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Audio Recording and Production Education: Skills New Hires Have and Where They Reported Learning Them

Dr. Doug Bielmeier

[1] Dr. Doug Bielmeier, Indiana University-Purdue University Indianapolis, Indianapolis, Indiana, 46202
DBielmeier@gmail.com

ABSTRACT

To understand how audio recording and production programs meet the needs of the larger entertainment industry, this study directly asked new hires what skills they have and where they were learned. In the New Hires Survey, they were asked to rate the level of proficiency of their skills, where they learned these skills, and what skills they need to learn. The new hires reported learning basic technical skills during formal audio recording and production training, but learned social and communication skills on their own or on the job. They requested a greater emphasis on career critical areas of live sound and music business. Further research is recommended to understand industry needs, identify best practices for the acquisition of skills, and to determine how educational institutions can keep pace with the ever-changing entertainment industry.

1. INTRODUCTION

The Audio Recording Industry is one of the main suppliers of content to the larger entertainment industry. Many different types of formal Audio Recording and Production (ARP) training programs exist to prepare students for a career in the entertainment industry [4]. However, only a few researchers and educators have questioned whether these ARP programs are teaching skills that the entertainment industry needs or wants. Furthermore, no research exists on what skills new hires in the industry actually have, or how and where they learned these skills. Therefore, to better understand the relationship between ARP programs and the needs of the entertainment industry, this study directly asked new hires what skills they have and where they were learned [1].

1.1. History of Research

Though research into ARP programs is limited, the first major writings were presented at the 1978 Trends in Audio Education Symposium at the 60th AES Convention held in Los Angeles. At this convention papers were presented on best practices and educational approaches in ARP education. The conference engaged both educators and industry experts in panel discussions and even included student perspectives. One of the conclusions drawn from this conference urged ARP programs to teach professional attitudes and increase awareness of what goes on day-to-day in the working environment [5, 6, 12, 13, 14].

Over the next decade, the largest shift between analog to digital technology occurred in the industry [16]. Therefore, Lightner [11] suggested that these new industry technologies should be incorporated into the

design of ARP courses. Lightner's research found that employers complained that many graduates had unrealistic people skills, weak customer service skills, and lacked communication skills. Similar research indicated that the ability to work well under stress, be an astute observer, be easy to work with, and have a sense of humor was paramount for aspiring engineers [15]. As a follow-on study by Walsh [19], educators identified specific occupational skills and knowledge needed by ARP students. His study found that educators and employers agreed that customer relations and studio protocol were most important.

1.2. Current Research

In the early 2000s, Internet and digital audio workstations again changed recording practices. To reflect the technological changes, Tough [17, 18] polled audio industry experts for what skills ARP students should have when entering the workforce in 2019. This research created a list of over one hundred essential skills. In a companion study employers were asked what skills their new hires have and the skills they thought were most important [2]. The study's results created a list similar to the top skills indicated by Tough's research. However, employers commented on the importance of social and communication skills and were very critical of their employees' levels of proficiencies in these skills.

In a follow-on study, ARP educators were surveyed about the communication skills that were focused on in their classrooms, their department/institution, and their internship programs. The quantitative data suggested that both educators and their institutions lacked a focus on apprenticeship skills: the ability to work under the authority of a mentor [17]. This is a significant skill to learn and possess in an industry where hiring and retention are based on the apprenticeship model. Interns and new engineers find themselves working long hours under the direction of more experienced engineers and managers. [9]. Compounding this, fewer than half of the institutions required an internship: a plausible place for students to learn apprenticeship skills [3].

Of the little research completed, the participants have primarily been employers and educators. In contrast, this study turned to new hires to understand if they have the essential skills and if they learned them at ARP programs. The New Hires Survey (NHS) allowed participants to rate their perceived level of proficiencies of skills identified by the employers in previous research.

2. METHODOLOGY

The perceptions of skill sets by new hires were collected in this study. New hires were defined as employees hired in the last five years. Over three thousand studios in Canada and the United States were contacted between October 2012 and January 2013 and fifty-two new hires responded.

2.1. Instrument

Data was collected using a rating scale, open-ended questions, and optional clarification boxes. In the NHS, new hires scaled their perceived level of proficiency of skills and indicated where these skills were learned. In open-ended questions, they identified the skills most challenging to learn, where they learned their skills, and what skills their ARP program did not focus on.

2.2. Skills

Using the top forty of one hundred skills identified by Tough [17, 18], the NHS rated skills in the areas of: Communication (COM), General Audio (GA), Digital Audio (DA), and Music Business/Business (MBB). The top COM items included: (1) the ability to be an effective listener towards co-workers and clients, (2) communicate clearly and tactfully with clients and co-workers, and (3) be professional around clients. The top GA items included: (1) knowledge of effects, (2) studio signal flow, (3) studio microphone techniques, and (4) the ability to successfully plan, conduct, and conclude a recording session. The top DA items included the ability to record audio on a current computer platform using a current audio program, and the ability to mix and edit in the digital audio realm. The only MBB item included was an understanding of business ethics.

2.3. Data Analysis

The data was analyzed using basic descriptive statistics. This statistical analysis indicated the percentage of mastered skills, and where they were learned, as reported by new hires. For the open-ended questions and optional clarification sections, a purposeful coding method was used. The top forty skills from Tough's research were used as the codes to identify within the responses the skills new hires found most challenging

Table 1. Top Nine Mastered Skills and Where They Were Learned as Reported by New Hires

Skill	%	Description	% On Own	% On the Job	% Formal AET
9COM	70.7	Passion for Work	70.7	17.1	12.2
2COM	61	Responsibility	70.8	17	19.5
3COM	61	Effective Listener	36.6	51.3	12.2
1COM	56.1	Completing projects	39.8	31.0	29.2
5COM	56.1	Professional w/ clients	22	56.1	21.9
35GA	55.3	Basic Technical Skills	13.9	16.7	69.5
21DA	55.3	Organize Session Data	18.9	27	54
15COM	55	Self-Starting	53.8	23.1	23.1
14COM	55	Patience in Studio	28.2	56.4	15.4

and those that were lacking from their ARP program [17,18].

2.4. Validity

The content validity of this survey was established by Tough's [17, 18] research, which were the skills tested in this instrument. By using a Delphi method, Tough identified what skills were most important for employees entering the industry in the next five years by asking top industry professionals to rate a list of skills [17, 18]. The top 40 skills from this research were used in this instrument.

The instrument's construct validity was established by Dr. David Tough and Dr. David Sanders [15, 17, 18]. These two ARP experts were asked to evaluate the construct of introversion in the areas of communication, general audio, digital audio, and music business. Moreover, the presence or absence of one or more criteria considered to represent the areas of interest in this study were not detected by the ARP experts. Dr. Tough did however recommend that the response to each skill be opened up from the simple (a) I have mastered this skill, (b) I'm developing this skill, and (c) I don't have this skill, to five levels of complexity. The survey was altered to include the options (a) I do not possess this skill, (b) I have a basic proficiency in this skill, (c) I have an intermediate proficiency in this skill, (d) I have an advanced proficiency in this skill, and (e) I have mastered this skill.

The criterion-related validity as well as the reliability of the instrument were established by the use of a pilot test conducted from August 15th to September 15th prior to the administration of the final survey. This pilot test included all of the aforementioned sections and an additional pilot review section. A small convenience sample of 20-40 new hires and employers were asked to take the survey and indicate if the survey allowed them to accurately identify perceived and observed skills and where they were learned.

3. RESULTS

3.1. Sample

The new hires that completed the survey had worked in the entertainment industry two years or less and were between twenty-one and thirty years old. They were employed as live-sound engineers or recording engineers at medium to large businesses. Most attended a three or four-year professional school (47.7%), while the next largest group attended a four-year music college for their formal ARP training (34.1%).

3.2. Top Skills

The NHS asked new hires to scale their skill level and identify where they gained this proficiency. The top skills and where each was learned, are presented in Table 1. The new hires reported they had mastered or had advanced technical skills as a result of learning them at their ARP programs. In the open clarification sections for these skills, the new hires reported that great teachers and professionals helped them learn these technical skills. However, the new hires reported learning to be effective listeners and professionalism with clients primarily on their own or on the job. In the open clarification section, one new hire noted, "Often my fellow interns think they have a skill and then they see the head engineer in action and realize that they have a lot to learn" (see Appendix Table 2).

3.3. Least Mastered

Results for skills least mastered were also identified. As shown in Table 2, the new hires reported communication skills were not learned in their ARP programs.

Table 2. Least Mastered Skills and Where They Were Learned as Reported by New Hires

Skill	%	Description	% On Own	% On Job	% Formal RPI
19COM	25.6	Tact and Diplomacy	46.2	35.9	18.0
18COM	33.3	Avoid/resolve Conflict	46.2	46.2	7.7
20COM	33.3	Handle High Pressure	17.9	61.6	20.5
38COM	34.2	Think Outside the Box	60.5	18.4	21.1
13COM	37.5	Adapt and Change	22.5	55.0	22.5
34COM	39.5	Client Confidence	26.3	53.5	20.1

3.4. Common Skills as a Trait

In the optional clarification sections, the new hires reported that the ability to use tact and diplomacy when dealing with clients is the result of their personal values and character. They responded that good communicators have inherent skills to avoid or resolve potential human conflict situations that can arise in the studio environment. One new hire admitted that he learned to address conflicts and handle high-pressure situations 'the hard way' while touring with a band as a live-sound engineer (see Appendix Table 2).

3.5. Most Challenging

In an open-ended question, the new hires were asked what skills they found most challenging to learn (see Appendix Table 1). As shown in Table 3, the new hires reported that social and communication skills were some of the most challenging to learn. In the optional clarifications sections, the new hires reported a need for their ARP programs to focus on business and communication that included interactions with clients and co-workers, music marketing, networking, and business ethics. One new hire indicated that these were the skills he needed most at his job.

3.6. Learning on their Own

In another open-ended question, the new hires were asked where they learned their skills (see Appendix Table 2). The new hires reported mastering the skills they found most challenging on their own. They reported that they were self-taught in all disciplines by researching, doing, and asking questions online or with people they met. One new hire responded that he learned most of his skills by making his own music: "With each piece I composed, I noticed improvement way beyond the improvement I saw while I was a student." Another new hire commented that one does not know how to apply this information until one has several gigs under his belt. This same new hire added, "After a year of mixing over 200 bands, I finally feel I have a grasp on using all the skills acquired at school." Other new hires reported that they were able to perfect their skills through work and personal drive, trial and error, failing, and developing their ears. However, the new hires did report that during formal ARP training, they learned basic theoretical knowledge, technical skills related to audio production, general audio recording and mixing, DAW software, microphone techniques, audio gear and equipment. Nevertheless, the new hires reported that on the job they learned the ability to be professional yet direct, to be prepared and arrive early, to take risks, and to challenge themselves to learn more.

Table 3. The Most Challenging Skills and Where They Were Learned as Reported by New Hires

Skills	%	Description	% On own	% On Job	% Formal RPI
4COM	92.7	Communicate	26.8	42.3	30.9
13COM	85.0	Flexibility	22.5	55.0	22.5
19COM	89.7	Tact/diplomacy	46.2	28.2	25.6
20COM	89.7	Handle Pressure	17.9	61.6	20.5
29COM	84.7	Humility	31.6	55.3	13.1

3.7. Skills Not Covered

In a third open-ended question, the new hires were asked what skills their formal ARP programs did not cover (see Appendix Table 3). As shown in Table 4, the largest percentage of the new hires reported that there was a lack of focus on skills for live sound. The new hires stated a need to focus on methods and industry standards for live sound that included proper level setting in a live sound environment as opposed to a studio environment, and operation of standard digital consoles such as the ls9. The next largest percentage of new hires reported a need to focus on business and communication skills.

Table 4. Skills the New Hires Reported Their Formal ARP Programs Did Not Cover

Area	n= 45	%
Live sound	8	17.8
Communications skills	7	15.6
Technical Skills	5	11.1
Business	5	11.1
Broadcasting	3	6.7
Mastering	3	6.7
Application	3	6.7
Post-production	2	4.4
Analog	2	4.4
Music theory	2	4.4
Ear training	2	4.4
Video	1	2.2
Production	1	2.2
Creativity	1	2.2

4. DISCUSSION

4.1. Results Summary

According to the new hires, their ARP programs adequately provided them with technical foundations and skills. The new hires thanked their ARP programs for the equipment and training provided. The ability of programs to train students in these technical skills is consistent with the greater ease by which technical skills are demonstrated and assessed [10].However, the skills including session procedures, conducting sessions, and technical vocabulary are all technical skills with an inherent social and communication component. Few new hires reported mastering these technical skills with social and communication components. Furthermore, more than half of new hires reported that on the job they learned key social and communication skills, including patience in the studio, professionalism with clients, and effective listening. According to the new hires, their least developed skills, which were Tact and Diplomacy, and Avoid/ Resolve Conflict, were neither learned nor taught at their ARP programs. In addition, the new hires reported that social and communication skills were some of the most challenging to learn. Compounding this, employers ranked these communication skills as some of the most desired skills [17, 2]

4.2. Results Related to the Literature

In this study, the students reported not learning communication skills within their ARP Programs. This is verified by over 158 employers who were very critical of their new hires' communication skills [2]. One employer complained that new hires were unaware of the people skills needed by engineers, and lacked the focus to pay attention to the client on the other side of the glass [2]. "Most self-centered kids (no child left behind) are used to talking constantly - even when they have no idea of what the issue is... it takes a reasonably long time to train kids to only worry about the customer, and what they want and need" [2]. Also, the employers condemned the use of texting as a means to communicate with clients. "New hires today want to communicate with clients via email or texting. Clients want a more personal approach like the phone or in person" [2]. Another employer blamed texting or lack of "face time" to be responsible for the new hire's inability to work effectively in a creative and collaborative environment as an adult.

This lack of focus on communications skills is represented in past research and has been documented as an issue since the 1980s [2, 7, 8, 9, 11, 15, 19]. While technology changes, the need for good communication skills remains a constant in the entertainment industry. The most effective place to acquire these skills has yet to be determined.

5. RECOMMENDATIONS

5.1. Examining Curriculum

Employers of past research have observed that their new hires do not have strong social skills [2]. Furthermore, new hires of this study reported learning these skills on the job or on their own. Their ARP programs should consider examining their curricula. Fortunately, employers have expressed a willingness to work with educational institutions for the acquisition of the most important skills [2]. ARP educators and industry practitioners should begin a conversation that could

promote research in several areas: (a) understanding industry needs, (b) identifying best practices for the acquisition of technical skills, and (c) determining how educational institutions can keep pace with the ever changing entertainment industry. These discussions should happen both nationally and regionally to meet the needs of both markets.

5.2. Business and Communication Skills

In addition, the new hires of this study desired a better foundational education in music business, networking, and music marketing to meet the needs of today's demanding entertainment industry. Nationally, ARP programs are often located in media and communication colleges or music colleges. Research should explore the prevalence of business and entertainment industry courses in these two types of colleges.

5.3. Live Sound

Finally, the largest group of new hires reported that live-sound skills were not a part of their formal education. This is important considering the largest percentage (27.9%) of this study's new hires reported having jobs in the live sound segment of the entertainment industry. Initially, it would prove useful to examine ARP curricula to determine how many or what types of programs include these live sound skills. Additionally, a survey determining the importance of live sound at ARP programs should be conducted to learn if this study's discovery is part of a larger lack of focus in live sound. This new survey could be given to both students and educators.

ARP programs should be including courses that focus on skills new hires need in the entertainment industry beyond the studio. Therefore, it is critical for educational institutions to keep pace with the changing industry. Educational cultures should foster a community that stays relevant and reflects the industry.

6. CONCLUSION

The ARP programs of this study are providing graduates with technical skills; however, a greater emphasis should be placed on social and communication skills. Furthermore, new hires of this survey requested curriculum focusing on live sound and music business. Meeting the needs of the larger entertainment industry is imperative for the success of these programs and their graduates.

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9. APPENDIX

Table 1. Skills the New Hires Reported as Most Challenging to Learn.

Code	Response
OEQ 1	Accounting, taxes, and payroll.
OEQ 2	Continuing work passion.
OEQ 3	Elastic audio and using patching to the outboard gear.
OEQ 4	Finding and working with clients that inspire my creativity.
OEQ 5	I found music theory to be challenging in the beginning.
OEQ 6	Learning a variety of workflows dependent on where and/or with whom I am working
OEQ 7	MIDI and Mastering
OEQ 8	Mastering
OEQ 9	Music industry politics
OEQ 10	NA
OEQ 11	Recording and mixing music to sound radio ready.
OEQ 12	Signal flow!!!! I felt like a retard trying to fully grasp this depending on the set up.
OEQ 13	The effective management of people has been the most challenging skill to learn
OEQ 14	Time management
OEQ 15	Working with difficult clients
OEQ 16	climbing truss safely
OEQ 17	digital editing
OEQ 18	golden ears
OEQ 19	patience and tact with difficult clients
OEQ 20	Time management: juggling several projects at the same time is difficult and causes stress.
OEQ 21	Constant updating and maintaining of software is a pain. Also, the idea that there is only one software that can record audio and midi data. Workflow is individual and there are several capable sequencers to work with.
OEQ 22	Signal flow...I get it... but for some reason it is hard to maintain especially when a session is in full swing.
OEQ 23	Microphone techniques is my biggest challenge. Really capturing something perfectly in focus is incredibly challenging - it's easy to sound "good" and so hard to sound "great".
OEQ 24	Recording/signal flow in a professional studio and outboard gear. This is what I had the least interest and practice in.
OEQ 25	Mixing and mastering. I will never understand it, and I do not care to. I enjoy being a 2nd engineer, recording, and microphone skills.
OEQ 26	Learning to swallow my ego and be the scapegoat when things go wrong. The mixing engineer is almost always blamed regardless of the cause, especially in a live sound application.
OEQ 27	Just the sheer learning of technology and the curve that comes with its application and vast selection of materials, techniques, etc. This is normal, I believe, and a necessary task for learning my trade.
OEQ 28	Electrical engineering aspects of audio work. I'm definitely more of a "music" guy than a "science/engineering" guy. But I'm working on it every day.
OEQ 29	The signal flow at the Art institute in Studio A and the routing of the lexicon and the other reverb unit... The TC electronic. It was crucial to get in there and get familiar yet studio time was very scarce!
OEQ 30	Music Theory has long been by toughest challenge. I am strong with basics, but things that I do not use regularly slowly fade, and don't always return.
OEQ 31	The most challenging skill to learn for me was to know when to stop, finish, and complete a project. Sometimes I would over-do or over work on a project.
OEQ 32	Learning how to keep calm when everything goings wrong. The best engineers I've seen stay cool no matter what the situation is. This I believe comes with confidence in your craft.
OEQ 33	Mastering. I'm trying to get better at mastering, for the sake of my smaller budget clients - since they won't be sending my mixes out to get mastered, I usually master them. I know this is my weak link.
OEQ 35	Mixing and mastering have taken the most time to have a style and process where everything sounds right and professional.

Table 2. Where the New Hires Reported Learning their Skills.

Code	Response
OEQ 36	[redacted] Institution name
OEQ 37	Audio Production Program
OEQ 38	From a combination of on the job training, school and on my own through experience.
OEQ 39	From everywhere. I have a choice two mentors that have taught me more than anything though
OEQ 40	I learned most of my audio knowledge when I went to college for Audio Production.
OEQ 41	I've learned most of them form school and watch tutorials on YouTube
OEQ 42	Most of the skills I use on the job I have acquired through my years in college.
OEQ 43	Most skills were learned on the job.
OEQ 44	NA
OEQ 45	Interning at a studio, teaching myself how to edit and become useful for the studio.
OEQ 46	Mainly on the job but a lot at school
OEQ 47	On the job
OEQ 48	Real
OEQ 49	School and doing it on my own time. In a setting where time was of no consequence.
OEQ 50	I've been performing live and recording since I was 6, but I credit most of my learning from vocational school during high school, then to college, then to internship, then job. It was all a process.
OEQ 51	Most of my personality traits were developed, school expanded my knowledge for audio skills, and then work and my personal drive expanded, and fine-tuned those skills.
OEQ 52	In general I learned most of my skill by making my own music. Which each piece I composed, I noticed improvement way beyond the improvement I saw while I was a student.
OEQ 53	Almost all the technical skills related to audio production, i learned at the Art Institute of Washington (3 year professional school). The internet and on the job experience have helped to supplement the basic foundation I got from professional training.
OEQ 54	I learned majority of my audio skills from the Art institute of Washington from 20027 to 2011. Then I am sound engineer at my church.
OEQ 55	The skills of arts of the audio industry I learned throughout high school and college. The skills to produce, compose, and the drive to succeed in a highly competitive music industry I gained from my passion towards music creation.
OEQ 56	I learned many technical skills on the job and in a 4-year college program. Business skills were learned in graduate school and on the job. Most professionalism and networking skills were learned on my own and on the job.
OEQ 57	I am unique in that I have a combination of learning sources being simultaneously a student, intern, and employee in my given field. In all of these and different ways are where I learn the bulk of my knowledge.
OEQ 58	I learned the basics and mechanics of audio production and recording at the [redacted]. I relearned an adapted much of the information for the live audio environment on the job.
OEQ 59	Most audio related theory and concrete information (compressors, EQ's, attack times, pro tools I/O, etc.) was learned from school. The problem is that you don't know how to truly apply this information until you have several gigs under your belt. After a year and over 200 bands that I've mixed I finally feel that I have a grasp on using all the skills I've acquired at school.
OEQ 60	General audio recording and mixing- Undergraduate and graduate electronic music and recording technology programs. Live engineering learned on the job with a production company. Client relations learned on the job with a not-for-profit arts organization.
OEQ 61	I learned how to use my ears on my own time. I learned how to eventually get what I was hearing in my mind. I was able to organize my thoughts and advance to a professional mindset through school enrichment.
OEQ 62	I learned how to be technical at AI, I learned how to be a business professional, in the business world. This is primarily do to my age and previous professional experience before going back to college.
OEQ 63	All basic theoretical knowledge (what are compressors, EQ's, attack times, etc.) came from my education in Audio Production. My jobs expected me to have that understanding already - what they taught me is EVERYTHING else you need to know if you want to actually get hired. This meant being professional yet direct, coming prepared and early, learning to take risks and challenge yourself to learn more.
OEQ 64	Audio specific skills I learned through schooling, such as DAW software, microphone techniques, audio gear and equipment.
OEQ 65	I learned skills at my 4-year music program, my masters level recording program, on the job, and through my own continuing education process.
OEQ 66	I was already an electronics tech prior to opening my studio. My prior work was more sophisticated than that in a pro recording studio. My knowledge as a trained musician was also invaluable when designing and building this studio.
OEQ 67	Skills came from personal interest and experimentation. You haven't asked in this survey if the respondent is an educator, but the ability to teach this subject matter comes from on the job success and failure to reach the students. Experience is the best way to gain the skills of teaching.
OEQ 68	I'm usually self taught in all my disciplines. I learn things but researching, doing, and asking questions. Online or with people I meat.
OEQ 69	Studied music from a young age in piano lessons, took a couple of years at college in performance piano before I switched to record. Studied music production & technology with Scott Metcalfe and Justin Kurtz at the Hartt School, University of Hartford. Interned at Riverdale Recorders in Edmonton, Alberta; and then Tapeworks Inc. in Hartford. I started working @ Tapeworks immediately after my internship ended, in June 2010. Have been there since.

OEQ 70	My dad taught me a lot about construction design and carpentry. I started music lessons in the first grade, and received almost all of my music theory while in grade schools, although at certain points I did have private teachers. I received a couple MCP windows certifications while in high school, and learned enough to pass A+ certification on my own. Much of my etiquette, general attitude and problem solving came from my parents. My audio degree taught me a lot about DAWs, signal flow, mixing techniques, and other technical aspects of audio. I learned how to run efficient sessions by diving in and formulating my own process through trial and error. Every session that failed was a huge learning experience, and the vast majority of the time I was engineering alone and had to figure things out for myself. My live sound I learned from another engineer at the job I currently have.

Table 3. What Skills the New Hires Reported their Formal ARP Programs Did Not Cover.

Code	Response
OEQ 71	Audio Production and Engineering
OEQ 72	Audio for video post-production
OEQ 73	Broadcasting elements and terms that are actually used in that environment.
OEQ 74	Communication, networking, professionalism, business.
OEQ 75	I learned the basics of EQ, compression, reverb, routing, mic techniques, etc.
OEQ 76	I think mastering was left a vague area that I learned on my own.
OEQ 77	I was not formally trained. I do have a certification in low-voltage wiring and electronics.
OEQ 78	Live Audio Engineering. School could have had a focus on that.
OEQ 79	Live sound
OEQ 80	Live sound
OEQ 81	Most of the application of the skills only focused on knowledge.
OEQ 82	NA
OEQ 83	Not sure.
OEQ 84	[redacted] Studios and [redacted] neither particularly covered mastering...i had to learn that on my own
OEQ 85	Other DAW outside of Logic, Pro Tools, and Reason. Would have liked to been trained in Reason more
OEQ 86	Production (only a couple classes)
OEQ 87	Studio politics
OEQ 88	acoustics, patching
OEQ 89	audiovisual, extensive post production, television broadcasting
OEQ 90	business relations with clients
OEQ 91	out of the studio stuff
OEQ 92	recording techniques, DAW software, production techniques, business
OEQ 93	studio performance,
OEQ 94	unsure.
OEQ 95	Did not cover more specific requirements/regulations to deliver audio for video/broadcasting. Newer industry developments like BS.1770. Did not cover tape machines. Did not go in to mastering.
OEQ 96	1. Live Sound Reinforcement (no training) 2. Music Theory (10 weeks isn't enough) 3. Ear Training (pitch rather than just frequency) 4. Marketing your music (10 weeks not enough)
OEQ 97	I was trained on the craft of recording and mixing, but not being creative. Creativity I had to learn on my own.
OEQ 98	Theory and technical music knowledge outside of the absolute basics. DAWs outside of Pro Tools and Logic on platforms other than Apple. Any sort of practical implementations for live sound. Integrating our audio work with other essential project departments, such as programming. General rules for yourself, outside of etiquette. How to get what you need out of coworkers or artists that are unwilling to do what you need.
OEQ 99	Not enough Live audio and on location recording training...ironically these are the skills i need most on the job.
OEQ 100	Live Sound, Marketing your music, and Pitch training and/or music theory. There was a little bit, but only scratched the surface of these concepts.
OEQ 101	Performer psychology, analog recording media and machines, and all recording software aside from Pro Tools and Logic Pro.
OEQ 102	Tactile and Practical applications and "real-world" experience in the scholastic/academic program
OEQ 103	Live sound methods and industry standards like proper level setting in a live sound environment as opposed to a studio environment and operation of standard digital consoles such as the ls9