

# DVR Industrial Technology Committee

## Final Report 2011-2012

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### **YEAR FOCUS: Pre-engineering programs, specifically PLTW and EbD**

First meeting 10/28/11 – Topic: Drafting/Engineering

Meeting took place at luncheon during the ITEC conference in Normal, IL

In Attendance:

Steve Silca - Ridgewood

Nick Michalek – OPRF

Ryan VanHerst – OPRF

1. Discussion on implementation of Project Lead the Way courses at OPRF (PLTW)
  - a. OPRF has implemented 3-4 different PLTW courses. The courses are both introductory (Principles of Technology) as well as more advanced (Electronics Technology)
  - b. This is OPRF's second year with PLTW courses
  - c. PLTW courses have NOT reduced enrollment in other department courses
    - i. In fact, in 2 years, the department has gone from 1.8 FTE's to 2.6 FTE's.
  - d. OPRF still offers woodworking and drafting curriculums outside of the PLTW courses
2. Discussion of EbD curriculum
  - a. Steve Silca and Julia Wicklund from Ridgewood attended summer training in August to learn about the first class in the Ebd continuum, Foundations of Technology
  - b. Ridgewood will be implementing the curriculum for the 2012-2013 school year. The course is in the registration guide and will be promoted to the feeder school this school year.
  - c. This year is designated for ordering equipment, remodeling the classroom space for and EbD lab, and advertising to current students as well as incoming students.
  - d. The training was reported as engaging and very helpful to get the Ebd program up and running at RHS
3. Discussion of OPRF Industrial Technology area renovations
  - a. Due to a grant that OPRF will potentially receive for their child care facilities, OPRF Industrial Tech labs and shops may be moved/renovated
  - b. OPRF teachers shared hand sketches about the new layout and the impact on the program

- c. All present at the meeting shared their input and questions about the potential renovations
      - i. The renovations are still contingent on the grant approval
- 4. Discussion of Ridgewood STEM Corridor renovations
  - a. Ridgewood is currently planning a \$1 million renovation of the entire STEM wing
  - b. Will include an enlarged lab for EbD classes, and brand new CAD lab, an increased storage and display area
  - c. Ridgewood will continue all Tech Ed course offerings next year and offer the first course in the EbD sequence – Foundations of Technology

Second meeting 2/10/12

Attendees:

Steve Silca (Ridgewood High School), Frank Holthouse (Leyden High Schools), Antigone Sharris (Triton College)

Meeting held at Ridgewood High School @ 9:00 am.

Topics covered:

1. Steve shared the architectural plans for the new STEM corridor at Ridgewood
  - a. New corridor will house a new CAD lab and a new STEM lab for implementation of the EbD program
  - b. Renovation will also house a machine shop and storage room for projects and tools in the STEM lab
  - c. Corridor will have brand new lockers, new floor, and interactive touch screen interfaces
2. 3D printers
  - a. Leyden currently has 2 3D printers, a fairly cheap model that they bought recently and also a new Dimensions printer – one at each campus
  - b. Triton and Ridgewood do not have 3D printers or plans to purchase one – Frank offered to print a few 3D parts for these other schools
3. Antigone discussed the history of Triton's CTE programs over the course of the last decade
  - a. Some programs have shrunk or been eliminated altogether
  - b. Antigone drew parallels between the changes in the local community's business landscape and changes in enrollment in the programs
4. Discussion about Society of Hispanic Engineering Professionals (SHEP) and Society of Polish American Engineers
  - a. Leyden had their first event with representatives SHEP organization recently
    - i. SHEP representatives visited and presented to Leyden's new Engineering Club
  - b. Ridgewood is just beginning to form a relationship with the Society of Polish American Engineers
    - i. Ridgewood hosted a luncheon with two representatives from this society, STEM teachers, the Principal, the Superintendent, and Anne Cothran from the DVR office.
    - ii. These representatives were invited to the Ridgewood Career Fair on 2/24
    - iii. It is currently planned that these representatives will become more involved in Fall 2012 when Ridgewood begins its EbD program next school year.

5. Antigone spoke about several different Engineering organizations that she feels would be very supportive of STEM programs at the high school level. She recommends that the following organizations are those with which we have the best opportunities to secure funding, materials, recognition/awards, and scholarships. She also offered to help schools formulate a working relationship with these organizations:
  - a. ASME – American Society of Mechanical Engineers
  - b. ISPE – Illinois Society of Professional Engineers
  - c. SME – Society of Mechanical Engineers
  - d. FMA – Fabricator and Manufacturers Association
6. Antigone spoke about the JETS program that she is involved in at Triton College
7. Frank mentioned that the sponsors of their new Engineering Club at Triton are going to be shadowing the PMSA Robotics Club (FIRST Robotics Team) later this month as they contemplate the direction their new club will take
8. Frank is now teaching ENT110 at Triton College in the evenings – this is his 2<sup>nd</sup> semester
9. Implementation of EbD and PLTW
  - a. Leyden
    - i. Has secured most necessary internal approvals to start the program next school year. The first course, Intro to Engineering Design (IED), is on the books for next school year. They are hoping to offer 2 sections of IED at each campus
    - ii. Leyden is sending 2 teachers (Frank is one of them) to the mandatory training this summer
    - iii. PLTW is paid for entirely with grant funds and existing school supply funds. They will be able to use some existing equipment to defray some of the setup costs.
  - b. Ridgewood
    - i. Has secured all necessary internal approvals to start the program next school year. The first course, Principles of Technology, will be offered in the fall of 2012. They are hoping to offer at least 2 sections of this course in the fall.
    - ii. Sent 2 teachers to Maryland last summer for training on the program
    - iii. Circulated to all 3 of their feeder schools to advertise the program to incoming 8<sup>th</sup> graders – the response was very positive at 8<sup>th</sup> grade registration as indicated by many incoming students signing up for the program
    - iv. **Is running 2 sections of Principles of Technology for the 2012-2013 school year**
10. Antigone reminded everyone of the importance of submitting courses for approval for dual credit
  - a. Leyden plans to use the first course of the PLTW program, Introduction to Engineering Design (IED) as a dual credit course for ENT110
  - b. Ridgewood plans to submit their CAD I (year-long) course as a dual credit course for ENT110
  - c. Antigone informed everyone that the new contact for this information is Rick Sigovia
  - d. Antigone will also put Steve in touch with Luke Sikora who is running the new Independent Contractor program at Triton. Hopefully, Ridgewood's Construction Principles class (year-long) could be considered for dual credit with one of the courses in that program's sequence
11. Tour of Ridgewood Facilities
  - a. Included a visit and pictures of the Woodshop and Construction shop at Ridgewood
  - b. Also visited the new fieldhouse, the newly renovated library, student services, and administrative office area.

4/20/12 – meeting cancelled due to lack of RSVP.