# Commercial Music – Year Two Report – February 2023

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The following contains the portion of the Commercial Music program review document submitted in January 2021, pages 96-98.

From the original 2021 program review document, Table 1 summarizes the expected outcomes.

Table 2 parts A, B, C and D are the original Expected Outcomes, Measure, Target and Action Plan respectively. Section, E, F and G are now completed as part of the two-year update.

# **12.** COMPLETE THE CONTINUOUS IMPROVEMENT PLAN (CIP) TABLES THAT FOLLOW.

# Table 1. CIP Outcomes, Measures & Targets Table (focus on at least one for the next two years)

A. Expected Outcomes	B. Measures	C. Targets
Students will learn to adjust final mix loudness levels that conform to online streaming content providers, using dynamic processing tools such as compression, limiting and EQ.	Students will use a Loudness Unit Full Scale (LUFS) meter to rate their standards conformity by how much gain reduction is applied to their file.	80% success. Success = less than 0-6db attenuation imposed by the content provider.
Students will develop standardized portfolio templates for use by other students.	Adoption by Audio IV, Live Sound III and Commercial Music Project students.	75% adoption by students.
Students will produce and engineer a livestream musical performance.	Students will learn Online Broadcast System (OBS) software and livestream one concert as either the engineer or engineer/performer.	80% students in Audio IV or Commercial Music Project live stream one event.

### **Continuous Improvement Plan**

Outcomes might not change from year to year. For example, if you have not met previous targets, you may wish to retain the same outcomes. You must have at least one program learning outcome. You may also add short-term administrative, technological, assessment, resource or professional development goals, as needed. Choose 1 to 2 outcomes from Table 1 above to focus on over the next two years.

A. Outcome(s) - Results expected in this program (from column A on Table 1 above--e.g. Students will learn how to compare/contrast Conflict and Structural Functional theories; increase student retention in Nursing Program).

B. Measure(s) – Instrument(s)s/process(es) used to measure results (e.g. results of essay assignment, test item questions 6 & 7 from final exam, end of term retention rates, etc.).

C. Target(s) - Degree of success expected (e.g. 80% success rate, 25 graduates per year, increase retention by 2% etc.).

D. Action Plan - Implementation of the action plan will begin during the next academic year. Based on analysis, identify actions to be taken to accomplish outcome. What will you do?

E. Results Summary - Summarize the information and data collected in year 1.

F. Findings - Explain how the information and data has impacted the expected outcome and program success.

**G.** Implementation of Findings – Describe how you have used or will use your findings and analysis of the data to make program improvements.

#### Table 2. CIP Outcomes 1 & 2

## A. Expected Outcome #1

Students will learn to adjust final mix loudness levels that conform to online streaming content providers using dynamic processing tools such as compression, limiting and EQ.

B. Measure (Outcome #1)	C. Target (Outcome #1)
Results from a Loudness Unit Full Scale (LUFS) meter.	< 0-6dB gain reduction imposed by steaming service.

# D. Action Plan (Outcome #1)

For one mixing assignment, students will adjust output levels to conform with one streaming service (YouTube, Spotify, TIDAL, etc.)

# E. Results Summary (Outcome #1)

**Examples of student work:** 

https://www.youtube.com/watch?v=UD\_ZtkbcJ5w

Faculty research showed that most students preferred presenting audio on YouTube, therefore this streaming service was the focus of faculty efforts. Additional research confirmed that best practices are very similar to traditional mixing levels such as the example below:

Dialogue: -6db to -15db(Nb. Most YouTubers tend to stick at -12db max) Overall mix Level: -12db to -20db Music: -18db to -20db Sound Effects: -14db to -20db. (Source: https://filmstro.com/blog/how-to-set-the-right-audio-levels-for-youtube)

It should be noted that this chart of recommended values is aimed at videos that contain voiceover dialog, i.e. dialog that is intended to be heard <u>above</u> the music. As a result, these recommended music loudness levels (-18db to -20db) are too low and not recommended for a music-only video. The recommended level for music-only videos is -14 LUFS (Loudness Unit Full Scale: the maximum loudness a system can handle and which varies from system to system). Therefore, students mixing their audio in classes such as MUSC 2448 Audio Engineering IV and MUSC 2350 Commercial Music Project for the purposes of using these as source material for their "demo reels" aka portfolios, will likely exceed this in some cases. As a result, YouTube's audio algorithm may attenuate their audio level. Conversely, YouTube's compression

algorithms will not only attenuate audio that exceeds -12 LUFS but will actually increase audio levels that are too low. For example, audio levels that are below the recommended range of -13 to -15 LUFS will be boosted.

# F. Findings (Outcome #1)

For the purposes of this CIP, faculty learned that obtaining the gain/attenuation factors applied to uploaded audio is not possible. However, considering the similarity with traditional levels, best practices dictate that students err on the side of caution and mix their audio slightly softer, at the target range of -14 LUFS and to apply compression/limiting to prevent any transient peaks from exceeding this level (which would result in YouTube's own compression algorithm being applied. At the end of the process, faculty and students have learned that it is better to have YouTube apply gain rather than have YouTube attenuate.

Based on these findings, as well as feedback from students who are uploading music content to YouTube, the faculty are including these concepts earlier in the curriculum. Historically, emphasis on mixing for streaming services has been the focus in Audio Engineering IV because it is the last course in the Audio Engineering sequence. However, students seeking the AAS Commercial Music Degree are only required to complete up to Audio Engineering II and as a result, they may not obtain the specialized emphasis on mixing levels for streaming services since their focus may be on Live Sound or Music Business.

# G. Implementation of Findings (Outcome #1)

For the purposes of monitoring their target mix levels, students have access to the built-in level meters on their Digital Audio Workstations (DAWs) such as Avid's *Protools* and Apple's *Logic*. In addition, students are able to specify these target level limits inside the DAW as well as in third-party plugins. Therefore, the ideal class for this new focus on introducing streaming service mixing levels is the **MUSC 2427 Audio Engineering II**. For applying these concepts as well as developing mastery, additional focus will be included in the Commercial Music program's newly created **MUSC 2741 Audio Plugins** course which is also required for all Commercial Music students and has Audio Engineering II as a prerequisite. In the Audio Plugins course there are a variety of plugins referred to as "mastering plugins" which are specifically developed for specifying target output levels. As mentioned above, while finding out specific gain/reduction data from a streaming service are not readily available, faculty will continue to investigate services which may provide this data. In addition, faculty will investigate the possibility of reverse engineering the gain/reduction of audio after it has been downloaded and compared to the original uploaded material. Finally, faculty will also collect data from student experiences regarding any obstacles and/or improvements to student outcomes.

#### Table 2. CIP Outcomes 1 & 2 (continued)

# A. Expected Outcome #2

Students will develop standardized portfolio templates for use by other students.

B. Measure (Outcome #2)	C. Target (Outcome #2)
Adoption by Audio IV, Live Sound III and Commercial Music Project students.	75% adoption by students.

## D. Action Plan (Outcome #2)

Commercial Music Students will develop templates for several AAS graduate specializations: Mixing Engineer, Live Sound Engineer, Songwriter, etc. These are modeled on the CSS-based templates provided by some web hosting sites (e.g. WordPress)

# E. Results Summary (Outcome #2)

As can be seen below, the objective of creating and adopting standardized portfolio templates catered to audio industry students was achieved:

Spring 22 Online Profile 80% Completed Portfolios 90% Adopted In-House Created Portfolio Templates 80%

#### Fall 22

Online Profile 90% Completed Portfolios 90% Adopted In-House Created Portfolio Templates 90%

While the target adoption by a minimum of 75% of students was achieved in the CIP's intended sense, continued research has yielded new information. For instance, as mentioned in the Action Plan above, general, high-quality portfolio templates have been available for several years by web hosting services such as WordPress and these templates continue to greatly improved in quality. While it is the goal of this CIP for students to use the templates created in the MUSC 2350 Commercial Music Project course, it may potentially become unnecessary when considering the quality and availability of these often free templates. In addition, while the intention was to develop templates that were more specific to audio industry professionals, the reality is that, at a granular level, there will never be a "one size fits all" template. Therefore, in the process of researching templates, new resources have become available. Specifically, companies have made templates tailored to portfolios in specific sub-disciplines within the audio industry. For example, the following screenshots are from Slidesgo.com: <a href="https://slidesgo.com/theme/audio-engineer-portfolio">https://slidesgo.com/theme/audio-engineer-portfolio</a> and these slides templates can be readily converted to web pages for hosting on a student's domain or with his hosting service.



These template resources may lessen the need for students to develop their own specialized templates for areas such as audio engineering, songwriting, etc. However, it should be noted that the free-online resources are not as detailed. The examples listed above are 5-10 slides each while the the Songwriter Template developed by students and faculty at Collin is 42 slides prompted much more detail. Therefore, while some students

may continue to want to develop their own templates, our findings are that most students do not have the necessary design skills to do a superior template compared to what is now available and the templates function as a helpful "checklist" of prompts for information they should include. Regardless, the most important takeaway for both students and faculty is to continue researching these resources along with research into current trends in portfolio best practices.

# G. Implementation of Findings (Outcome #2)

Students will continue focusing their efforts on creating professional-quality portfolios that include both print and online materials. The most important item in the portfolio is the student's "demo reel". Based on our continued research, issues discussed in faculty meetings have resulted in changes that are implemented in the classroom. For example, in Fall 2022 the Commercial Music Project professor expressed the need for shorter example clips which could be pieced together to form a 2-3 minute demo reel showcasing a variety of the student's work in different genres of music. The problem at that point was that students were needing to spend too much time going back through their course work to create the needed short sample clips. As a result of this discussion, the Audio Engineering instructors began requiring that all student mixing assignments be submitted with both a 15-20 second excerpted example as well as the full-length version. These short clips were of immediate value and used in the Commercial Music Project class for the portfolio demo reel as part of the online portfolio in this CIP. These demo reels are the most important part of the student portfolio and therefore need to be the primary emphasis. In conclusion, the packaging template is less important and therefore can be sourced from readily available resources such as those shown above as well as templates created by students.

Faculty will continue to collect data on this CIP from both students and the online resources as they become available.

## Notes on CIP 3.

As stated in the instructions for the CIP, only one outcome needed to be the focus.

# Table 1. CIP Outcomes, Measures & Targets Table (focus on at least one for the next two years)

Commercial Music chose to focus on the first two of the three listed in the table and those findings are presented in this document. While CIP 3 was a not the focus for the past two-year cycle, it will become a focus in the next two years leading up to the Program Review in year 5. The sudden increase in need for live streaming skills in both software and hardware brought on by the COVID-19 pandemic has declined along with the decline in the pandemic itself. And while there were many positive takeaways from the new skills both students and faculty in music and audio technology suddenly needed to learn, the pressing need for these skills is no longer as urgent. In addition, opportunities for students to run live-stream concerts have diminished as well due to increased constraints imposed by the college. For example, initially faculty were free to stream from a variety of services including Twitch, Discord, YouTube, etc. However, as of now, the college only permits livestreaming through the college's Facebook account and students do not have access to the streaming key. Regardless, at this point, new research will begin to assess the current need for these livestreaming audio skills and those findings will be implemented in the commercial music curriculum.