

CABRILLO COLLEGE PROPOSED A.A. DEGREE & CERTIFICATE IN
Music Technology & Recording Arts

The fall 2007 Cabrillo College Occupational Needs Analysis labor market survey gauged the level of need and interest in hiring graduates of the proposed Cabrillo College A.A. degree and certificate program in the Music Technology, Recording Arts, and Sound Engineering field.

The mission of the Cabrillo College Music Technology and Recording Arts Program is to produce professional level Producer/Engineer/Musicians, support students in pursuit of higher education in Music Technology, as well as provide Music Department students with an opportunity to integrate the study of new technologies with a traditional comprehensive music education.

The proposed program is designed to meet the needs of students who wish to prepare themselves for an associate degree or vocational certificate in the Music Technology and Recording Arts professions.

A database of employers within this field was established, and a labor market survey conducted, by the Cabrillo College Planning and Research Office in the fall of 2007 to help determine the current and anticipated future employment needs within businesses in the field of music and sound technology.

The curriculum for the proposed program is being designed and implemented by James Durland, Cabrillo College Music Instructor, in conjunction with Rock Pfothauer, Dean of Career Education and Economic Development. A student earning an A.A. Degree or Certificate in Cabrillo's Music Technology/Recording Arts Program would have successfully completed the following Core Courses:

► **TECHNOLOGY STUDY (6 units):**

Music 7, Music 31A, Music 57A

♪ **MUSIC STUDY (11 units):**

Music Fundamentals – 3 units: Music 6 or Music 5A

Music Appreciation – 3 units: Music 10, Music 11A, Music 12 or Music 13

Songwriting – 2 units: Music 28

Piano – 1 unit: Music 51A, Music 51B, Music 51J, Music 22

Performing Group – 2 units: Choir, Orchestra, Band, etc.

♪ **ELECTIVES/EMPHASIS (3 units):**

Recording/Engineering – Music 31B, Music 31D

Live Music Production – Music 31B, Music 31C

Music Production/Composition – Music 57B, Music 57C

A database comprised of 169 businesses in Santa Cruz County was developed by Judy Cassada, of the Cabrillo College Planning & Research Office. These business were surveyed as to their current and future needs for workers with the skill set possessed by graduates of a Music Technology Program. The businesses fell within the following categories of users of professional music/audio services:

Conference Centers/Resorts/Hotels	Musical Instruments–Renting
Digital Radio Service	Musicians
Filmmaking	Musicians-Symphonies
Labor Union*	Performing Arts
Music Arranger	Radio Stations
Music Background and Foreground	Recording Studios
Music Instruction	Schools/Universities
Music Production Services	Sheet Music
Music Publishers	Sound Engineering
Music Rehearsal Studios	Sound Systems and Equipment
Music Stores	Television Stations
Musical Instrument Stores	Theaters/Live Performance Venues

*Local 611 of the International Alliance of Theatrical Stage Employees and Moving Picture Technicians and Allied Crafts (IATSE) is not a direct employer, but rather contracts with local businesses. IATSE dispatches workers to jobs in Santa Cruz County and neighboring areas. The labor union represents technicians, artisans and craftspersons in the entertainment industry, including live theatre, motion picture and television production, and trade shows. According to Chief Call Steward Poco Marshall, the IATSE dispatches between approximately 300-800 workers each month to entertainment and industrial events in the Santa Cruz County area, many requiring audio and sound technician-related skills.

Twenty-five of the one hundred sixty nine (15%) Santa Cruz County businesses in the music and sound industry responded to a survey administered by phone, mail and/or email. The following bullet points summarize the data contained in data tables found in Appendix A:

- 24% of employers expected to hire employees with Music Technology/Recording Arts skills in the future, 28% were not sure, 40% had no plans to hire, and 8% did not respond to this question.
- Of the 24% of employers who planned to hire music technologists in the future, 80% planned to hire at least one full-time employee with these skills within the next year.
- Given our sample size, it is 90% likely that between 10% and 38% of the 169 potential music technology/recording arts employers will be hiring at least one full-time employee with music technology skills in the coming year.
- Based on survey responses it is 90% likely that between 16 and 64 full-time music tech positions will be open in Santa Cruz County in the coming year.

- 38% of respondents view the job market in this field as “Steady.” Another 38% feel it is “Growing slowly.”
- 32% of businesses anticipate hiring additional part-time employees within the next one to three years.
- The median number of employees per business in this sample is 4.
- Six of the employers included in this sample expect to hire twelve music technicians/recording arts specialists within the next year to replace current employees who are leaving.
- Of the employers who currently retain employees with music technician/recording arts skills, 43% expressed “difficulty in hiring employees with sufficient knowledge and skills” for working in the music tech/recording arts field. Of those without music technician/recording arts employees, 17% expressed difficulty in hiring employees with this skill set.
- The average pay for an inexperienced worker in the Music Technology field is \$11.66 per hour, or a median of \$11.85 per hour.
- Those with two or more years experience average \$19.34 per hour, or a median of \$17.50. This is approximately \$40,000 per year.

Detailed information on the survey results can be found in the appendices.

The CCONA survey was conducted by Judy Cassada, Research Specialist, with assistance from Craig Hayward, Director of Planning & Research at Cabrillo College.

APPENDICES:

Appendix A - Data Tables

Appendix B - Survey Respondents

Appendix C - Survey Instrument

Appendix D - Database of Businesses

APPENDIX A: Data Tables - Music Technology & Recording Arts

1. What is the total number of employees in your business?

Number of Employees	Number of Responses	Percentage
0 Employees	4	16.0
1 Employee	4	16.0
2 Employees	3	12.0
3 Employees	1	4.0
4 Employees	1	4.0
5 Employees	1	4.0
6 Employees	2	8.0
7 Employees	1	4.0
8 Employees	1	4.0
9 Employees	1	4.0
11 Employees	1	4.0
13 Employees	1	4.0
15 Employees	1	4.0
70 Employees	1	4.0
200 Employees	1	4.0
300-800 Contractors	1	4.0
Total	25	100%

2a. How many full-time employees do you currently employ with Music Technology/Recording Arts skills?

Number of Employees With These Skills	Number of Responses	Percentage
0	12	54.5
1	2	9.1
2	1	4.5
3	2	9.1
4	1	4.5
6	1	4.5
9	1	4.5
13	1	4.5
30	1	4.5
Total	22	100%

2b. How many part-time employees do you currently employ with Music Technology/Recording Arts skills?

Number of Employees With These Skills	Number of Responses	Percentage
0	12	54.5
1	2	9.1
2	1	4.5
3	2	9.1
4	1	4.5
6	1	4.5
9	1	4.5
13	1	4.5
30	1	4.5
Total	22	100%

3.

3. Do you expect to expand the number of employees with these skills in the future?

	Number of Responses	Percentage
No	10	43.5
Yes	6	26.1
Not sure	7	30.4
Total	23	100%

3a. How many additional full-time employees do you anticipate hiring within the next year?

Number of Employees	Number of Responses	Percentage
0	6	54.9
1.00	1	9.1
1.50	1	9.1
2.00	2	18.1
3.00	1	9.1
Total	11	100%

3b. How many additional full-time employees do you anticipate hiring within the next three years?

Number of Employees	Number of Responses	Percentage
0	3	42.9
1.00	2	28.6
1.50	1	14.3
2.00	1	14.3
Total	7	100%

3c. How many additional part-time employees do you anticipate hiring within the next year?

Number of Employees	Number of Responses	Percentage
0	6	60.0
1.00	2	20.0
1.50	1	10.0
2.00	1	10.0
Total	10	100%

3d. How many additional part-time employees do you anticipate hiring within the next three years?

Number of Employees	Number of Responses	Percentage
0	3	30.0
1.00	3	30.0
1.50	1	10.0
3.00	1	10.0
4.00	2	20.0
Total	10	100%

4. Do you have difficulty in hiring employees with sufficient knowledge and skills to work in the area of Music Technology/Recording Arts?

	Number of Responses	Percentage
No	13	65.0
Yes	7	35.0
Total	20	100%

5. Throughout the next year, how many new employees do you expect to hire, with these skills, to replace current employees who will leave?

Number of Employees	Number of Responses	Percentage
0	12	66.7
1.0	2	11.1
2.0	2	11.1
3.0	2	11.1
Total	18	100%

6. In general, how do you view the Music Technology/Recording Arts job market in the Santa Cruz County area?

	Number of Responses	Percentage
Declining Slowly	4	19.0
Steady (No Change)	8	38.1
Growing Slowly	8	38.1
Growing Rapidly	1	4.8
Total	21	100%

7a. How much do you pay an inexperienced worker in this field, per hour?

Hourly Salary	Number of Responses	Percentage
.00	1	6.3
8.00	2	12.5
8.50	1	6.3
9.00	1	6.3
9.50	1	6.3
10.00	1	6.3
11.69	1	6.3
12.00	1	6.3
12.50	1	6.3
13.50	1	6.3
14.00	1	6.3
15.00	2	12.5
20.00	2	12.5
Total	16	100%

7b. How much do you pay an experienced worker in this field, per hour?

Hourly Salary	Number of Responses	Percentage
10.00	1	6.3
12.00	1	6.3
12.50	1	6.3
13.00	1	6.3
15.00	2	12.5
16.50	1	6.3
17.50	2	12.5
18.00	2	12.5
22.00	1	6.3
25.00	1	6.3
30.00	1	6.3
32.50	1	6.3
35.00	1	6.3
Total	16	100%

APPENDIX A, CONTINUED
WRITTEN COMMENTS: Music Technology & Recording Arts Survey

4. Do you have difficulty in hiring employees with sufficient knowledge and skills to work in the area of Music Technology/Recording Arts?

- ▶ No. Bands are required to bring their own sound tech. (Blaine Neagley, Crow's Nest)
- ▶ Yes. Technology skills can be trained – it is my firm opinion that many young recording engineers lack the people skills and sensitivity required by the job. (Andrew Zenezak, Gadgetbox Studio)
- ▶ No. I get a resumé once a week. (Brody Bergholtz, Indigital Recording Studio)
- ▶ We outsource for these skills. (Benjamin Short, Santa Cruz County Symphony)
- ▶ No. Plenty of qualified pros in area. (MaryLou Plate, Santa Cruz Sound Co.)
- ▶ Yes. Lack of specific product knowledge and awareness. Lack of sales skills. (Richard Gellis, Union Grove Music)
- ▶ No. We find people who know gear and recording, it's hard to find GOOD ones. (Matt Ward, Universal Audio).

OPEN-ENDED COMMENTS WRITTEN ON BACK OF SURVEY:

- ▶ It IS very difficult to find good sound engineers, so we wish success for this program! Musicians will be happy to have them! The Cayuga Vault is a very small business run primarily by volunteers. Our sound engineer, who has worked almost every single show for the past seven years, was a co-founder of the Vault, and works totally volunteer. However, normally sound engineers make at least \$50-70 an hour if not much more. Because we are such a small business that runs so much based on volunteers, this survey is not really applicable for us. However, if you ever have volunteer students interested perhaps in doing internships, especially relative to business and marketing in the music industry, please send them our way! We are excited you are starting a new program and wish you the best of luck! (Amanda Mehl, Assistant, Cayuga Vault)
- ▶ This sounds like a great program. I know my musician customers will appreciate any advance in the recording arts. I hear many self-produced/self-recorded CD's by amateurs and professionals that do not compare to well recorded studio music. Good luck. (Ed Claxton, Ed Claxton Guitars)
- ▶ An ongoing problem with interns I see graduating from music recording arts programs is that there is significant emphasis placed on equipment and gear and not nearly enough placed on the psychology involved in a typical recording session. I find it analogous to highway robbery how a facility (particularly private ones such as Full Sail, Expression Center, etc.) can charge the amount of money they do and after 2-4 years of training, allowing these young adults into believing that because they had an opportunity to use high dollar equipment and work with an occasional "high-profile" act, they should now be "entitled" to a full-time salaried position. I would be more than happy to participate in an

Open-Ended Comments Written on Back of Survey, continued:

intern training program throughout this new proposed program, and I feel in my 10 years of experience I can really help young engineers balance the technology-oriented skills with the ever-delicate skills needed to help aspiring artists create. Please feel free to contact me!! (Andrew Zenezak, Gadgetbox Studio)

► Currently I am the only Santa Cruz employee. That will change this year or next. It is highly likely that Santa Cruz becomes the headquarters. Currently, Denmark is our center of operations. (Michael Logue, Koblo)

► KUSP's business sector (public broadcasting) is in the midst of significant change, driven by technological shifts, realignment and consolidation of other media, and the continuing shift away from tax-based public support and towards voluntary/philanthropic financial support.

In general, traditional commercial media (newspapers, TV broadcasting, etc) are having their business models eviscerated by the rise of advertiser-supported Internet services (like those created by Google). The response of commercial media has been to reduce editorial expenses and consolidate. The most obvious example in Santa Cruz County has been the acquisition of the Santa Cruz Sentinel by MediaNews Group, leading to steep reductions in newsroom staff and closure of their Santa Cruz headquarters (with production and support functions combined with the San Jose Mercury-News and the remaining editorial and sales staff moved to Scotts Valley).

As commercial media abdicate their public service responsibilities, demands on public broadcasting to fill some of that gap increase – but at the same time, tax-based support for public broadcasting continues to decline (a pattern that has been generally true for over two decades, under both Republican and Democratic control of both the Congress and the White House). Having to “do more with less” is now resulting in public broadcasters attempting to find new strategies to increase efficiency and reduce operating overhead – making more revenue available for programming.

The first significant example of this in public broadcasting locally was the merger of KQED in San Francisco with KTEH in San Jose (KTEH operated the public TV station licensed to Watsonville, which is now known as KQET). This merger is improving efficiency but not leading to job growth.

KUSP is seeking ways to adapt its traditional operations in line with these trends. Our most extensive discussions have been with KAZU, the public radio station operated by CSU Monterey Bay, but our planning extends beyond that specific relationship.

In some respects KUSP is already where most of the sector is going in terms of revenue sources; almost 85% of our revenue is contributed by individuals and local businesses in the Monterey Bay area (with about 10% coming from federal sources and 5% from foundation grants). KUSP has never received local or state government support – unlike most public radio and TV organizations in the U.S., which are affiliated with and get financial support from universities or state governments

Were we ultimately able to gain significant “leverage” in terms of operating efficiency, we would over the middle term (2-5 years) be able to add programming staff, all of whom would need skills in audio recording and similar disciplines. Much of that skill base overlaps with the curricular areas covered by the courses listed on page 1. This assumes, however, that the overall support from the community for our public broadcasting activities can be maintained or increased (since the trend away from tax-based support seems to be irreversible).

A best-case scenario might increase our workforce in this area by 25% (or about two full-time-equivalent positions) over that 2-5 year time frame.

Please let me know if you would like further information. (Terry Green, KUSP)

► I think it would be great to have the A.A. Degree available. It can be used anywhere. If I was younger I would go for it. Thanks. (Jacqueline Wright, The Music Lady)

► Good luck! (Tim Prince, Ridgetop Sound)

APPENDIX B: Survey Respondents
Cabrillo College Survey Regarding the Proposed A.A. Degree &
Certificate in Music Technology & Recording Arts

- 1. ANTARES AUDIO TECHNOLOGIES**
Georganne Drayton, CFO
231 Technology Circle
Scotts Valley, CA 95066
831-461-7800 / 831-460-7801
georganne@antarestech.com
Software Plug-Ins
- 2. BANANA SLUG STRING BAND**
Doug "Dirt" Greenfield, Artist/Manager
P.O. Box 2262
Santa Cruz, CA 95063-2262
831-429-9806
dougdirty@bananaslugstringband.com
Children's Music Group
- 3. CAYUGA VAULT**
Amanda Mehl, Assistant
1100 Soquel Avenue
Santa Cruz, CA 95060
info@cayugavault.com
Music Venue
- 4. CROW'S NEST**
Blaine Neagley, Entertainment Director
2218 East Cliff Drive
Santa Cruz, CA 95062
831-476-4560
blainer@aol.com
Nightclub/Restaurant
- 5. ED CLAXTON GUITARS**
Ed Claxton, Owner
2523-B Mission Street
Santa Cruz, CA 95060
831-469-4563
emclaxton@aol.com
Acoustic Guitar Building
- 6. GADGETBOX STUDIO**
Andrew Zenezak, Owner
P.O. Box 8551
Santa Cruz, CA 95060 95060
831-588-7307
andyz@gadgetbox.net
Recording Studio
- 7. HILL GUITAR CO., INC.**
Kenny Hill, Owner
9011 Hwy. 9
Ben Lomond, CA 95005
336-9317 / Fax: 336-9428
khill@hillguitar.com
Guitar Making & Sales
- 8. INTL. ALLIANCE OF THEATRICAL STAGE EMPLOYEES (IATSE)**
Poco Marshall
Chief Call Steward
P.O. Box 7571
Santa Cruz, CA 95061-7571
831-458-0338 / Fax: 831-401-2379
citysteward@iatse611.org
www.iatse611.org
Trade Union
- 9. INDIGITAL RECORDING STUDIO**
Brody Bergholz, Owner/Engineer
419 May Avenue
Santa Cruz, CA 95060
831-588-2879
admin@indigitalstudio.com
Recording/Music Production
- 10. JEFF TRAUGOTT GUITARS**
Jeff Traugott, Owner
2523-B Mission Street
Santa Cruz, CA 95060
831-426-2313 / Fax: 831-426-0187
jeff@traugottguitars.com
Guitar Making & Sales

11. KEYFAX NEW MEDIA

Terry Shields, Manager
P.O. Box 958
Aptos, CA 95001-0958
831-477-1205
www.keyfax.com
Sound Engineering

12. KOBLO

Michael Logue, Director
3120 Main Street
Soquel, CA 95073
831-295-3909
mlogue@cruzio.com
Music Creation/Sharing

13. KUSP RADIO

Terry Green, General Manager
203 8th Avenue
Santa Cruz, CA 95062
831-476-2800 / Fax: 831-476-2802
terryg@kusp.org
Public Radio Station

14. MAGIC SOUND

Alan Goldwater, Owner
1780 Chanticleer Avenue
Santa Cruz CA 95062
831-475-7505
magicsound3@aol.com
www.magicsound.us
Studio & Acoustics Consulting

15. MORE MUSIC

Scott Cooper, General Manager
512 Front Street
Santa Cruz, CA 95060
831-458-2438
guitars@moremusic.com
Retail

16. THE MUSIC LADY

Jacqueline Wright, Owner
5736 Soquel Drive
Soquel, CA 95073
831-479-1807
the.music.lady@hotmail.com
Music Promotion

**17. PAJARO VALLEY PERFORMING
ARTS ASSOCIATION**

Julia Sauer, Business Manager
231 Union Street
Watsonville, CA 95076
831-763-4047
www.mellocenter.com
Theater Rental & Production

18. PARRISH PIANO STUDIO

Susan Parrish, Owner
4637 B2 Scotts Valley Drive
Scotts Valley, CA 95066
831-438-8081
Piano Instruction

19. PHANTASMA SOUND

Errol Specter, Owner
7909 Fremont Avenue
Ben Lomond, CA 95005
831-336-2494
phantasmasound@sbcglobal.net
Music Production

20. RIDGETOP SOUND

Tim Prince, Owner
2975 Fern Flat Road
Aptos, CA 95003
831-688-1023
ridgetop@cruzio.com
Recording Studio

21. SANTA CRUZ CO. SYMPHONY

Benjamin Short, Office Manager
307 Church Street
Santa Cruz, CA 95060
831-462-0553 / Fax: 831-426-1193
sccs@santacruzsymphony.org
Non-Profit Organization

22. SANTA CRUZ SOUND CO.

MaryLou Plate, Owner
950 41st Avenue
Santa Cruz, CA 95062
831-475-0768 / Fax: 831-479-7374
scsound@pacbell.net
Pro Audio Sales, Service, Rental

23. UNION GROVE MUSIC

Richard Gellis, Owner
1003 Pacific Avenue
Santa Cruz, CA 95060
831-427-0670 / Fax: 831-427-1915
www.uniongrovemusic.com
Retail Music Store

24. UNIVERSAL AUDIO

Matt Ward, President
1700 Green Hills Road
Scotts Valley, CA 95066
831-440-1176 / Fax: 831-461-1550
matt@uaudio.com
Pro Audio

25. VILLAGE MUSIC CIRCLES

Jamie Shuler, Marketing Assistant
719 Swift Street, #65
Santa Cruz, CA 95060
831-458-1946 / Fax: 831-459-7215
Jamie@drumcircle.com
Drum Circle Facilitation