

## The Six A's: Criteria for Designing Projects

### Authenticity

- Where in the “real world” might an adult tackle the problem or question addressed by the project?
- How do you know the problem or question has meaning to the students?
- Who might be appropriate audiences for the students’ work?

### Academic Rigor

- What is the central problem or question addressed by the project?
- What knowledge area and central concepts will in address?
- What habits of mind will students develop? (e.g., questioning and posing problems; precision of language and thought; persistence)
- What learning standards are you addressing through this project? Cite the source, e.g., district or state.

### Applied Learning

- What will the students do to apply the knowledge they are learning to a complex problem? Are they designing a product, improving a system, organizing an event?
- Which of the competencies expected in high-performance work organizations (e.g., working in teams; using technology appropriately; communicating ideas; collecting, organizing, and analyzing information) does the project provide opportunities to develop?
- Which self-management skills (e.g., developing a work plan, prioritizing pieces of work, meeting deadlines, identifying and allocating resources) does the project require students to use?

### Active Exploration

- What field-based activities does the project require students to conduct? (e.g., interviewing expert(s) or participating in a worksite exploration)
- Which methods and sources of information are students expected to use in their investigations? (e.g., interviewing and observing, gathering and reviewing information, collecting data, model-building, using on-line services)

### Adult Connections

- Do students have access to at least one outside adult with expertise and experience relevant to their project who can ask questions, provide feedback, and offer advice?
- Does the project offer students the opportunity to observe and work alongside adults during at least one visit to a worksite with relevance to the project?
- Does at least one adult from outside the classroom help students develop a sense of the real-world standards for this type of work?

### Assessment Practices

- What are the criteria for measuring desired student outcomes (disciplinary knowledge, habits of mind, and applied learning goals)?
- Are students involved in reviewing or helping to establish the project criteria?
- Which methods of structured self-assessment are students expected to use? (e.g., journals, peer conferences, teacher or mentor conferences, rubrics, periodic review of progress vis-à-vis the work plan)
- Do students receive timely feedback on their works-in-progress from teachers, mentors, and peers?
- What work requirements are students expected to complete during the life of the project? (e.g., proposal, work plan, reflection paper, mini-presentation, models, illustrations)
- Do students prepare a culminating exhibition or presentation at the completion of the project that demonstrates their ability to apply the knowledge they have gained?

### Exemplary Categories for Six A's

Category	Exemplary
Authenticity	<ul style="list-style-type: none"> <li>• Adults in the “real world” are likely to tackle the problem or questions addressed by the project.</li> <li>• The problem or question has meaning to the students.</li> <li>• There is an external audience for the student work.</li> </ul>
Academic Rigor	<ul style="list-style-type: none"> <li>• There is a well-defined and clear Driving Question that is derived from specific nation, state, district, or school content standards.</li> <li>• The project demands breadth and depth of specific knowledge of central concepts.</li> <li>• Students develop new habits of mind (e.g., questioning and posing problems; precision of language and thought; persistence).</li> </ul>
Applied Learning	<ul style="list-style-type: none"> <li>• Students apply new knowledge to a realistic and complex problem.</li> <li>• Students use multiple high-performance work organization skills (e.g., working in teams; using technology appropriately; communication ideas, collecting, organizing, and analyzing information).</li> <li>• Students formally use self-management skills (e.g., developing a work plan, prioritizing pieces of work, meeting deadlines, identifying and allocating resources) to improve their teams' performance.</li> </ul>
Active Exploration	<ul style="list-style-type: none"> <li>• Students do field-based activities (e.g., interviewing experts, surveying groups of people, exploring worksites).</li> <li>• Students gather information from a variety of primary sources and use a variety of methods (interviewing and observing, collecting data, model-building, using on-line services).</li> </ul>
Adult Connections	<ul style="list-style-type: none"> <li>• Students have multiple contacts with adults outside of school who have expertise and experience and who can ask questions, provide feedback, and offer advice.</li> <li>• Students have the opportunity to observe and work alongside adults in a worksite relevant to the project.</li> <li>• Adults outside of school provide students with a sense of the real-world standards for this type of work.</li> </ul>
Assessment Practices	<ul style="list-style-type: none"> <li>• Students help in establishing assessment criteria.</li> <li>• Students use a variety of structured self-assessments (journals, peer conferences, teacher or mentor conferences, and rubrics).</li> <li>• Students receive frequent and timely feedback on their works-in-progress from teachers, mentors, and peers.</li> <li>• The final product is a culminating exhibition or presentation in front of an informed audience</li> <li>• The project employs multiple products, and all products are aligned with outcomes.</li> </ul>