the anatomy of velopharyngeal structures, most common types of speech errors, and most common treatment strategies, as well as information on how to appropriately feed a baby who has a cleft palate. It is important to note that this course will NOT result in an official certification to become a speech pathologist and does not confer a degree in speech therapy. It should also be noted that this course only covers one narrow area of speech therapy and does not represent the entire discipline.

Throughout this course, participants will:

- a) Learn to perceive sound errors associated with cleft palate speech production
- b) Acquire strategies to stimulate the production of different sounds
- c) Practice treatment strategies for specific sounds
- d) Create an appropriate treatment plan for individual patients
- e) Model treatment strategies for parents, family members, and the patients themselves to ensure that they have an understanding of the techniques and can practice at home
- f) Learn where to download therapy materials on LEADERSproject.org
- g) Determine an appropriate frequency for therapy sessions or home practice, and know when to return to previous steps of the therapy hierarchy
- h) Understand when to contact the surgical team with concerns and how to provide relevant information to the medical professionals

It is the responsibility of students to:

- a) Attend all sessions on time and stay until the end of the session
- b) Read and review course materials each day
- c) Prepare for a daily guiz on course material presented the previous day
- d) Create a personal resource manual based on the materials distributed and created during the course
- e) Teach what they learn to family members to promote home practice

Program Plan

This 5-day program is organized into different sections to facilitate learning of the course content and allow students to understand new concepts through interactive activities and case study exercises.

Developed in 2012 by Dr. Cate Crowley and Dr. Miriam Baigorri, the Cleft Palate Speech and Feeding course takes place over five days. The first half of course days are academic sessions during which the trainer will instruct using PowerPoint presentations and the course videos. During these sessions, participants will also have an opportunity to apply their newly acquired knowledge during role-playing and think-aloud activities that will support their development of perceptual and clinical skills. In the afternoons, participants will apply these skills by working with patients with cleft palate, both pre- and post-surgical palate repair.

The participants will be closely supervised by speech therapists who have knowledge and experience providing therapy to this population. The curriculum will cover anatomy and physiology of cleft palate (including how to identify a submucous cleft), basic embryological development, and specific assessment and treatment strategies used to evaluate and improve the speech of patients with cleft palate. If timing permits, participants will also learn strategies for feeding babies with cleft palate, how to address speech errors before surgery, how to identify hallmark traits of different syndromes associated with cleft palate, and the types of surgical interventions that are sometimes required for patients with cleft palate. After each day of the course, the evaluator will administer a review quiz that covers topics from the previous day of material.

Quiz questions pertaining to each module can be found in the "Cleft Palate Course Quiz Questions" PowerPoint. The evaluator should select 5-6 relevant questions for each quiz (based on the amount of material covered in the preceding course session) and grade the quizzes according to the answers provided.

Focus of treatment

The focus of this course is fostering participants' skills and understanding through practical application of the course content. Throughout the program, there is a strong emphasis on interactive and applied activities that involve interaction between the trainer and participants and encourage participants to directly apply their newly acquired knowledge in an active way. Unlike some traditional lectures, this course includes multiple learning modalities and resources, including case studies, practical exercises, role-playing activities, and frequent (daily) evaluation of participants' knowledge and skills.

One key objective of the course is to empower the participants to provide high-quality speech therapy services to their patients. As the trainer, you are the most important part of this course. You will have the opportunity to educate, inspire, and empower future therapy providers that you will train. Respect for your students will be vital in shaping the program dynamic, and sharing insight and information from your own prior experiences is highly encouraged throughout the course.

Another important responsibility of the trainer is to ensure that participants are prepared to effectively carry the skills that they learn in the course back to their own communities, whether that be in a hospital or another work environment. Speech therapy with this particular population is often undervalued or overlooked, leaving many children without the services that they need after surgery. Upon completing this course, the participants should be prepared to return to their communities and advocate for the patients who truly need these services, but may not otherwise receive them.

Throughout the course, the trainer can promote engagement by asking frequent questions to participants to ensure that they are following along, comprehending major concepts, and able to apply their knowledge. Before advancing to new topics, the trainer should make sure that all participants have understood previously presented concepts. To find out if the trainees are ready to advance to a new topic, the trainer might:

- Ask participants to state something new that they learned
- Give brief oral guizzes about recent material

- Provide opportunities to use new concepts in practical activities, for example, by asking, "How would you accomplish this with your patient?"

Key characteristics of the trainer

To be an effective trainer, you should:

- Have a background in the material being presented and possess a very strong understanding of all concepts in the course. Please, review all of the materials before starting the course so that you have all of the necessary knowledge relating to every section of the course, as well as familiarity with the course structure as a whole. To review content relating to cleft palate speech and feeding therapy, you can visit: www.youtube.com/user/LEADERSproject → Playlists → Cleft Palate Speech and Feeding Video Modules. This will lead you to the extended cleft palate video module series, an online course that includes all topics covered in this Train the Trainer course.
- Be **committed**. These materials have been prepared and tested to ensure that the course is as effective as possible. Please, be sure to respect the course materials in their entirety.
- Be **patient.** Listening to the students is the best way to find out whether or not they are processing and retaining the information being presented.
- **Accept**. The students of this course will come from different backgrounds and disciplines, with diverse levels of experience, but the trainer should always keep in mind that everyone involved in the course is there for the same reason: they are committed to helping children with cleft palate.
- **Engage.** This 5-day course is most effective when all participants are engaged including by speaking in the class, working in small groups, and doing the role-playing scenarios. Remember to ask everyone to answer questions.
- Be a **trainer** of trainers. Another key element is to ensure that the participants are equipped with the skills they need to be able to train others and share the information they learn with their communities. How you are as a trainer will be their example of what makes a good trainer. They will learn are learning from your example.

How to prepare the materials before beginning the course

Requirements to organize the course

To acquire all of the necessary documents, the trainer will need internet access, a printer, and a flash drive. He/she will not need internet access during course days, because all of the videos and PowerPoint slides will already be saved on the flash drive before the first day of the course. However, during the five days of the course, the trainer will need access to a computer and a projector in order to present the aforementioned videos and PowerPoint presentations.

How the trainer will obtain the videos, guizzes, and exams

The trainer should write an email to Dr. Cate Crowley at cic49@tc.columbia.edu to request the course videos and assessment materials. In the email, be sure to include your personal and professional information, as well as where you will be giving the course. Once she receives your email, she will answer with the pre-test (to be given prior to the start of the course), the daily quizzes, and the final exam that you will administer to the course participants. She will also provide access to the course videos to be used during the course (as indicated at designated points in the PowerPoint slides">cic you will slides). It is the responsibility of the trainer to download the videos well before the start of the program and to copy the videos to a flash drive that can be used to access them during the course. Keep in mind that you will need internet access to download the

videos. Once they are copied to a flash drive, the videos should be able to be played without an internet connection.

To receive a copy of the assessments and exams that will be administered during the five day course, you should also email Dr. Cate Crowley at cjc49@tc.columbia.edu with your personal and professional details, as well as where you will be giving the course. She will provide you with three different types of tests which you will use to assess whether your students are learning and understanding the presented material. The pretest is for students to demonstrate their knowledge about cleft palate speech prior to taking the course. The daily quizzes assess content from the previous day's class. The purpose of daily quizzes is to review and practice information from the course. Quiz questions will be available for each topic covered and the trainer is expected to customize the daily quiz by selecting 5-6 questions from the material taught during the previous course day. The final exam is used to evaluate all content that the participants learned during the course. Frequent evaluation of participants throughout this course is a way for the trainer to have an idea of whether the trainees are comprehending and retaining the material and to find out which concepts need to be reviewed or more strongly emphasized, as well as to motivate the students to study the material and ask clarifying questions about topics they do not understand.

How to create the "Trainer Binder"

It is the trainer's responsibility to obtain a 3-ring binder that can be used to store the required documents for the course. The very first step you should take in preparing to give this course is to print out the complete manual and put it in the binder. Your binder should also contain the required documents, accessible at www.leadersproject.org under the section, "Cleft Palate" and subsection "Train the Trainer/Entrenar a los Entrenadores". These documents have been combined into one PDF file so that it can be conveniently downloaded and printed (though keep in mind that you will need internet access to download it). The documents in the PDF should include:

- "Discrimination Clown" (To evaluate and teach sound discrimination)
- "Oral cavity anatomy diagram" (profile view)
- "Acevedo Spoke diagram"
- All of the "Cleft Palate Word Games"
- "Anatomy and Physiology of the Velopharyngeal Mechanism"
- "Articulation Hierarchy for Cleft Palate Speech Therapy"
- "Speech strategies for BEFORE surgical cleft-palate repair"
- "Speech sound assessment"
- "Diagnostic evaluation and interview"
- "Five Reasons Nonspeech Oral Motor Exercises Don't Work"
- "Information on Nonspeech Oral Motor Exercises Parent handout"
- "How to feed a baby with cleft palate"
- Role-playing activity (clinician and patient)
 - This last page contains case examples to use during each day of the training. You will assign a case to a pair of participants. You must explain that one of the participants will play the role of the speech therapist, and the other will be the patient. You will give the patient a small piece of paper with information about a hypothetical case to act out. The piece of paper will describe which cleft palate speech errors he/she should present. The speech therapist will have to perform

an evaluation and present appropriate strategies to try to help his/her partner who hypothetically has cleft palate.

- In addition, when you receive the pre-test, daily quizzes, and final exam from Dr. Crowley, you should also put that material in your Trainer Binder

Materials for the student

The students should have access to and receive all of the learning and resource materials. They will obtain the same documents as the trainer, with the exception of: this manual, the tests and quizzes, and the hypothetical role-playing scenarios (You will give these to them throughout the course). Each day, you should present the students with printed copies of the PowerPoint slides that will presented in class on that day (downloadable at www.leadersproject.com under the section "Cleft Palate" and subsection "Train the Trainer/Entrenar a los Entrenadores"). This will allow them to take notes and keep a copy of the presented information. Before beginning the course, it is the trainer's responsibility to download the documents for the students, also available at www.leadersproject.org (PDF in the section "Cleft Palate" and subsection "Train the Trainer/Entrenar a los Entrenadores") and organize binders for the students, which you will give to them as part of the course.

Note: It is important that all of the students receive the documents found in the PDF packet *before* beginning the course, but the printed PowerPoint slides must be distributed *separately* each day, so that students receive each day's lecture slides *at the beginning of the class meeting* on the appropriate day.

Other materials needed for the course

Supplies

- Pencils or pens for the participants
- Participant name tags
- Plastic straws that bend at the tip for all of the participants
- Paper for the participants
- Small mirrors (e.g. dental mirror). The mirror should have a thin border so that the participants can see how it fogs with oral/nasal airflow.
- Small flashlight to examine the inside of the oral cavity. It is possible to use a smartphone flashlight, but be sure to warn the participants to be careful not to inadvertently shine the light directly into their classmates' or patients' eyes.

At least one week before beginning the training, be sure to:

- Send an email to Dr. Cate Crowley (and receive a response) to obtain the course videos and assessments (pre-test, daily quizzes, final exam).
- Organize all of the required documents. They should be printed and organized in the appropriate binder, ready to be used in the course and distributed to participants.
- Feel comfortable with all of the course material in the video and PowerPoints.
- Ensure that the videos and PowerPoints are ready to be used during the course by uploading them to a flash drive and confirming access to a computer and projector on each day of the course.

Special thanks to Teachers College, Columbia University SLP students who work in Dr. Crowley's lab and for their contributions to creating this train the trainer manual and materials: Casey Sheren, Sara Horne, Grace Frutos, Julie Smith, Marcos Sastre and Chelsea Sommer.