HSE- Mid-Year Synopsis (MYS) composition guidelines

Introduce of our team

This is the first year of our program, which is designed to be student driven with Mr. Thomas as its advisor. The program is divided into various divisions (e.g., business, marketing, web page design, CAD, welders, body design, material orders, etc…). During the general meetings, each division must report their new business and target objectives for the upcoming meeting. The students are the main governing body of the HSE Program.

Team Name:_____

“The Cards”
**Mission Statement**

“If you are believer in your dreams, then they will come true.”

**Purpose**

The Alternative Energy Program is designed to allow students to push their creativity and imagination to the maximum level. The program is student operated with group involvement in the daily operations.

- **Logo**

“Cardinals”

**Overview on Financial Support Partnership**

Square-One and Dassault/Delmia
Project Introduction and Summary

The team at Melvindale High School is very diverse in both ethnicity and gender. The students within this program are really energized to meet and exceed the objectives of our HSE Project. This partnership between HSE, Square-One, and Northern Allen Park-Melvindale School District is the first of its kind in our district. This type of partnership is win-win for all parties, especially our students.

The MHS team will address a major issue facing us all. The question at hand is our dependence on foreign oil resources. We are using up natural resources at an alarming rate. Will these resources be available in the future?

The MHS team will address the need for the development of renewable energy sources. We are examining the development of a hybrid vehicle. The team is part of the Innovative Vehicle Design with the Square-One Foundation. The students have established high expectations and objectives to meet the challenges of this project. The student’s objectives are to research, design, build, modify, and establish a final product to be driven on the roadways of Michigan.
This year, the students have identified the following objectives.

(a) Research the chosen topic.
(b) Examine various materials and resources to build the vehicle.
(c) Begin the building process.

The project timeline was stalled until we could secure a safe working environment within our school system. This issue was resolved after three months. During this time the students were able to establish a clear understanding of the topic and proper materials necessary to be successful in building process. Presently, the team is looking at late summer, for the final product to be completed.

Team Accomplishments To Date

1. A safe work environment has been secured.
2. Proper tools have been purchased and donated.
3. General design was created by the CAD division.
4. Students voted on the design.
5. Materials have been ordered.
Roadblocks and Solutions

A major roadblock was the ability to find a place to house the program. After a few months of looking at places in the district and presenting our selections to the administration, a location was secured.

Another issue facing our program was working on ideas as a team instead of looking to the teacher to make all decisions. The students are asked to solve problems together as a team.

Student Learning

The students are learning numerous new educational applications:

- CAD
- Drafting Skills
- Web page Design
- Metallurgy
- Welding Skills
- Grinding Skills
- Lathing Skills
- Electrical Skills
- Cross-Curricular partnerships:
  1) Mathematical
  2) Science
  3) Marketing
  4) Drafting/CAD
  5) Economics
The Future

The team members are planning to start the building process by mid-February, but we feel that our goals can be met by July 1, 2010. The modifications to the vehicle may continue throughout the summer. This of course depends on many factors, which are unknown at this time.

Marketing

After the vehicle is completed, we plan to showcase it in numerous ways. The team is planning have the vehicle at downriver functions, such as parades, festivals, and major events. We feel that this type of exposure will be a way of letting everyone know about the educational partnership between High School Enterprise (MTU), Square-one, and the Melvindale School System.