



Business, Consumer Services and Housing Agency– Governor Edmund G. Brown, Jr.

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MEMORANDUM

DATE	12/01/2015
TO	Advisory Committee Members
FROM	Ben Triffo, Legislative Analyst on behalf of Task Force Members – Innovative Subject Matters
SUBJECT	Task Force Report

Background:

Pursuant to Education Code section 94880.1(a)(3), the Task Force transmits the attached report, entitled “Coding the Future: Recommendations for Regulatory Oversight in the High Technology Education Field,” to the members of the Advisory Committee. The Task Force’s report includes its recommendations and findings to the Legislature on each of the following:

- Whether students attending institutions should receive certain disclosures prior to enrolling in an educational program offered by those institutions.
- Whether the means of reporting student outcomes and the content of those reports are appropriate.
- The steps the state may take to promote the growth of high-quality training programs in skills for high technology occupations.

Action Requested:

To review the report be prepared to discuss and take action on it at the February, 2016 Advisory Committee meeting. Specifically, pursuant to Education Code section 94880.1(b), the Task Force requests that the Advisory Committee approve the report so that the Bureau may provide the approved report to the Legislature no later than July 1, 2016.

Coding the Future

Recommendations for Regulatory Oversight in the High Technology Education Field



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Executive Summary

The origins of the Task Force begin with Senate Bill 1247 (Lieu, Chapter 840, Statutes of 2014), in which the Bureau was charged to create a Task Force to review standards for education and training programs that specialize in innovative subject matter and instruction for students in high-demand technology fields for which there is a demonstrated shortage of skilled employees (High Technology Program(s)). Specifically the Task Force is to report on: (1) the disclosures students should receive prior to enrollment at such an institution; (2) whether the means of reporting student outcomes and the content of those reports are appropriate; (3) and steps the state may take to promote the growth of high-quality training programs in skills for high technology occupations. California Education Code (CEC) § 94880.1.

When it comes to private postsecondary education there is a wide variety of programs a student can choose from when considering a course of study, and institutions offering High Technology Programs are becoming a popular option. These programs offer an immersive collaborative training in high-technology fields, and are teaching their students skills for jobs which there are demonstrated shortages. There has been tremendous growth in this sector; in 2014 there were 6,740 graduates nationally from institutions offering High Technology Programs, with an estimated 16,056 graduates for 2015. In 2014 the average program length was 10.8 weeks, with an average tuition price of \$11,063.¹

Despite the rise in graduates, there seems to be a gap between the amount of highly skilled employees and the amount of job openings. Both Web and Software Developers are listed as two of the top 50 fastest growing occupations in California; with Software Development also being listed in the top 50 for occupations with the most job openings in California. These jobs generally do not require a traditional four year college degree, and often result in wages that are one and a half times higher than the average American private-sector job. Unfortunately, the lack of highly-skilled employees, coupled with a booming tech industry, has created a skills gap that is struggling to be filled. Institutions like those mentioned above work to reduce this gap, and as such there has been an increase in the amount of institutions offering these High Technology Programs.

With an increase in High Technology Programs being offered, along with an increase in graduates; there is a need to ensure that students are being protected, and that there is a necessary amount of oversight from the Bureau for Private Postsecondary Education (Bureau) on institutions offering these programs. With this, the Bureau oversaw the creation of a Task Force to address these items, along with other duties outlined in Senate Bill 1247 (Lieu, Chapter 840, Statutes of 2014).

The recommendations in this report build upon current Bureau laws and regulations, and helps ensure that California continues to be on the forefront of technology and innovation. The recommendations are the result of input from stakeholders over a nine-month span that can be used to provide statutory direction, regulatory analysis, and Bureau actions with a goal of ensuring consumer protection, and reducing the skills gap that exists within this given portion of the labor

market. Founded upon these ideas, the Task Force report aims to address the following issues. For detailed recommendations, please see the corresponding sections of the report.

Disclosures

Students attending private postsecondary education institutions currently receive a wide set of disclosures from an institution prior to enrollment, the primary of which are the enrollment agreement, course catalog, and School Performance Fact Sheets (discussed in a later portion of this report). The Task Force recommends the following actions to ensure that students attending High Technology Programs are adequately protected.

Task Force Recommendations:

1. Introduce a new component of the course catalog that addresses the rigor involved with the program.
2. Include in the course catalog a detailed section that discusses career guidance services.
3. Add to the enrollment agreement an area for students to attest that they have been provided information on program rigor and career services.

Reporting of Student Outcomes

As discussed earlier, one of the key disclosures provided to a prospective student is the School Performance Fact Sheet (SPFS). The SPFS provides the prospective student with various statistics and figures that show the outcomes of recent graduates of said institution. In order to ensure that outcome data is accurate and that the SPFS is relevant, the Task Force recommends the following items in order to enhance student protection.

Task Force Recommendations:

4. At a minimum, conduct a pilot program that reports salary/wage information by institution from High Technology Program Graduates
5. Modify the SPFS to create a unique disclosure that is a better fit to the characteristics of High Technology Programs.

State Steps

California has always been known for fostering a landscape of innovation and diversity; and when it comes to acquiring high-technology skills, it should be no different. The skills gap will shrink as there are more qualified applicants entering the labor force, helping meet market demand. In order for this to happen, the Task Force recommends an expedited approval to

operate process for institution's offering High Technology Programs, and to increase outreach to communities that typically would not have access to high technology skill development.

Task Force Recommendations:

6. Modify the approval to operate application process to create an expedited process for a school wishing to offer a High Technology Program in order to decrease application turn times, shift the burden of responsibility from the Bureau to an institution, and bring prospective employer validation to each program.

7. Increase state outreach efforts towards underserved and underrepresented communities to spread awareness of a rapidly growing industry through strategic partnerships with existing programs.

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The Landscape

During the late 1980's, private postsecondary education was regulated by a division within the State Department of Education. It was during this time California developed a reputation as the "diploma mill capital of the world". The result was growing concern over the integrity and value of the degrees issued by private institutions. Senate Bill 190, the Private Postsecondary and Vocational Education Reform Act of 1989 (Reform Act) overhauled the state's regulatory program and oversight authority of private colleges was transferred to a 20 member Council, which operated as a separate entity under the umbrella of the Department of Education. Concurrently, the Maxine Waters School Reform and Student Protection Act was adopted, which expanded the requirements and standards for private institutions with respect to solicitation, recruitment, enrollment, and school performance.

In 1995, The California Postsecondary Education Commission found that as many as 1,000 unapproved institutions were still in operation in the state and the Council lacked the enforcement power to address such a violation. In 1997, Assembly Bill 71 (Wright Act) was enacted in 1997 creating the Bureau for Private Postsecondary and Vocational Education (BPPVE), concurrently moving the oversight of these institutions to the Department of Consumer Affairs (DCA). However, the Wright Act simply transferred responsibility for administration of the Reform Act to the BPPVE, and extended the Reform Act's sunset date. On January 1, 2007, the regulatory authority of the BPPVE was allowed to sunset, dissolving the Bureau and leaving the state without a regulatory body to oversee private institutions and ultimately, protect students.²

Bureau for Private Postsecondary Education

In 2009, the Legislature and the Governor reached agreement on the need to regulate these institutions and enacted the Private Postsecondary Education Act (Assembly Bill 48, Portantino, Chapter 310, Statutes of 2009), thus creating what is now known as the Bureau for Private Postsecondary Education (Bureau) under the California Department of Consumer Affairs. Today, the Bureau is responsible for, among other things:

- Protecting consumers and students against fraud, misrepresentation, or other business practices at private postsecondary institutions that may lead to loss of student tuition and related educational funds;
- Creating and enforcing minimum standards for instructional quality and stability for all students in private postsecondary education and vocational institutions; and
- Establishing and enforcing minimum standards for ethical business practices, health and safety, and fiscal integrity of postsecondary education institutions.

Founding of the Task Force

In Senate Bill 1247 (Lieu, Chapter 840, Statutes of 2014), the Bureau was charged to create a Task Force to review standards for education and training programs that specialize in innovative subject

matter and instruction for students in high-demand technology fields for which there is a demonstrated shortage of skilled employees (High Technology Program(s)). Specifically the Task Force is to report on: (1) the disclosures students should receive prior to enrollment at such an institution; (2) whether the means of reporting student outcomes and the content of those reports are appropriate; (3) and steps the state may take to promote the growth of high-quality training programs in skills for high technology occupations. California Education Code (CEC) § 94880.1.

The California Employment Landscape

When viewing the California employment landscape, it is clear that there is a disparity between the amount of skilled employees and the number of available jobs. According to the California Employment Development Department's (EDD) Labor Market Information Division, in California alone between 2012 and 2022 there will be a projected combined 69,400 unfilled Software Developer (both Systems and Applications) positions within the state's economy; with both positions being in the top fifty fastest growing occupations in California.³ This data evidences a skills gap that is preventing work force participants from meeting employer demand.

The skills gap has begun to be addressed on the national level as well through the White House's TechHire Initiative. According to the TechHire Initiative, "Employers across the United States are in critical need of talent with these skills. Many of these roles do not require a four-year computer science degree."⁴ This is supported by a recent study by the Bureau of Labor Statistics, which shows that there are currently over half a million unfilled jobs in information technology throughout the entire U.S. economy. These vacancies represent approximately 12% of the openings in the United States, the largest of any category.⁵ It is strange that there are large numbers of vacancies within the sector given that, "IT jobs in fields like cybersecurity, network administration, coding, project management, UI design and data analytics offer pathways to middle-class careers with average salaries more than one and a half times higher than the average private-sector American job."⁶

Task Force Methodologies

Membership Composition

After the Bureau established the Task Force by March 1, 2015, the Task Force began by holding seven meetings between April and December 2015. Pursuant to statute, the Task Force consists of two members from the Bureau's Advisory Committee (namely the Advisory Committee Chair and a past student of an institution), a Postsecondary Education Expert, and two institution affiliates. The Bureau's Chief was also present at meetings to provide input. It was because of this makeup and public meetings that the Task Force was able to draft recommendations that took into account input from their individual members, along with pressing issues directly from the Bureau, as well as public concern. This blend of input led to robust meetings and discussions to ensure that the needs of private industries was met through responsible and fair regulatory proposals, and that students would not be victim to predatory practices that can occur in the private postsecondary industry.

Guest Speakers

During their meetings the Task Force heard from a variety of speakers that included Bureau representatives, former students, institution representatives, employers of graduates of these institutions, and a subject matter expert⁸. Two Bureau approved institutions, Dev Bootcamp and General Assembly, assisted in securing a panel of three former students, and a panel of three employers of graduates. Concurrently, they also secured speakers from each of their respective companies.

The Task Force attempted on numerous occasions to invite representatives from various state agencies to speak on the need for state action related to the high technology workforce demand. The Task Force hoped to learn what plans various agencies within the state had to address the high technology skills gap, along with any outreach efforts that are taking place to reach underserved communities. While many individuals who were contacted recognized the need for action around these topics, due to various circumstances these guest speakers did not materialize.

Student Complaints

The Task Force considered various student complaints against institutions that offer High Technology Programs. Bureau staff compiled and presented to the Task Force a comprehensive summary of complaint themes about these programs. Public advocates provided links to blogs and articles that recounted in great detail individual student experiences while attending a High Technology Program, and Bureau staff included summaries of those experiences for the Task Force to review. Common themes from these experiences were compiled along with themes from complaints received by the Bureau from students who attended similar institutions. The Task Force performed a robust review of the summary of the complaints from both the Bureau and industry websites. These complaints were reviewed and taken into consideration when recommendations were being determined. This report includes attachments of and references to said complaints, testimonials, meeting minutes, meeting webcasts, and expert opinion.

What is a High Technology Program?

Inevitably, as is the case with most market demands, there is often an opportunity created for entrepreneurs. The skills gap present in not just California's economy, but the national economy has led to institutions offering High Technology Programs that train students in high-demand skills. Given that these High Technology Programs do not resemble a traditional classroom and educational model, the Task Force decided that there needs to be a broad set of current characteristics that can be used to classify an institution as having a High Technology Program as of December 2015. Due to the fluidity of the technology sector, however, it must be noted that these characteristics, like the sector, are constantly evolving. It was determined that a High Technology Program typically:

- Provides instruction on innovative subject matters that will prepare graduates for highly skilled employment in which the graduates are proficient in the theoretical and practical application of these innovative subjects. These subjects may include, but are not limited to:
 - Computer systems and analysis;
 - Data science and analytics;
 - Programming;
 - Software engineering and development;
 - Computer science;
 - Coding;
 - Analysis, design, business and marketing associated with these innovative subject matters.
- Is non-credit bearing, with a length of less than 600 clock hours or 20 weeks, and is offered by a non-accredited institution.
- Focuses on soft skill development, is collaborative in nature, and is project-based and competency driven, in which the program's skills are defined and assessed based upon workforce demand and employer feedback, and are graded on a pass/fail basis.

Approach and Methods for Protecting Students and Fostering Growth

The Task Force believes that ensuring student protection, while cultivating a landscape of innovation are imperative to the strength of California's economy and the upward mobility of its residents. Based on the public testimony summarized below, the Task Force advises that the California State Legislature adopt and implement the recommendations discussed below, and allow High Technology Programs to meet California's workforce demands.

Disclosures

Under current law, there are a variety of disclosures that a student must be provided prior to enrollment in an approved private postsecondary institution. Two of the primary required disclosures that are provided are the school catalog and the enrollment agreement, and a third being the School Performance Fact Sheet (SPFS) which will be discussed later in this report. Collectively, the goal of these disclosures is to ensure the protection of the student and their ability to make well informed decisions regarding the institution and course of study that they wish to pursue.

Topics covered in school catalog and enrollment agreements include, but are not limited to:

- General institution information, along with program specific details (including a description of instruction provided)
- Detailed information on a student's right to cancel/withdraw and refunds
- An itemization of all institutional charges and fees
- Certification that student has received the catalog and School Performance Fact Sheet
- Faculty qualifications

- Admissions, probation and dismissal, and attendance policies
- Whether the institution participates in federal financial aid
- If the institution provides placement services, a description of the nature and extent of the placement services
- Bureau contact information

Public Testimony

With this information in mind, the Task Force believed that it was necessary to learn more about how different institutions disclose specific information to students and heard testimony from institutional representatives, former students, and public commentators.

Summary of Institution Testimony

The Task Force first spoke with representatives from two Bureau approved institutions offering immersive High Technology Programs - General Assembly and Dev Bootcamp. While these institutions had fundamentally different missions and student communities, there were many similarities in the disclosures that each institution provides to its students.

Both institutions noted that they view the disclosures as part of a greater admissions process. General Assembly's admissions process begins with an application, followed by an interview with an admissions representative. This interview is designed to review time commitment, and the resources required for the program and serves as the initial informal disclosure about the expectations and realities of each student. Following the interview, students complete a coding exercise designed for applicants with no coding experience. After the coding exercise the prospective student completes an interview style activity known as the "Fit Test" to determine if the individual will work well in groups, and that their admissions are a match for the program. Following this "Fit Test" the applicant will meet with an instructor to go over the results of the coding exercise and debrief about the previous admission activities. Should the applicant complete the entire process, they are offered admission. Prior to final enrollment however, students are provided with a school catalog that outlines course information, graduate information (employment, salary, etc.), time commitments, and overall student expectations. In the same vein, representatives from Dev Bootcamp noted their admissions process is fairly similar to that of General Assembly. During the application process, prospective students are directed to former student testimonials, along with responses to Frequently Asked Questions. After an application has been submitted, the prospective student will have an interview with an alumnus, wherein they are introduced to the Student Code and Student Agreement. These documents outline the time commitment, and expectations of the prospective student. After the interview, if the student is viewed as a fit for the program they will be offered admission. Both institutions attempt to be as upfront as possible with all potential students about the rigor and demand of their programs. After a student has been granted admission, both institutions have an "on ramp" program for students (Dev Bootcamp's "Phase Zero" and General Assembly's "Pre-Work"). The on-ramp programs, which can also be understood as an informal orientation, are online based, and serve as an introduction for the student to their class cohort, begin

interaction with coaches and faculty (having continued discussions on expectations), and start to lay the foundation of their knowledge.

After discussing the admissions, and the pre-work process of both institutions, the Task Force felt it was important to be informed of any feedback from current or former students received by the institutions regarding disclosures. The intuitions self-reported that more often than not students note they would have liked to have been more aware of the intensity of the program. Both General Assembly and Dev Bootcamp are rigorous and intensive programs that seek to immerse students and challenge them to learn new, high-technology skills in a fast-paced environment. Representatives reported that typically six weeks into the programs students “hit a wall” and tend to struggle in overcoming challenges presented to them. Accepting this reality and seeking to promote greater student resource and stress management, General Assembly provides a support structure for students through constant access to instructors and one-on-one advice. Along with on-location alumnus to help give advice to students, Dev Bootcamp takes a more unique approach by having mandatory on-site therapy sessions, as well as required yoga classes once a week. Both institutions noted that while it is important to be as transparent as possible about the program rigor prior to enrollment, student responsiveness, organization and work ethic play significant roles in reacting to the difficulty of such programs.

Summary of Former Student Testimony

After speaking with institution representatives, the Task Force spoke with three recent graduates from both institutions. Similar to the institutions, each student came to their program with a different background, and for a different reason, yet there were common themes present between each of their experiences. The first item that was overlapping in each student’s experience was the transparency of the institutions. All three students noted that each school was upfront and honest about the rigors and expectations of the program; and that they were not surprised by the workload when they began their programs. They were provided student testimonials, frequently asked questions, school catalogs, as well as student expectations. With all of the documentation that was provided, they were fully aware of what to expect when they started the program.

An additional shared experience between all three students was their exposure to their “cohort groups”, or the other students who are enrolled in the program along with them. While the students felt that they were given ample time to interact with their cohort groups during the on-ramp period, they wish that they would have been provided some additional information on their peers, as well as on those who were in cohorts before them. This information could have provided valuable insight into the skill levels of their future peers, as well as allowed them to see the results and experiences of previous students. To this extent, some of the students felt that a more selective admissions process would lead to more successful cohort groups.

The final item that was apparent across all three experiences was the on-ramp period. All three students felt that this process was beneficial to their learning curve during the program. The on-ramp periods allowed for the students to bond with the fellow members of their cohort group, and at the same time begin to build their knowledge base. However, there were also shared ideas on what could be changed

during this process. It was made clear that the pre-work during this period should be mandatory. Students who dropped out of their cohort more often than not were students who did not complete their pre-work. Along with pre-work being mandatory, there was recommendation that this work be more technical in nature. Students felt that at times they felt overwhelmed by all the tools at their disposal, and that the on-ramp period would be a perfect opportunity for students to become acclimated to items at their disposal. All students noted that though there are improvements that can be made, both institutions were extremely transparent when it came to expectations of the student; and that ultimately the responsibility is on the student to be prepared themselves with the information that they are provided.

Student Complaints

After hearing the above testimony, the Task Force reviewed complaints from students who attended institutions offering High Technology Programs. In particular the following complaints pertained to the program's rigor, and what to expect from their educational experience:

- The school did not deliver as promised and students had to teach themselves. There was a lack of guidance and education from instructors.
- The institution's website was misleading; they advertised that no coding experience was needed, but the course work was not at an introductory level.
- Though the instructors were great coders they did not provide a quality instruction. There was a lack of support from the instruction staff.
- Some instructors were recent graduates from the institution.
- The pre-work was not adequate preparation if you had no prior experience.
- The Outcomes and Job Assistance Staff changed multiple times, making you feel that you are on your own for your job search.
- The "Recruiter Network" that was promised did not seem to exist, had to find a job on craigslist.

Recommendations:

After reviewing the above testimony, the Task Force determined that there are notable differences between traditional private postsecondary institutions and those that offer High Technology Programs; and that there is additional information, outside of what is currently required, that should be provided to prospective students. These additional disclosures will ensure that student protection is being met and that students are able to determine if a High Technology Program is a fit for them.

1. Introduce a new component of the course catalog that addresses the rigor involved with the program.
 - a. Detail program specific expectations and characteristics; including but not limited to pre-work requirements, the collaborative nature of the program, and time commitment.
 - b. In order for this information to be beneficial for institutions, sample language has been included in Appendix B.
2. Include in the course catalog a detailed section that discusses career guidance services.
 - a. Provide specific details regarding expectations from both the student and the institution.

- b. List any specific soft skill development that will be targeted and developed throughout the program and career guidance services.
 - c. In order for this information to be beneficial for institutions, sample language has been included in Appendix B.
3. Add to the enrollment agreement an area for students to attest that they have been provided information on program rigor and career services.

Reporting of Student Outcomes

Along with the enrollment agreement and course catalog, another primary disclosure that helps ensure student protection is the School Performance Fact Sheet (SPFS). The SPFS is the primary means of reporting former student outcomes to prospective students. Students rely on this data to make informed decisions when it comes to selecting a career path, as well as an appropriate institution. With this in mind, the Bureau requires certain data points to be captured on this document.

With a SPFS, a prospective student can ideally view a given program's:

- On-time Completion Rates
- Job Placement Rates
- State Licensure/Exam Results
- Salary and Wage data for students with employment in a related field of study
- Cohort Default Rate

Public Testimony

In order to obtain a better understanding of the reporting of student outcomes as they pertain to High Technology Programs, the Task Force again heard testimony from representatives of Dev Bootcamp and General Assembly, along with former program students, Bureau representatives, various members of the public, and a subject matter expert.

Summary of Institution Testimony

The institutional representatives stated that it is important to them to track student outcomes, as well as to ensure successful student outcomes. Dev Bootcamp and General Assembly both emphasized their coaching and support programs, their hiring resources, and the fact that they actively survey their graduates, leading to reporting of successful student outcomes.

From as early as a student's on-ramp period, Dev Bootcamp and General Assembly inform students that there will be a firm level of support when it comes to careers after graduation. Both schools stated that they begin this support by introducing soft skills during the on-ramp phase. These skills often consist of working within a group dynamic, meeting project deadlines, and presentation skills. Both institutions believe that exposing students to these skills will help them develop the necessary acumen to be successful in a high pressure work environment. Along with these soft skills, students are also exposed to mock interviews, resume critiques, and are aided in the creation of a social media profile, i.e., LinkedIn. During this period students are also introduced to career coaches who provide support and

recommendations to the students throughout their time in their cohort. Both institutions believe that the consistent exposure to these soft skills and resources allow their students to be competitive job seekers after graduation.

Both schools described the various employment resources that are provided to students during their time in the programs. While students are in their cohort, both institutions provide access to various computer platforms that allow students to be exposed to potential employers. Though these platforms have variances in their specific abilities, the overall capabilities are the same. When given access to such a platform, students are able to post their resume, examples of their work, and articulate particular skills they possess. Potential employers are also able to view these profiles, allowing them to determine if the student is a fit with their company, and to communicate with the student. Career coaches typically have access to this platform as well, allowing them to stay in contact with the student and provide support as needed. They are able to see where the student is in the job search process (e.g., companies they have applied to, interview status, resume critiques). Often the institutions provide students with “meet and hire” events that allow students to interact with potential employers. Students are invited back to these events as many times as they wish.

Finally, both organizations appear to place an emphasis on following up with their recent graduates. At the time of graduation, students are provided a survey asking about the level of satisfaction that they have with the program. Because mindsets often change, both schools also send a follow up survey after an extended period of time after graduation, asking if the student still feels the same way. Once a graduate receives a job they are sent an additional survey requesting the terms of employment; i.e. company, hours worked, salary, and the amount of time it took to gain employment. General Assembly and Dev Bootcamp testified that they use this collective data to refine their programs, and to make them as accommodating as possible for future students; as well as to make the hiring and recruiting process as simple as possible for potential employers.

Summary of Student Testimony

Former students also gave testimony that helped to inform further Task Force discussions and recommendations. Students who achieved positive outcomes following graduation noted that the most important features of the program were: soft skills, communication with program staff as an alumni, and end products from cohort/group-based projects and activities.

When speaking with the Task Force, all three students agreed that soft skill integration was a key component of their post-graduation outcome success. These soft skills prepared the students for working in a team environment, and allowed them to demonstrate to employers that they possess the equivalent of on the job experience. By demonstrating that they have worked collaboratively in groups for extended periods of time, the students felt confident and prepared when meeting with potential employers. There was a common thought amongst the students that a traditional university would not have provided them with this level of preparation. The students noted that even though the schools provided them with these skills, it was up to the students to be responsive and to make themselves open to critique and feedback.

Another component that led to the apparent successful outcomes for students was the level of communication with program staff after graduation. All three students noted that they were in constant communication with staff and were provided with general career support, breakout sessions, meet and greets, and seminars hosted by previous graduates. In particular, the seminars discussed topics that the previous graduates wished they would have known when beginning their search for employment. The panel was in agreement that they felt supported by their school, and that they were provided with ample resources while on their search for employment.

The final component that the panel noted was the end products of working with their cohort groups. The three students noted that there were pros and cons to working on a collaborative project with their cohort group. They noted that it is a benefit to be able to take a deliverable to a prospective employer, and present it to them. Students are able to discuss with the employer how they would change the project if they were completely in control of the final outcome. The students believed that this allows them to sell their unique viewpoints and skills to the potential employers. Conversely, there was commonly held belief amongst students that if you were in a low performing cohort group, that you would not be able to obtain a quality job. Students mentioned however that program staff mitigate this concern by focusing the students on the project itself, and not post program employment. While this did not completely remove the tension surrounding potential employment, the students did appreciate the staff's efforts to maintain student focus throughout the cohort project period.

Summary of Employer Testimony

Along with the testimony heard from the institution representatives and former students, the Task Force also heard from three different employers. While most of the testimony heard from these panelists is being reserved for a following section of this report, it is worth noting here that the employers mentioned different styles of onboarding of new employees in this sector. While many startups and companies do hire on a full-time, permanent basis, it was mentioned that some companies bring on recent graduates on a contract-to-hire, or as an apprentice. These contracts or apprenticeships are typically three months in length, and are at a lower salary than what a full-time, permanent employee would earn. Both Dev Bootcamp and General Assembly view these different types of employment as employed, and report their graduates as such.

Summary of Bureau Testimony and Related Findings

When discussing the reporting of student outcomes, the Task Force reviewed whether it is appropriate to have institutions offering High Technology Programs use the current format of the School Performance Fact Sheet (SPFS). The Task Force turned to Matthew Wiggins, Bureau staff, to provide an overview of the current format of the SPFS and proposed regulations that will affect the SPFS.

Mr. Wiggins informed the Task Force that currently institutions offering High Technology Programs are expected to use the same SPFS format and content that all other institutions currently use.

The Task Force decided to review the various components of the SPFS and the proposed regulation changes. While reviewing the different components it became apparent that there were multiple

sections that were not relevant to High Technology Programs. These sections in particular are the 150% Completion Rate Table; Licensure and Exam results; and the Federal Cohort Default Rate data. These were deemed irrelevant due to the fact that there is no opportunity for students to finish outside of their cohort's completion date (students are required to start the program over if they are not able to keep pace); there are currently no state licenses or exams required for these programs; and currently institutions offering High Technology Programs do not receive Federal financial aid.

Mr. Wiggins also informed the Task Force of the proposed regulation changes that pertain to uniform reporting requirements. The proposed changes, among other things, would include a new definition for "Gainful Employment," including self-employment documentation requirements; removal of portions of the Placement Rate Table; and require institutions that do not qualify for Federal financial aid to have a disclosure stating as such.

Summary of Public Comment and Subject Matter Expert Testimony and Related Findings

Throughout the process of hearing various testimonies, the Task Force also looked to public comment for input around the student reporting recommendations. A consistent theme that was heard from various public advocates was the need for more reliable wage data. It was mentioned that currently institutions rely on self-reported student wage data (salary, employment status, etc.) gathered via surveys, emails, and various other outreach methods which only display wages at the time a graduate is hired. While these methods have been the norm for multiple years, the Task Force decided to review alternate methods of collecting this data in order to ensure data integrity, and to reduce the burden of work for institutions.

One of the specific recommendations from public comment was to look at a web based program called "Salary Surfer" - Salary Surfer is provided by the California Community Colleges Chancellor's Office (CCCCO), and some view it as a valuable tool to both students and regulators. According to the CCCCCO, Salary Surfer "uses the aggregated earnings of graduates from a five year period to provide an estimate on the potential wages to be earned two years and five years after receiving a certificate or degree in certain disciplines." ⁷ The program receives its data by providing social security numbers of graduates to the Employment Development Department (EDD) and matching it to a "Base Wage File." This file will show if a given social security number has any reported earned wages for a given quarter of the year. This information is transmitted to the CCCCCO, and is then analyzed and presented in its current form.

The Task Force decided to review the foundations of this program, and to determine the feasibility of a similar program being used to report outcomes for students who attend High Technology Programs.

In order to accomplish this objective, the Task Force heard testimony from Patrick Perry, Senior Research Associate at West Ed, who performed a pivotal role in the development of Salary Surfer. Mr. Perry began his work on Salary Surfer while working for the CCCCCO. He noted that the main goal of creating this program was to provide valuable data to students and help them make well informed decisions. He saw no reason why the same approach cannot be taken for private postsecondary institutions, in particular those who enroll students in High Technology Programs. He noted that there are three main benefits when it comes to using Base Wage data as it pertains to private postsecondary

and High Technology Program institutions: (1) an increase in data reliability; (2) the ability to compare the wages of graduates from various institutions across California; and (3) the removal of the burden of reporting from institutions.

Mr. Perry stated that data reliability is always a concern when reviewing outcomes reported directly from students and institutions. Mr. Perry stated that by using a Base Wage data program this concern is greatly minimized. Schools would submit a roster of social security numbers to the Bureau who sends this data to EDD to determine if there is a “match”. A match would result when a given social security number shows a record of earned wages for a given quarter in the year. When there is a match this information is returned to the Bureau where they are able to determine the wage that a graduate has earned after program completion. This data would then be provided back to the institution for inclusion on their School Performance Fact Sheet (SPFS). The data can be organized in such a way (CCCCO displays wage data two years prior to graduation, two years post-graduation, and five years post-graduation) that allows students to see not what wage they will earn as soon as they graduate, but expected wages as they develop within their career. By providing students access to a potential career trajectory, students are able to make a better informed decision when it comes to choosing a school and career.

Mr. Perry stated that using a model like this will allow students to compare the wages of graduates from different institutions side by side. While this data would be disclosed on an institution’s SPFS; it could also be made available on a website operated by the Bureau. Students would potentially be able to look at similar programs from various schools and view the earnings of their graduates over the course of their careers. By presenting the data in this fashion, students would be exposed to this information while reviewing all of their school choices, rather than when viewing the data when they are provided the SPFS. By presenting prospective students with this information on demand, they will be able to compare their options at their convenience and make a choice that best fits them.

The Task Force determined that a system such as this would reduce the amount of workload that is required of schools when compiling their SPFS. By minimizing the amount of time and resources spent on outreach, tracking, and follow up; schools will be left with a smaller burden of responsibility and will simultaneously be providing more reliable data to their students.

Recommendations:

While considering all of information presented to them, the Task Force recognized that the SPFS is fairly encompassing, however when reporting on students from High Technology Programs it may not reflect information that is pertinent or necessary. Disclosures are only as reliable as the data that they provide; and to this end the Task Force wants to ensure that all data that is being provided is relevant and accurate. Accordingly, the Task Force recommends modifications to the SPFS provided by institutions offering High Technology Programs and recommends changes to how the outcome data contained in the SPFS is collected.

4. At a minimum, conduct a pilot program that reports salary/wage information by institution from High Technology Program graduates.

- a. Compare social security numbers of graduates who have at least two quarters of earned wages (in a field related to their area of study) to Base Wage data that is available through the Employment Development Department (EDD).
 - b. Methodologies may be based on techniques implemented by various bodies that have used Base Wage data to report on student outcomes, located within the Unemployment Insurance Code Section 1095, including but not limited to:
 - i. California Community Colleges
 - ii. University of California System
 - iii. California State University System
 - c. Once data is available in a user friendly format, supplement the current Salary/Wage table in the SPFS with the institution specific data.
5. Modify the SPFS to create a unique disclosure that is a better fit to the characteristics of High Technology Programs.
- a. Remove components of the SPFS that do not pertain to High Technology Programs, such as the 150% Completion Rate, Exam/Licensure table, and the Cohort Default Rate.
 - b. Ensure that there is a component that speaks to gainful and self-employment.
 - c. In order for this information to be beneficial for institutions, sample language has been included in Appendix B.

State Steps

The current nationwide need to promote growth and meet workforce demand in the IT sector is essential to the health of our nation's economy; and California has a prominent role to play. California is consistently at the forefront of innovation, and the IT sector is no different. With the IT hotbed located in the greater San Francisco Bay Area, the state of California has a responsibility to foster an environment of innovation. With this innovation comes the need for employees that possess the skills to meet employer demand; which as discussed earlier, is not being met due to the widening skills gap within the labor force.

Public Testimony

To better understand the next steps that California can take to foster growth within the high technology sector and to help reduce the skills gap, the Task Force looked to the BPPE; along with Dev Bootcamp and General Assembly; and three employers in this sector to provide expertise on the matter.

Summary of Bureau Representative Testimony

The Task Force first spoke with the Licensing Chief of the Bureau, Leeza Rifredi. There are multiple steps that a prospective school must take before becoming a Bureau approved institution, and before making substantive changes to an approved school. Ms. Rifredi began her testimony by stating that when the Bureau receives an application it is reviewed within thirty days by a licensing analyst. This initial review is for completion only, and not for compliance; most applications that are received are incomplete, and this is one of the major sources of the Licensing Unit's backlog. If the application is deemed incomplete after initial review, a deficiency letter will be sent to the applicant. Once there is a completed application on file, it will go to a queue for review by another analyst. The analyst conducts a thorough

compliance review of the application, ensuring it meets all Bureau standards. If there are deficiencies a letter will be sent notating the needed corrections, with a thirty day response time. Within two weeks of response, the application will be reviewed again for compliance. Once this review is complete, the application will move to a Quality of Education review. A Quality of Education review is required when the applying school does not have any approval to operate from a different licensing entity. The Quality of Education Unit will following items: admissions requirements, projection of enrollment for the first three years, descriptions of each program, access to distance education platforms, how assignments are graded, skills and competencies that graduates will have, make-up of the faculty, facility and equipment available to students, job outlook, and how the institution plans on maintaining data on graduates employed in the field. If the application is still deficient but only has a minor issue, the Education Specialist will reach out to the applicant; if there is a major issue the application will be prepared for denial, followed be a deficiency letter. It was noted that the Quality of Education Unit currently has a backlog of six months to a year.

While continuing with her testimony, Ms. Rifredi noted that there are additional types of applications that the Bureau receives; ranging from new locations, change in ownership, or a change in educational objective (addition/removal of an offered program). In regards to schools in the high technology sector, the Bureau anticipates there being a great deal of changes in educational objectives, due to the fluidity of the industry. Because of this, these applications can be seen as a non-substantive change, which has a much shorter turn time, allowing for students to be kept on the cutting edge of technology.

Summary of Institution Testimony

After speaking with Ms. Rifredi, the Task Force again turned to General Assembly and Dev Bootcamp for any recommendations for growth in the high technology sector. Similar to their responses towards disclosures, and outcomes; both institutions agreed that more work could be done to increase diversity in the sector.

While it is recognized that the high technology sector currently has low representations amongst women and people of color; it was surprising to see the proactive approaches that these two institutions have taken to help bridge the gap. Both institutions noted that women and people of color only represent approximately 20% of the workforce in the high technology industry (though the San Francisco Bay Area is slightly higher). Both institutions offer scholarship programs for underserved communities, people of color, and women in order to help bring the economic opportunities to a demographic that may not be consistently exposed to the industry. Dev Bootcamp and General Assembly both mentioned the White House's "Tech Hire Initiative", noting that it has helped reinvigorate their desire towards a goal of equal representation in their programs. Both schools noted that though they have been working towards these goals, much more work needs to be done across the sector.

Summary of Employer Testimony

Employers of graduates also shared their expertise to the Task Force in regards to what steps California can take to help strengthen and expand the high technology workforce. Though each company offers different products and services, all agreed upon the following ideas: the demand for workers in the high technology industry makes it difficult to retain talent; and that a level of communication between employers and schools is necessary.

While speaking to the Task Force in regards to talent retention, it was clear with all three employers struggle to maintain a qualified staff. The three companies stated that it can often be hard to fill positions with qualified candidates due to the constantly evolving nature of the industry. It was noted that the most successful candidates are the ones who can balance the soft skills with the technical skills, noting that graduates from these institutions typically can do this a bit better than other applicants. Another aspect that makes it difficult for smaller startups to retain talent is the poaching of employees by larger firms. Graduates come to startups as entry level web developers, and within a few months they develop more refined skills that appeal to larger companies. In particular, Thoughtbot experienced over 50% turnover in 2014. While dealing with high turnover and the difficulties of finding qualified applicants is frustrating, they noted that this is partially due to the fact that graduates are entering the marketplace with a solid baseline level of knowledge.

When discussing the skills that graduates are entering the workforce with, the three employers made note of the level of communication that they keep with the schools. In particular, Branchbird noted that they provide feedback on the graduates that they hire, as well as those that they don't. All three employers agreed that communication between companies and the schools is necessary if students are to be kept on the cutting edge of technology. All three companies believed that employers are the pulse of the high technology sector, and are the best source of knowledge of what the trends are in the industry. Along with this communication, it was noted that maintaining a high level of selectivity for cohorts will ensure that graduates are kept at their current level of quality, and will prevent a saturation of the talent pool. Given these items, all three employers agreed that there is still a high demand for employees, and that supply cannot keep up.

Recommendations:

After much deliberation around these topics, the Task Force noted that there are industry specific challenges faced not only by institutions, but by students as well. The information that was discovered confirmed many widely held beliefs, and reinforced the need for action. Institutions that offer High Technology Programs are faced with lengthy timelines when seeking BPPE approval (both with the initial application, as well as ongoing modifications); while students from underserved communities and underrepresented demographics continue to be left behind the current wave of innovation. As stated by #YesWeCode, "By learning this highly valuable and relevant 21st century skill, these young people are shifting the trajectory of their futures and transforming their relationships with their communities and their country"⁹. These challenges faced by both institutions and students have prevented the skills gap from shrinking, as there have been thousands of jobs left unfilled throughout the state. With this information in mind, and knowing that Web and Software Developers are amongst the fastest growing

occupations in California; it is clear that there is need for immediate action. In order to ensure that employer and student needs are met the Task Force found it necessary to modify the application process for schools wishing to offer High Technology Programs, and to increase outreach to underserved and underrepresented students.

6. Modify the approval to operate application process to create an expedited process for a school wishing to offer a High Technology Program in order to decrease application turn times, shift the burden of responsibility from the Bureau to an institution, and bring prospective employer validation to each program.
 - a. Create an Advisory Board that can be used in lieu of the Bureau's Quality of Education Review.
 - i. The Advisory Board will serve as a third party that will assist institution administration and faculty in fulfilling their stated educational objectives.
 - ii. The Advisory Board will not only provide support with initial approval applications, but also with ongoing changes that an institution wishes to submit to the Bureau.
 - iii. An institution may include Advisory Board meeting minutes (in which the Advisory Board must decide if the High Technology Program that is being offered by the institution is in demand, and has met industry standards) with their Bureau application to supplement the Quality of Education review.
 - iv. An institution may include an Evaluator Report (a questionnaire provided by the Advisory Board that determines if the program meets market demand, and has met industry standards) with their Bureau application to supplement the Quality of Education review – Optional recommendation, will be decided upon 12/01/2015**
 - v. A detailed account of the Advisory Board's responsibilities, **as well as the Evaluator Report** can be found in Appendix B.
 - b. Create Evaluator Reports that can be used in lieu of the Bureau's Quality of Education Review or Advisory Board Minutes.
 - i. The Evaluator Reports will consist of questionnaires that will verify if the corresponding High Technology Program meets the needs of employers and industry standards.
 - ii. An institution may include Evaluator Reports with their Bureau application to supplement the Quality of Education review.
 - iii. Evaluator Forms may only be used in conjunction with Approval to Operate applications.
 - iv. The format of the Evaluator Report, along with requirements of being an evaluator can be found in Appendix B.
 - c. Require that prospective institutions offering High Technology Programs attend a modified Licensing Workshop if they wish to utilize the expedited approval process.
 - i. The workshop will consist of the current Licensing Workshop that the Bureau offers; however there will be a component at the end that focuses strictly on

- High Technology Programs. Additional focuses will be on career services, additional disclosures, and specific soft skills that the institution plans on developing.
- ii. The additional component of the workshop will also focus on items that can delay the application process, specifically financial documents and the components of a complete application.
 - d. Designate a High Technology Program expert as a point of contact within the Bureau.
7. Increase state outreach efforts towards underserved and underrepresented communities to spread awareness of a rapidly growing industry through strategic partnerships with existing programs.
- a. These programs can be at the state and federal level, or with a non-profit organization. These programs can include, but are not limited to:
 - i. Employment Training Panel (ETP)
 - ii. California Community Colleges
 - 1. A possible outcome includes “Pop-Up” locations, where a High Technology Program is offered in conjunction with a community college in an underserved community (rural, inner city, etc.).
 - iii. Eligible Training Provider List (ETPL)
 - iv. Girls Who Code
 - v. #YesWeCode
 - vi. CodeNow

Conclusion

The recommendations in this report are the direct result of deliberations occurring over several months and are based on the input from a variety of stakeholders in the private postsecondary industry. Some of these recommendations may require changes in regulations or statute, while others may be implemented within the current construct of the Bureau. These recommendations attempt to ensure necessary student protections, while fostering an environment of innovation.

To guarantee the economic prosperity of the state and its diverse population, California must address the issues and recommendations identified by this Task Force. This will require a commitment from the Bureau, institutions offering High Technology Programs, workforce partners, and policymakers so more Californians can acquire the necessary skills to meet the demand of an evolving economy.

Task Force Members

Shawn Crawford, Chair

Shawn Crawford is the Senior Vice President, Chief Compliance Officer of ITT Educational Services, Inc. (ITT/ESI) in Carmel, Indiana, and is responsible for overseeing and directing the compliance, internal audit, regulatory and accreditory efforts of the company's ITT Technical Institutes and Daniel Webster College. ITT/ESI is a leading provider of technology-oriented postsecondary degree programs, and operates more than 130 ITT Technical Institutes and Daniel Webster College. ITT/ESI institutions serve more than 47,000 students at their campuses in 39 states and online. ITT/ESI has been actively involved in the higher education community in the United States since 1969.

He was previously the Director of Compliance at Great American Financial Resources, Inc. (GAFRI), a wholly-owned subsidiary of American Financial Group. GAFRI is a diversified financial services organization founded and headquartered in Cincinnati, Ohio, and its insurance companies provide customers with annuities, supplemental insurance, and life insurance through a distribution system of licensed independent agents and registered representatives. In this role he was responsible for directing legislative and regulatory compliance, including anti-money laundering and anti-fraud programs. His previous positions with GAFRI included legal and regulatory work involving securities and other investment products. Prior to this he was with Federated Department Stores, Inc. in Cincinnati, where he was involved in ensuring compliance with the Employee Retirement Income Security Act of 1974 (ERISA) and managing employee benefits for more than 100,000 plan participants.

He earned a J.D. from the University of Pittsburgh School of Law, and a B.A. from Allegheny College. Mr. Crawford serves as the Chair and an institutional representative on the Advisory Committee for the Bureau of Private Postsecondary Education in California, co-Chair of the California Coalition of Accredited Career Schools, and has served as a speaker and panelist for the Association of Private Sector Colleges and Universities and the Accrediting Commission of Career Schools and Colleges.

John Carreon

With over 25 years of legal experience, John Carreon is currently the Senior Vice President, Regulatory Affairs and Associate General Counsel for Education Corporation of America (ECA). John joined Kaplan, Inc. in May, 2006, working as the Vice President, State Affairs and Associate General Counsel until ECA acquired Kaplan's ground-based nationally accredited schools in September, 2015. As head of the Regulatory Affairs Department for ECA, John identifies and develops relationships with key officials who are in positions or agencies that affect its education businesses. To ensure a high level of accountability, John and his team monitor federal, accretor and state compliance standards, and provide guidance on virtually all state issues that arise with respect to any of ECA's education businesses, as well as planning and oversight for federal and accretor requirements.

John's positions before joining ECA/Kaplan include Senior Counsel for Sears Holdings Corporation, overseeing the company's regulatory and litigation matters; Regulatory, Compliance and Litigation Counsel for GE Healthcare; and General Counsel for GE Healthcare's MRI and X-ray divisions. Early in his

legal career, he was an Associate with Winston & Strawn LLP and served as an Assistant State's Attorney for Cook County, Illinois.

John has a Bachelor of Science in Accountancy from the University of Illinois, Champaign-Urbana, and is a Certified Public Accountant. He obtained his Juris Doctor and Master of Business Administration from Loyola University, Chicago.

Marie Roberts De La Parra

Ms. Roberts De la Parra is the CEO of Wait a Green Minute this entity focuses on executive coaching to strengthen and enhance leadership development. She is also the CEO of BMB Construction Properties leading it as a sustainable strategic master planner of community and economic development. June 2008, Ms. Roberts De La Parra founded the nonprofit organization, Terra Green Community Development Corporation receiving its IRS designation as a 501©3. The goal of the organization is to address access to healthy food options, energy efficient green home ownership, foreclosure mitigation housing counseling, and building financial capacity within economically disadvantaged and underserved communities that includes microfinance lending. Promoting neighborhood stabilization is the organizational goal. Terra Green CDC is a certified Covered California Entity, a Kiva Zip Trustee, and is a California Capital Access Program lender. Terra Green CDC is certified by the US Department of Agriculture to operate a SNAP EBT Farmers Market, and certified by the United States Department of the Treasury CDFI Fund as a Community Development Entity (a CDE), and is a certifiable Community Development Financial Institution, a CDFI. She has also participated in extensive training on "Healthy Food Financing" provided by the CDFI Fund. Terra Green CDC has been invited by the SBA Administrator in Washington DC to become a certified loan intermediary. Ms. Roberts De La Parra is a certified foreclosure intervention and default housing counselor, a MHA Making Home Affordable certified Military Housing Professional, a HUD certified Environmental Consultant, certified as a Housing Development Finance Professional by the National Development Council, and is also a Covered California Certified Enrollment Counselor.

Ms. Roberts De La Parra was honored by CA Public Utility Commissioner, Timothy Alan Simon and Assembly Member Gwen Moore (retired) with the Connections Women Business Enterprise Green Business Award 2009, she has received the Certificate of Special Congressional Recognition, honoring her as a Female African American Environmental Champion presented by Congresswoman Barbara Lee, the Certificate of recognition and appreciation from the National Association of Women, Commendation from the Board of Supervisors County of Alameda State of California Keith Carson, Certificate of Recognition for her dedication and commitment to making Oakland A Model City Ron Dellums, California Legislature Assembly Certificate of Recognition for Hard Work and Commitment to the Betterment of the Environment and for Strengthening Bay Area Cities Sandre Swanson Assemblymember 16th Assembly District, and the Certificate of Special Congressional Recognition for outstanding and invaluable service to the community from Congressman George Miller. In May 2014 Ms. Roberts De La Parra was appointed to the EPA Environmental Finance Advisory Board (EFAB) in Washington D.C. February 2015 she became part of the Leadership Council for NSBA the National Small Business Association.

Her educational background includes being an alumni of UCLA's Andersons School of management, and an alumni of Northwestern University's Kellogg School of Management with a current focus at Kellogg to receive her certificate as a Scholar in Leadership. In June 2016 she will be in receipt of her MBA in Community Development Policy and Practice. . She is committed to connecting individuals to beneficial opportunities and she does so through leveraging her relationships.

Liz Simon

Liz Simon is the Vice President of Legal & External Affairs at General Assembly, a global educational institution that empowers people pursue work they love through instruction and opportunity in the most relevant skills of the 21st century. Her responsibilities include leading GA's legal, government and public affairs, as well as its social impact efforts. Liz joined GA from the Obama Administration, where she served as Counselor to the Director of U.S. Citizenship and Immigration Services and worked on policy issues at the nexus of immigration and entrepreneurship. Prior to that, Liz was an attorney at Hogan Lovells, a Washington D.C.-based law firm. Liz holds a bachelor's degree in Government from Cornell University and earned a J.D. from the University of Michigan Law School.

Kim Thompson-Rust

Kim Thompson – Rust has more than 20 years' experience in the private post-secondary education sector working for various entities that included publicly traded, private equity, and privately owned corporations. Kim has worked with several national and programmatic accrediting agencies: ACCSC, ACICS, ACCET, ABHES, COE, and NACCAS, along with various state licensing and degree granting authorities across the United States. Her experience at the school and corporate level includes research, strategic planning, policy writing, compliance training presentations, interpretation and dissemination of regulations, review and guidance on marketing collateral, business practice assessment as well as business practice improvement as it relates to national and programmatic accrediting agencies, and internal audit preparation. She also served as the project lead for approval obtainment for start-up schools, change of location, new programs as well as internal and external audit preparation and narrative responses. Kim received a Bachelor's degree in Sociology for California State University, Fresno.

Footnotes

¹2015 Coding Bootcamp Survey – Course Report, Liz Eggleston, <https://www.coursereport.com/2015-coding-bootcamp-market-research.pdf>

²Background Paper for the Bureau for Private Postsecondary Education (Joint Oversight Hearing, April 21, 2014, Senate Committee on Business, Professions and Economic Development, Senate Committee on Education, Assembly Committee on Business, Professions and Consumer Protection and Assembly Committee on Higher Education)

³EDD Labor Market Information Division,
[http://www.labormarketinfo.edd.ca.gov/file/occproj/cal\\$occmmost.xlsx](http://www.labormarketinfo.edd.ca.gov/file/occproj/cal$occmmost.xlsx)
[http://www.labormarketinfo.edd.ca.gov/file/occproj/cal\\$occfastest.xlsx](http://www.labormarketinfo.edd.ca.gov/file/occproj/cal$occfastest.xlsx)

⁴Creating Pathways to Better, Well-Paying Tech Jobs and Meeting Urgent Employer Demand Across the U.S. (TechHire Initiative)

⁵The TechHire Opportunity (TechHire Initiative)

⁶The TechHire Opportunity (TechHire Initiative)

⁷Bureau Representatives: Leeza Rifredi – Licensing Chief; Matthew Wiggins – Associate Governmental Program Analyst
Institution Representatives: Scott Zaloom – Senior Regional Director, General Assembly; Jon Stowe – President, Dev Bootcamp
Former Students: Leslie Forman – General Assembly; Santiago Gomez Lavin – General Assembly; Patrick Reynolds – Dev Bootcamp
Employers: Matt Bendett – Co-Founder, Peerspace; Kim Gerard – Technical Lead, Branchbird; Dan Croak – CEO, Thoughtbot
Subject Matter Expert: Patrick Perry – Senior Research Associate, WestEd

⁸Salary Surfer, www.salarysurfer.cccco.edu

⁹#YesWeCode, <http://www.yeswecode.org/mission>

All website links referenced in this Appendix are true and accurate as of 12/01/2015.

Appendix A

Sample Program Rigor Language

Sample Career Services Language

Modified SPFS

Advisory Board Policy

Evaluator Report Instructions and Questionnaire

DRAFT

Sample Program Rigor Language

Program Expectations

Programs offered by the Institution are rigorous and require a significant amount of work, both in and out of class. Students should expect to be dedicated to participating and completing assigned coursework. Working outside of the immersive portion of the Institution's programs is strongly discouraged. Students will be required to show a high level of motivation and persistence to complete the program.

Time Commitment

The program is a total of ___ clock hours over a period of ___ weeks. The preparation work is completed remotely via distance education. The distance education portion requires 15-20 hours of work per week. Following preparation portion, students complete the on-site program of 35 hours of work per week.

Students, in addition to spending 35 hours per week at the school for scheduled instructional activities, will spend an additional 25-30 hours per week working on homework/projects.

Collaboration/Communication

Throughout the on-site instruction students participate in soft skills seminar sessions. These sessions allow students to learn and develop soft skills for use at the Institution and in their careers. The goals of soft skills seminar sessions are to experience collaboration, experience its value, commit to the work of engaging in collaboration, and know when you are collaborating and when you are not.

Projects are an integral part of the Institution's programs. The soft skills learned are applied by working in teams both during instruction and completing homework/projects after class. Teamwork and strong communication skills are required to complete the program successfully and set students up for success in the workplace. Making graduates strong communicators is an essential part of the program.

The institution strives to create an optimal learning environment for its students by addressing the human side of software development. Through a series of activities the institution helps students learn intrapersonal and interpersonal skills to keep teams operating at their full potential.

Pre-Work

After students are accepted and enrolled into the program, they are required to complete pre-work materials and assignments. The Institution's pre-work is up to ___ hours of work. It is designed to introduce students to many topics and tools they will touch upon again during the program. Completion of the pre-work is mandatory and ensures a baseline level of knowledge in each class. Students who do not complete the required pre-work may be asked to defer their enrollment to a future cohort.

The pre-work includes coding challenges and assignments, so it is vital students have reliable access to the internet throughout the duration and are open and willing to complete the assigned work.

Sample Career Services Language

Career Services

The Career Services Team is dedicated to seeing students take control of their career aspirations and goals, by helping to communicate their skills, make valuable connections, and identify ideal career opportunities. Career Services programming is interwoven into the Institution's courses. Job search support is also available to all graduates who choose to opt-in to it by meeting the requirements outlined below.

In order to be eligible for Career Services, a student must meet the following requirements:

- » Resume
- » Digital presence (social media)
- » Professional project/portfolio
- » Attendance & participation in all Career Services programming
- » Attend job interview(s) arranged by the Career Services Team. If not, the service may no longer be available to that student.

Career Services will include:

- » Hiring events
- » Employer referrals
- » Access to Institution's internal profiles or job board
- » Mock interviews and portfolio reviews
- » 1:1 support & office hours

The Institution cannot and does not guarantee employment or salary. Many students desire to obtain employment on their own. The Institution supports and encourages this effort and will provide techniques on seeking and securing employment.

Continuous career services are available to all eligible graduates. Graduates who require additional assistance after their initial employment should contact the Institution to provide updated resume information and are encouraged to use the resources available from the Career Services Team.

Modified School Performance Fact Sheet

Institution Name
 Institution Address
 Phone, Fax, Website

School Performance Fact Sheet
20XX & 20XX Calendar Years
Educational Program (Program Length)

On-Time Completion Rates

Calendar Year	Number of Students Who Began the Program ¹	Students Available for Graduation ²	Number of On-time Graduates ³	On-time Completion Rate ⁴
20XX				
20XX				

Student's Initials: _____ Date: _____

Placement Rates

Calendar Year	Number of Students Who Began the Program ¹	Number of On-time Graduates ³	On-time Graduates Available for Employment ⁵	On-time Graduates Employed in the Field ⁶	Placement Rate Employed in the Field ⁷
20XX					
20XX					

Students are entitled to a list of the job classifications considered to be in the field of this educational program. To obtain this list, please ask an institutional representative or you can review the list of the institution's website at <http://www.schoolofchoice.com/jobclassifications>.

Student's Initials: _____ Date: _____

This school prepares its graduates to work in freelance employment, as an entrepreneur, or as self-employed individuals. A defining characteristic of these two work-styles is that they are often comprised of projects or short-term job opportunities. This type of work may not be consistent; depending on the job, project or budget, periods of employment can range from one day to weeks to several months. In addition, the hours worked in a day or week may be more or less than the traditional 8 hour work day or 40 hour work week. Additionally, during periods when individuals are not working on a specific job or project, they can expect to spend time on expanding their networks, advertising or promoting their services, or honing their skills. Once graduates begin to work freelance or are self-employed, they will be asked to provide documentation that they are employed as such so that they may be counted as placed for our job placement records. Student initialing this disclosure understand that some or all of this school's graduates are employed in this manner and understand what comprises this work-style.

Student's Initials: _____ Date: _____

Salary and Wage Information (includes data for the two calendar years prior to reporting)

Calendar Year	On-time Graduates Available for Employment ⁵	On-time Graduates Employed in Field ⁶	Annual Salary and Wages Reported for On-time Graduates Employed in the Field ⁸				
			\$15,000 to \$20,000	\$20,001 to \$25,000	\$25,001 to \$30,000	\$30,001 to \$35,000	No salary Information Report
20XX							
20XX							

Students are entitled to a list of the objective sources of information used to substantiate the salary disclosure. To obtain this list, please ask an institutional representative where to view this list.

Student's Initials: _____ Date: _____

Student Loan Information

This institution is not accredited. Students attending unaccredited institutions are ineligible for federal financial aid programs. Because the institution does not participate in federal financial aid programs, the institution is unable to report information regarding student loan debt.

Student's Initials: _____ Date: _____

This fact sheet is filed with the Bureau for Private Postsecondary Education. Regardless of any information you may have relating to completion rates, placement rates, starting salaries, or license exam passage rates, this fact sheet contains the information as calculated pursuant to state law.

Any questions a student may have regarding this fact sheet that have not been satisfactorily answered by the institution may be directed to the Bureau for Private Postsecondary Education at: P.O. Box 980818, West Sacramento, CA 95798-0818, www.bppe.ca.gov, P: 888.370.7589 or 916.431.6959, F: 916.263.1897.

I have read and understand this School Performance Fact Sheet. The School Performance Fact Sheet was reviewed and discussed with a school official prior to signing an enrollment agreement.

Student Name - Print

Student Signature

Date

School Official

Date

Definitions

¹“Number of Students Who Began the Program” means the number of students who began a program who were scheduled to complete the program within 100% of the published program length within the reporting calendar year and excludes all students who cancelled during the cancellation period.

²“Students available for graduation” is the number of students who began program minus the number of students who have died, been incarcerated, or been called to active military duty.

³“Number of On-time Graduates” is the number of students who completed the program within 100% of the published program length within the reporting calendar years.

⁴“On-time Completion Rate” is the number of on-time Graduates divided by the Number of Students Available for Graduation.

⁵“On-time Graduates available for employment” means the number of on-time graduates minus the number of on-time graduates unavailable for employment.

“On-time Graduates unavailable for employment” means the on-time graduates who, after graduation, die, become incarcerated, are called to active military duty, are international students that leave the United States or do not have a visa allowing employment in the United States, or are continuing their education in an accredited or bureau-approved postsecondary institution.

⁶“On-time Graduates employed in the field” means on-time graduates who within six months after a student completes the applicable educational program are gainfully employed, whose employment has been reported, and for whom the institution has documented verification of employment. For occupations for which the state requires passing an examination, the placement shall be measured six months after the announcement of the examination results for the first examination available after the student completes an applicable educational program.

⁷“Placement Rate Employed in the Field” is calculated by dividing the number of on-time graduates gainfully employed in the field by the number of on-time graduates available for employment.

⁸“Salary” is as reported by the on-time graduate or graduate’s employer.

⁹“No Salary Information Reported” is the number of on-time graduates who after making reasonable attempts, the school was not able to obtain salary information for these on-time graduates.



Advisory Board Policy:

PURPOSE:

To ensure that the institution has an active advisory board of in-field specialists, current in the applicable specialty, representing its communities of interest, to assist administration and faculty in fulfilling stated educational objectives.

POLICY:

Advisory Board meetings will be held at a minimum once (1) each calendar year. No less than three (3) community Advisory Board members must be in attendance at any given meeting, not employed by the school, for each discipline or group of related programs. The Board will be comprised of industry representatives, employers (with an emphasis on employers that have hired graduates) and working graduates.

Programs offering complete or partial content by distance education have a minimum of one (1) representative, not affiliated with the institution, specializing in this method of delivery. The distance education specialist's role is, at a minimum, to review and comment on the method of delivery, process and infrastructure in the context of the courses or programs.

PROCEDURE:

Meeting Topics:

The following topics are to be discussed at each meeting so that feedback is obtained to improve the training, topics include:

- Mission Statement
- Admissions Requirements
- Program Content
- Program Length
- Program Objectives
- Method of Delivery
- Instructional Materials
- Facilities, Supplies & Equipment
- Method of Evaluation
- Student Support Services
- Completion Rates
- Placement Rates
- Licensure Rates, if applicable
- Student / Graduate Feedback
- Employer Feedback
- Current and Projected Community Needs for Graduates in the Field

Minutes:

Prepared minutes of meetings are maintained, distributed and used to improve curricula. Meeting minutes include member participation (member name, title, affiliation), topics discussed, summary of significant outcomes and activities, areas of unfinished business with projection for completion, and a list of recommendations made by the advisory board, and the institution's response to these recommendations.

DRAFT

SAMPLE 1

INSTRUCTIONS FOR OBTAINING REQUIRED EVALUATOR REPORTS

An institution is required to submit a minimum of three (3) Evaluator Reports (w/ resumes or bios) for each program. In lieu of the three Evaluator Reports, Advisory Board minutes will suffice (w/resumes or bios for each board member).

The evaluation reports must be obtained from ONE of the following combinations:

- Three prospective employers (3 total); or
- Two prospective employers and two practitioners not associated with these employers (4 total); or
- Two practitioners and a qualified Board Member (3 total); or
- Two practitioners and a professional board or association (3 total).

Each Evaluator shall be familiar with the work related to the occupational training to be reviewed. This is important to ensure proper evaluation of whether the program meets its proposed occupational objective.

Evaluators shall not be associated with the school in any way and shall attest to such by signing Evaluator Report.

The school should use the evaluators' suggestions/comments to make any necessary or desired changes to a program prior to submittal. Should the school choose not to incorporate the suggestions, a detailed explanation must be attached.

Submit a resume or brief bio for each Evaluator or Committee member utilized for review.

Enclosed is an Evaluator Report. Use this Report when soliciting comments from evaluators (photocopy forms as needed).

Submit the completed Evaluator Report Forms (w/resumes or bios) with the application.

EVALUATOR REPORT

Name of Institution _____

Program Title _____

Length (hours and/or credits) _____

Type of Delivery (residential, online, or hybrid) _____

I. Program Title

A. Is the title of this program acceptable to the industry? Yes__ No__ Questionable__

II. Program Objective

A. Is the program objective clearly stated? Yes__ No__ Questionable__

B. Does the time required for completion of the total program seem reasonable in relation to the program objective? Yes__ No__ Questionable__

III. Curriculum

A. Are the course objectives clearly stated? Yes__ No__ Questionable__

B. Is the content of the courses adequate to meet the stated objectives of the program? Yes__ No__ Questionable__

C. Is the content of each course adequate to meet the stated objective of each course? Yes__ No__ Questionable__

D. Is the sequence of subject matter and related activities suitable for the attainment of the specific objectives? Yes__ No__ Questionable__

E. Are safety precautions required?
If yes, do they seem adequate? Yes__ No__ Questionable__

F. Is the equipment and supply list satisfactory for meeting the needs of business or industry? Yes__ No__ Questionable__

G. Is the theory allotted each subject sufficient to support practical or lab activities? Yes__ No__ Questionable__

H. Does the curriculum provide specific and related knowledge necessary for occupational competence at an entry level with minimum supervision? Yes__ No__ Questionable__

I. Are prerequisites or entry requirements adequate to meet program objectives? Yes__ No__ Questionable__

J. Does curriculum provide for adequate skill development through meaningful activities? Yes__ No__ Questionable__

K. What can a student who has completed a program of this nature expect to earn upon entry into this occupational field? \$ _____

IV. Please comment on those items checked with "NO" or "Questionable."

V. Evaluator Information

Name _____ Company _____

Address _____
Street City State Zip Code

Phone Number _____

Email _____

Position _____ No. of Years _____

A. Did you receive a copy of the following items for review:

- 1. Program and/or Course Syllabus? Yes ___ No ___
- 2. Course Schedule? Yes ___ No ___
- 3. Supply/Equipment List? Yes ___ No ___

B. What, if any, additional materials were given for review? _____

VI. Occupational Background (please submit/attach a resume or bio in addition to a brief description below)

Education _____

Experience _____

Recommendation: ___ Approval
___ Non-approval of Program in current form

The undersigned agrees there exists no personal or business relationship with the school or owner(s) and agrees not to make copies or divulge any of the content of the program or course materials evaluated.

Signature _____ Date _____

SAMPLE 2

INSTRUCTIONS FOR OBTAINING REQUIRED EVALUATOR REPORTS

An institution is required to submit a minimum of three (3) Evaluator Reports (w/ resumes or bios) for each program. In lieu of the three Evaluator Reports, Advisory Board minutes will suffice (w/resumes or bios for each board member).

The evaluation reports must be obtained from ONE of the following combinations:

- Three prospective employers (3 total); or
- Two prospective employers and two practitioners not associated with these employers (4 total); or
- Two practitioners and a qualified Board Member (3 total); or
- Two practitioners and a professional board or association (3 total).

Each Evaluator shall be familiar with the work related to the occupational training to be reviewed. This is important to ensure proper evaluation of whether the program meets its proposed occupational objective.

Evaluators shall not be associated with the school in any way and shall attest to such by signing Evaluator Report.

The school should use the evaluators' suggestions/comments to make any necessary or desired changes to a program prior to submittal. Should the school choose not to incorporate the suggestions, a detailed explanation must be attached.

Submit a resume or brief bio for each Evaluator or Committee member utilized for review.

Enclosed is an Evaluator Report. Use this Report when soliciting comments from evaluators (photocopy forms as needed).

Submit the completed Evaluator Report Forms (w/resumes or bios) with the application.

EVALUATOR REPORT

Name of Institution _____

Program Title _____

Length (hours and/or credits) _____

Type of Delivery (residential, online, or hybrid) _____

I. Program Title

A. Is the title of this program acceptable to the industry? Yes__ No__ Questionable__

II. Program Objective

A. Is the program objective clearly stated? Yes__ No__ Questionable__

B. Does the time required for completion of the total program seem reasonable in relation to the program objective? Yes__ No__ Questionable__

III. Curriculum

A. Is the content of the courses adequate to meet the stated objectives of the program? Yes__ No__ Questionable__

B. Is the sequence of subject matter and related activities suitable for the attainment of the specific objectives? Yes__ No__ Questionable__

C. Does the curriculum provide specific and related knowledge necessary for occupational competence at an entry level with minimum supervision? Yes__ No__ Questionable__

D. Does curriculum provide for adequate skill development through meaningful activities? Yes__ No__ Questionable__

E. What can a student who has completed a program of this nature expect to earn upon entry into this occupational field? \$ _____

IV. Please comment on those items checked with "NO" or "Questionable."

V. Evaluator Information

Name _____ Company _____

Address _____
Street City State Zip Code

Phone Number _____

Email _____

Position _____ No. of Years _____

A. Did you receive a copy of the following items for review:

- 1. Program and/or Course Syllabus? Yes__ No__
- 2. Course Schedule? Yes__ No__
- 3. Supply/Equipment List? Yes__ No__

B. What, if any, additional materials were given for review? _____

VI. Occupational Background (please submit/attach a resume or bio in addition to a brief description below)

Education _____

Experience _____

Recommendation: ___ Approval
 ___ Non-approval of Program in current form

The undersigned agrees there exists no personal or business relationship with the school or owner(s) and agrees not to make copies or divulge any of the content of the program or course materials evaluated.

Signature _____ Date _____

Appendix B

Summary of Student Complaints

2014 Graduate Salaries as Reported by Graduates – Dev Bootcamp

2014 Wage Distribution for Web Development Graduates – General Assembly

High Technology Program Student Complaint Summaries

The below complaint summaries are compiled from both Bureau received complaints and those found on various reputable industry websites (coursereport.com, quora.com). Complaints that were chosen from websites were those that were not entirely negative (zero or one star reviews), but offered a balanced review of the institution. These complaints have been presented in a brief summary form (there will be no student/institution names provided) in order to ensure privacy and confidentiality. For the sake of simplicity, these summaries have been categorized by complaint topic.

Curriculum/Education:

- The school did not deliver as promised and students had to teach themselves. There was a lack of guidance and education from instructors.
- The institution's website was misleading; they advertised that no coding experience was needed, but the course work was not at an introductory level.
- Though the instructors were great coders they did not provide a quality instruction. There was a lack of support from the instruction staff.
- Some instructors were recent graduates from the institution.
- The pre-work was not adequate preparation if you had no prior experience.

Refund:

- The "money back guarantee" in the contract which was different than the advertisement on the website.
- School refused to refund a deposit to a student that never attended class.
- The institution failed to provide refunds when student withdrew or was terminated.

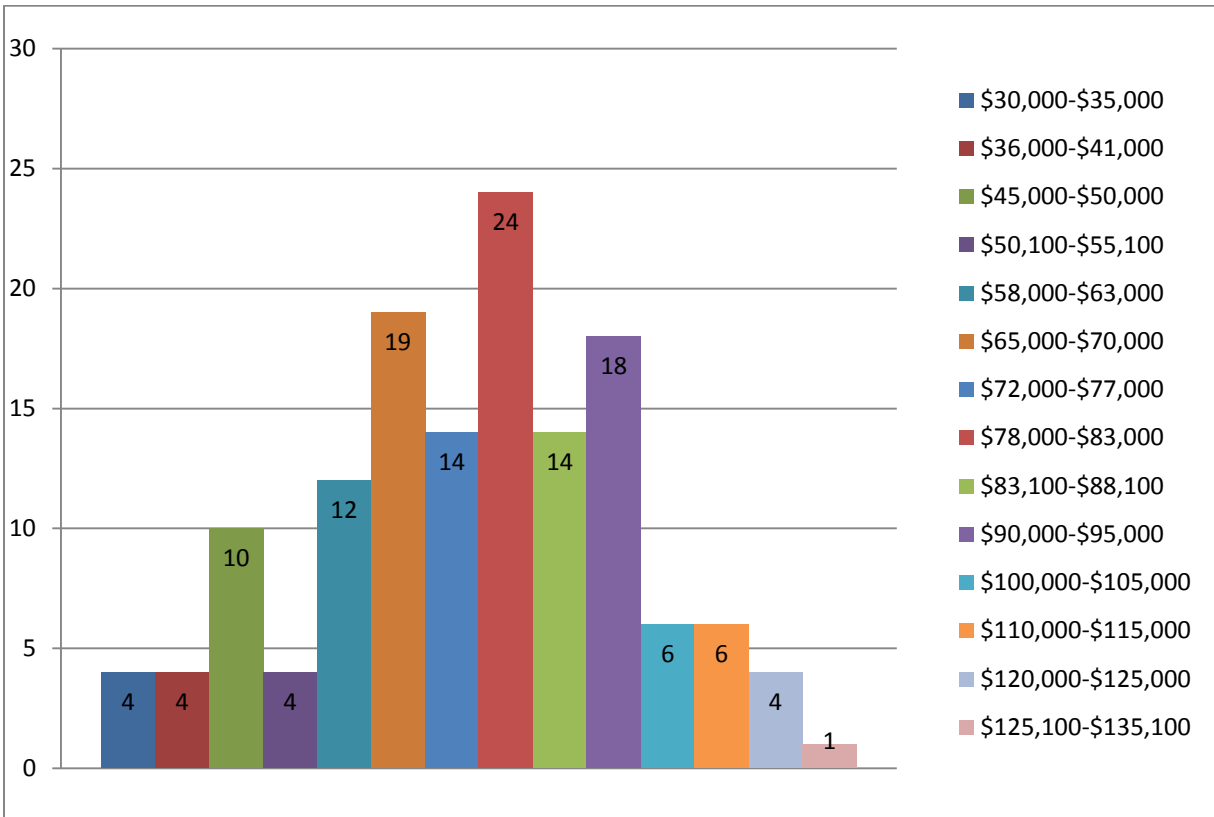
Non-Program Related Issues:

- Students were required to perform manual labor such as yard work, and cleaning bathrooms and carpet.
- Living conditions for students were unsanitary.

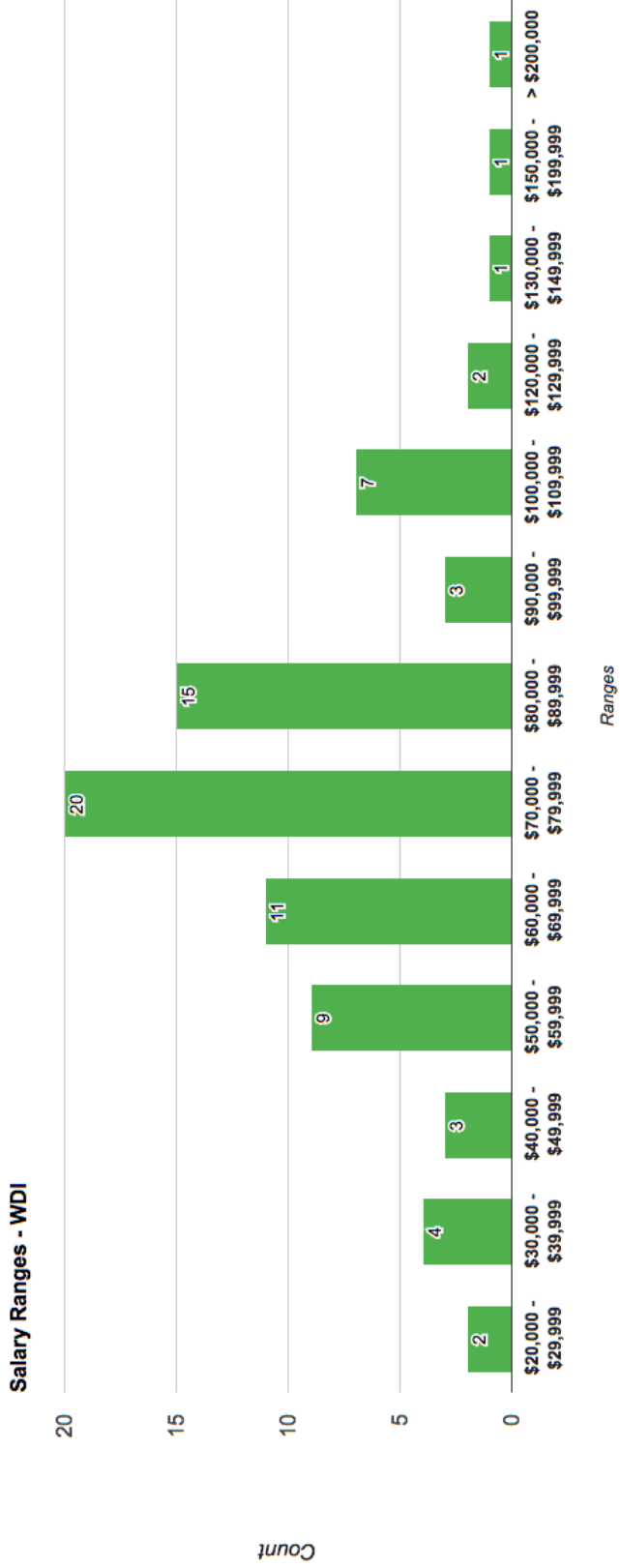
Career Assistance:

- The Outcomes and Job Assistance Staff changed multiple times, making you feel that you are on your own for your job search.
- The "Recruiter Network" that was promised did not seem to exist, had to find a job on craigslist.

2014 Graduate Salaries as Reported by Graduates



**Information Provided by Dev Bootcamp. Note that not all graduates report salary.*



**Information Provided by General Assembly. Note that not all graduates report salary.*