Program Review 2014-15 - Baking and Pastry Arts

PR 2A - Enrollment Data:
Enrollment in the Baking & Pastry Arts Program from 2011 Fall through 2014 Spring remained stable, averaging 62 students for the two course sections offered each semester, with the exception of 2013 Fall when we offered a third course section, which brought the enrollment numbers up accordingly. Most semesters on average, the Program courses operate at 24% over the "class size maximum" of 25.

The difference between the total and the unduplicated enrollment figures indicates that our students are at LBCC to seriously follow a Program of Study, many taking two or more Departmental courses each semester.

Baking & Pastry students are overwhelmingly Female, and the divide is only increasing:
2011-12-132012-132013-14
Female 71% 78% 83%

While the gender remains the same, the Ethnicity of the Baking & Pastry student is changing:
2011-12-132012-132013-14
Hispanic/Latino 27% 40% 54%
White 28% 31% 24%
Black/African Am 18% 11% 10%
Asian 16% 11% 7%

This shift in Ethnic distribution is in alignment with those of the College as a whole.

PR 2B - Achievement Data:
Since 2011, Student Success and Retention Rates in the Baking & Pastry Arts Program have continued to improve:
2011-12-132012-132013-14
Retention 90% 94% 96%
Success 84% 85% 88%

The very low difference between the two figures indicates that the overwhelming majority of Baking & Pastry students who 'stick-it-out to the bitter end' also do well in the course.

The Baking & Pastry Program has some of the highest Success/Retention rates at LBCC, coming in higher than the average at the School of CTE:
2011-12-132012-132013-14
Retention 85% 86% 85%
Success 70% 69% 66%

As well as higher than average at LBCC college-wide:
2011-12-132012-132013-14
Retention 83% 85% 85%
Success 67% 67% 66%

Ethnically-speaking, the success and retention rates are similar across the board, at approx 87+% and 93+% respectively, with one exception. The Black/African American students have equivalent retention rates as the others, but their success rate is significantly lower, averaging 69%, almost 20% lower than the rest of the students. The reason for this is unknown.

The Female B&P students not only out-number the Male B&P students, but they out-achieve them, as well:
Retention 92% 86% 95% 90% 96% 91%
Success 86% 78% 88% 72% 91% 70%

This difference in achievement could explain why more Females enroll than Males…

Graduation and Certificate rates are also on the rise in the Baking & Pastry Program. This can be directly attributed to the removal of an impediment in the B&P Curriculum beginning AY 2011-2012. Food Preparation 1 (Cular 213A) did not materially contribute to the B&P Program Outcomes, was taught at an inconvenient time (starting at 7 a.m.) for the nighttime Baking Students, and was often "closed" due to the overwhelming number of students wanting to begin the Culinary Arts Program. Removing the Food Prep requirement from the B&P Program opened a flood-gate, allowing four times as many Baking AS Degrees and three times as many Certificates of Achievement to be conferred in 2012 than over the previous two Academic Years combined:

2009-102010-112011-122012-132013-14
AS Degree 01465
PR 2C - HR (Staffing) Data:
During the review period, the Baking & Pastry Arts Program was taught by one Full-Time Faculty member.

The Program was granted one new Full-Time Faculty member, to start 2014 Fall.

Until our new Full-Time Faculty member was hired, starting in 2014 Fall, we were able to use some of the Part-Timers from our "pool". In 2013 Fall, one taught an extra section of Cular 207: Commercial Cake Decorating on Friday/Saturday (using the Saga Room/Cafeteria as a classroom), and two others each taught a section of Cular 200: Introduction to Chocolate. In 2014 Spring, the same two again each taught a section of Cular 200: Introduction to Chocolate, and one of those two also taught a section of Cular 214: Professional Gourmet Cooking.

With regard to the State mandated 75%/25% ratio of Full-Time to Part-Time Faculty, up until AY 2013-2014, we had always met the 75% goal. Beginning in 2013 Fall, with the Department Head restructuring, we were forced to bring in more Part-Time Chef Instructors.

<table>
<thead>
<tr>
<th>Year</th>
<th>Full-Time</th>
<th>Part-Time</th>
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<tbody>
<tr>
<td>11</td>
<td>81%</td>
<td>19%</td>
</tr>
<tr>
<td>12</td>
<td>81%</td>
<td>19%</td>
</tr>
<tr>
<td>13</td>
<td>93%</td>
<td>7%</td>
</tr>
<tr>
<td>14</td>
<td>90%</td>
<td>10%</td>
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</tbody>
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As mentioned above, we were granted another Full-Time Chef Instructor (to start 2014 Fall). But, when we move in to the new Math-Tech V-Building, our Program will grow and we will have to employ the use of more Part-Time Chef Instructors so we can conduct our Program in more of a “cohort-based” fashion.

PR 3A - SLO - summary of collected program data:

Program SLO #1: Create a yeast bread product to industry standards.
The Baking & Pastry Arts Students all do very well in achieving this Program Outcome, with an average of 91% of students achieving the expected level of success.

Program SLO #2: Create a pastry product to industry standards.
The Baking & Pastry Arts Students all do very well in achieving this Program Outcome, with an average of 94% of students achieving the expected level of success.

Program SLO #3: Synthesize the principles and reactions of basic baking ingredients and their properties alone and when combined with other ingredients.
The Baking & Pastry Arts Students do not do very well with this Program Outcome, with an average of 48.5% of students achieving the expected level of success.

Program SLO #4: Title.
The Baking & Pastry Arts Students all do well in achieving this Program Outcome, with an average of 73% of students achieving the expected level of success.

PR 3B - SLO - uses in program improvement:

Program Level SLOs:
Due to space and time limitations, we are unable to independently assess the rubric-based/hands-on Program-Level SLOs (#1, #2 & #4). As discussed below (item 4C), students finish the Program out of sequential order, and we must use their individual course final exam results to supply the assessment data.

As the Program is able to be taught now, each semester we only have a handful of students exiting the Program. It is impossible to schedule and run an assessment of these SLO skills for the exiting students at any time during the semester.

This limitation does not include Program-Level SLO #3, which is assessed every semester, as students identify the end of their course of study. Again, as discussed below (item 4C), the Program curriculum has been rewritten to address the deficiencies highlighted by the poor results of this SLO.

Course Level SLO:
Assessment results have prompted the development of a new curriculum (see item 4C, below), spinning-off subject matter from core courses into their own varietal courses to allow for more in-depth exploration of important concepts and theories.

PR 3C - SLO - action/change based on results:
See discussion in item 3B, above.

PR 4A - Projects/Strategies-development & change:

Over at least the past ten years, new Culinary facilities have been proposed in three different locations:
1. PCC Campus
2. Los Coyotes Medical Office Building Site
3. LAC Math-Tech V-Building

While we were always operating under the expectation of new equipment in the proposed new facility, we were trapped within the limitations of our existing facility.
We could not ignore the restrictive and outdated conditions under which we were teaching and which directly affected our students. We asked for more staff and we outfitted the old kitchen with as much equipment as it could take.

**PR 4B - Projects/Strategies - results:**

In the last three years, a significant amount of tools and equipment have been purchased and made available for student use, these include:

- Rolling Pan Racks (2012): purchased four rolling racks;
- 20-quart Mixer: purchased a 20-quart mixer;
- Stand Mixers (2014): purchased 13 5-quart mixers;
- Small Equipment (2014): purchased 12 turntables, pots, and pans;
- Small Equipment (2013): purchased 12 small ice cream makers, rolling pins trays, cutters, spatulas, and silpats...

Many students cannot afford to buy all of the necessary small equipment and tools required for their Culinary Arts courses, or they end up buying whatever is on sale at the local discount store. This poses many problems, as they may be using a tool made from a different material or in a different size than the one the Chef Instructor specifies. The result is that their food may not cook/bake/turn-out the same way as it is supposed to. This makes learning difficult for the student and grading difficult for the Chef Instructor. With the purchase of "class sets" and new equipment, the students now have an opportunity to fairly practice.

The Kitchen and Storage Rooms have also been reconfigured with new storage shelves and refrigerator boxes for each Chef. This makes it easier for the Chefs to have an organized workspace, which improves their efficiency and instruction.

Other Projects/Strategies that we have implemented are:

- Increase Instructional Lab Assistant Hours (2014): 100% full-time status effective 08/01/2014.
- Hire New Full-Time Faculty (2014): start date 08/22/2014

The impact of these staffing strategies on students has been positive so far, though their implementation is still in their infancy.

**PR 4C - Projects/Strategies - future plans:**

The written exit exam for the Baking & Pastry Arts Program is cumulative of the two years of instruction, while the competencies are tested at the end or during each class when they are taught.

Although students do well on their competency exams, they don't do as well on the written exit exam. This is due to three persistent limitations:

1. Up until now (2014 Fall), we have only had one Chef Instructor teaching the entire B&P Program. Because of this, we have only been able to offer the advanced courses every year-and-a-half. When students are taking the B&P Program exit exam, they haven’t used some of the recipes/concepts in a year-and-a-half and have forgotten them.

2. We were unable to schedule more sections of courses not only due to lack of staff, but mainly due to space limitations. Both Culinary Arts Department Programs are housed within one Instructional Kitchen. The Department teaches approximately 80 hours of Lab classes each week, beginning at six in the morning and running until almost eleven at night, often with only “passing time” separating an outgoing class from an incoming one. As it is difficult to get students to attend on Friday evenings, we have resorted to teaching Saturday mornings in addition to Saturday afternoons.

3. Because of the intermittent scheduling of the required courses, there was no way to establish or enforce sequential pre-requisites. The courses were taken when they were offered and as students were able to enroll. This made it impossible to establish a "map" of skills to be developed and later mastered. It was possible for students to take Cular 207: Commercial Cake Decorating before they had learned basic piping skills in Cular 206: Baking & Pastry II.

The hiring of Chef Jennifer Gomez in 2014 Fall will begin to address the first limitation. The opening of the Math-Tech V-Building will address the second limitation. The following itemized change in curriculum (capitalizing upon additional staff and space) will begin to address the third limitation.

Beginning 2014 Fall, we starting teaching a new curriculum with new classes. The new curriculum consists of two 5-unit core classes:

- Cular 241: Intro to Baking & Pastry Skills and Principles – this class introduces the concepts of baking
- Cular 242: Intermediate Baking & Pastry Skills and Principles – this class introduces the concept of pastry

Several 1.5- and 3-unit "varietal" courses that further develop the concepts introduced in the core classes have also been created.

Mandatory courses:

- Cular 258: Artisan Bread – will be taught for the first time in 2015 Spring
- Cular 259: Viennese Pastries – will be taught for the first time in 2015 Spring
- Cular 246: Specialty Cakes & French Pastries – successfully taught for the first time in 2014 Fall
- Cular 247: Cake Decorating – will be taught for the first time in 2015 Spring

As well as elective courses:

- Cular 253: Chocolate Confections, Decorations, & Showpieces – successfully taught for the first time in 2014 Fall
- Cular 254: Sugar Confections, Decorations, & Showpieces – successfully taught for the first time in 2014 Fall
- Cular 255: Plated Desserts – will be taught for the first time in 2015 Spring

We also have three other varietal courses pending approval:

- Cular 252: Frozen Desert
- Cular 256: Holiday Desserts
Finally another two new courses will be taught for the first time when the Math-Tech V-Building opens in 2015 Fall:

- Culinary 243A: Advanced Bakery Operations
- Culinary 243B: Advanced Bakery Practicum

In Culinary 243A, students will review the theories previously learned and develop menus, while in Culinary 243B, students will master their previously learned skills as they will be producing the breads and desserts for the restaurant, as well as all of the baked goods for the retail bakery counter.

**PR 5 - Dept - how does it fit into big picture?:**

- Educational Master Plan:
  - Mission Statement “workforce development”
  - Values > Responsibility > “effective use of our various resources”
  - Values > Excellence > “continuous improvement of our educational environment”
  - Goals > Student Success > “improve the rates at which students gain the foundational skills necessary to … achieve their … career goals.”
  - Goals > Community > “to promote efficient student pathways to… career success and … workforce development.”

- Board of Trustees' Goals 2011-2013:
  - “Support the Student Success Agenda”
  - “Support the Career Technical Education Workforce Development”

- Board of Trustees' Goals 2014-2016:
  - “Continue to Support the Student Success Agenda”
  - “Continue to Support the Career Technical Education Workforce Development”
  - “Support programs to build a more collegial campus community by creating better relationships and communications among all campus stakeholders”

- President's Agenda:
  - Student Success > “Continue to support the development and implementation of outcomes assessment, focusing on the use of data to improve student learning and achievement and organizational efficiency and effectiveness”
  - Economic and Workforce Development > “align [CTE] programs with the workforce needs and ensure that program certificates and degrees lead to meaningful employment”

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**Projects/ Strategies and Resources Needed**