

APPENDIX A CAREER EDUCATION (CE) SUPPLEMENTAL QUESTIONS

CE programs must conduct a full program review every 4 years. The comprehensive program review includes responses to the CE supplemental questions below. Every two years (once between full program reviews) these supplemental questions must be answered and submitted to Academic Affairs for posting on the College website.

Use labor market data, advisory committee input/feedback, and institutional and program-level data to respond to the following questions:

- 1. How strong is the occupational demand for the program?** In your response, describe any changes in demand over the past 5 years and discuss the occupational outlook for next five (5) years. Provide applicable labor market data (e.g., US Bureau of Labor Statistics, Employment Development Department) that address state and local needs.

The Digital Arts Program is geared toward the industry classification of *Multi-Media Artists and Animators*, which is defined as those who “Create special effects, animation, or other visual images using film, video, computers, or other electronic tools and media for use in products or creations, such as computer games, movies, music videos, and commercials.”

The data below from the California Employment Development website is for the sector *Multi-Media Artists and Animators*. The first diagram shows the statistics for demand and wages from 2018. The second diagram shows the same information for 2021. Projections for demand are typically a ten-year estimate.

Diagram 1: 2018 demand and wages: *Multi-Media Artists and Animators*

Los Angeles County is the same as Los Angeles-Long Beach-Glendale MD.

Occupational Wages [Top]

Area	Year	Period	Hourly Mean	Hourly by Percentile		
				25th	Median	75th
Los Angeles-Long Beach-Glendale MD	2018	1st Qtr	\$41.55	\$28.43	\$39.59	\$50.12

[View Wages for All Areas](#) [About Wages](#)

Occupational Projections of Employment (also called "Outlook" or "Demand") [Top]

Area	Estimated Year-Projected Year	Employment		Employment Change		Annual Avg Openings
		Estimated	Projected	Number	Percent	
Los Angeles County	2014 - 2024	12,500	13,140	640	5.1	298

[View Projections for All Areas](#) [About Projections](#)

Diagram 2: 2021 demand and wages: Multi-Media Artists and Animators

Los Angeles County is the same as Los Angeles-Long Beach-Glendale MD.

Occupational Wages [Top]						
Area	Year	Period	Hourly Mean	Hourly by Percentile		
				25th	Median	75th
Los Angeles-Long Beach-Glendale MD	2021	1st Qtr	\$54.96	\$31.14	\$48.03	\$67.72

[View Wages for All Areas](#) [About Wages](#)

Occupational Projections of Employment (also called "Outlook" or "Demand") [Top]						
Area	Estimated Year-Projected Year	Employment		Employment Change		Total Job Openings
		Estimated	Projected	Number	Percent	
Los Angeles County	2018 - 2028	12,840	13,890	1,050	8.2	15,570

As you can see in the first diagram, the previous estimate for employment demand in Los Angeles County covered the years 2014-24. At the time the projected jobs for 2024 in this field were 13,140. The average annual hourly wage in 2018 was \$41.55.

In the second diagram, the projections are for 2018-2028. Jobs are projected to increase to 13,890 in the Los Angeles area, and the 2021 median wage is \$54.96.

Statistics for the state of California similarly project an increase in jobs for this field, and also show that California by far leads the nation in these types of jobs. The table below reflects data from 2020.

States with the highest employment level in Special Effects Artists and Animators:

State	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
California	11,460	0.70	3.67	\$ 50.71	\$ 105,480
New York	2,000	0.23	1.21	\$ 47.48	\$ 98,770
Texas	1,250	0.10	0.54	\$ 31.13	\$ 64,740
Georgia	1,230	0.28	1.50	\$ 31.18	\$ 64,850
Washington	1,170	0.37	1.92	\$ 43.33	\$ 90,130

- 2. How does the program address needs that are not met by similar programs in the region?** In your response, identify any distinctive components of the program (e.g., curriculum, facilities, resources) and/or describe any unique contributions the program or its students/graduates make to the community served.

The only other community college in the South Bay to have a similar certificate program is Long Beach City College. West LA College, Southwest, and Compton College offer some courses in the discipline but not a certificate. The closest college to us with a large program is Santa Monica College. This leaves the El Camino College program as the most robust program at the community college level in an area where the majority of students are from groups under-represented in Digital Media industries.

The Southern California Regional Occupational Center, also located in Torrance, offers classes with high school credits only. CSU Dominguez Hills offers two certificates in the area of Digital Media, but are oriented toward television and sound production. Cal State Long Beach does not offer a certificate program in Digital Media, and their Design degree program is impacted.

Other comparable programs in the area are offered at private institutions, or through UCLA extension, and are extremely expensive in comparison to El Camino College and serve a different population. Students from our program have provided a service to the campus for over ten years by designing and producing the college creative arts journal (the Myriad) and working on specific illustration projects with the Union newspaper and the Center for the Arts.

- 2. What are the completion, success, and employment rates for students in the program?** In your response, identify the standards set by the program and discuss any factors that may impact completion, success, and employment rates among students in the program. Describe the status of any action plans for maintaining/improving rates relative to such benchmarks.

Completion, success, and employment rates

Certificates awarded 2018-2021: 3

Total awards 2018-21: 12

Transfers: 2

Success rate for 20/21: 59.7%

Course Completion 20/21: 78.3%

Enrollment 20/21: 95%

Analysis: The above data reflects the years impacted by Covid 19 and our forced move to online teaching. The program stayed remarkably stable in the number of certificates awarded (same as the previous 3 years) and retention actually rose a tiny bit, up from 77% in 2017. However the success rate dropped from 70% in 2017 to just below 60% in the last year. I believe this is due to moving instruction online in an emergency manner without training or preparation, the challenges faced by our student population in accessing technology and internet adequate enough to complete our courses, and the impact of the pandemic on our students' home lives as

well. Many of these issues have been addressed by federal funding in the form of the CARES act that enabled the college to purchase 1500 laptops and hotspots for checkout to students, and meeting the challenge of connecting our students to these opportunities by coordinating efforts by IT, Journalism, and Digital Arts to create a system that let students who needed this help know how to access it. Although it took 3-4 semesters to perfect, through that system we now have streamlined the process of matching students in need to the technology and software they require to succeed in our courses.

Identify the standards set by the program and discuss any factors that may impact completion, success, and employment rates among students in the program.

Completion & Success: The Digital Arts certificate is a rigorous 31-33 program that requires foundation studio and theory courses as well as a capstone independent study project. Success is measured 1) by completing all certificate requirements and receiving a certificate, 2) transfer to a 4-year program, 3) employment, and 4) successful completion of a course since we serve students with varying goals.

Obstacles students face in completing the program are:

1. Some required courses, including upper-level courses, are only offered once per year making it hard to finish within 2 years
2. Changes made at the Chancellor level to units and hours of lecture/lab courses have slowed down the curriculum process for adding intermediate and advanced courses.
3. enrollment into the required capstone independent study courses is competitive and limited, creating an impediment to completion.

Employment: At present the college does not track students once they leave the program, and they also do not track transfers to private colleges such as local art schools. In 2017 the college conducted a survey of students who had either completed a CTE program or completed over 9 units of CTE courses. The results are not broken down by program but overall, 89% of respondents were satisfied or very satisfied with their training, 55% were working and said that their CTE training had had a positive impact on their employment, 44% had transferred to another college or university.

Action plans for maintaining/improving rates relative to such benchmarks.

- Art 141 Digital Art Fundamentals is being designated as a gateway course and will be eligible for institutional assistance to support students in future.
- The classroom labs are being updated
- A new advisory board has been created with stronger ties to the animation industry
- Providing both online and in-person courses going forward
- A new hire to replace outgoing FT supervisor of the program
- Updating the certificate to remove the independent study obstacle and replace the requirement with upper-level coursework. All animation courses now have a second level.
- Increase focus on internships and training opportunities through our advisory board partners
- Consider breaking up the certificate into stacked certificates: Foundation, Intermediate, Advanced Project

- 3. List any licensure/certification exam(s) required for entry into the workforce in the field of study and report the most recent pass rate(s) among program graduates.** In your response, identify any applicable performance benchmarks set by regulatory agencies and describe the status of any action plans for maintaining/improving pass rates relative to such benchmarks. There is no exam for this occupation. Students require a portfolio of work samples for employment and transfer.
- 4. Are the students satisfied with their preparation for employment? Are the employers in the field satisfied with the level of preparation of program graduates?** Use data from student surveys, employer surveys, and other sources of employment feedback to justify your response.

At present the college does not track students once they leave the program, and they also do not track transfers to private colleges such as local art schools. In 2017 the college conducted a survey of students who had either completed a CTE program or completed over 9 units of CTE courses. The results are not broken down by program but overall, 89% of respondents were satisfied or very satisfied with their training, 55% were working and said that their CTE training had had a positive impact on their employment, 44% had transferred to another college or university.

The Digital Arts certificate is a broad foundational program. The 2021-22 advisory board feels that in order to be competitive in the fields of animation and games our students need to concentrate more on the studio fundamentals of drawing, life-drawing, painting, sculpture, and photography to build their foundation skills, and recommend adding a course on visual story development (storyboarding/animatics), as well as courses in animation and game design fundamentals, and a capstone course requiring a team project where art students could collaborate with students from other departments on a short animation or game. A series of stacked certificates could be beneficial, allowing students to start with the studio and digital foundation courses that would help them find an entry-level digital artist position, and then continue their training to move to the next level. Several short non-credit certificates were created in 2018-19 that could serve as a model to expand upon.

- 5. Is the advisory committee satisfied with the level of preparation of program graduates? How has advisory committee input and feedback been used in the past two years to ensure employer needs are met by the program?** Describe the status and impact of any advisory committee recommendations.

From 2020-22 I have been remotely attending the Los Angeles Area Regional Advisory Board meetings in Animation and the broader Graphics Arts and Design. From these meetings I have learned that the industry in general, and the animation industry in particular, is actively looking to diversify their workforce by creating internships specifically geared towards community college students and special training opportunities as well, realizing that our students need that extra help to compete with those coming from private art schools and universities. This new development, along with the rapid expansion of

animation and gaming production in the Los Angeles area, has led me to new advisory board members specifically in the areas of animation and interactive media.

The previous advisory board suggested a broad program so students would be able to pick their own path, also because a broader education would help to safeguard against ups and downs in the industry (such as were seen over the last 2 decades when many jobs went overseas). That is the model that was used for the current course sequence. The current advisory board feels that our students need more focused training in basic foundational skills such as drawing and painting, as well as filmmaking skills of story structure, camera and lighting, and group projects to develop soft skills and portfolio projects.

California Education Code 78016 requires that the review process for CE programs includes the review and comments of a program's advisory committee. **Provide the following information:**

- a. Advisory committee membership list and credentials.

Rabia Abedin, DreamWorks
Manager, Early Career Programs & Diversity Outreach
rabia.abedin@dreamworks.com

Grazia Como, Netflix Animation
Program Manager, Early Career Recruiting, Outreach & Engagement
gcomo@netflix.com

Dale Mulcahy, Treyarch Corporation, a subsidiary of Activision
VFX Manager
dale.mulcahy@gmail.com

Annie Hirata, DreamWorks
Technical Director, Feature Film
anniehirata2@gmail.com

Nick Smith
Independent CG/3D Artist, Los Angeles/Japan
nick@nickinmotion.com

- b. Meeting minutes or other documentation to demonstrate that the CE program review process has met the above Education Code requirement.

2020-22 Digital Arts Advisory Minute & Notes

Regional advisory board meetings:

11/13/20: Center for a Competitive Workforce (CCW) Regional Program Advisory Meeting in Animation

Summary: This meeting was attended by representatives from the Animation industry and representatives from area Community Colleges. From the animation representatives we learned that even in the time of Covid and remote work, the animation industry was strong and hiring new workers, there was discussion about the pipeline and a description of internship and training opportunities at various companies as well as a description of how a recruiter works and where they look to seek new talent. From the community colleges represented it was clear that many programs are general (such as ours) and some do focus more intensely on animation. Those that do have robust facilities with more focus on cinematics and a faculty with ties to the industry. These schools were suggested as good 4-yr schools in animation: Cal State San Jose, Fullerton, Northridge, Long Beach. Private schools are: Art Center, Otis, Gnomon, Laguna, Cal Arts

10/29/21: Center for a Competitive Workforce (CCW) Regional Program Advisory Meeting in Graphic Arts & Design

Summary: Similar to the Animation meeting, this meeting was attended by representatives from a broad array of design and digital industry representatives from area Community Colleges. We heard from representatives working in marketing, branding, digital production, design, and animators and motion graphics artists who work for Snapchat. We learned that with remote work, more jobs had opened up since now one can work for companies located anywhere. Also, there is much more digital work for clients since everyone is online. Communication and writing skills are very important especially since everything is presented online. Students need to know how to write an email, a proposal, and maintain an online presence. Soft skills were emphasized, and the business side of the industry, and there was agreement in the need to diversify the workforce. Industry would like to see more focus in our programs toward portfolios that show specific skills. Some companies provide mentoring. From the community colleges represented: Mission College offers non-credit workshops in business skills, and a club to work on group projects, such as pro-bono projects for community non-profits etc. to simulate real world projects.

ECC Digital Arts Advisory Board meeting 12/8/21: Minutes

Present: Joyce Dallal, Grazie Como (Netflix Animation), Rabia Abedin (Dreamworks), Nick Smith (independent animator)

Introductions

1. Grazie:
 - a. Been at Netflix Animation for three years, with the outreach and engagement team, so we specifically focus on emerging talent programs to help pipeline new to market talent into our productions. Specifically have three programs that we're focused on which is our writing apprenticeship, our story and our training programs. It's really an opportunity to help talent get their foot in the door, get them acclimated to working in a production environment and hopefully at the end of those programs kickstart their career so that they have longer term opportunities within our studios and across our productions. We do external engagements where we try and connect with a lot of different organizations or schools, just to kind of create more accessibility so

students and or faculty have access to an understanding of animation and what animation what we typically look for, so students can be prepared for those entry level jobs.

2. Rabia:
 - a. Been at Dreamworks about three years now, lead the early career programs in diversity outreach team. The early career programs include things like our internship program, training program and a few others that we're hoping to bring about next year. So anything related to junior level talent is my team, and we also oversee the diversity outreach for the studios so creating and executing a lot of initiatives as relates to finding and hiring diverse talent at all levels so we partner with our shows both in TV and feature to find artists that are historically underrepresented and we'll do that through a lot of entrepreneurial initiatives.
3. Nick:
 - a. Artist for 16 years working in animation field or for TV will be commercials. Been mostly a freelancer in Los Angeles and Hollywood I also work over in Tokyo. I worked a little bit at Otis college of Art and Design but I've always pretty much a freelancer. I have a small shop in Japan as well. I work with other studios, whether it be taking contracts on personally or working with their studios.
4. Joyce: Excited to meet everyone, welcome new members and welcome back old. Overview and history of program, discussion of challenges with Covid impact on instructions, under-preparation of students, infrequency of advanced courses and obstacles to completions. Importance of completion to justification of program continuation. Goal to see students gain skills to transfer and enter industry, happy that large companies are reaching out to Community Colleges to create pipeline for students.

Share 2021 Student show work. Feedback:

Nick: I would say the work being strong is most important, more important than doing all the coursework is to have a strong portfolio. Course work should lead to that.

Grazie: We don't require any degree for our programs, it does just come down to the personal skill sets and either they've achieved that in the program or not.

RE: Student work: the sense that I was getting in terms of some of the work is definitely there's some really great pieces but if there was alignment to animation specifically, I'm not quite seeing it. I think there's a lot of students that are doing interesting things related more towards like their personal interests, more of the Fine Arts side of things.

For something specific for animation this is where I think you need more of those advanced classes, where it really is taking those foundational skills: the painting, color theory, drawing, life drawing, and applying it to what is essentially film and cinematography and animation. That's the piece sometimes where I think there's a little bit of a disconnect in some of the programs, is taking those fine arts or foundational classes and then closing that gap to where it's being applied to an actual animation which is filmmaking, and I think that's a piece here that I'm not seeing in your curriculum. Unless I'm missing it I don't see anything like any film classes or cinematography classes or storyboarding classes.

Rabia: For the online gallery I was expecting to see a little bit more as relates to students who took the modeling and animation or motion graphics courses. Speaking from a recruiter lens, some schools have a student showcase with links to their portfolios; A Grad show or senior showcase with all the upcoming graduates and their portfolios right there, and disseminate all that that link to all the studios so we can take a look and see who we might want to hire.

General discussion: Importance of Animation Pipeline:

Nick: It is important to understand the animation pipeline, both 2d and 3D, so student skills relate directly to jobs. When people are bringing somebody in based on their experience they're going to want them to fit into one of these categories in regards to what they're coming in for and their reel needs to show that they will be able to handle themselves in any of these given categories. This is pretty much the Bible of production, you know this is how we go from start to finish, we go from storyboard to you know selling the tickets. It's good that they're able to express themselves in artistic way, but at the end of the day it's not just the art side it's also the ability to use this skill set within the production pipeline, whether it be modeling, motion graphics, lighting etc, these are all core skills needed in the industry. And they're going to have to show proficiency in some of that. It's good for them to show that they're creative but also to show a breakdown that they have an understanding of these things, then that's going to help them get a leg up for internship. I'm a generalist so I had to learn all of these different things, whether it be lighting, shading, effects, animation, rigging, all that stuff. They need to show proficiency in that, whether it's called games or commercials or any label you want to call it. We're all using the same tools and we're all using the same skill sets. A video game is nothing more than an animation loop, and being an animator you have to understand how to actually make that animation loop. It's all the same tools to make a commercial or a movie. I worked on video games, I worked on movies, the software is all the same. I mean you're working with 3ds Max or you're working with Cinema, these are some of the industry standards that we are working in to get these things done.

Suggestion: Could the animation companies create 1-2 internship positions with preference for students who complete, as long as that means their skills are guaranteed to be up to par. Creativity is important but they also need to demonstrate they know the skills. Tailor the syllabus to the skills they need to show in their reel to show potential employers that they can do the job.

Rabia: Dreamworks doesn't look at portfolios for the internships, we look at the resume. We have a good chunk of our internships that are in production. So if there is a student who wants to become a modeler one day, but our modeling department doesn't have a need for a modeler right now because of their their production schedule, they might want to still have a production intern. So for those internships you don't need a portfolio. But like Nick said, having that basic understanding and that passion for animation and would pretty much suffice in order for them to be an eligible candidate for training. When we go to schools, we talk about what our pipeline looks like and what we're looking for an intern and those are some of the key aspects. Knowing that they're coming out of currently studying animation, illustration, etc at a junior college or college, wherever it may be is pretty much enough, as long as they have the soft skills and the

professionalism and emotional maturity to do an internship. There are internships that will be of a more artistic nature, and in that case the job description will say a portfolio is required.

Grazie: Netflix not offering internships at present. Where we've focused is on our training programs, because, as I mentioned before, the goal is to really get people into the door and then actually place them so that they have long term opportunities. We are looking at portfolios and looking for those strong foundational skills, so plus one to everything that Nick said. We're looking for those folks that have that at least that base understanding of a production pipeline and what those specific areas are and that they can demonstrate that in their portfolio in some capacity or other. Because to be really transparent, it's very hard for a studio to take someone who doesn't have those skill sets at all and train them. At some point there's only a certain amount of time that's given to train someone to get them production ready. So for productions, everything is based on portfolios and the strong understanding of foundational skill sets.

Curriculum

Grazie: I've seen some schools that just focus on film making, storyboarding, and art/design, and some that focus solely on CG/3D and touch on filmmaking, story, and art. I point this out as it may be best to start by determining what your curriculum can support right now and further leveling up those classes versus trying to bring on more tracks and addressing every part of the pipeline. I'm happy to speak more about other academic programs that have pretty well-rounded animation programs in place.

Portfolio/reel

Nick: Is there a portfolio or DEMO reel class that you have already? That's the cherry on top, that's the moneymaker right there in regards to them getting from point A to B. For the reel, I would say to err on the side of caution: show two to three skill sets within your reel. I work as a generalist, I have a focus in modeling and I love everything modeling related but I'm a generalist because some places go by algorithms and then, if you only put one skill then you're immediately cut out of the algorithm. But if you have at least two or three different skill sets then you're at least headed to the algorithm and then they're going to give your reel to those departments for the supervisors to see. So if they're showing two to three skill sets like lighting or modeling then that that can really help them get to the other side because, if they don't need modelers at the time, maybe they need lighters. Lighting is a very overlooked skill set and in a lot of schools, nobody trains the lighters properly, most people learn lighting on the job or they learn digital lighting. There's always a need for lighters, it's not always about animating the characters but about animating the camera itself. They should understand how to work a camera. These are things that aren't necessarily focused on always but if they're able to show that skill set within the reel, you only need the door cracked open and after that you should be able to shine.

Reel suggestions:

Nick: There are no templates out there really, but students should show those skill sets and spell it out for them in the beginning, like "I am a lighter and I am a blah blah artist." Make it

very clear that these are the pieces that I'm showing and I want you to focus on this, and after that is just a matter of decent editing, and no irritating music, and a good flow going like you know anywhere from 30 seconds to a minute and a half. Nobody's trying to watch a five minute reel. Even if you don't have that much work, if you have one piece, and show the breakdown of the piece to show that you have the understanding. That would be a good demonstration and if you have that, four times out of five, you've just shown that's your little showcase of you having a working knowledge or understanding of the given area that you said that you would like to work in.

Grazie: Instagram is a great place for students to look at industry artists' work for reference on designing for animation and/or building an online presence/portfolio. If there are animated films or series that students really love I always recommend they look at the credits and pull names from the different departments and just start doing research. This will lead them to more direct examples of animation portfolio's/reels. Also, recruiters tend to source talent on Instagram in addition to online websites.

Wrap up: we arranged for Dreamworks to do presentation over winter in Art 195, and discussion of future meetings for Spring.

Minutes from 12/13/21 DA Advisory Board Meeting Joyce Dallal, Annie Hirata (Dreamworks), Dale Mulcahy (Treyarch)

1. Introductions
 - a. JD: overview of DA program
 - b. Annie: Loved animation and art in high school, went to ECC in art, took Art 141, realized she wasn't suited to traditional studio art but more interested in digital. Switched to engineering and coding and transferred to UC Irvine in their CG program. Realized coding is another path to animation and is creative too. Did tech jobs until Covid, then switched and took one of the Dreamworks' summer training opportunities which ended in a job as technical director. As tech director she works with animators to help create code to animate things.
 - c. Dale: learned to draw from copying comic book drawings, went to Ringling school of art in Florida, eventually did more training and series of jobs got him into game industry in CA, currently VFX supervisor at Treyarch.
2. Pipeline
 - a. Game industry pipeline similar to animation: story and visual concept: including characters, world design, genre, audience, gameplay, monetization, then prototype with low quality assets, then production—where story is refined and create final characters, creatures, props and environments, create code. Whole process can take few years. Many different jobs involved. Artist jobs are concept art (2D and 3D. Photoshop, Zbrush, Maya), animator (storyboards, makes things move), 3D modeler (builds the models in 3D), FX (add effects-Houdini, Maya, Unity, Unreal). Also, acting, sound design, editing, testing...
 - b. Animation pipeline: script and storyboard (done here), assets designed and created, animation often done overseas. Foundation drawing skills essential. Also visual storytelling—cinematic skills, editing, how to put visual narrative together. For technical director job: drawing fundamentals and the Maya course would be important, along

with intro to coding courses, but not web coding. Rigging and shading also technical jobs.

3. ECC student work and feedback:
 - a. For jobs, students need to show reel with specific skills. Our program is very general right now. Drawing and storytelling important for everything. Software can be learned. Group projects can give roles to each member, reel can showcase their part.

Netflix Meeting 1/17/22

Present:

- Grazia Como- Animation O&E
- Bri Contes - Animation O&E
- Gary Pritchard, Dean of Fine Arts, Cerritos College
- Curtis Stage: Chair, Multi-media Mission College
- Joyce Dallal, Professor Digital Arts, El Camino College

Meeting Notes:

C. Stage:

For animation: storyboard and concept art are jobs that are staying here (not overseas). These should be focused on. They require multiple levels of drawing, including life drawing, and computer classes. Drawing skills and story development key.

- For storyboard: Also storytelling/film/photo for camera angles, narrative structure.
- Concept art: also painting, color, photo for lighting
- Mission College has 2D/3D/stop motion tracks in animation sequence. Stop motion helps with story structure—have to complete project.
- For 2D teach After-effects and Animate. 3D-2 classes in Maya. Also team projects which teach communication, soft skills, production timelines
- 12 class degree (Mission) has 130 animation students
<https://www.lamission.edu/Careers/Multimedia-Studies-Animation-and-3D-Design.aspx>
- LAUSD Prep program for animation in pathway schools
- course for animation students at local high schools, traditional animation class plus career information about pipeline and the different jobs.
- Hire people with experience in industry to teach

GComo:

- Check out the Bric Foundation: <https://bricfoundation.org/> Organization working with state for animation/game pathway at high school level
- Yes: Storyboard and concept art are the most important areas. Focus on the storytelling and drawing skills, not the technical ones. Concept and visualization are key. Drawing and Painting skills required. It is hard to fill these jobs.
- Netflix had 2000 applicants to their storyboard/concept training program but only 371 students had the skills. Important skills are drawing, draftsmanship, knowledge of story structure (film-making) visual storytelling, camera, staging, acting, and how to tell a story. Recommends a beginning production class in film, and studio photo classes for lighting in addition to drawing and painting.
- Netflix uses storyboards not animatics. The camera moves are indicated on the storyboards.

- Recommends group projects. Look at Texas A&M Visualization program and Clemson U Digital Production course. A 10-week program to produce a 30 second short.
- Emphasize personal stories to develop authentic voices

Other comments:

- Pathways are important to guide the students so they when to take courses. Also we could collaborate with other community colleges to provide more diversity of courses, especially now that there are remote options.
- CTE courses are supposed to be fast-tracked through the curriculum process according to the state.
- We can also modify the syllabi of existing courses by taking this industry advice direct to the instructors so they can incorporate into the existing courses. This is faster than writing new curriculum.
- Transfer Degree: Build relationships with CSUs. Good animation programs are at San Francisco, Fullerton, Long Beach, San Jose, Northridge
- CSU Entertainment Alliance: <https://www.calstate.edu/CSUEA/Pages/default.aspx>
- Cerritos Program map: <https://programmap.cerritos.edu/academics/interest-clusters/07b259a7-cdc0-4b27-aa29-dfa341b3a7e9>
- All the advice given also extends to gaming
- Mission College has a non-credit “Design Hub”: Club for students to work on professional projects. A hands-on program that partners with companies. Students have to apply, show a portfolio.

Digital Arts Advisory meeting 3/23/22 minutes

Present: Dale Mulcahy (Treyarch), Annie Hirata (Dreamworks), Grazia Cuomo (Netflix), Annette Owens, Joyce Dallal, Anya Zinoveva, Diana-Sofia Estrada

Current state of the program:

1. What we have now is a foundation program, and it is much more geared to graphic design than animation
2. Over 30 years have seen ups and downs and changes in industry. Current certificate reflects 2 things:
 - a. Downturn in vfx resulted in broadening the program so students would have more diverse skills, experiences. Allow them to pick their own path.
 - b. Recession resulted in many classes being cut and not restored, so loaded up with courses so students wouldn't get stuck—but watered down the program
3. Pasadena program: foundation certificate and then animation as separate certificate
4. State of things now: New hire will continue to lead program. I can give recommendations. I will give contacts of advisors and will be up to them to decide on direction in tandem with department.

Minutes

- Brief Introductions. Adjunct instructors were invited to attend as well as advisors

- The current state of the program (see above)
- We looked over current list of courses—what should stay, what should go, what should be added. What would be considered foundation, what might be put into advanced certificate.
- For a game design track: Dale recommends a whole class in game design using paper mockups, then 3D modeling class(es), and a very simple game design.
- Best for students from different departments to collaborate with CIS student engineers doing coding. A game design program would need collaboration.
- Recommendation of Python for coding for animation, Unreal (free) for games
- Look at Cal Poly San Luis Obispo game program as a model robust hybrid program combining creative and technical

What is missing from our program:

- Visual storytelling—storyboarding/animatics
- Include life drawing and photo classes in required core
- Draftsmanship is important for character design, world building, and prop design
- Focus on the artistic side of animation: Visual development, storyboarding and CG all have unique set of skills that all work together
- Sculpture can be helpful background experience for 3D work, but not essential
- Camera and lighting (photography experience) are important to 3D modeling and animation
- Animation fundamentals, modeling techniques, lighting and camera all needed
- Rigging is complicated, in order to concentrate on the animation part in 3D, good to use free resources of rigged characters
- A survey course on the industry and pathways would be a good addition
- Overall recommendation: focus on the basics and fundamental skills. Communicate with the 2D area: drawing, painting, illustration—can include digital tools in their training, animation drawing skills such as motion, gesture, animals as well as figures, characters, worlds, and higher levels to Illustrator and Photoshop courses too.
- Also remember to keep courses that students need to get into entry-level jobs now. Games and animation jobs are longer term goals, for those goals transfer, internships and training programs are the next step.
- Would be good to indicate pathways in the list of courses