A Model for Teaching Master-Level Audio Production: “COLA”

Timmy Tappan
Belmont University

Audio production in the recording studio has evolved considerably since 1878 when Edison patented the phonograph, the first commercially successful invention to record and reproduce sound. According to Millard (2005) Edison’s focus was actually on creating a sound recording device that could be used in business as an early dictation machine and primarily, “…in terms of a device to save incoming phone calls...the first attempt to make a telephone answering machine” (p. 27).

The level of sophistication of audio production in the early days can best be described as rudimentary due to the limitations of the fledgling technology. Production was also constrained because sound recording was a new process that was just being developed and no one had written the “how-to” book yet. However, in time, the role of the record producer changed to more effectively controlling the process of recording as a prelude to controlling the product itself. As technology advanced, the science and art of audio production also advanced.

Today’s contemporary recording process now employs an amazing repertoire of technology that controls an extraordinary array of audio elements. Consequently, the landscape of audio production has grown to a highly sophisticated skill set that allows a producer to exert a far greater influence on the musical and technical aspects of the final audio product.

The primary agent of change in the control of the production process has been technological advancement. New technologies have made it possible for audio producers to edit and manipulate recorded sound in a manner that varies from incredibly authentic reproductions of the original sounds to final recordings that no longer bear recognizable antecedence to the original performances, depending on the selected actions of the producer. The capabilities of the modern producer seem almost limitless in the face of digital editing techniques, carefully controlled and applied signal processing, and software “plug-in” technologies that allow an array of recording “apps” to modify sound in ways never before thought possible.

In addition to the technology-driven changes in the audio production process, today’s audio producer is confronted with many other challenges...
that require skills beyond operating the customary studio equipment and procedures usually thought of as basic to the audio production craft. Studio production is much more than manipulating technology, although that set of skills can come in very handy when producing a serious project. The purpose of this paper is to describe the other skills necessary to complement technical ones in the process of professional audio production.

I have named the instructional model for teaching these skills: COLA. It is an acronym for the four main areas of focus of audio production: Communication, Organization, Leadership, and Analysis/Evaluation. Increasing production student skills in these four areas helps students achieve a circumspect view of the overall and integrated demands of being a music producer.

**Communication**

I remember being in the studio when a client called me and said he absolutely loved my production, but there was a little thing he wanted changed. He said he wanted me to keep everything exactly the same, but slow down the bass drum. Now, if you think about this for a while, it seems impossible. Slowing the bass drum while keeping everything else the same would sound extremely...unmusical. However, after I thought about it a little longer, a possible solution crept into my brain. I went back to the final mix and deleted every other bass drum hit. By doing this relatively simple procedure, I was able to decrease the number of bass drum “beats” in half. This was the solution my client was awaiting. I didn’t really slow down the bass drum, but because it hit only every fourth beat instead of every other beat, it gave the perception to the client that I had slowed the bass drum. Client was happy. I made money. I was happy.

The relevant point in this example is that without communication skills, particularly ones that involve higher-order thinking, the producer could not have easily fixed the problem. I’ve seen producers and artists come to blows over much less. Being able to interpret information that often comes from non-musical or non-technical shareholders in a recording is an important skill that requires a producer to see a bigger picture, one that can be interpreted in terms of “studio speak.”

Communication is important in every stage of the recording process from pre-production to getting paid. Unless there is a clearly articulated set of instructions, plans, understandings, assumptions, schedules, and other criteria, the production process has considerably more opportuni-
ties for failure. How many times have we all heard bad news that begins, “But I thought…?” The truth is that we all have to work at being better communicators. Some are better at it than others, but all of us can improve our communication skills by working at it. Producers in particular need to work at communications exceptionally hard because so much depends on the sharing of precise information.

I use several different assignments in my master production classes to increase students’ facility in communicating.

The first is a recording review entitled “Production Analysis.” This is a paper of six to eight pages that allows a student to describe in depth and detail the technical and musical aspects of a commercially successful recording. Musical elements include form, tempo, style, melody, harmony, performance precision, and other pertinent aspects of musical design and performance. Technical elements include frequency response, tonal blend, EQ, clarity, dynamic range, stereo imaging, and other mix and recording features. In addition to the written “PA,” students are also required to give three-to-five-minute oral presentations of their reports to the class. They are allowed to use notes, but not the written report itself. Students are also required to create written reports and reflection papers on a variety of production-related subjects. With ten multi-era, multi-genre PAs and eight homework/reflection papers required, students are continually confronted with the opportunity and encouragement to improve their communication skills.

Probably the greatest test of communication skills lies in the two recording projects each student must complete. Each production student is required to organize and implement two studio sessions as the producer-in-charge. Completing successful sessions requires efficient and effective communications on the part of the producer. In order to better prepare students for these situations, even though there is an element of sink-or-swim challenge to the actual sessions, we role-play in class, and go over possible scenarios of confrontation or difficulty in the studio. No one has gotten hurt yet.

Organization

A successful producer must be organized. When I was primarily a session musician in Nashville, I worked for many producers, some good, some not so. One of the things I discovered was that producers who had well-planned recording sessions seemed to get better results and were
more efficient at what they did than those who were less organized. Planning a session in detail not only made good sense from a musical and technical perspective, it also saved money. Studio time costs money unless you own your own studio. Even then, spending more time in the studio doing things that could have been simplified or more effectively accomplished, results in costs of time and sometimes a catastrophic reduction in quality.

Covey (1989/2004) points out that one of the seven habits of highly effective people is that they begin with the end in mind (p. 95-144). This is a key ingredient in my production students’ first encounter with organizational skills. The organizational planning comes under the heading of pre-production techniques and these become the foundation for the two recording sessions they each lead. They study the first principle of production: know the purpose of the recording session. This is the “end” in “beginning with the end in mind.” Knowing why you are there is a necessary first step in being able to arrive at a destination. How else would you know when you got there if you didn’t know where you were going in the first place? From there we discuss talent and music and how the selection process works in different production scenarios. We discuss the organizational must of establishing a solid budget by itemizing all the necessary facets of implementing a recording session. We discuss selection of technical aspects of the recording—studio, engineer, assistant engineer, recording media, etc. We continue with the technical aspects of mapping out track assignments, microphone usage, and work on developing a production schedule.

Organizational tasks for students are also incorporated in their Production Analyses (PAs). They must efficiently report their findings in a manner that is coherent and optimal in expression. The only way they can accomplish this is to concentrate their information in a highly organized manner in order to benefit them the most (a good grade for the class, a necessary career skill for a successful producer).

The real organizational testing comes when the students put together their two studio recording projects. Without the process of pre-production organization, students would be adding more stress to an already stressful activity. Making a multitude of elements in a recording studio work together in harmony doesn’t occur by wishful thinking. All the musicians, singers, engineers, technical equipment, music, and coffee work together efficiently and effectively only if it is well planned. And the only way to well plan such an undertaking is by imposing a solid organizational struc-
Leadership

There are a multitude of leadership theories. One theory is referred to as the trait theory. It suggests that certain people are natural born leaders and that to be born without this particular trait is to be born a follower. Another leadership theory is that of the “great event” leader. This situation gives rise to the belief that someone who is confronted with a compelling challenge and overcomes it, becomes a great leader out of necessity. There is also the transformational theory of leadership that suggests that anyone can learn to be a leader by studying and employing the attributes necessary to fill that position. Our concepts of leadership are evolving. According to Senge (1994), “The new view of leadership…centers on subtler and more important tasks. …They are responsible for (facilitating) learning” (p. 340). By sometimes teaching the class themselves, and by supervising recording sessions, students more fully understand the nature of what it is like to facilitate learning.

My studio production class is predicated on the assumption that people can learn to become leaders. It assumes students can acquire the necessary skills to lead, influence, and nurture a recording production to a successful outcome. Tom Peters (n.d.) suggests, “Leaders don’t create followers, they create more leaders.” In my class we stress the importance of servant leadership and that relates to helping people achieve their goals. This thread happens to be the basic theme behind Covey’s *The 8th Habit* (2004).

There are two ways a production project can arrive at a joyful conclusion: one, if something magical happens and it all falls together out of coincidence or luck; or, two, if a conscientious, well-prepared leader makes it happen. A successful recording is almost never an accident. Besides good music, it requires good recording techniques, expert talent performances, a collaborative vision of what the outcome is to be, and a producer who can combine all of his or her skills and resources at hand to achieve that outcome. A good producer doesn’t depend on luck: he or she makes it happen through skill and hard work.

Besides talking about leadership basics in class, students must write a reflection paper (along with an oral synopsis) about what attributes they think make a good leader. They are also required to research a professional producer’s career and write a report acknowledging the career curve, in-
Industry opportunities, and leadership qualities.

Students undergo the biggest leadership test as they plan and execute their two recording projects. Not only must they exhibit communication and organizational skills, they are also required to employ leadership skills on the journey to project completion.

Analysis/Evaluation

The process of analyzing and assigning value to the different facets of studio production can be a daunting task. While assessing whether or not a singer’s pitch is acceptable can be a relatively straightforward process, deciding on the value or acceptability of an overall solo performance can be difficult, to say the least. What enters into the producer’s purview is not only the technical performance of all the different talent and technical input, but also the decisions that encompass taste, style, preference, marketplace appropriateness, radio acceptance, and a host of other considerations that do not orient themselves to simple yes or no decisions.

The best a studio production course can do in the area of evaluation and analysis is to present as many scenarios as possible where decision-making becomes a turning point in the production process. It is essentially a process of case studies. Knowing that there are not always easy or defensible answers to production questions should not deter an instructor from presenting the different points in which a producer must make a crucial decision in a project. We don’t live in a black and white world. I try to help my students find a comfort zone with a multitude of shades of gray.

In my experience as an instructor of studio production, I try to justify my production decisions with as much fact as possible, and in cases where the decisions are gut instinct or simply taste, I tell my students the truth and ask what they would do in that case. Encouraging dissenting or differing views in this way strengthens the decision-making process overall and helps build confidence in students.

Students get the opportunity to analyze recordings from a production viewpoint through the Production Analyses (PAs). They analyze an entire song recording by breaking the recording into smaller pieces. Analyzing instrumentation helps evaluate what instrumental and mixing combinations sound good. Analyzing arrangements and orchestration helps students better understand the underlying musical structures that build drama, or convey dreamlike soundscapes, or smack you in the face. Discussing vocal performances in terms of time and spectral processing helps students
better understand how to achieve a certain performance effect. Discussing vocal performances in terms of emotional impact helps students recognize the value of “heart” in a performance.

The PAs are positioned in different musical genres and times. Students analyze country before 1960, country between 1960 and 1980, country after 1980, pop before 1960, pop between 1960 and 1980, pop after 1980, R&B any time, urban (hip-hop or rap) any time, a classical recording any time, and then one of the students’ choices from any genre and any time period.

Question: How does one evaluate art? Answer: Very carefully! This is really a good question in this context because after all of the technical considerations are eliminated and the mundane aspects of a recording project have been covered, what is left is the analysis and evaluation of the art and commercial viability of the product. Even if everything up to the finish of the project has gone exceedingly well, how do we know the product will be exactly the way we want it? And then, how do we know that the way we want it is the way it should be? Is it good? Will it sell?

These are questions a producer must face on a daily basis, and usually has to answer (for better or worse). However, just because we may not have exacting, pinpoint answers, it does not mean we should ignore the questions. Trying to answer questions that are difficult or have no answer is not a worthless activity. It actually makes us better at what we do when we wrestle with the hard-to-solve problems. Just because an instructor doesn’t have an answer does not mean no learning is going on. My production class welcomes these kinds of questions.

Conclusion

I tell my students that production is life, and life is production. Call it the Zen of audio production. The part this plays in the teaching/learning process is crucial: students learn better when they encounter information that is relevant and relatable to their lives. Through the process of establishing better expressions of communication, organization, leadership, and analysis/evaluation students are better prepared to face the challenges of master audio production (and maybe life).

COLA is actually a modeling practice that first gives students a lot of information that they will need to use as producers. It then enables them to employ these activities and concepts in actual fieldwork (the production projects). Then there is the time to analyze and evaluate the results, an
important part of the learning process.

Communicating, organizing, leading, and analyzing will help students be better prepared in the future—in whatever they do. Hopefully, it will help make them better producers. Really, really hopefully, it will help make them better people.
Timmy Tappan started playing the piano at age five and hasn’t stopped since. After teaching chemistry and mathematics in high school, the call of music forced him to temporarily abandon teaching and threw him on the road as a traveling minstrel. Upon joining the artist Bobby Goldsboro as his musical director and eventually his producer, he became a studio musician in Nashville and began writing songs. He hit big in the 1980s with Fool’s Gold, a number one country hit for Lee Greenwood. He has produced a number of artists for records, advertising, and television. While continuing to work within the music industry, he began teaching in Belmont University’s music business program and is now an assistant professor of audio engineering and music business at Belmont in the Curb College of Entertainment and Music Business.