Two-Year Review
Vocational Training Programs

Name of Program: Architecture
Division Chair_Kate Cambell  Academic Year_2014_

Program Specific – Desired Student Outputs (Ed Code 78016(a)(1))—Meets a documented labor market demand.

What do the data indicate about the desired student outputs at the program level?

a) Documents and labor market data from professional organizations, government agencies, and community groups related to needed skills and demand for future workers.

Per department of Labor, Architecture is expected to grow 17% in the next 10 years

Summary

<table>
<thead>
<tr>
<th>Quick Facts: Architects</th>
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<tbody>
<tr>
<td><strong>2012 Median Pay</strong></td>
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<tr>
<td>$73,090 per year</td>
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<tr>
<td>$35.14 per hour</td>
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<tr>
<td><strong>Entry-Level Education</strong></td>
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<tr>
<td>Bachelor’s degree</td>
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<tr>
<td><strong>Work Experience in a Related Occupation</strong></td>
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<tr>
<td>None</td>
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<tr>
<td><strong>On-the-job Training</strong></td>
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<td>Internship/residency</td>
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<tr>
<td><strong>Number of Jobs, 2012</strong></td>
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<td>107,400</td>
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<td><strong>Job Outlook, 2012-22</strong></td>
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<tr>
<td>17% (Faster than average)</td>
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<td><strong>Employment Change, 2012-22</strong></td>
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<td>18,600</td>
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Job Outlook

Architects

Percent change in employment, projected 2012-22

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Percent Change</th>
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</thead>
<tbody>
<tr>
<td>Architects, except landscape and naval</td>
<td>17%</td>
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<tr>
<td>Architects, surveyors, and cartographers</td>
<td>15%</td>
</tr>
<tr>
<td>Total, all occupations</td>
<td>11%</td>
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Note: All Occupations includes all occupations in the U.S. Economy.

Employment of architects is projected to grow 17 percent from 2012 to 2022, faster than the average for all occupations.

Demand is projected for architects with knowledge of green design, also called sustainable design. Sustainable design emphasizes the efficient use of resources, such as energy and water conservation; waste and pollution reduction; and environmentally friendly design, specifications, and materials. Rising energy costs and increased concern about the environment have led to many new buildings being built with more sustainable designs.

Job Prospects

With a growing number of students graduating with architectural degrees, strong competition for internships and jobs in the field is expected. Competition for jobs will be especially strong at the most prestigious architectural firms. Those with up-to-date technical skills and training in sustainable design could have an advantage.

Employment of architects is strongly tied to the activity of the construction industry. Therefore, these workers may experience periods of unemployment when there is a slowdown in requests for new projects or when the overall level of construction falls.

b) Data from advisory committee regarding appropriateness of current outcomes and needs for entry and upgrade level training.

- Overall, the committee was impressed with the department’s current outcomes. The concerns were beyond their technical skill but rather
the “soft skills” that are needed to be successful in the professional work place.

- Stronger connection to the community and site, especially for design courses is needed. Advisors related the value of visiting the site, observing the local conditions, users and patterns, ‘tasting the dirt.’
- Continued focus on CAD skills, especially BIM/Revit skills to meet the needs of the current job market.

c) Data from employers

- Importance of presentation and client relations: imagery/graphics, traditional drawing documentation, and verbal/written presentation skills.
- With our new facility in place, there was a discussion on Continuing Education for architectural professionals (i.e. preparation for professionals taking architectural licensing exams and LEED professional accreditation).

d) Data from students via focus groups, & surveys/questionnaires

- Students want to have the studio open 24hrs, which is the model of all universities that have architecture programs.
- Some classes are only offered once every 2 or 3 semesters. This can be a barrier to students and increases time needed to complete certificates/degrees.

e) Review and comments from a local South Bay Workforce Investment Board (*N.B.— Required by LACCD Board regulation*).

Evidence of Students’ Attainment of Intended Learning Outcomes (*Ed Code 78016(a)(3)—Is of demonstrated effectiveness as measured by the employment and completion success of its students.*

How and why is the program/discipline effective? Analyze student performance indicators and patterns of student success in the course and/or the program. Provide evidence regarding progress toward and achievement of desired student outputs. Where appropriate, please indicate “not applicable.”

Select those performance indicators applicable to the program.

a) Success and retention rates.

1) What is the overall trend in success and retention in your program (have they increased/decreased)? Cite evidence from assessment of student learning outcomes.
2) How do these rates compare to the college and/or comparable programs? College average is at 84.3%. The department continues to have excellent retention rates as has been the norm historically.

3) Analyze course specific trends in success and retention. We have begun to “unstack” some of our courses. This has allowed the faculty to cover additional topics and offer a more detailed learning experience for the students. Faculty are able to spend more time with students during lab session of the course.

4) Are there any courses where the trend over the past two years deviates from the program trend? What explains any observed differences? NO

5) Do some courses tend to have higher or lower success and retention rates than other courses? Digital course tend to have higher success rate due to availably of computers, software, and TA’s. Our studio and hand drafting course are a challenge due to cost and time commitment from students.
b) Degrees and certificates

1) Describe the types of awards (degrees/certificates) available through your program.
   
   We offer 1 AS degree, 2 Certificates of Achievement, and 4 Skills Certificates. The awards are focused on architectural technology, graphics, and design. We are in the process of registering the existing skills certificates with the Los Angeles Orange County Regional Consortium. Once this process is complete, awards will be counted in Arc data and shown in State data.

2) What is the general trend in program awards over the past 3 to 5 years and how does this compare to the college as a whole?
   
   Although many of our students have completed the courses required for certificates, for a variety of reasons the certificates are not awarded. The primary reason is that students do not track their own progress and submit the required paperwork. The college needs to provide support to students in CTE programs to automate the process. In our department, we have developed a tracking system that can scan student records and report results. Much of the process is manual and tedious. We have implemented a system to track current students and have student workers fill out certificate application forms. We expect to submit 30-50 applications for certificates by Summer 2014. Although the number of enrollments and course completions is consistent with previous years, this would represent more than a 1,000% increase in awards.

c) Certification exam results

1) Is there a governing board that provides certification exams for students in your program?
   
   No

2) What was the most recent pass rate and how does this compare to pass rates over the past 3 to 5 years? What factors affecting pass rates are relevant for program planning?
   
   N/A

d) Job placement rates

1) Do you track job placement of students in your program or use external data (VTEA)?
   
   Yes, we regularly review Core Indicator #4 data from Perkins data. So far we have not been able to receive a satisfactory explanation of how this data is calculated. For example the sample size for 12-
13 is shown as 7/12 and the results are indicated to underperform negotiated target levels. We do not believe that this small sample size can adequately represent our program. Many of our students work as consultants or in their own part time businesses as draftspersons. Our understanding is that self-employed data is not included in the Perkins data. As a whole, we believe the Perkins data is not a reliable metric of our program. We do not have any other survey data beyond anecdotal. We have had recent successes with local industry partners, including one that hired 20 students to work part-time for a 2-4 month period as draftspersons.

2) How do your rates compare to external criteria or standards?
   See above.

Duplication--(Ed Code 78016(a)(2)) Does this program represent unnecessary duplication of other manpower training programs in the area? Please describe any relevant differences between your program and the college and/or other programs.

NO