CQI Sample Project
Accepted for funding Fall 2018

Title of project: Classical Knife Cut Improvement

Knife skills are one of the most basic and important skills for anyone in the culinary profession. Uniformity and consistency are important for a number reasons. First, pieces of an individual food that are the same size and shape cook at the same rate. When food is cut inconsistently before cooking some pieces will be cooked perfectly while others are overdone and others underdone. Proper knife skills portray an image of competence and professionalism in the kitchen, quite simply good knife cuts look good in a dish. A customer will subconsciously assume that with the level of perfection shown to a cut vegetable, that same level of perfection will be given to every aspect of the meal. When cooks know the dimensions of the classical cuts, there in no ambiguity about what is expected. A small dice is a ¼ inch cube, a medium dice is a ½ inch cube.

Courses and/or discipline related to your project: Culinary
In which semester do you plan to implement the project? Fall 2018
What is your budget of projected expenses?

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 – 3d knife cut models</td>
<td>$200.00</td>
</tr>
<tr>
<td>1 – knife cut poster</td>
<td>$25.00</td>
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<tr>
<td>Practice Potatoes</td>
<td>$100.00</td>
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TOTAL $325.00

1) What is the learning gap? What evidence did you collect to identify the learning gap in the classroom? How did you collect the initial data – was it formative or summative? Direct or indirect? (Direct is preferred.)

Knife skills map directly to learning outcome #3 of CLR 117 “Produce classical knife cuts to industry standards.” Knife skills also relate to the second program objective “Demonstrate basic proficiency in fundamental cooking and baking techniques.”

Student knife skills in classes are measured by both formative and summative measures. At the end of the CLR 117 class students take a knife skill practical test that accounts for 9% of their final grade. In the past 2 semesters 16 students have taken the practical for an average score of 77%. While this does not seem like a bad score at first glance. I hope to increase scores on that final test to a “B” level. More important is the knife cuts produced by students every day in the kitchen labs, an indirect formative assessment, by observing the students every day during menu production in each class taught I do not see the same level of knife skill, displayed in the practical exam. Knowledge of knife skill is tested during
written quizzes, Mid-term and final exams. Embedded questions ask students to identify the dimensions of classical knife cuts. Student correct answers on these tests average 60%.

Rubric - One point for each component in answer:
- Learning gap is compelling (important topic or significant numbers).
- Learning gap is clearly tied to course outcomes, program objectives, and/or general education goals.
- Answer uses assessment language (formative/summative, direct and indirect) correctly.
- Multiple measures are collected.
- Initial data appears validated, rigorous, and quantitative.

2) How do you propose to address the learning gap? Describe your innovation and planned activities.

My proposal is to purchase for the kitchen lab 12 polymer resin, color-coded, three dimensional classical knife cut models (see picture). Along with a wall poster showing visual example of classical knife cuts, this poster will be hung in the kitchen lab. When students are in class, cutting vegetables for recipes, they can have the 3D model at their workstation to check the accuracy of their cuts against the model, this will allow the students to self evaluate the accuracy of their product and make adjustments as necessary.

To be proficient in knife skills, practice is imperative. Accuracy and consistency are developed by repetition which develops the required hand/eye coordination and muscle memory needed so that the production of correct, accurate and consistent cuts become second nature. In order to give the students access to product for that practice, another component of my proposal is the purchase of potatoes for the students to practice on. Class time in CLR 117 is already devoted to practice, but in other lab classes, time is too precious to use for this practice, but students will be given the option of coming in early, before or after class to practice. I plan to open the kitchen one Saturday morning per month for any culinary student to come in and practice their cuts under my supervision. Students will also be given the option of taking potatoes home with them to practice on their own, students who choose this option will be required to give me photographic documentation of the results of their practice, so we can be assured that the product is not wasted.

Rubric - One point for each component in answer:
- Proposal is innovative
- Proposal is well defended
- Proposal shows promise
- Activities are feasible
- Activities are compelling

3) How many and which students would be impacted by your proposed change? Students in CLR 117 Fundamentals of Culinary Skills will be affected the most since this is the class that introduces them to knife skills, however the improvement in skill will carry over to each subsequent kitchen lab class in the program.

Rubric - Evaluators will award points from 1-5 where 1 affects students in one class, 3 affects all sections on one campus and 5 affects all students College-wide.
4) How will you determine student learning was improved? Describe the ways you will collect data, decide whether or not the results are valid, and measure success.

The Summative assessment of the final knife practical in CLR 117 will still be given at the end that class during Fall 18. I hope to see an improvement of those scores by at least 3 point to raise the average score to a low B level of 80%. The embedded test questions will remain in class quizzes and tests, those scores will be aggregated to determine average score. I hope to see a 10% increase in the average score to 70%. This data can be reported and presented in Spring 19.
To assess the lasting effect of this initiative, a rubric will be developed to grade the proficiency level of the knife skill displayed by the test CLR 117 class as they progress through the program. Classes will begin to be graded with this rubric in the Fall 18 semester to have a baseline to measure against the results of the CLR 117 class as they move forward in the program. Results of this can be reported in Fall 19.

Rubric - One point for each component in answer:
- Student learning data will be collected in a timely and/or efficient way.
- Data will be collected in at least one direct, quantitative way.
- Data will be collected in multiple ways, which can be direct, indirect, quantitative, qualitative, formative, or summative.
- Data will be analyzed or reflected upon.
- A target success rate is identified (such as “5% improvement in success” or “80% or more students will achieve a passing grade.”)

5) How do you plan to report back your findings, regardless of whether or not the innovation worked? (This can be through department/discipline meetings, professional development presentations and conferences, writing it up for newsletters, program reviews, and/or presenting to the Assessment and Research Subcommittee – describe at least two ways you will communicate your findings.)

Rubric – 5 is a perfect score.

The findings will be reported in the following ways:
- Report to culinary program faculty at discipline meetings
- Report to culinary program advisory board meeting
- Results will be included in the culinary program review

1 point for putting results in Improve
1 point for presenting at department/discipline meetings
1 point for writing it up in a newsletter
2 points for teaching a professional development or at a conference
2 points for putting it in annual/program reviews
2 points for presenting to the Assessment and Research Subcommittee

Possible Total Rubric Score for Questions 1 to 5 = 0-25. Proposals must achieve at least a 20 to be considered for funding.