How did the legendary recording studio engineers of the past use analog consoles?

The Educational Guide at The Recording Session Vault Educational Website Project is more than just a series of articles. Instead, let's think of it for what it actually is— a comprehensive curriculum that could be taught as either a semester, or full-year length course to introduce students, teachers and aspiring engineers to the world of professional music recording. While the lessons are designed to teach how the great music of the past was created, it is worth noting that the vast majority of the products that were used to create it— are still being made by the very same amazing companies. (I will introduce the Product Guide for Education next week which is another new component of the website experience.)

How does each lesson work? The following is a sample lesson plan for teachers to be able to use in their classrooms.

A Sample Lesson Plan

Each of the chapters of the Educational Guide are designed to be tools for teaching. For example, the following can be used to illustrate how this process might work in your classroom. Let's apply the lesson about how to use an analog console as an example:

How did the legendary engineers of the past use recording consoles?

Educational Objective— The students will examine the different sections of an analog console to understand their development, purpose and function in the recording studio environment.

Monday– (This lesson is based on a 45-50 minute class period, but can be easily adapted for a block schedule which may have a 90-minute class meeting time.)

The students will read the introduction to the lesson which should take them 3-5 minutes. (As a side note, the articles have been authored for students who are in grades 6-12, who have attention spans that would average 7.5 minutes.)

After reading the introduction, I would show the students a video clip (or clips) of a console in action, which should last no more than 5 minutes, so that they can see what they will be learning about in your class. There are links below to playlists of video clips to choose from for your lesson. These clips (from the YouTube channels for each of the respective manufacturers) will give the students an introduction to the following analog console models which you could use as a teaching tool in this formative stage of the lesson. You can select one of the clips that pertains to the product that your students may have in their classroom, or that you (as a teacher) have a strong sense of familiarity with and are comfortable teaching to your students for the overview or introduction to this unit of study.

AMS-Neve Genesys Black Console Overview
API 2448 Analog Mixing Console Overview
Trident 68 Console Overview
Audient 4816-SE Console Overview
SSL-12 Audio Interface Overview
Mackie 1604VLZ4 Mixer Overview

Next, the students should take 6-8 minutes to read the second section which examines the following topics:

- What is a console?
- How did this amazing and crucial technology in the world of professional music recording change and evolve over time?

At this point, I would break the students into groups (if possible, 5 students per group is a great number to have for this lesson) and begin studying a diagram of the console, so that we can have a class discussion about how this important component of the recording process is broken-down into sections for ease of operation.

Then–

Introduce in a brief lecture (no more than 6-8 minutes) the different sections of an analog console and have your students study the diagram of each section that can be found in the console manual of operations that you are using as your teaching tool, or have in your classroom. Ask the students to discuss the following questions in their study or class lab groups as they examine the materials or study the console (or interface) in their classroom–

1. What is the purpose of the monitor section of the console? Why does this section offer the ability to select multiple speaker systems and or output sources? If I am looking at the meter bridge, which section showcases the main output of the console?
2. What is the purpose of the channel strip section of the console? Why does the channel strip have different areas that have different functions? If I am looking at the meter bridge, which section showcases the output for each of the channels of the console?
3. What extra features does this console possess that the historical consoles that you read about in the opening might not have had at the time of their development? Why do you think that this console has these new features?

The following represents the product links for each of the console models listed below to teach to your student groups. At each of these links, you can find a manual with diagrams that can be used to teach your students more about each of these amazing products.

AMS-Neve Genesys Black-- Product Link
API 2448-- Product Link
Trident 68-- Product Link
Audient 4816-SE-- Product Link
SSL-12-- Product Link
Mackie 1604VLZ4– Product Link

Give the students 6-9 minutes (depending upon their experience and ability) to address each of the questions in their student groups. If you have the console in your class, or a similar model then you can use it to go over the answers with the students. If you do not possess a console of this magnitude, then you can use an image of the console (from the product links below) on your overhead projector to discuss their answers and use the console or interface that you do have to make a comparison with for the lesson.

Image of the AMS-Neve Genesys Black
Image of the API 2448
Image of the Trident 68
Image of the Audient 4816-SE
Image of the SSL-12 Interface
Image of the Mackie 1604VLZ4 Mixer

Closure–

Ask your students to address the following question for their first lesson. This question should be answered on an individual basis and addressed at the beginning of the class period for discussion during the next class date. However, before the students leave the class, ask them to tell you about the different sections of the console. You can call on a student to answer this final question, prior to addressing the item below for a future class discussion.

1. Why is a console considered to be the hub of a recording studio environment?

As you can see, this lesson has all of the elements of a thought-provoking class– it features questions, visuals, student discussion and if it is available, a hands-on introduction to the centerpiece of the studio in which the students may be working to learn the art of music recording for the balance of their time in the course. Plus, each of the resources for the lesson will allow you to be able to teach it effectively in your classroom, even if you do not possess a console or an interface of this ilk. By the way, I have taught this actual lesson and used the Mackie 1604VLZ4 (an earlier version of it) as the teaching tool because we had one for the use of our multimedia course. It will work in your classroom, too.

If you have any questions about this lesson, this unit in the Educational Guide or want more information about the website, please reach out to me with any questions that you might have. It is my hope that this post finds each of you doing well and having a great weekend, too.

Sincerely–

John Long