

GREATER LAWRENCE TECHNICAL SCHOOL
57 River Road, Andover, Massachusetts 01810

PROGRAM ADVISORY COMMITTEE
MEETING MINUTES
November 16, 2023

The Greater Lawrence Technical School Program Advisory Committee meeting was held on November 16, 2023, at Greater Lawrence Technical School.

The following members were in attendance:

Facilitator: Danielle Ahern	CTE Program: Environmental Science
Recorder: Dana Nuenighoff	
Materials Manager: Danielle Ahern	
Dialogue Monitor: Danielle Ahern	
Timekeeper: Dana Nuenighoff	
Faculty Present	
Danielle Ahern	
Dana Nuenighoff	
Advisors Present	Name of Business / Population Represented
Jeffrey Cary	Town of Andover
Janel Granum (Online)	Woodard and Curran
David Heislein	Army of Corps of Engineers
Karen Martin	Town of Andover
Rich Niles	Woodard and Curran
Jerry Keefe	EPA
Guest Present	
Morgan Conklin	Woodard and Curran
Sarah Scagliarini	Woodard and Curran

Agenda Item #1: Call to Order

- a. Welcome/Introductions

Status report: Ahern called the meeting to order at 5:45 PM.

Agenda Item #2 Verification of committee members' contact information, phone numbers, and emails.

- a. Please verify the e-mail address for each member.
- b. Please distribute and collect information sheets for new members and members with pending paperwork. (Please return the paperwork to Sue Ouellette.)
- c. Per DESE recommendations, Program Advisory Boards must be a diverse representation of the communities. Members should respond to the [Google Form](#) (Share link with all members) documenting their attendance and whether they are able to represent the diverse perspectives of our community.

Status Report:

- a. Email Addressed has been verified for each member.
- b. Facilitator asked for outstanding forms; no members had outstanding paperwork.
- c. Facilitator asked for members to complete google form.

REPORT OF OLD BUSINESS

Agenda Item #3: Minutes

- a. Review minutes from the last advisory meeting, and voice comments, questions, or concerns (Minutes are posted on the GLTS website).
- b. Solicit a motion to approve minutes, 2ND the motion.

Status Report:

- a. Minutes Reviewed and no comments were made.
- b. Action Items Reviewed and no comments were made.
- c. No motion to approve minutes, due to lack of majority.

Recommendation:

Motion: Majority not present to vote.

2ND:

Vote:

NEW BUSINESS

Agenda Item #4: CTE Program Facilities Review

- a. **Review shop facilities and equipment (Tour Shop).**
 - i. Does the current shop design meet current industry standards?
 1. Are there any safety concerns?
 - a. If so, what improvements could be made?
 - i. What are the estimated associated costs to complete the improvements?
 2. Are there any repairs needed to the existing infrastructure?
 - a. If so, what improvements could be made?

- i. What are the estimated associated costs to complete the improvements?
3. Are there any shop area spaces that need to be redesigned for improved layout and/or functionality?
 - a. If so, what improvements could be made?
 - i. What are the estimated associated costs to complete the improvements?
4. Are there any storage issues?
 - a. If so, what improvements could be made?
 - i. What are the estimated associated costs to complete the improvements?
5. Are there any cosmetic renovations or improvements needed to ensure our program is reflective of the current industry styles, trends, and standards?
 - a. If so, what improvements could be made?
 - i. What are the estimated associated costs to complete the improvements?

a. Review shop facilities and equipment.

- i. Does the current shop design meet current industry standards?
 1. Safety concerns:
 - a. Niles mentioned needing a fume hood for ventilation and chemical storage. Ahern agreed but doesn't know where we would put it, that we need more space.
 2. Repairs:
 - a. No repairs discussed at this time.
 3. Layout / Functionality:
 - a. There needs to be more space for equipment and upper-level shop space. There is not enough room in 6006 for 2 or 3 grade levels. When 2 grade levels are in 6006 at the same time it is difficult for students to focus. Sophomores do not have enough lab space for experiments.
 - b. Heislein asked if the band saw, and drill press were necessary since they take up room. They were intended for upperclassman projects and skills; we don't know yet if they are needed since we do not have upperclassmen. We may be able to remove them and replace them with smaller equipment.
 - c. Last year glass doors were mentioned to divide 6006, but that work did not take place over the summer.
 - d. An external door is needed to get to the Freight Farm for student safety and supervision.
 - e. A freight farm is here but there are no utility hookups (water/electrical) and therefore cannot be used. It is urgent the utilities are connected for the 11th grade curriculum.
 4. Storage:
 - a. The hallway acts as storage for 9th and 10th grade.
 5. Cosmetic Renovations:
 - a. The reorganization of supplies in the hallway is needed. More cabinets.

Recommendations:

- a. Fume hood with dedicated ventilation to outside for working with and storing chemicals.

- b. Ice machine for packing samples. Ahern replied that an ice machine is in the 24/25 budget.
- c. Facility - add new space for 11th grade in adjoining classroom/shop space. Purchase required equipment to support the 11th grade curriculum including lab benches.
- d. Facility - add new space for the 10th grade including lab benches so they have space to safely perform experiments.
- e. Facility - add external door to freight farm for access and student supervision/safety.
- f. Facility - install utilities asap.
- g. Faculty - add a new instructor for 11th grade.

Motion: Majority not present to vote.

2nd Motion:

Vote:

Agenda Item #5: Reviewing the Budget for the upcoming school year and 5 year outlook for equipment needs (SY24/25):

a. Review SY23/24 Budget

- i. Review Spring Minutes and Department Budget (for SY24/25). Consider the trajectory of your industry over the next 5 years when answering the following questions:
- ii. Can you outline the specific types of equipment you/your company plans to invest in over the next 5 years?
 - 1. What will the benefits be of investing in these items?
 - 2. Will any existing pieces of equipment be phased out with the implementation of new equipment?
 - 3. Are there ways we can align our equipment needs with environmentally friendly/sustainable practices?
- iii. How important do you view preventative maintenance for the equipment you plan to purchase?
 - 1. Do you have a suggestion for how we budget preventative maintenance/repair costs for new and existing equipment?
 - 2. Are there specific preventative maintenance contracts we should consider, and what key features should we look for?

Status Report:

- a. Land Survey equipment on budget but not yet ordered. Asked for suggestions for equipment. On the doc for the spring meeting. Benefit to having less sophisticated equipment so students can learn the basics (ie - drone/gps survey vs a total station)
- b. Since the program is still growing, it makes sense to keep the budget similar to previous budgets to account for duplicate equipment needs.
- c. Make sure maintenance is bundled separately.
- d. Ice maker needs
- e. Fume hood needs
- f. Freight farm utilities

Recommendations:

- a. Equipment - keep similar to last year due to the growing program, will have to account for 11th grade equipment needs which are estimated at this point.
- b. Supplies - increase to account for 11th grade consumables
- c. Maintenance - increase to account for aging equipment and new 11th grade equipment.

Motion: Majority not present to vote.

2nd Motion:

Vote:

Agenda Item #6: Curriculum

- a. What are new and emerging trends in the industry?
- b. Is there new technology or techniques that we should be teaching our students?
- c. Are there any additional certifications that are valuable for students to have in the industry?

Status Report:

- a. Niles asked about lab diversity-macroinvertebrates.
- b. Heislein asked about Wetland delineation–industry standard needed for entry level field work.
- c. Ahern mentioned the Environmental Science Bus.
- d. Granum natural vegetation to strip out nutrients. Collecting natural vegetation to test how it filters pollutants.
- e. Massachusetts integrated waters list.
- f. Turbidity measurements, Martin mentioned jar testing and basic water/wastewater labs for students to experiment with.
- g. Carrey asked if we had a stream gauge in the Merrimack River. It would be a good way to collect and analyze data overtime. Industry standard for water quality testing.
- h. Stormwater management. Where can we tie that into the curriculum? Niles mentioned having a flood simulation model.
- i. Keefe asked if OSHA was part of the curriculum. Said OSHA 40 would be helpful for students to be trained and available to shadow and work at environmental sites safely.
- j. Zephyr Foundation-Augmented Reality Sand. To teach students about topo mapping, landform design, and coastal processes like sea level rise, storm surge and other water related events. Nuenighoff mentioned seeing them at the Boston Sea Rovers conference in Danvers.
- k. Time for our advisers to come in to talk about their careers.

Recommendations:

- a. Reach out to the Zephyr Foundation about bringing in the Augmented Reality Sand model.
- b. Contact a driller to install a well for groundwater sampling and analysis curriculum.
- c. Develop a curriculum for wetland delineation.
- d. Jar testing equipment to look at water/wastewater treatment.
- e. OSHA 40 training.

Motion: Majority not present to vote.

2nd Motion:

Vote:

Agenda Item #7: Cooperative Education/Industry Trends

1. Review current GLTS Co-Op placements.
 - a. What patterns and trends do you notice in the data related to the program placements?
([GLTS Coop Report](#))
2. Have you hired any of our students (coop or recent graduates) and if so, what are their strengths and what skills/understandings are they lacking?
3. What should we be doing as teachers to help our students be prepared to be successful at your company and/or in our industry?

Status Report:

- a. Ahern and Nuenighoff are hoping to set up at least 5 coops for January 2025

- b. Niles asked about how we present the coop opportunities to the students.
- c. Woodard and Curran could do shadowing, field trip opportunity? Have done programs with other high schools in the past. UNH plant.
- d. Email everyone to get links to videos for their companies.
- e. Fish and Wildlife and Mass Division of Wildlife. Need volunteers for surveys.

Recommendations:

- a. Email each advisory board member to get informational videos on their company's projects and have them visit to speak with the upperclassman
- b. Members will begin thinking about coop education opportunities.

Motion: Majority not present to vote.

2nd Motion:

Vote:

Agenda Item #8: Elect Advisory Chair

- a. The General Advisory Meeting will take place on January 16, 2024.
- b. Are there any nominations for the Program Advisory Chair for the 2023-2024 school year (take nominations)?

Status Report:

- a. The majority were not present to vote. The Advisory Chair was not elected.

Recommendations:

Motion: Majority not present to vote.

2nd Motion:

Vote:

Agenda Item #9: Comprehensive Local Needs Assessment (CLNA) Review

GLTS completes a CLNA every two years for each career area. This process allows departments to review and identify their needs and potential root causes. In reviewing the CLNA, please provide insights on the following:

- A. What improvements can be made to ensure support for all students, including students identified as non-traditional or special populations?
- B. Is the program curricula aligned to workforce/career needs?
 - a. What changes could the department make to ensure students are employable for entry-level positions?
- C. Is the department layout adequate to support the learning needs of all students?
 - a. Is there adequate room for all students to practice skills to proficiency?
 - b. Are the equipment needs and educational material needs being met?

Status Report:

- a. Because the environmental science and technology program is new, there was not a CLNA to review.

Recommendations:

Motion: Majority not present to vote.

2nd Motion:

Vote:

Agenda Item #10:

Status Report:

Recommendations:

Motion:

2nd Motion:

Vote:

ADJOURNMENT at 7:00 PM.

Motion: Majority not present to vote.

2ND:

Vote:

Next Meeting: April 11, 2024

Respectfully Submitted: Dana Nuenighoff