

# Appendix 5

## **How Project Meets Straight A Goals**

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The proposed project utilizing a career pathway approach to increasing high school graduation rates and career readiness by offering online post-secondary health sciences courses to online high school students meets the Straight A Fund goal of increasing **student achievement** based on the following:

1. The Expectancy-value theory of motivation, which suggests that students conduct a cost-benefit analysis when weighing the relative value of competing tasks.
2. Extremely hard work from teams of devoted educators who are committed to rigorous assessment using the response to intervention (RTI) process.
3. Utilizing “Learning by Doing” instructional techniques to leverage students’ creativity by linking them to the health sciences discipline and holistically connecting classroom work with hands-on training and skills development.

The Expectancy-value theory: The development team hypothesizes that some students may have dis-identified with academics. As such, they may not place a high value on academic achievement. These students are at-risk for not completing high school. The team believes that these students may value a career, therefore, by offering courses that are clearly on career pathways, these students may be motivated to succeed. As well, the fact that these courses would count for both high school and college credit provides the student with a double dose of academic success through a single academic experience. The team also believes that success at an academic task may cause students to re-identify as being successful in academics which may further motivate them to continue with additional postsecondary achievements, especially if we cultivate that interest (Wigfield & Eccles, 2000<sup>1</sup>).

Response to Intervention (RTI): Some students may be challenged by these certificate courses and thus require remediation in order to succeed; while, others may not be challenged enough which can cause a student to dis-identify with academics. The certificate courses will include a comprehensive evaluation component for tracking student performance across the entire spectrum of learning from extremely-low to extremely-high performances.

As a result, students’ academic performance will not only be tracked but the data collected can be disaggregated along the full learning continuum to inform student instruction and content delivery. The system will track the number of remediation attempts students complete before passing each embedded quiz or mini-assessment.

For example, if a student does not pass after five attempts they will be notified immediately that the course instructor will be contacting them to schedule instructor-led remediation. This feature ensures that students performing between mid-level and lower-end of the achievement spectrum access and receive academic support from course instructors based on their individual learning needs.

Learning by Doing: The hands-on simulation-based medical education (SBME) and Food Sciences mobile classrooms allow the team to utilize a training method where students practice tasks and processes in simulated “real-world” settings with immediate feedback resulting in improved skills. Piloting the SBME and Food Sciences mobile classrooms will serve several purposes:

1. The SBME mobile classroom provides hands-on experiences for students learning how to respond in medical situations that range from routine monitoring of vitals to emergencies without having to involve real patients. It will also allow students to review and practice procedures and skills as often as required to reach proficiency without harming patients.
2. The Food Sciences mobile classroom also provides hands-on experiences for students related to the technological infrastructure supporting modern industrial kitchens and food laboratories. It will also show them, first-hand, the whole system view of food sciences from the roots in the dirt to the safe processing, sanitary preparation, nutritional quality, and aesthetic value of food.
3. The SBME and Food Sciences mobile classrooms will be dispatched to learning centers in Dayton, Columbus, Cleveland and other areas, making it possible for online students across the state to travel to central meeting points for intensive, hand-on training.
4. SBME and Food Sciences mobile classroom experiences will be recorded to demonstrate educational lessons that can be accessed by other online students. The team will develop case studies for students to solve complex cases in teams, while collaborating remotely.

By using this skills development and training method, intervention/remediation and acceleration can be addressed immediately and students receive appropriate academic support from course instructors based on their individual learning needs. Only students who cannot achieve skill mastery using the simulated remediation will be referred for instructor-led remediation. This feature is critical to maximizing high school graduation and matriculation rates.

According to the development team’s research findings, there are no experiential online learning programs similar to this proposed grant application for high school students. Experiential learning programs available are in a traditional brick and mortar setting and the resources are stationary. There are also online learning programs available that challenge their students to create their own experiences. Our proposal is unique in that the experiences can commute to online learners via the SBME and Food Sciences mobile classrooms making training and skills development readily available to all students.

Market Study: UD has been conducting its own market study to determine what Health Sciences certificate programs to add to the university’s offerings. A June 2013 update, found that there is a mismatch between the demand and supply for health care workers with at least some college education. So, during the grant period, the team will conclude the market study to determine which health sciences certificate programs should be pursued based on supply and demand as well as student interest and success with the courses that are proposed in the current project.

## **Brief Description on how members of the Partnership will work on the Project**

Naim Sanders, Executive Director, will serve as the partnership program manager on behalf of PAOH and will work with UD's program manager, Dr. C. Jayne Brahler, to identify, select, and prioritize the activities in which the parties engage in, if awarded a grant under the Straight A Fund competition. PAOH's program manager will also ensure that program activities are in compliance federal, state, and local guidelines governing the grant competition and the work described in the proposed project. They will also be responsible for monthly project updates and grant management.

The partnership team will work closely on all three major tasks of the proposed project. For Task 1: Pilot two certificate courses and both mobile classrooms: the PAOH team will focus on student recruitment and registration for the pilot and assist with setting up and testing the mobile classrooms; while, the UD team will focus on teaching the pilot classes; collecting and analyzing students' performance and usability data to inform additional course development; setting up and testing the mobile classrooms; and scheduling and holding mobile classroom sessions.

During Task 2: Develop six core courses for health sciences certificate programs: the PAOH team will continue implementation of their marketing plan for the health sciences certificate courses; provide support to students enrolled in pilot as well as their families; participate (staff, students, and families) in UD's market analysis; and provide input (staff, students, and families) on course development. The UD team will use the results of the data analysis from the pilot courses to inform the development of the additional courses; complete the Quality Matters online curriculum development review; and package the courses for approval by the School of Education and Health Sciences.

Task 3: Complete market analysis to determine certificate program offerings: During this time, the PAOH team will participate (staff, students, and families) in UD's market analysis; continue implementation of their marketing plan for the health sciences certificate courses; survey students and families to obtain feedback from participating in the pilot; provide input (staff, students, and families) on the selection of the health sciences potential certificate program options; and complete the final grant management review and close-out. The UD team will seek input from students, parents, employers, and other stakeholders specific to employment opportunities and position/job requirements to develop and package a list of possible certificate programs for review and approval by the university. Finally, the UD team will conduct the project's evaluation as required by the Straight A Fund Grant.

The partnership team's working relationship is outlined in more detail in *See Appendix 1: Description of the Nature of the Partnership* with meetings between and among team members to ensure consistent communication around issues related to scope of work, risk management, project plan, scheduling, coordination, etc. All team members will be expected to be prepared for and to participate consistently in these meetings.

## REFERENCES

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<sup>i</sup> Wigfield, A., & Eccles, J. S. (2000). Expectancy--value theory of achievement motivation. *Contemporary Educational Psychology*, 25(1), 68-81. doi:10.1006/ceps.1999.1015

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