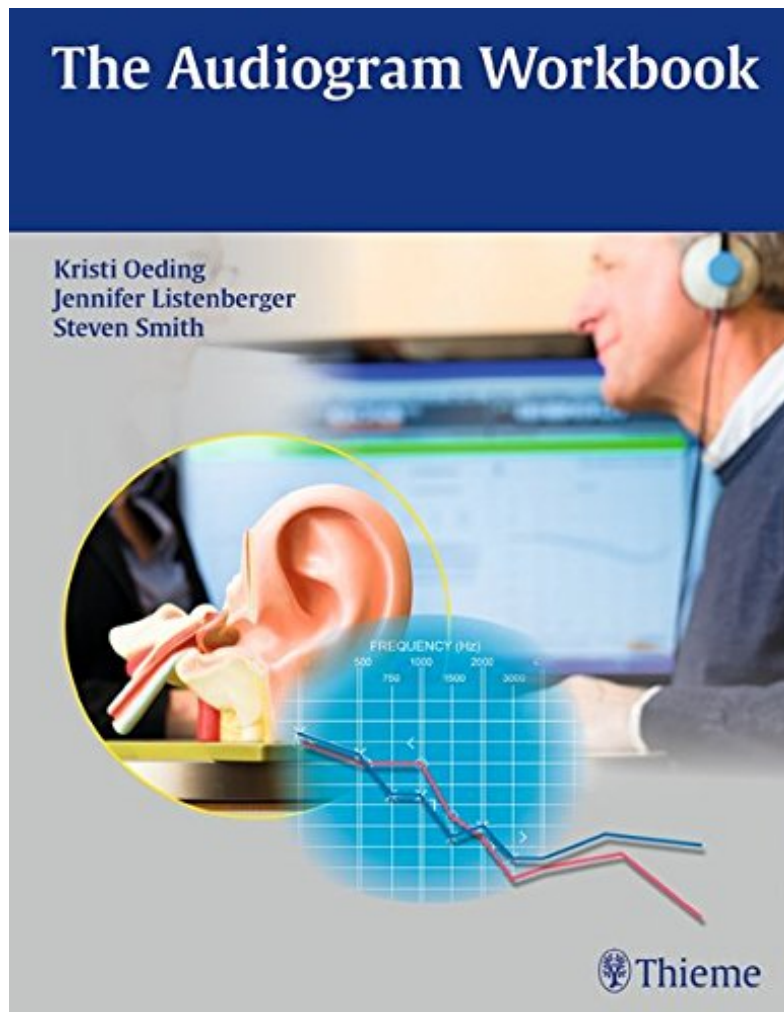


## Book Review

Published January 18th, 2017

Jo(anne) DeLuzio, PhD



The identified purpose of this book is to provide students “with essential practice in reading and interpreting audiograms.” There are over 100 cases presented. The introduction to this book is outstanding, clear and concise. Inclusion of a list of numerous audiological abbreviations is greatly appreciated, and really beneficial for students as well as new clinicians.

Each case that is presented contains a brief case history, audiological test results, and interpretation of these results, as well as some recommendations for patient management. Test results provided include pure tone air and bone conduction thresholds, speech audiometry (SRT and WRS), and tympanometry. This provides the opportunity for students to integrate audiological tests results and recognize how everything must all fit together to provide a clear picture of the type and degree of hearing loss of the person being assessed. Recognition that a pure tone audiogram needs to be viewed in the context of the person being tested as well as in conjunction with other test results is critical if students are truly able to interpret test results.

The cases in the book are divided neatly by type of hearing loss (i.e., normal hearing, conductive hearing loss, sensori neural hearing loss, mixed hearing loss, and non-organic hearing loss.) An excellent variety of audiograms and cases are presented. The wide range in case histories for

people who demonstrate normal peripheral hearing was particularly impressive. The final section of the book provides practice cases that are arbitrarily organized, which is important if students are to have the opportunity to demonstrate their ability to classify hearing loss. Personally, I would have preferred to see fewer training cases and more practice cases, although the sheer number of cases provided in the book is indeed impressive.

It is reasonable for the authors to utilize in their book the audiometric symbols that are most commonly used in clinical practice. I do think that an opportunity was missed to point out that bone conduction symbols lack standardization and may reflect placement of the bone oscillator. Students will no doubt encounter a wide range of symbols for masked and unmasked bone conduction when reviewing audiograms done by a variety of practitioners in the “real” world. It would have been quite helpful to describe and display some of these symbols, while still utilizing the more common ones in the cases provided.

Masking is described in the book as being necessary when  $AC_{\text{test ear}} - BC_{\text{non-test ear}}$  is 40 dB or greater when using headphones, and 60 dB or greater when using inserts. However, there are many examples in the book where masked symbols appear on the audiograms when this difference does not occur, and no explanation is ever provided. This might be confusing for students or the less experienced clinician who might not realize that sometimes masking is done during air conduction testing when the tester *suspects* it might be necessary in order to save time by avoiding having to go back and retest some of the air conduction thresholds after bone conduction testing has been completed. As well, only final audiometric thresholds are ever shown on the audiograms. It is an important teaching tool to sometimes include the unmasked symbols in addition to the masked ones so that the learner can gain a deeper appreciation of cross-hearing, clinical masking, and the shifting of audiometric thresholds to reflect the person’s true hearing.

Despite these few minor suggestions for improvement, this workbook provides an excellent training tool for anyone who needs to develop expertise in reading audiograms. I used some of this material in an applied audiology course for graduate students in speech-language pathology and found it tremendously beneficial. I was absolutely delighted to see that the interventions recommended did not stop at medical intervention. As well, recommendations for evaluation for hearing aid and cochlear implant use as well as other hearing assistive technology are included. Some of the cases in the book recommend that training in other communication strategies be considered, providing a wonderful educational opportunity and encouraging conversations around communication intervention and training.

The authors are to be commended for producing such an excellent resource.