

Directions for Principal for Test out Option

Please complete the rubric for the teacher interested in participating in the test out option for the Project-Based Learning course for the 21st Century Series. A teacher must score at an Applying (3) level or above in each of the look-for areas to qualify for the test-out option.

A teacher must submit a scored copy of the rubric with the district sign off form and payment before they attend the examination portion of the test.

Please fill out the below section before submitting.

I _____ verify that _____ has met the
(Principal Signature) (Learners Signature)

proficiency according to the rubrics to participate in the examination portion of the test-out option.

For questions regarding please email cff_cs@embeddedlearningacademy.com or call 1-877-574-1638.

Project-Based Learning in the 21st Century Look-fors

Look-For #1:

Project Concept: Teacher's project concept is standard-focused and well matched to student abilities, project experience, community involvement, and fits within a suitable time frame.

Indicators:

- Teacher planned outcomes are in line with district, state, or national standards.
- Teacher structures products and performances that are closely aligned to standards and that are rich and varied enough to make credible judgments about student learning.
- Teacher provides opportunities for students to construct knowledge.
- Teacher addresses issues, problems, or questions faced by people in the world outside of school.
- Teacher designs robust projects that require students to engage in a complex, problem-solving process of assimilating facts, using skills, contemplating solutions, and creating worthwhile products.
- Teacher creates an engaging introduction or launch activity.
- Teacher provides an appropriate timeline.
- Teacher identifies and incorporates topics and/or problems that intrigue and interest students.
- Teacher coordinates resources outside the classroom that can extend and contextualize learning.
- Teacher embraces technology for project planning and project execution, modeling its effective use in instructional planning and delivery.
- Teacher facilitates technology resources and tools used by students.

Evidence:

- Teacher frames and communicates learning goals.
- Teacher models effective use of technology when framing and communicating goals and expectations.
- Teacher sets student technology expectations during project work and assessment, ensuring that technology is infused throughout the project and that standards for its use and for the products created are set high and evaluated thoroughly.
- Teacher communicates clearly how artifacts and performances are connected to district, state or national standards.
- Teacher designs projects to engage students in conducting research, discussing ideas, and developing their own products such as essays, reports, presentations and tangible artifacts.
- Teacher encourages exploration of research beyond the classroom through communication with experts in the community, region, or nation.
- Students are engaged during project launch.
- Students work at an appropriate pace to gain the required knowledge and skills to create high-quality products and performances, and they are neither rushed nor bored by overly-drawn-out tasks.
- Students are engaged in completing the project work.
- Most students complete the assigned activities in the time allocated.

	Project Concept Rubric
Innovating 4	<ol style="list-style-type: none"> 1. Cross-curricular project outcomes are clearly specified and go deeper than district, state or national standards. 2. Project products and performances result in exemplars that can be shown to future classes to illustrate deep understanding of district, state or national standards. 3. Teacher orchestrates but rarely instructs; students are responsible for the vast majority of “teaching” that occurs during the project. 4. Project emphasizes complex, cross-curricular issues and the experience of varied individuals outside of school. 5. Project requires students to spend more than a week solving a set of complex, engaging, interrelated problems by collecting, analyzing and synthesizing information. 6. Project utilizes technology for communication, planning, research, collaboration, infusion of local and global resources, and final product. 7. Launch activity has students anxious to begin work on the project. 8. Specific, clear timeline provided for all project activities, due dates and performances. 9. Project topic and problems to be addressed interest students greatly. 10. Outside resources such as speakers, field trips or data collection are integrated smoothly and heighten student engagement in the project. 11. Technology resources are infused and integrated and vital to the project, not retrofitted or added on.
Applying 3	<ol style="list-style-type: none"> 1. Project outcomes are clearly specified and match essential district, state or national standards. 2. Project products and performances are rich and varied and provide evidence for attainment of essential district, state or national standards. 3. Teacher orchestrates more than instructs; students have ample opportunity to teach themselves and others. 4. Project includes attention to issues and life experiences outside of school. 5. Project requires students to spend several days or more solving a complex, engaging problem by collecting and analyzing information. 6. Project makes available technology for communication, planning, research, collaboration, infusion of local and global resources, and final product. 7. Launch activity engages student interest. 8. Timeline provided for all project activities and performances. 9. Project topic and problems to be addressed have some interest for students. 10. Outside resources such as speakers, field trips, and data collection are integrated smoothly into project activities. 11. Project products and performances are usually infused with technology, and these products and performances generally exhibit

	the full rigor and high expectations evident with all classroom work.
Moving 2	<ol style="list-style-type: none"> 1. Project outcomes are vague; the connection to essential district, state, or national standards is unclear. 2. Project products and performances are formulaic and monotonous and the evidence of standards attainment is vague and inconsistent. 3. Teacher instruction predominates; students have little opportunity to teach themselves and others. 4. Project does not pay attention to issues and life experiences outside of school. 5. Project includes one or more problems to be solved, but they are neither substantive in content, nor complex in procedure. 6. Project limits availability of technology for communication, planning, research, collaboration, infusion of local and global resources, and final product. 7. Launch activity is more engaging and better received than a worksheet would be. 8. Project timeline is provided, but it is incomplete or difficult to understand. 9. Project topic and problems to be addressed does not have the active interest of students. 10. Outside resources such as speakers, field trips and data collection get in the way of project work and sustained learning. 11. Technology is added on or perfunctory and not integral to instruction, and expectations for its use are not clearly communicated to students.
Beginning 1	<ol style="list-style-type: none"> 1. Project outcomes are not connected to any district, state, or national standard 2. Project products and performances are insufficient to provide convincing evidence of standards attainment 3. Teacher instruction is continual; students have no opportunity to teach themselves. 4. Project does not consider current school issues or student experience within school. 5. Project does not require problem-solving. 6. Project ignores the use of technology for communication, planning, research, collaboration, infusion of local and global resources, and final product. 7. Launch activity is nonexistent or of such inferior quality that it does not engage students. 8. Teacher does not provide a project timeline. 9. Project topic or problems to be addressed does not interest students. 10. Outside resources have no role in the project. 11. Technology is not used or used only rarely by students.

	Project Concept Tips
Innovating 4	How can you plan and structure a project so that it is the students – rather than yourself – who are teaching themselves and others the knowledge and skills defined by essential district, state, or national standards? How can you involve students more fully in project planning? How can you create projects that interest students? How can a project be planned so that it enables students to address and learn from multiple content areas at the same time? What additional supports in the form of timelines, templates, exemplary projects, or rubrics would enable students to complete a longer and more complex project without becoming bored or confused? Can students arrange and schedule the outside resources you intend to use? Have you modeled effective planning and shown that planning to students via an online classroom vehicle? Have you created an online repository of resources and exemplars as well as goals and expectations that students may visit at any time? Have you set the standard for infused technology use by your students?
Applying 3	How can you plan and structure a project so that the students do the majority of teaching themselves and others the knowledge and skills defined by essential district, state, or national standards? Is there a part of the project or an activity that you could turn over to students to plan? Are students fully aware of when things are due? Do they need any more supports so they won't be confused? Is there a way to use outside resources more effectively?
Moving 2	How can you plan and structure a project so that the students spend as much time teaching themselves as you spend teaching them? Is the project content directly aligned with district, state, or national standards? Have you considered what supports in the form of timelines, templates, or rubrics that students need to fully understand your expectations for the project? Do they know when everything is due? Have you considered using outside resources such as speakers, field trips or data collection?
Beginning 1	Have you thought through how the project activities, products and performances line up with important district, state, or national standards? Are you certain that students understand the order in which project activities are to be completed and when things are due? Would students be more engaged in the project if you “launched” the project in a way that intrigued them and captured their interest and imagination? Would they be more engaged if the project included field trips, outside speakers or the opportunity to collect information about things that were important to them?

Look-for # 2:

Project Plan: Teacher's project plan is organized by a Driving Question that makes the project intriguing, complex, and problematic. The Driving Question leads to authentic components of the project and assessment.

Indicators:

- Teacher designs open ended Driving Question or problem that has meaning and relevance to students, inspires higher order thinking, encourages focused problem-solving skills, and requires core knowledge to answer.
- Teacher designs the Driving Question to require multiple activities, to be a synthesis of different information and to lead to an authentic component of the project and assessment.
- Teacher requires students to engage in targeted inquiry, including using prior knowledge, gaining in-depth understanding of the subject, and mastering core conventions of the discipline/field.
- Teacher incorporates activities and tasks that encourage student autonomy, voice and choice.
- Teacher employs a variety of assessments that are sufficient to assess students on all outcomes.
- Teacher creates formative and summative assessments.
- Teacher supports student created culminating exhibitions, presentations, or products in order to demonstrate that students can apply their knowledge to an audience beyond the teacher and classroom.
- Teacher organizes project around the creation of artifacts that demonstrate content learning and skill development.
- Teacher offers appropriate scaffolds and support for activities.
- Teacher provides opportunities for students to use technology as a learning tool for communication and research, for documenting their learning and for collaboration.
- Teacher makes allowance for varying skill levels of the students.
- Teacher uses technology to communicate and elaborate on the Driving Question, as well as for a jumping-off point for resources, inquiry, activities, tasks, and the communication of expectations and timelines.

Evidences:

- Teacher provides scaffolds for students to rephrase or explain the Driving Question in their own words and tell why it is important to address this question.
- Teacher requires identification, analysis and synthesis of information to answer the Driving Question. It cannot be answered with a simple "yes" or "no".
- Teacher designs the Driving Question to reflect the core concerns and questions of a discipline.
- Teacher purposefully plans for students to be engaged in research: mining the Internet, scanning library resources, and talking with outside experts and/or community members.
- Teacher expects that the record of the research in progress by students is documented, journaled and shared online with the class.
- Teacher ensures students learn core disciplinary knowledge and conventions.
- Teacher guides and supports students to make decisions about aspects of the project activities.
- Teacher requires students to demonstrate a variety of knowledge, skills and competencies

through artifacts and performances.

- Teacher creates project plans that requires students to display what they have learned before an audience.
- Teacher creates various assessment tools such as rubrics, scoring guides, criteria checklists, and tests.
- Teacher provides students with timely lessons and resources, or coaches them to find their own, in order to build knowledge of content and to develop skills.
- Teacher provides feedback to students on the quality of their products and performances before the final exhibition or presentation.
- Teacher participates in the online work with the students by guiding, coaching, and interacting with students online.
- Teacher documents his or her planning process and elaborates on expectations through an online classroom learning vehicle such as a Wiki or a blog.
- Teacher takes advantage of the power of technology to create a record and uses students online journaling and work for both formative and summative assessment.

	Project Plan Rubric
Innovating 4	<ol style="list-style-type: none"> 1. Teacher works with students to design an open ended Driving Question or problem that has meaning and relevance to students, inspires higher order thinking, encourages focused problem-solving skills, and requires core knowledge to answer. 2. Teacher works with students to design a Driving Question that requires multiple activities and synthesis of different information and that leads to an authentic component of the project and assessment. 3. Teacher works with students to plan activities that encourage student autonomy, voice and choice. 4. Teacher works with students to communicate and collaborate online, bringing the same rigor and high expectations to online communication as to classroom work. 5. Teacher works with students to create a variety of formative and summative assessments that are sufficient to assess students on all outcomes. 6. Teacher plans for students to present a culminating exhibition of multiple products and/or performances and demonstrate that they can apply their knowledge to an audience beyond the teacher and classroom. 7. Teacher organizes project around the creation of elaborate artifacts that demonstrate deep content learning and complex skill development. 8. Teacher has taken into account the needs of different students and has prepared scaffolds matched to the demands of each activity. 9. Teacher models and expects student technology use through the class Wiki or blog or online community which is continually used for journaling student work in progress, for research, for collaboration, for formative and summative assessment, and as the raw material for student products. 10. Teacher designs and models technology use by students as a core

	<p>expectation.</p> <p>11. Teacher provides students with the opportunity to improve their technology skills and extend the reach of the project using technology.</p>
Applying 3	<ol style="list-style-type: none"> 1. Teacher designs an open ended Driving Question or problem that has meaning and relevance to students, inspires higher order thinking, encourages focused problem-solving skills, and requires core knowledge to answer. 2. Teacher designs a Driving Question that requires multiple activities and synthesis of different information and that leads to an authentic component of the project and assessment. 3. Teacher incorporates activities and tasks that encourage student autonomy, voice and choice. 4. Teacher encourages students to communicate and collaborate online, bringing the same rigor and high expectations to online communication as to classroom work. 5. Teacher creates a variety of formative and summative assessments that are sufficient to assess students on all outcomes. 6. Teacher plans for students to present products and other artifacts to an audience beyond the teacher and classroom. 7. Teacher organizes project around the creation of several artifacts that demonstrate content learning and skill development. 8. Teacher has prepared scaffolds and supports for all activities. 9. Teacher includes technology tools as a regular part of the project. 10. Teacher models technology use during the project. 11. Teacher provides students with the opportunity to improve their technology skills.
Moving 2	<ol style="list-style-type: none"> 1. Teacher designs a Driving Question that requires students to find information, reach conclusions and display their conclusions for assessment. 2. Teacher designs a Driving Question or problem that requires them to solve an easy problem that includes knowledge and concepts defined by district, state, or national standards. 3. Teacher includes the opportunity for students to make some choices in the way they complete the project. 4. Teacher encourages students to communicate and collaborate online but the communication lacks rigor. 5. Teacher does not develop a variety of assessments for all project outcomes. 6. Teacher plans for students to present at least one product or performance to their classmates. 7. Teacher includes the production of at least one artifact during the project, but it does not clearly demonstrate content learning and skill development. 8. Teacher has prepared scaffolds or supports for the most difficult/complex activities. 9. Teacher includes technology tools infrequent as part of the project.

	<p>10. Teacher offer limited modeling of the use of technology.</p> <p>11. Teacher provides students with the limited opportunity to improve their technology skills.</p>
Beginning 1	<ol style="list-style-type: none"> 1. Teacher creates a Driving Question that has a single answer which can be easily identified without sustained problem-solving. 2. Teacher designs a Driving Question or problem that does not require knowledge and concepts defined by district, state, or national standards. 3. The project contains no opportunities for students to make choices or influence outcomes. 4. Teacher does not encourages students to communicate and collaborate online 5. Teacher does not make any attempt to assess student process or learning during project. 6. Teacher does not plan for students to present products or performances. 7. Teacher does not require artifacts produced during project. 8. Teacher does not prepare scaffolds or supports . 9. Teacher does not involve technology in the project. 10. Teacher does not model the use of technology. 11. Teacher provides students no opportunity to improve their technology skills.

	Project Plan Tips
Innovating 4	<p>How can you involve your students in creating a open ended Driving Question or problem that has meaning and relevance to students, inspires higher order thinking, encourages focused problem-solving skills, and requires core knowledge to answer? Does your Driving Question lead to multiple activities, some planned and chosen by students that require the analysis and synthesis of essential information and result in a public performance or product? Have you modeled technology use and your own project-based learning by providing an online record of your planning and work? Have you shared expectations, timelines, and activities with your students online so they can continually refer to this information from anywhere? Have you involved your students in creating formative and summative assessments? Do project performances and artifacts demonstrate deep content learning and complex skill development? Have your prepared scaffolds and other support materials for all activities that address the varied needs of different types of students? Have students developed new or solidified already gained technology skills as a result of the project? Have students used technology as a core element of project-based learning for journaling, researching, collaborating, sharing, synthesizing ideas, and creating closing activities?</p>
Applying 3	<p>Is your Driving Question sufficiently open-ended so that students can answer it (correctly) in different ways and reach different (correct)</p>

	<p>answers? Does it require students to think critically and conceptually? Does it require them to engage in multiple activities and synthesize information in order to solve a problem? How can you build in opportunities for students to make significant choices, voice their own opinions and act autonomously? Have you designed appropriate formative and summative assessments addressing all project outcomes? Have you arranged for performances and products to be exhibited to an audience beyond the classroom? Do students' artifacts demonstrate their content learning and skill development? Have you developed scaffolds and other support materials for all activities? Do you use technology to model project-based learning and research? Do you use technology to publish expectations, timelines, and activities? Do students use technology as an assigned, integral part of project activities?</p>
Moving 2	<p>Does your Driving Question have more than one (correct) answer? Does it require students to do more than record and recall information? Does the Driving Question direct students to solve an accessible problem that includes knowledge and concepts defined by district, state, or national standards? Does the Driving Question require students to do research and reach conclusions? Are students able to make some choices in the activities they undertake and/or the strategies they use to complete these activities? Have you made sure that at least some of the project outcomes will be assessed? Do some students have the opportunity to present their artifacts and receive critique? Have you prepared scaffolds and supports to help students through the most difficult activities? Are there ways for you to use technology to share expectations and ideas with your students? Are there opportunities for some students to use technology?</p>
Beginning 1	<p>Have you built your project around a Driving Question, and used this to organize activities? Can the project activities or the artifacts that emerge from these activities be assessed? Have you considered making some of the activities optional so that students will have the opportunity to make choices? Have you considered using the activities as opportunities to assess student understanding of content? Will products result from these activities? Do you have any plans to support and scaffold students if they run into difficulties or are confused about what to do? Have you structured the project so that students can present their products and/or performances to the rest of the class? Have you considered including technology as part of the project?</p>

Look-for # 3:

Project Implementation and Management: Teacher implements and manages the project to encourage development of student independence, autonomy, and responsibility for mastering content and skills as defined in project and successful completion of project.

Indicators:

- Teacher initiates the in-class portion of the project with an engaging launch activity.
- Teacher uses the Driving Question(s) to direct project activities.
- Teacher designs, introduces, and facilitates student-directed learning activities.
- Teacher clearly explains assessments and criteria for performance to students at beginning of project.
- Teacher ensures that project materials are organized and available to students.
- Teacher purposely designs project with student interest and engagement in mind.
- Teacher guides students to make decisions about the assignment of roles and responsibilities necessary to carry out the activities.
- Teacher requires students to practice the 21st Century skills of collaboration, problem solving, presentation and self-management.
- Teacher provides students with constructive feedback and information to improve their performances and solidify new learning.
- Teacher expects student work online, using the class Wiki or blog or online vehicle to be conducted with the same rigor and high expectations as class work.

Evidence:

- Teacher is actively engaged and interested in the project launch activity.
- Teacher posts Driving Question(s) on classroom walls, boards and online.
- Teacher discusses project products, activities, and assessments at the beginning of the project.
- Teacher requires students to articulate project learning expectations and assessment criteria.
- Teacher structures the classroom so that it permits students to work together on a set of activities designed to answer the Driving Question and accomplish the goals of the project.
- Teacher supports students conducting extensive exploration and research, including field-based activities.
- Teacher encourages student contact with one another and with the teacher online.
- Teacher encourages students contact with adults outside the classroom.
- Teacher establishes the expectation that students can explain where project materials and resources are to be found.
- Teacher structures activities that require that student groups have leaders and task specialization.
- Teacher expects students to learn different things that are shared with others, and/or to employ different skills which are contributed to the group effort, in order to accomplish project activities.
- Teacher expects that collaboration in class be enhanced, furthered, and documented via the class Wiki or blog or other online tool.
- Teacher scaffolds student use of a variety of time and task management tools during project

implementation.

- Teacher helps students manage conflicts within a group.
- Teacher provides regular feedback on performance as the project progresses.

Project Implementation and Management Rubric	
<p>Innovating 4</p>	<ol style="list-style-type: none"> 1. Teacher initiates the in-class portion of the project with a compelling, memorable and engaging launch activity directly connected to the Driving Question. 2. Both teacher and students introduce and facilitate student-directed learning activities. 3. At the beginning of the project, teacher and students take responsibility in partnership for verifying that all students understand the assessments and criteria for performance that will be used in the project, and have seen and analyzed examples of excellent work. 4. Teacher scaffolds student organization of project materials and decide how to make them available during the project. 5. Teacher is present and provides opportunities for students to work on the project outside of class time. 6. Teacher requires students to make decisions about the assignment of roles and responsibilities necessary to carry out the project. 7. The 21st Century skills of collaboration, problem solving, presentation and self-management are interwoven through all project activities in class and online. 8. Teacher structures project that involve students to provide each other with frequent and constructive feedback and information to improve their performances and solidify new learning. 9. Teacher designs project that involve student journaling, documenting and describing their work-in-progress via the class Wiki, blog, or online community. 10. Both teacher and student interact extensively via the classroom Wiki or blog or online community, documenting their problem solving, research, and collaborative activities
<p>Applying 3</p>	<ol style="list-style-type: none"> 1. Teacher initiates the in-class portion of the project with an engaging launch activity directly connected to the Driving Question. 2. Teacher introduces and facilitates student-directed learning activities. 3. Teacher clearly explains assessments and criteria for performance to students at beginning of project. 4. Teacher ensures that project materials are organized and available to students. 5. Teacher makes an effort to be available for out of class project work. 6. Teacher usually gives students the responsibility to make decisions about group roles and responsibilities. 7. Teacher requires students to practice the 21st Century skills of collaboration, problem solving, presentation and self-management. 8. Teacher provides students with frequent and constructive feedback and information to improve their performances and solidify new learning.

	<ol style="list-style-type: none"> 9. Teacher designs project that occasionally involve student journaling, documenting and describing their work-in-progress via the class Wiki, blog, or online community. 10. Teacher engages with students online for project work and expects students to interact with the teacher and one another online for project work.
Moving 2	<ol style="list-style-type: none"> 1. Teacher initiates the in-class portion of the project with a launch activity, but it neither engages students nor captures their interest. 2. Teacher attempts to structure project around student-directed learning activities, but does a sub-par job of facilitating these activities. 3. Teacher mentions assessment and criteria for performance at the beginning of the project, but does not explain these clearly or verify that students understand. 4. Project materials are unorganized making it difficult for students to get what they need for project activities. 5. Teacher makes limited time available for out of class project work. 6. Teacher occasionally gives students the responsibility to make decisions about group roles and responsibilities. 7. The teacher provides occasional opportunities to practice the 21st Century skills of collaboration, problem solving, presentation and self-management. 8. Teacher occasionally provides students with feedback intended to improve their performances, but it is neither timely nor specific enough to be useful. 9. Teacher does not require but recommends student journaling, documenting and describing their work-in-progress via the class Wiki, blog, or online community. 10. Teacher occasionally engages with students online for project work and expects students to interact with the teacher and one another online for project work.
Beginning 1	<ol style="list-style-type: none"> 1. Teacher ignores the launch activity and begins the project by telling students what the Driving Question is and what they have to do to complete the project. 2. All activities are teacher directed. 3. Teacher does not mention or explain assessments and criteria that will be used at the beginning of the project. 4. Project materials run out and/or teacher and students can't locate them. 5. Teacher makes no effort to be available for out of class project work. 6. Teacher makes all decisions regarding group roles and responsibilities. 7. There are no opportunities to practice the 21st Century skills of collaboration, problem solving, presentation and self-management. 8. Teacher does not provide constructive feedback and information to improve their performances and solidify new learning. 9. Teacher does not use technology and does not expect students to use technology. 10. Teacher does not engage with students online for project work.

	Project Implementation and Management Tips
Innovating 4	Can you think of a way to make the project launch activity even more memorable and engaging? Have you prepared your students to act as mentors and facilitators so they can take the lead in helping their peers? Do they have the opportunity to act as learning facilitators? Are your students able to explain what assessments and criteria will be used for project activities and products? Did you show your students examples of excellent work? Do your students organize, make available and take care of project materials and resources? Can you make your room available for students to work on their projects before and after school and at lunch? Have you involved your students in substantive decisions making to the maximum extent possible and practical? Do your students decide who will carry out what task within a group? Do they assign other students roles within the group? Have you considered all possible opportunities to teach the 21 st Century skills of collaboration, problem solving, presentation and self-management? Have you structured project time and activities so that students give frequent and constructive feedback to other students and help them improve their performances and solidify new learning? Have you created a Wiki or blog or online community where you have shared your planning and expectations with the students? Have you created an online community repository for student journals, research, collaborations, and work-in-progress? Have you set the bar for technology use as high when online interactions and work is happening as when classroom work is occurring? Have you taken the same care, rigor and attention to planned technology activities and expectations as to classroom activities and expectations?
Applying 3	Can you think of a way to make the project launch activity more engaging for students? Have you made it clear that you expect students to take an active role in their own learning and designed scaffolds to help them to reach this goal? Are your students fully aware of the assessments and criteria for performance that will be used in the project? Are project materials well-organized and easily accessible? Can you think of a way to make project activities more engaging for students? Do you strive to give students the opportunity to make decisions about group roles and responsibilities? Are you managing the project so that students must practice the 21 st Century skills of collaboration, problem solving, presentation and self-management? Do you provide students with frequent and constructive feedback so they may improve their performances and solidify new learning? Have you described expectations for all students in a format they can access from school or home? Have you structured technology activities to bridge home-to-school work and experiences?
Moving 2	Can you think of a way to make the project launch activity more engaging for students? What tools and strategies might be used to facilitate students' self-directed learning? Do you think your students fully understand the assessments and criteria for performance that will be used

	<p>in the project? Do you think students will have any difficulty finding needed project materials? Is there anything you could do to make the project activities more interesting for students? Do you think students have enough opportunities to make decisions about group roles and responsibilities? Do you think students have adequate opportunities to learn and practice 21st Century Skills of collaboration, problem solving, presentation and self-management as they are working on the project? Do you think students would find it helpful if you provided more frequent, timely and specific feedback so they can learn from their stumbles, improve their performances and solidify their learning? Do you think students would be more self-directed if they were allowed an online space for their work and activities? Do you think that sharing your expectations, activities, timelines, and the Driving Question online would facilitate student learning?</p>
<p>Beginning I</p>	<p>Have you considered launching the project with an activity? Have you considered conducting the project in such a way that students have to direct and manage their own learning, and cannot overly rely on you to teach them? Do you think your students fully understand the assessments and criteria for performance that will be used in the project? Have you checked to see if you have adequate project materials and resources ready for students? Have you considered the project activities from the students' perspective? How could you make them more interesting and engaging? Have you considered allowing students to make decisions about group roles and responsibilities? Have you considered incorporating opportunities to learn and practice 21st Century Skills of collaboration, problem solving, presentation and self-management as part of the project? Have you considered giving students feedback so they can improve their performances? Have you considered how technology can further, deepen, and facilitate student learning?</p>

Look-for # 4:

Project Reflection: Students and the teacher consider and discuss what has been learned during the project, celebrate accomplishments and gain insight about how to improve their future performance.

Indicators:

- Teacher encourages students to reflect on their strengths and areas for improvement.
- Teacher and students can articulate what they have learned from completing a project.
- Teacher and students can articulate changes they will make in future projects.
- Teacher and students celebrate what has been learned and accomplished.

Evidence:

- Teacher models strategies, procedures, rituals and forms to facilitate student reflection and analysis.
- Teacher changes the project plan to incorporate new insights and learning.
- Teacher posts project artifacts in a “place of honor” in the classroom, school, and/or collections of students’ work.
- Teacher prominently displays exemplary project work.
- Teacher shares address of online project work with parents and school community.
- Student records in writing plans for changes in future project behavior.

	Project Reflection Rubric
Innovating 4	<ol style="list-style-type: none"> 1. Project design requires students take the lead in organizing and conducting class reflection sessions on students’ strengths, weaknesses and areas for improvement. Students extend these sessions through their online project based learning Wiki, blog or other tool. 2. Both teacher and students anchor this learning in a continuum of improvement that stretches back to their first encounter with the project, and envision future goals for improvement. 3. Both teacher and students can specify what they have learned and how their behavior and abilities have changed over time and set goals for what they want to improve in the future. 4. Teacher and students recognize how their online work provided a record of the progress of their learning and how they changed and grew during the work. 5. Project requires students plan class celebration where both teacher and students celebrate what has been learned and accomplished.
Applying 3	<ol style="list-style-type: none"> 1. Teacher encourages students to reflect on their strengths, weaknesses, and areas for improvement. 2. Teacher and students articulate what they have learned from the project and changes they will make in future projects and project

	<p>work.</p> <ol style="list-style-type: none"> Teacher can specify what students have learned and how their behavior and abilities have changed over time and set goals for what they want to improve in the future. Teacher recognizes how the online work provided a record of the progress of their learning and how they changed and grew during the work. Teacher plans celebration where both teacher and students celebrate what has been learned and accomplished.
Moving 2	<ol style="list-style-type: none"> Teacher reminds students to reflect on their strengths and areas for improvement, but does not provide adequate class time or introduce a reflection ritual or strategy that minimizes embarrassment. Both teacher and student reflection is limited and provides little guidance for future improvement. Teacher can specify what they have learned and how their behavior and abilities have changed over time but does not set goals for what they want to improve in the future. Teacher does not recognize online work as a record of progress. When project is completed, there is a ritual of celebration, but this is overshadowed by a general feeling of relief.
Beginning 1	<ol style="list-style-type: none"> Teacher provides reflection time but ill-structured. Teacher does not generate guidance for future improvements. Teacher cannot identify what students learner or what needs changed. Teacher does not encourage online work. There is no celebration at all of what has been learned and accomplished in the project.

	Project Reflection Tips
Innovating 4	<p>Have you considered preparing students so they could lead the project reflection sessions? Have you considered having students put what they learned on the project in chronological perspective so they can see how they are developing and learning? Have you considered having them set goals for future learning? Have you considered giving students the responsibility for planning the project completion celebration? Have you considered having students plan an online reflection activity? Have you considered having students initiate an online completion celebration? Have you asked students to journal their suggested improvements to be shared with subsequent classes online?</p>
Applying 3	<p>During the project reflection session, do you encourage students to reflect on their strengths and areas for improvement? Do you ask your students to articulate what they have learned from the project and specify changes they hope to make in future project endeavors? Do you do the same? Do</p>

	<p>you celebrate project completion? Do you consider how technology can allow celebrations, journaling, and reflection to take on a greater depth when done by students online?</p>
<p>Moving 2</p>	<p>Have you provided the time and structure so that students can reflect on their strengths and consider areas in which they need to improve? Do you think students felt pleasure and accomplishment that they had completed the project or were they just glad to get it over with? What could be done to make the project a more positive experience and the reflection session an opportunity for honest self-reflection and learning? Have you thought about how technology might be used more extensively for future planning and for student work?</p>
<p>Beginning 1</p>	<p>Have you considered giving students a structured opportunity to reflect on their performance and learning during the project so they can be honest about their stumbles, learn from them, and be better equipped to undertake the next project? Have you considered organizing a project completion “celebration” to direct attention to what has been accomplished and learned? Have you considered how technology might be a way to engage and energize your students?</p>

Look for #5:

21st Century Skills: Teacher supports student use of 21st century skills and technology.

Indicators:

- Provides opportunities for development of 21st Century skills
- Allows for the student demonstration of their understanding about technology and how to use it effectively to achieve a specific purpose.
- Provides practice for students to find, access, and use credible information.
- Establishes teams of students who accomplish a shared goal while exhibiting trust and respect for each other.
- Guides students to recognize, understand, and respond positively to any and all types of changes.
- Provides opportunities for students to work independently whether it is in developing goals, managing time, or evaluating their learning or progress.
- Allows students the opportunity to prioritize, plan, and manage their learning to accomplish a goal.
- Encourages effective use of real-world tools by students to communicate, collaborate, and accomplish tasks.

Evidence:

- The teacher uses technology is an integral part of how teaching and learning happens.
 - The teacher uses technology for whole class, small group, and individual work.
 - The teacher empowers students with technology tools, encouraging and facilitating student learning.
2. The teacher infuses the teaching and development of the following 21st Century skills into instruction:
- Creativity and innovation
 - Critical thinking and problem solving
 - Communication and collaboration skills
 - Information literacy
 - Flexibility and adaptability
 - Initiative and self-direction
 - Productivity and accountability
 - Leadership and responsibility
- The teacher ensures hands-on instructional tasks for all students, involving technology, designed to mirror and enhance skills that are required for real-world professionals to be successful
 - The teacher groups and regroups students on computers and takes advantage of the distributed resources available on computers.

21st Century Skills Rubric	
Advanced 4	<p>The teacher continuously supports student use of 21st century skills and technology.</p> <p>As a result, the class is characterized by high levels (almost all students, almost all of the time, successfully) of the following: self-direction, initiative, and autonomy by students (individually or in groups); students critical reflection and review of their own and others' work; collaborative work on a complex project; understanding, valuing, and acceptance of traditions, beliefs, knowledge, language, and practices of diverse social groups; effective use of current technologies to enhance learning, communication, and real-world connections.</p>
Proficient 3	<p>The teacher usually supports student use of 21st century skills and technology.</p> <p>As a result, the class incorporates some of the following for most students to successful levels: self-direction, initiative, and autonomy by students (individually or in groups); students critical reflection and review of their own and others' work; collaborative work on a complex project; understanding, valuing, and acceptance of traditions, beliefs, knowledge, language, and practices of diverse social groups; use of current technologies to enhance learning, communication, and real-world connections.</p>
Basic 2	<p>The teacher occasionally supports student use of 21st century skills and technology.</p> <p>As a result, students are provided few opportunities to do any of the following and students show only minimal competence: self-direction, initiative, and autonomy by students (individually or in groups); students critical reflection and review of their own and others' work; collaborative work on a complex project; understanding, valuing, and acceptance of traditions, beliefs, knowledge, language, and practices of diverse social groups; use of current technologies to enhance learning, communication, and real-world connections.</p>
Below Basic 1	<p>The teacher does not support student use of 21st century skills and technology.</p> <p>As a result, students have no, or only minimal, opportunities to develop 21st century skills and to use technology to enhance learning. Learning activities are not collaborative, diversity is not recognized or valued, and technology is outdated.</p>

21st Century Skills Tips	
Advanced 4	What have you learned from your students? How do you incorporate and share their knowledge with each other in collaborative ways? In what areas has available technology assisted your students—e.g., online research, communication, problem solving, publication? What would you like to do more of or differently?
Proficient 3	What are some strategies you use to encourage students to become more self-directed in their learning? How do you have students access and use tools of real-world experts (scientists, mathematicians, historians) to investigate problems and develop solutions or explanations? What additional types of media could students use in the production of products or performances that exhibit or enhance their learning?
Basic 2	How do you determine the technology skill levels of your students and their ability to use these tools collaboratively? What supports do you need in order to become more proficient in your uses of technology? When planning your lessons, what criteria do you use to determine when and how technology might be integrated into your instruction to enhance learning? What help do you need in identifying specific resources (e.g. real world experts, media tools, instructional strategies) that will support learning?
Below Basic 1	When planning your lessons, what criteria do you use to determine when and how technology might be integrated into your instruction to enhance learning? On a scale from beginner to expert, where would you put yourself in terms of technology skills to support teaching and learning? How could these skills be enhanced?

Project-Based Learning in the 21st Century
Course Objectives

1. Distinguish between what project-based learning is and is not.
2. Define, generate, and identify a high quality 21st Century project-based lesson and resources.
3. Formulate a Driving Question based on real world application that incorporates authentic assessment.
4. Create a classroom culture of inquiry, independence, autonomy, and responsibility that models 21st Century skills.
5. Utilize reflective practices to restructure projects and celebrate accomplishments.
6. Understand the transformative possibilities of technology for teaching and learning in the project-based learning classroom.
7. Embrace and implement technology as infrastructure to facilitate learning through communication, collaboration, journaling, researching, reflection, creating, presenting, and publishing.