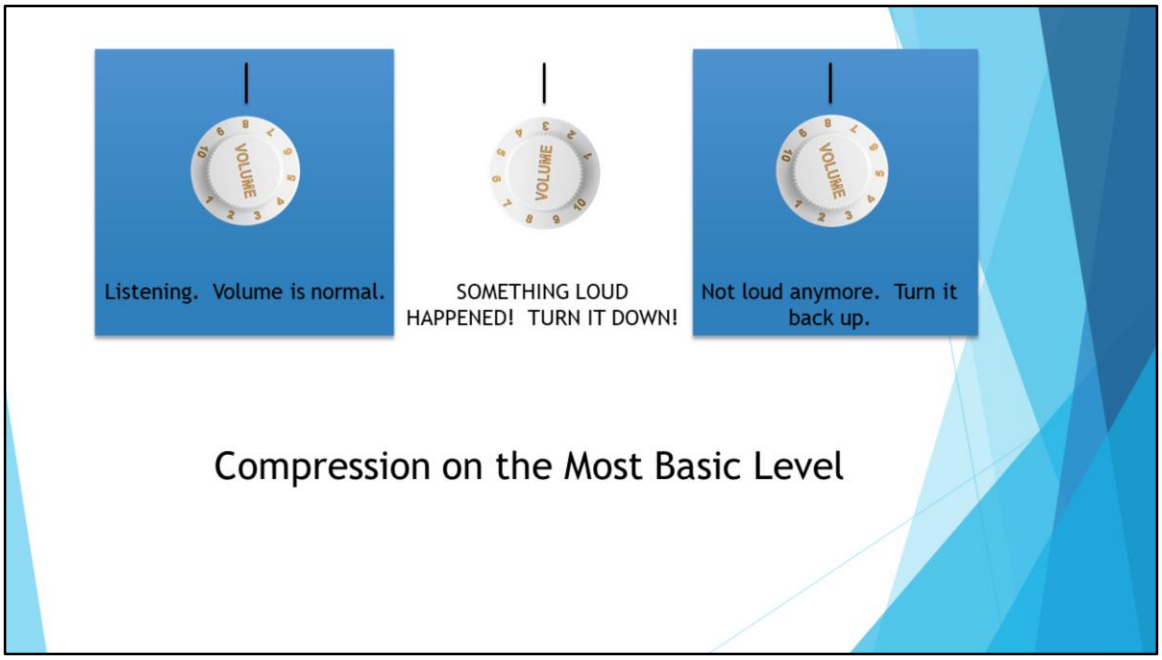
Module 1: Basics of Compressors in Audio Recording

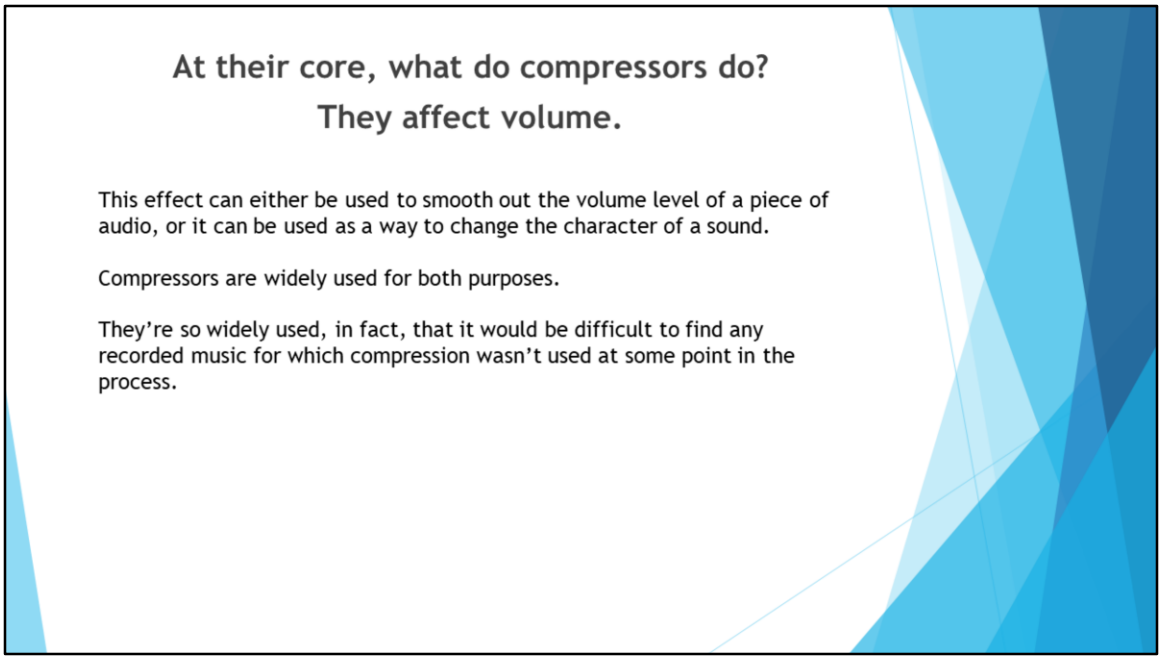
Designed and presented by Jonathan Kelly for the University of Tennessee Music Program

- **Target Audience:** This module is part of a course in audio recording being developed for the University of Tennessee. Students taking this course would likely be undergraduate or graduate students in music who are looking to increase their proficiency and understanding of recording music.
- **Problem Description:** Anyone recording music should have an understanding of what compression is, how it's used, and when it's appropriate to use it. This module should fill in all three of these gaps.
- **Instructional Goal:** By the end of this module, students should be able to define the basic controls of compressors, set the controls to create a desired outcome, and identify scenarios when it would and would not be appropriate to use compression
- **Performance and Learning Context:** This course will be a blended synchronous and asynchronous online course. There will be no face to face meetings. Learners will demonstrate their knowledge in quizzes, through discussion board posts, and in a final audio project. They should later be able to use their learning either in a professional studio setting or on their own home recordings.



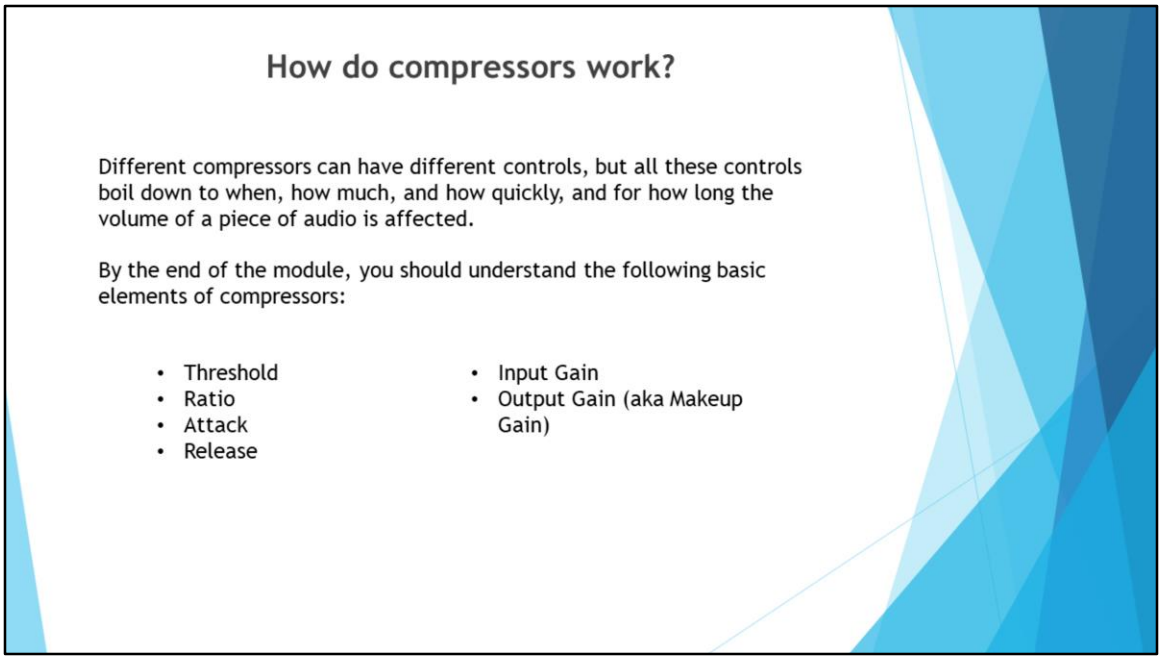
Principle Displayed:
ARCS motivational model

Explanation:
Using this simple comic to demonstrate the basic function of a compressor. Hopefully the simplicity of the design will help draw attention as well as build confidence.



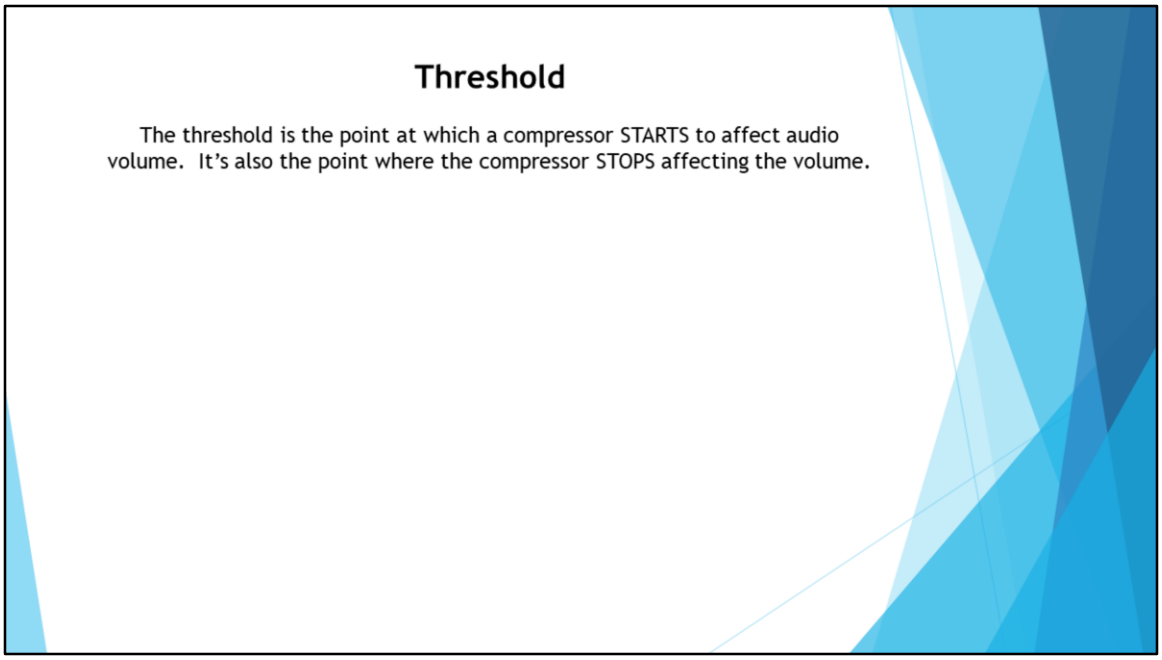
Principle Displayed:
ARCS motivational model

Explanation:
This would be showing the relevance of the material to the learner.



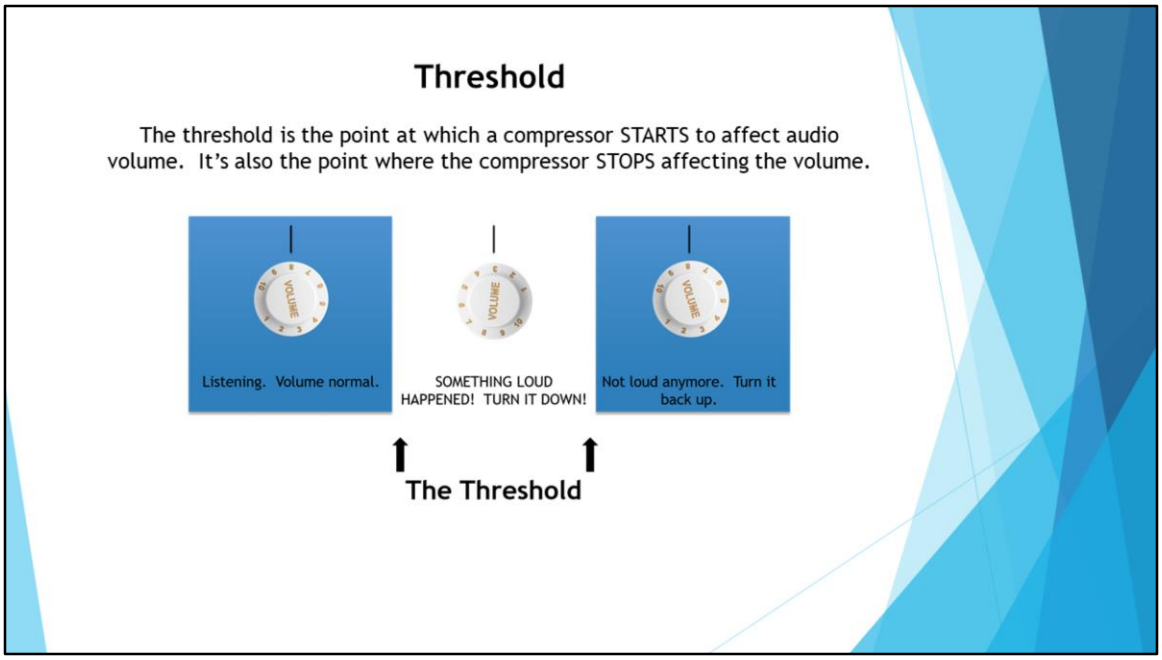
Principle Displayed:
Informing learner of objectives

Explanation:
By giving an overview of the terms we'll be covering, learners should feel comfortable as we start to discuss each concept in depth. On the next slide, when we start with "Threshold," the learner should get a feeling for how much material they're going to cover.



Principle Displayed:
Informing learner of objectives

Explanation:
By giving an overview of the terms we'll be learning about, learners should feel comfortable as we start to cover each concept in depth. On the next slide, when we start with "Threshold," the learner should get a feeling for how much material they're going to cover. The white space is to leave room for the diagram to appear in the next slide



Principle Displayed:
Visual representation of content

Explanation:
By tying into the intro image, it should help build confidence. The learner should realize that they already had a concept of what the threshold is, even if they never used that term before.

Threshold

The LOWER the threshold, the MORE compression.
The HIGHER the threshold, the LESS compression.

EXAMPLE:

Imagine you're listening to music in the car, and the next song is louder than you'd like. You turn the music down.

Now imagine a friend driving instead, a friend who likes really loud music. The same song comes on, and he has no problem with its volume. He leaves the volume the same.

You "compressed" the audio (in a manner) by turning it down. You have a **low threshold** for loud music.

Your friend did not turn down the music. He has a **high threshold** for loud music.

Principle Displayed:
Use of real world examples

Explanation:
While this does not apply to a hardware compressor, it should illustrate the concept through an easily understood real world example of the way we deal with audio. (image from: http://www.public-domain-image.com/free-images/miscellaneous/adjusting-the-volume-of-her-car-radio-while-seated-behind-the-wheel-of-her-automobile)