



# Rigorous and Meaningful Assessment in PBL

*How can we design meaningful and  
effective assessments in a PBL Project?*

Andrew Miller

MENA 2017

Twitter: @betamiller

[www.andrewkmiller.com](http://www.andrewkmiller.com)

# P R O J E C T B A S E D T E A C H I N G R U B R I C

Project Based Teaching Practice	Beginning PBL Teacher	Developing PBL Teacher	Gold Standard PBL Teacher
<b>Design &amp; Plan</b>	<ul style="list-style-type: none"> <li>▶ Project includes some Essential Project Design Elements, but not at the highest level of the Project Design Rubric.</li> <li>▶ Plans for scaffolding and assessing student learning lack some detail; project calendar needs more detail, or is not followed.</li> <li>▶ Some resources for the project have not been anticipated or arranged in advance.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Project includes all Essential Project Design Elements, but some are not at the highest level of the Project Design Rubric.</li> <li>▶ Plans for scaffolding and assessing student learning lack some details; project calendar allows too much or too little time, or is followed too rigidly to respond to student needs.</li> <li>▶ Most resources for the project have been anticipated and arranged in advance.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Project includes all Essential Project Design Elements as described on the Project Design Rubric.</li> <li>▶ Plans are detailed and include scaffolding and assessing student learning and a project calendar, which remains flexible to meet student needs.</li> <li>▶ Resources for the project have been anticipated to the fullest extent possible and arranged well in advance.</li> </ul>
<b>Align to Standards</b>	<ul style="list-style-type: none"> <li>▶ Criteria for products are given but are not specifically derived from standards.</li> <li>▶ Scaffolding of student learning, critique and revision protocols, assessments and rubrics do not refer to or support student achievement of specific standards.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Criteria for some products are not specified clearly enough to provide evidence that students have met all targeted standards.</li> <li>▶ Scaffolding of student learning, critique and revision protocols, assessments and rubrics do not always refer to or support student achievement of specific standards.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Criteria for products are clearly and specifically derived from standards and allows demonstration of mastery.</li> <li>▶ Scaffolding of student learning, critique and revision protocols, assessments and rubrics consistently refer to and support student achievement of specific standards.</li> </ul>
<b>Build the Culture</b>	<ul style="list-style-type: none"> <li>▶ Norms are created to guide project work, but they may still feel like “rules” imposed and monitored by the teacher.</li> <li>▶ Students are asked for their ideas and given some choices to make, but opportunities for student voice and choice are infrequent or are only related to minor matters.</li> <li>▶ Students occasionally work independently, but often look to the teacher for guidance.</li> <li>▶ Student teams are often unproductive or require frequent intervention by the teacher.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Norms to guide the classroom are co-crafted with students, and students are beginning to internalize these norms.</li> <li>▶ Student voice and choice is encouraged through intentionally designed opportunities, e.g., when choosing teams, finding resources, using critique protocols, or creating products.</li> <li>▶ Students work independently to some extent, but look to the teacher for direction more often than necessary.</li> <li>▶ Student teams are generally productive and are learning what it means to move from cooperation to effective collaboration; the teacher occasionally has to intervene or manage their work.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Norms to guide the classroom are co-crafted with and self-monitored by students.</li> <li>▶ Student voice and choice is regularly leveraged and ongoing, including identification of real-world issues and problems students want to address in projects.</li> <li>▶ Students usually know what they need to do with minimal direction from the teacher.</li> <li>▶ Students work collaboratively in healthy, high-functioning teams, much like an authentic work environment; the teacher rarely needs to be involved in managing teams.</li> </ul>

Project Based Teaching Practice	Beginning PBL Teacher	Developing PBL Teacher	Gold Standard PBL Teacher
<b>Build the Culture</b> <i>continued</i>	<ul style="list-style-type: none"> <li>▶ Students feel like there is a “right answer” they are supposed to give, rather than asking their own questions and arriving at their own answers; they are fearful of making mistakes.</li> <li>▶ Value is placed on “getting it done” and time is not allowed for revision of work; “coverage” is emphasized over quality and depth.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Students understand there is more than one way to answer a driving question and complete the project, but are still cautious about proposing and testing ideas in case they are perceived to be “wrong.”</li> <li>▶ The values of critique and revision, persistence, rigorous thinking, and pride in doing high-quality work are promoted by the teacher but not yet owned by students.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Students understand there is no single “right answer” or preferred way to do the project, and that it is OK to take risks, make mistakes, and learn from them.</li> <li>▶ The values of critique and revision, persistence, rigorous thinking, and pride in doing high-quality work are shared, and students hold each other accountable to them.</li> </ul>
<b>Manage Activities</b>	<ul style="list-style-type: none"> <li>▶ The classroom features some individual and team work time and small group instruction, but too much time is given to whole group instruction.</li> <li>▶ Classroom routines and norms for project work time are not clearly established; time is not used productively.</li> <li>▶ Schedules, checkpoints, and deadlines are set, but they are loosely followed or unrealistic; bottlenecks impede workflow.</li> <li>▶ Teams are formed using either a random process (e.g., counting off) or students are allowed to form their own teams with no formal criteria or process.</li> </ul>	<ul style="list-style-type: none"> <li>▶ The classroom features individual and team work time, whole group and small group instruction, but these structures are not well-balanced throughout the project.</li> <li>▶ Classroom routines and norms are established for project work time, but are not consistently followed; productivity is variable.</li> <li>▶ Realistic schedules, checkpoints, and deadlines are set, but more flexibility is needed; bottlenecks sometimes occur.</li> <li>▶ Generally well-balanced teams are formed, but without considering the specific nature of the project; students have too much voice and choice in the process, or not enough.</li> </ul>	<ul style="list-style-type: none"> <li>▶ The classroom features an appropriate mixture of individual and team work time, whole group and small group instruction.</li> <li>▶ Classroom routines and norms are consistently followed during project work time to maximize productivity.</li> <li>▶ Project management tools (group calendar, contract, learning log, etc.) are used to support student self-management and independence.</li> <li>▶ Realistic schedules, checkpoints, and deadlines are set but flexible; no bottlenecks impede workflow.</li> <li>▶ Well-balanced teams are formed according to the nature of the project and student needs, with appropriate student voice and choice.</li> </ul>
<b>Scaffold Student Learning</b>	<ul style="list-style-type: none"> <li>▶ Students receive some instructional supports to access both content and resources, but many individual needs are not met.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Most students receive instructional supports to access both content and resources, but some individual needs are not met.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Each student receives necessary instructional supports to access content, skills, and resources; these supports are removed when no longer needed.</li> </ul>

Project Based Teaching Practice	Beginning PBL Teacher	Developing PBL Teacher	Gold Standard PBL Teacher
<b>Scaffold Student Learning</b> <i>continued</i>	<ul style="list-style-type: none"> <li>▶ Teacher may “front-load” content knowledge before the project launch, instead of waiting for “need to know” points during the project.</li> <li>▶ Students gain key success skills as a side effect of the project, but they are not taught intentionally.</li> <li>▶ Students are asked to do research or gather data, but without adequate guidance; deeper questions are not generated based on information gathered.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Scaffolding is guided to some extent by students’ questions and “need to knows” but some of it may still be “front-loaded.”</li> <li>▶ Key success skills are taught, but students need more opportunities to practice success skills before applying them.</li> <li>▶ Student inquiry is facilitated and scaffolded, but more is needed; or, teacher may over-direct the process and limit independent thinking by students.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Scaffolding is guided as much as possible by students’ questions and needs; teacher does not “front-load” too much information at the start of the project, but waits until it is needed or requested by students.</li> <li>▶ 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.</li> <li>▶ Student inquiry is facilitated and scaffolded, while allowing students to act and think as independently as possible.</li> </ul>
<b>Assess Student Learning</b>	<ul style="list-style-type: none"> <li>▶ Student learning of subject-area standards is assessed mainly through traditional means, such as a test, rather than products; success skills are not assessed.</li> <li>▶ Team-created products are used to assess student learning, making it difficult to assess whether individual students have met standards.</li> <li>▶ Formative assessment is used occasionally, but not regularly or with a variety of tools and processes.</li> <li>▶ Protocols for critique and revision are not used, or they are informal; feedback is superficial, or not used to improve work.</li> <li>▶ Students assess their own work informally, but the teacher does not provide regular, structured opportunities to do so.</li> <li>▶ Rubrics are used to assess final products, but not as a formative tool; or, rubrics are not derived from standards.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Project products and other sources of evidence are used to assess subject-area standards; success skills are assessed to some extent.</li> <li>▶ Individual student learning is assessed to some extent, not just team-created products, but teacher lacks adequate evidence of individual student mastery.</li> <li>▶ Formative assessment is used on several occasions, using a few different tools and processes.</li> <li>▶ Structured protocols for critique and revision and other formative assessments are used occasionally; students are learning how to give and use feedback.</li> <li>▶ Opportunities are provided for students to self-assess their progress, but they are too unstructured or infrequent.</li> <li>▶ Standards-aligned rubrics are used by the teacher to guide both formative and summative assessment.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Project products and other sources of evidence are used to thoroughly assess subject-area standards as well as success skills.</li> <li>▶ Individual student learning is adequately assessed, not just team-created products.</li> <li>▶ Formative assessment is used regularly and frequently, with a variety of tools and processes.</li> <li>▶ Structured protocols for critique and revision are used regularly at checkpoints; students give and receive effective feedback to inform instructional decisions and students’ actions.</li> <li>▶ Regular, structured opportunities are provided for students to self-assess their progress and, when appropriate, assess peers on their performance.</li> <li>▶ Standards-aligned rubrics are used by students and the teacher throughout the project to guide both formative and summative assessment.</li> </ul>

Project Based Teaching Practice	Beginning PBL Teacher	Developing PBL Teacher	Gold Standard PBL Teacher
<b>Engage &amp; Coach</b>	<ul style="list-style-type: none"> <li>▶ The teacher has some knowledge of students' strengths, interests, backgrounds, and lives, but it does not significantly affect instructional decision-making.</li> <li>▶ Project goals are developed without seeking student input.</li> <li>▶ Students are willing to do the project as if it were another assignment, but the teacher does not create a sense of ownership or fuel motivation.</li> <li>▶ The driving question is presented at the project launch and student questions are generated, but they are not used to guide inquiry or product development.</li> <li>▶ Expectations for the performance of all students are not clear, too low, or too high.</li> <li>▶ There is limited relationship-building in the classroom, resulting in student needs that are not identified or addressed.</li> <li>▶ Students and the teacher informally reflect on what and how students are learning (content and process); reflection occurs mainly at the end of the project.</li> </ul>	<ul style="list-style-type: none"> <li>▶ The teacher has general knowledge of students' strengths, interests, backgrounds, and lives and considers it when teaching the project.</li> <li>▶ Project goals and benchmarks are set with some input from students.</li> <li>▶ Students are excited by the project and motivated to work hard by the teacher's enthusiasm and commitment to their success.</li> <li>▶ Students' questions guide inquiry to some extent, but some are answered too quickly by the teacher; students occasionally reflect on the driving question.</li> <li>▶ Appropriately high expectations for the performance of all students are set and communicated by the teacher.</li> <li>▶ Student needs for further instruction or practice, additional resources, redirection, troubleshooting, praise, encouragement, and celebration are identified through relationship-building and close observation and interaction.</li> <li>▶ Students and the teacher occasionally reflect on what and how students are learning (content and process).</li> </ul>	<ul style="list-style-type: none"> <li>▶ The teacher's knowledge of individual student strengths, interests, backgrounds, and lives is used to engage them in the project and inform instructional decision-making.</li> <li>▶ Students and the teacher use standards to co-define goals and benchmarks for the project (e.g., by co-constructing a rubric) in developmentally appropriate ways.</li> <li>▶ Students' enthusiasm and sense of ownership of the project is maintained by the shared nature of the work between teachers and students.</li> <li>▶ Student questions play the central role in driving the inquiry and product development process; the driving question is actively used to sustain inquiry.</li> <li>▶ Appropriately high expectations for the performance of all students are clearly established, shared, and reinforced by teachers and students.</li> <li>▶ Individual student needs are identified through close relationships built with the teacher; needs are met not only by the teacher but by students themselves or other students, acting independently.</li> <li>▶ Students and the teacher reflect regularly and formally throughout the project on what and how students are learning (content and process); they specifically note and celebrate gains and accomplishments.</li> </ul>

## Strategies Block Party

*As you collaborate with colleagues, try to find up to 5 strategies that will work for you and your students.*


# Project Assessment Map

