

## **Project Based Learning (PBL) Supported by United Technologies Center (UTC)**

October 22, 2016, Submitted by Susan Flaherty Walsh

### **PBL Welding**

#### **Proposal**

The UTC Adult Education Program offers a Welding course that supports and supplements the Alternative Education initiative in the State of Maine ([Chapter 127, 3.04](#)) and specifically the [SMHS Pathways' / Marine Trades Program](#). Several of these students are employed during the day and can not attend a daily "student schedule" program. For many, flexible scheduling is the reason they continue to work toward earning a high school diploma and have not dropped out. This is evidenced by the significant reduction in the dropout rate since the inception of SMHS alternative education model. Prior to the implementation of the alternative education model at SMHS, the dropout rate ranged between 19-31%. In 2015, the SMHS drop out rate was 2.9%. This significant change is in part a result of partnering with like-minded programming with the intent that not all students fit into a traditional educational track. This collaboration offers students a range of learning experiences that are both purposeful and authentic while meeting their educational needs.

Sumner Memorial High School (SMHS) Alternative Education Pathways' students will attend UTC Adult Ed for the purpose of earning SMHS Graduation Standards while learning the art and skill of welding. This will be a 36 hour course with the intent that all students will work toward SMHS Graduation Proficiency and with the intent that many students will take and pass the welding certification test. The course design will include SMHS Standards from Mathematics, Science and Technology, Career and Education, and Habits of Work and Learning.

The PBL designed for this course, will be based using all the Career and Education and Habits of Work and Learning Standards, as well as, several focussed Math and Science and Technology Standards. SMHS teacher Shelbee Flynn, with my collaboration, will design the PBL curriculum to determine proficiency levels. Ms. Flynn and/or Walter Crabtree will accompany and assist the SMHS students concerning transportation from SMHS to UTC and return, to assist academics during the Welding class, and to observe and determine Standard proficiency of each student's PBL experience.

#### **Schedule**

UTC Adult Education Director has offered a revised schedule from the one advertised on the UTC website. The students will begin the 36 hour class from November 8- December 22 , 2016. The course will be held two nights per week on Tuesday and Thursday from 5:30pm-8:30pm. The schedule recognizes school vacations.

The following is a list of dates that classes will be held: November 8, 10, 15, 17, 29 and December 1, 6, 8, 13, 15, 20, 22.

#### **Students**

The students attending the PBL Welding experience are enrolled in the Pathways' Marine Trade Program. It is the expectation that all students, prior to the first class, will have earned the OSHA 10 certification through the SMHS safety program. Each will have appropriate safety gear. Each student will sign a learning contract concerning their participation and workplace expectations during this opportunity. This will include an attendance requirement. A student may not miss more than one class to qualify for the welding certification test funding. If under 18 years old, a parent/ guardian will also sign the contract. If these guidelines are met, the following students have been identified as possible participants, Cody Brooks, Tylar Brooks, Hunter Clement,

Robert Correia, Isaac Davies, Josh Stevens, Scylvia Touponce, James Worcester. If a student is prepared to take the Welding Certification test and has met the above learning contract guidelines, funding will be secured to pay for the students' certification test.

## Action Items

### Susan Walsh-

- Contact Greg Miller. OSHA training and teacher presence have been resolved. (10/23/16 email-done)
- Contact Pat Gillis concerning information for a Purchase Order for Julie Sattler, 21st Century funding. This will support five student class fees. (\$595.00 each student) *Pat- Julie needs to create UTC as a "vendor". Please send that same information to me, as SMHS Pathways'/Marine Trades will share some of these costs.* (10/23/16 email-done) Follow through week of 10/24/16
- Contact Julie Sattler concerning 21st Century funding for the supporting teachers for this PBL. **Done**
- Contact Nikki Chan concerning the \$175.00 Welding Certification fee, per student, at the completion for the course for those students who qualify. These funds are from the Gear UP grant. **Done**
- Contact Steve Belyea and Ty Thurlow for distribution of funds from a Marine Trades grant:
  - \$595.00 x three students' class fees **Done**
  - Transportation costs- quoted by Bion Holbrook 1,128 miles at 12 miles per gallon = 94 Gallons at \$3 per gallon = \$282 **Done**
- Contact Bion Holbrook to secure the white van for the twelve evening classes listed. The reservation is from 4:00pm-9:30pm on November 8, 10, 15, 17, 29 and December 1, 6, 8, 13, 15, 20, 22. Walter Crabtree (Whytne Crabtree) will drive the van. An additional driver is not necessary. (10/23/16 email-done)
- Create the [student learning contract](#) and have it approved by Ty Thurlow. (10/23/16 email-done)
- Contact all families for signatures on the student learning contract that outlines expectations and responsibilities. **Done**
- Continue to create PBL Welding curriculum with Shelbee Flynn. Our next meeting is Thursday, October 27th during period 4. **Revised. Susan and Steve**
- Contact Steve Belyea- determine schedule for each student to finalize OSHA 10 certification prior to November 8. Those certifications need to be in hand on November 8. (10/23/16 email-done) Follow through week of 10/24/16
- Meet with all students to determine if each has proper safety equipment. If not, Pathways'/ Marine Trades will assist. **Done**
- Meet with Food Service. Can they assist with "dinner bags" for these twelve evenings? 10/23/16 email

## Contacts

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