Project Based Learning at MRA

Project Based Learning (PBL) involves immersing students into the curriculum in order to increase student engagement and deepen learning. At MRA projects are created in conjunction with established themes and can vary based on student interest. The goal of any project is to connect it to student interests which often revolve around their world. Projects generally span an entire unit from start to finish. PBL is not about teaching a unit and doing a project at the end to demonstrate understanding.

When planning projects:

Consider your objective/essential question first:

- The project is focused on teaching students specific and important knowledge, understanding, and skills derived from standards and central to academic subject areas.
- Important success skills are explicitly targeted to be taught and assessed, including critical thinking/problem solving, collaboration, and self- management.

Use challenging problems or questions

- The project is focused on a central problem or question, at the appropriate level of challenge.
- The central problem or question is framed by a driving question for the project, which is:
 - o open-ended; it will allow students to develop more than one reasonable answer.
 - o understandable and inspiring to students.
 - aligned with learning goals; to answer it, students will need to gain the intended knowledge, understanding, and skills.

Use sustained inquiry

- Inquiry is sustained over time and academically rigorous (students pose questions, gather & interpret data, develop and evaluate solutions or build evidence for answers, and ask further questions).
- Inquiry is driven by student-generated questions throughout the project.

Keep them authentic

• The project has an authentic context, involves real-world tasks, tools, and quality standards, makes a real impact on the world, and/or speaks to students' personal concerns, interests, or identities.

Give students a voice and choice

- Students have opportunities to express voice and choice on important matters (questions asked, texts and resources used, people to work with, products to be created, use of time, organization of tasks).
- Students have opportunities to take significant responsibility and work as

independently from the teacher as is appropriate, with guidance

Provide reflection

• Students and teachers engage in thoughtful, comprehensive reflection both during the project and after its culmination, about what and how students learn and the project's design and management.

Allow for critique and revision

- Students are provided with regular, structured opportunities to give and receive feedback about the quality of their products and work-in-progress from peers, teachers, and if appropriate from others beyond the classroom.
- Students use feedback about their work to revise and improve it.

Encourage a public product

- Student work is made public by presenting or offering it to people beyond the classroom.
- Students are asked to publicly explain the reasoning behind choices they made, their inquiry process, how they worked, what they learned, etc.

Project Based Teaching at MRA requires:

Design and Planning

- Project should include all Essential Project Design Elements as described on the *Project Design Rubric*.
- Detailed and accurate plans include scaffolding and assessing student learning and a project calendar, which remains flexible to meet student needs.
- Resources for the project have been anticipated to the fullest extent possible and arranged well in advance.

Alignment to Standards

- Criteria for products are clearly and specifically derived from MRA standards which have been put together based on the state and national standards.
- Scaffolding of student learning, critique and revision protocols, assessments and rubrics refer to and support student achievement of specific standards.

Building the Culture

- Norms to guide the classroom are co-crafted with students, which they largely self-monitor.
- Student voice and choice is expected and ongoing, including identification of real- world issues and problems students want to address in projects.
- Students usually know what they need to do and are directed by the teacher only to the extent necessary when working individually or in teams.
- Students work collaboratively in healthy, high-functioning teams, much like an authentic work environment; the teacher rarely needs to be involved in handling problems.
- Students understand there is no single "right answer" or preferred way to do the project, and that it is OK to make mistakes and learn from them.

 The values of critique and revision, persistence, rigorous thinking, and pride in doing highquality work are shared, and students hold each other accountable to them.

Management of Activities

- The classroom features a balanced mixture of individual and team work time, whole group and small group instruction.
- Classroom routines and norms are followed during project work time to maximize productivity.
- Realistic schedules, checkpoints, and deadlines are set but flexible.
- Well-balanced teams are formed according to the nature of the project and student needs, with appropriate student voice and choice.

Scaffolds for Student Learning

- All students receive necessary instructional supports, removed when no longer needed, to access both content and resources.
- Scaffolding is guided as much as possible by students' questions; teacher does not "front-load" too much information at the start of the project, but waits until it is needed or requested by students.
- Key success skills are taught using a variety of tools and strategies; students are provided with opportunities to practice and apply them, and reflect on progress.
- Student inquiry is facilitated and scaffolded, while allowing students to act and think as independently as possible

Assessment of Student Learning

- Project products and other sources of evidence are used to thoroughly assess subject-area standards as well as success skills.
- Individual student learning is adequately assessed, not just team-created products.
- Formative assessment is used regularly and frequently, with a variety of tools and processes.
- Structured protocols for critique and revision are used regularly at checkpoints; students give and receive effective feedback to inform instructional decisions and students' actions.
- Regular, structured opportunities are provided for students to self-assess their progress and, when appropriate, assess peers on their performance.
- Standards-aligned rubrics are used by students and the teacher to guide both formative and summative assessment, and to guide students to deeper levels of thinking.

Engagement and Coaching

- Students and teachers, as appropriate for the students' age, co-define goals and benchmarks for the project, (e.g., by co-constructing a rubric) guided by standards.
- Students' enthusiasm and sense of ownership of the project is maintained by the shared nature of the work between teachers and students.
- Student questions play the central role in driving the inquiry and product development process; the driving question is actively used to sustain inquiry.
- Appropriately high expectations for the performance of all students are clearly established and shared by teachers and students.
- Student needs are identified and met not only by the teacher but by students themselves or other students, acting independently.

Resources:

www.bie.org

www.teachinteract.com

www.lhsgems.org

Lesley University Documents found on the teacher side of the MRA website