

INTRODUCTION, RATIONALE and REQUIREMENTS for 2013 OHC TECHNICIAN TRAINING MATERIALS

Materials Revised and Created: PowerPoint slides, Student Manual, Instructor's Manual

Background

We based the design of the 2013 edition of the OHC Technician PowerPoint training materials on the book *Trees, Maps, and Theorems: Effective Communication for Rational Minds* by Jean- luc Doumont (2009). Mr. Doumont presents research with practical applications that support the idea that effective and efficient public communication utilizes only one sensory channel at any one moment. *The primary focus in public presentations should be always on the speaker.* Visual information should complement but never distract from the spoken message. Therefore, a listener should never be put in the position of simultaneously reading slide text or listening to the speaker or looking at an animation that may or may not relate directly to the speaker's message. The slide design should be clean – preferably black and white – and use a limited number of fonts and color choices to emphasize key points or provide visual variety. Connected text should be used as sparingly as possible to avoid distracting the listener from the instructor's words or the instructor reading information more than teaching.

Goal

The overall goal in revising these PowerPoint slides was to *modernize and update* the presentation of information. Decisions in content and visual design were based on the following considerations: CAOHC requirements, diverse education and skill levels of active duty and civilian students, varied experience levels of instructors, current and potential teaching technology, the first version of training slides, and the experiences of audiologists, industrial hygienists and senior technicians involved in teaching the course.

Content

Informational content was *updated* between December 2011 and April 2013. A few concepts present in the previous version were deleted because we did not think they were relevant to the duties and daily responsibilities of an OHC Technician. For example, discussion of the acoustic reflex in the Anatomy unit was deleted because it is not a necessary element in referral criteria and can easily be misinterpreted outside of a full audiology evaluation. Also, details about the operation of sound level meters and dosimeters were summarized or eliminated because an OHC Technician would rarely, if ever, be responsible for performing these tasks. Additionally, BUMEDNOTE 6260 dated 13DEC2012, the most current guidance available at the time of publication, was considered when making decisions on hazardous noise levels. Take note that these changes may require some revision or deletion of current examination questions.

Some subject areas were *reorganized* to better reflect the sequence of tasks or decision making processes that an OHC Technician does on a regular basis. Two

major changes at the unit level were the “The Role and Responsibilities of the OHC Technician” and “Otoscopy and Tympanometry.” The topic “Role and Responsibilities” was made into a separate unit (previously part of the Overview unit) to be used according to the instructor’s discretion and student needs. We recommend it be taught at the end of the course to summarize and clarify how the course information relates to the students’ new job. It can also provide a motivational “pep rally” of the critical importance that each new technician will play in the military’s health and mission readiness goals. The unit is short and could be used after the Overview to introduce students to their future duties AND as the final unit to capsule their critical role in occupational audiology. Otoscopy was removed from the Hearing Protection unit and combined with tympanometry into a separate unit. These two procedures are related to each other and to the decision making process for medical and audiology referrals. We suggest that it be taught after “Ear Disorders and Hearing Loss” for continuity or between “Audiometric Testing, Follow Up and Referral” and “Hearing Protection” for its relationship to referrals and fitting earplugs.

The criteria for using a visual image were that the *image must have a direct relationship to the content and not distract from the information presented*. Real photos were preferred to cartoon images. However, one author insisted on inserting one monkey picture for a “mental break” in the long HPD unit, although the other author insists this is an example of the differences between male and female brains!

Presentation Notes and Technology Requirements

A basic white *background* was used typically with black text. Individual military services and instructors can modify or personalize.

The variety of *colors* used was limited and chosen for emphasis, clarity and differentiation of concepts, and for some variation in presenting content.

Font types and sizes were limited to increase consistency and reduce visual distractions. The basic font used was Lucinda Sans, bolded. A few “Smart Art” graphics (MS PowerPoint 2007) were used for variety and convenience. However, these graphics can undergo radical modifications if changes are made or if an older PowerPoint version is used.

Phrases were used as much as possible instead of sentences. The positive result is that instructors and students will not “read” the slides or experience dense, busy slides. However, some unit subjects and specific concepts were difficult to present without more text on the slide. Another reason more text than we preferred appears on some slides was due to our efforts to limit the number of slides per unit within the range of 20 to 30 slides.

Instructors will need to be familiar with the PowerPoint units and their contents before teaching the course. Since slide text has been reduced, *presentation notes have been written* to assist the instructor, particularly those new to teaching the course. Instructors are encouraged to personalize the notes with further information, examples and relevant anecdotes. Using “*Presenter View*” within PowerPoint greatly assists the instructor in seeing the Presenter Notes and monitoring the preceding and succeeding slides for continuity. Further details can be found in the next paragraph.

This revision is created in *MS PowerPoint 2007*. If a computer uses PowerPoint 97- 2003, there will be significant changes in formatting and display of graphics.

This issue may need to be addressed for immediate use of the new units.

Planning for available technology for the next five to 10 years, we did utilize the “*Presenter View*” option. An adaptor is required that allows one computer to send the slide show view to the student viewing screen and the “*Presenter View*” to the instructor’s screen. The “*Presenter View*” provides a screen divided into three sections: the slide presentation on the left side of the screen, the presenter notes on the right side of the screen (view and text size can be adjusted), and seven slides showing on a bottom strip to give before and after context to the current slide. It also allows for the instructor to write, highlight and draw on the slide while speaking. If this technology is not available or desired, the instructor can use the Instructor’s Manual during each unit.

Another technology issue is the *use of animation*. Animation was used for two reasons: a) to show process or hierarchy of events or b) to control the amount of information visible to students as the instructor explained the slide’s content. With very few exceptions, the only type of animation used was “*Entrance- Appear-Fast*” to provide a clean non- distracting appearance of information. Typically, the number of “*Clicks*” per slide is one to three (1- 3), except for a few special slides. Instructors who do not want to be bound to the computer mouse, etc. can remove the animation within the text. Future availability of wireless mouse units will allow for instructors to move about the room while teaching.

The *order of instruction* can be tailored to each instructor, however, we recommend that information be taught in an order that builds concepts consecutively. We have indicated that recommended order by the unit numbers: 1.1 “*Overview of HCP and Team Members*”, 1.2 “*Physics of Sound*” 1.3, 1.4, etc.

Student Manual/ Workbook

The Student Workbook has been revised to correlate with the PowerPoint instructional slides as closely as possible. However, the workbook does not correlate exactly with the PowerPoint slides in order to increase readability, provide additional information and encourage students to actively listen and take notes. This workbook includes practice audiograms consistent with DOEHS- HC software Version 4.1.0.2 which records single ear testing. We have included a functional appendix with several new educational materials that the OHC Technician can use.

We invite feedback and suggestions on any and all of these revisions.

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Reference: Doumont, Jean- luc (2009). *Trees, Maps, and Theorems: Effective Communication for Rational Minds*. Principiae: Belgium.