Reflective Educator Project
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Appendix A: Template Samples

Sample of Artifact #1: Designing Professional Inquiry
Sample of Artifact #2: Aligning & Designing Instruction I
Sample of Artifact #3: Aligning & Designing Instruction II
Sample of Artifact #4: Constructing Lesson Plans
Sample of Artifact #5: Engaging in Professional Inquiry
Sample of Artifact #6: Adjusting Instruction Using Evidence
Sample of Artifact #7: Engaging in Professional Inquiry
Sample of Artifact #8: Analyzing Whole-class Achievement & Growth
Sample of Artifact #9: Analyzing One Case
Sample of Artifact #10: Sharing a Culture of Professional Inquiry (The Research Poster)
Overview
The Reflective Educator Project (REP) is not your final student assignment. Rather, it is your first professional assignment. The REP is you (the teacher candidate, or TC) studying your own teaching progress. It is also a forum for you to document collaborative work done with the cooperating teacher and learners. The project should allow you to share how these aspects of student teaching have affected your development as an educator. The final product is a research poster presentation of what you have learned given to other teacher education students, faculty, staff, clinical personnel, and prospective employers during the final student teaching seminar.

To assist in organizing this effort across 14 weeks of student teaching, you are provided templates (Appendix B) to demonstrate what you have learned. These allow you, your cooperating teacher, your field supervisor, and your REP coach to see at a glance the work you have done and to check for alignment and connections among the pieces.

The REP Team
Although the teacher candidate (TC) takes ownership of the REP, collaboration is key throughout this sequence (as in the education profession overall). Using a team approach to this work will benefit the outcome. Team members include:

1. The teacher candidate (TC) who conducts this research and who, along with the cooperating teacher, has the final say in all REP dialogues.
2. The TC’s classroom of learners. TCs should take full advantage of what students know about themselves as well as their impressions of TC teaching.
3. The cooperating teacher (CT) who, with the TC, helps determine all final REP decisions.
4. The REP coach who will oversee elements such as alignment, use of research protocols, and quality of the final research poster and presentation. The primary purpose of the REP coach is to assist the candidate in producing a meaningful final presentation and to ensure candidates move beyond novice thinking about their students and instruction.
5. Field supervisors (FS), administrators, school counselors, parents and others will serve as resources for contextual research.

REP Protocol
The Reflective Educator project is divided into 10 artifacts that analyze planning and instruction of a four-lesson sequence. Each artifact builds on and is tightly connected to the previous ones; please study each artifact before beginning the REP to see the total picture. For each artifact, the candidate will submit to the appropriate assignment drop box on D2L by the appropriate due date:

1. ...one or more of the provided templates with appropriate information,
2. ...a thoughtful answer to the accompanying discussion question.

After receiving the artifact submission, an assigned REP coach will review the artifact and offer helpful suggestions. When coach feedback is posted, the TC is required to read that feedback (documented in D2L and verified by the REP coach). The TC is then welcomed to continue the dialogue using the assigned D2L discussion board to clarify questions until the D2L discussion board closes—for most artifacts, 8 days after the artifact due date. (Artifacts #2 and #10 have a two-week...
dialogue time frame.) **Important:** failure to submit an artifact and/or read coach feedback will prevent a TC from moving on and submitting the next artifact. Late artifact work is not accepted except with approval from the MSU Field Placement & Licensure Office and is subject to point deductions (see student teaching handbook).

*Indicates terms or concepts covered in the REP Glossary

**Timeline of Student Teaching Observed Lessons**

1. Observation #1: The FS and CT watch the same lesson using the REP goal-setting Observation Form to provide feedback that helps the candidate develop a professional goal.
2. Observation #2: FS does a normal observation using Danielson Observation Tool.
3. Observation #3: CT and FS both do an observation of an REP lesson (different lessons) using a Professional Development Data Collection Tool designed by the candidate.
4. Observation #4: FS does a typical observation using the Danielson Observation Tool. *(If there is a second endorsement, this observation would be in the new content area.)*

**REP Final Grade (100 points possible)**

50 points of the total REP points possible (100 pts.) are awarded TCs who submit all 10 artifacts and reflection responses and who read coach feedback. 5 pts. per dialogue.

50% of the REP grade (50 pts.) is issued by the REP coach for the final research poster. A rubric with all requirements is provided in Appendix C.

**Portfolio**

The portfolio is compiled by the TC to provide supporting documents for the research project. It comprises all 10 artifacts as well as anything else the TC desires to include: copies of assessments and assessment tools, lesson plans not in the four-lesson REP sequence, observation documents, journals, etc. The portfolio can exist either digitally or in notebook format. From time to time, REP coaches may ask to see ongoing portfolio materials in order to better assist the candidate, so please keep it updated.
Summary of Artifacts

Ten Artifacts show careful inquiry of professional practice in the following areas:

1: Researching Teacher & Learner Context
2: Designing Professional Inquiry
3: Aligning & Designing Instruction I
4: Aligning & Designing Instruction II
5: Constructing Lesson Plans
6: Adjusting Instruction Using Evidence
7: Engaging in Professional Inquiry
8: Analyzing Whole-class Achievement & Growth
9: Analyzing One Case
10: Sharing a Culture of Professional Inquiry

IMPORTANT: Fall 2019 teacher candidates must have taught their four REP lessons by October 25.

Figure 2: Summary of Artifacts
<table>
<thead>
<tr>
<th>Artifact Title</th>
<th>TC Role</th>
<th>Mentor Role</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Artifact #1: Researching Teacher &amp; Learner Context (due approximately week 3 of student teaching)</strong></td>
<td>The TC will collect and present data about teacher and learner strengths in 3 areas (interests/preferences, academics/skills, socialization/behavior) using student questionnaires, CT interviews, and collaboration with other school personnel. The TC will also document an observed classroom need for each learner, along with the level of support required to meet that need. Finally, the TC will collaborate with the CT on an REP lesson sequence topic.</td>
<td>Candidates will need help designing student questionnaires. They will also ask knowledgeable mentors for information about learner strengths and needs. Especially in the fall, the CT and TC will be discovering some of these together—how different students interact most effectively, for example. Finally, he TC will consult with the CT to determine a four-lesson sequence that can be analyzed for this project. These four lessons can be part of a larger unit but will be separately assessed (pre-., formative, summative) and aligned with major content and core standards.</td>
</tr>
<tr>
<td><strong>Artifact #2: Designing Professional Inquiry (due approximately week 4 of student teaching)</strong></td>
<td>The TC will schedule the first observed lesson and provide a copy of the REP Goal-setting form (available on our website), to the CT, FS. The lesson must also be videoed so that the TC can complete a copy of the same form. The TC will then use data from all three forms to create a professional goal, which will become the basis of the REP Professional Development Research Question (RQ). Additionally, the TC will investigate two peer-reviewed journal articles on the same topic as the professional goal and, finally, determine a case-study student who will help spur development toward the professional goal.</td>
<td>The TC will depend on the CT and FS to formally observe the first formally observed lesson taught by the TC and provide as many feedback notes as possible—focusing both on whole-class and individual student responses to TC instruction. The form for this observation, the REP Goal-setting form (available on our website), has reduced normal 22 assessment categories from the Danielson Framework to include 6 that relate closely to instruction. After viewing the video (which the TC may need help to make) and completing his or her own goal-setting form, the TC will talk to mentors for help in confirming a meaningful professional goal to pursue during the REP project. The TC will also seek assistance in selecting a case-study student (kept anonymous) who will help challenge and spur professional goal work.</td>
</tr>
<tr>
<td><strong>Artifact #3: Aligning &amp; Designing Instruction I (due approximately week 6 of student teaching)</strong></td>
<td>The TC will map out standards-based instructional outcomes/lesson objectives for the four REP lessons using the two-part prompt: “Students will learn that...[so]...students will be able to....” for all four REP lessons. The TC will also design a pre-assessment and a summative assessment that measure individual student understanding of those outcomes/objectives.</td>
<td>CTs and FSs will help TCs revise the four lesson-level instructional outcomes/lesson objectives. CTs will sign to approve these outcomes/objectives and both the pre- and summative assessment. (The summative assessment can be part of a larger assessment, but the TC may need help in determining which parts of that assessment measure the outcomes for the four REP lessons.)</td>
</tr>
<tr>
<td><strong>Artifact #4: Aligning &amp; Designing Instruction II (due approximately week 7 of student teaching)</strong></td>
<td>The TC will describe a formative assessment and one primary instructional strategy for each of the four REP lessons. The TC will also generate a research question data observation tool to collect data on the Professional Development Research Question (RQ).</td>
<td>TCs will likely need help from mentors to design four, individually measurable formative assessments, the results of which will be the basis for TCs adjusting their teaching between REP lessons. TCs may also need assistance designing the primary instructional strategy for each of the four REP lessons. CTs will sign off on this plan of formative assessments and instructional strategies.</td>
</tr>
<tr>
<td><strong>Artifact #5: Constructing Lesson Plans (due approximately week 8 of student teaching)</strong></td>
<td>The TC will design four full lesson plans using the REP lesson template, based on the earlier blueprint of learning goals, assessments, and primary strategies. This template encourages TCs to carefully consider management and differentiation as part of their planning.</td>
<td>CTs will sign off on these lesson plans prior to their being taught in the classroom.</td>
</tr>
<tr>
<td>Artifact Title</td>
<td>TC Role</td>
<td>Mentor Role</td>
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<tr>
<td>Artifact #6: Adjusting Instruction Using Evidence (due approximately week 9 of student teaching)</td>
<td>After teaching each REP lesson, TCs will study the formative assessment data and consider how they should adjust instruction for the next lesson. Reflections on each lesson after it is taught are done in <strong>red</strong> font. TCs will then create an adjustment to the next lesson in <strong>green</strong> font that corresponds to each <strong>red</strong> font reflection from the previous lesson.</td>
<td>Mentor feedback and assistance will help the TC make sense of assessment results and enable TCs to transform data into needed instructional changes.</td>
</tr>
<tr>
<td>Artifact #7: Engaging in Professional Inquiry (due approximately week 10 of student teaching)</td>
<td>The TC will engage data collectors for each of the four REP lessons to complete the data collection tool designed in Artifact #4—documenting REP Professional Development RQ results in the form of measurable student responses during each lesson.</td>
<td>The TC will have designed a data collection tool to document student responses to his or her work on the professional goal. For example, if the goal were more efficient transitions, the data collector would time the beginning and end of each transition—both for the whole class and for the case-study student. The TC will be asking the CT and FS to serve as data collectors for one or more lessons, as data needs to be charted for all four lessons—either by others or self-assessed via video.</td>
</tr>
<tr>
<td>Artifact #8: Analyzing Whole-class Achievement &amp; Growth (due approximately week 11 of student teaching)</td>
<td>The TC will chart pre-, formative, and summative assessment data for all students in order to examine their individual growth during the REP four-lesson sequence and to compare it with the professional development data in order to consider possible effects of TC professional development on student achievement.</td>
<td>After charting assessment scores, the TC may need assistance, to determine trends of growth or stagnation in student achievement over the four lessons. If this growth or stagnation is connected to his or her work on the professional goal, the TC may also need help in seeing that connection.</td>
</tr>
<tr>
<td>Artifact #9: Analyzing the Case (due approximately week 12 of student teaching)</td>
<td>The TC will chart earlier research about the case-study student’s strengths and need along with all the student’s assessment data. The TC will also chart information about the case-study student’s responses to the TC’s professional development work and, finally, present strategies tried with that student. This allows the TC to deeply study the effects of his or her reflective work on a targeted case student.</td>
<td>Mentor assistance will be invaluable to the TC when it comes to making sense of the data—especially as various elements connect with other elements. The TC may need help in determining patterns that might have predicted some of the case-study student’s challenges and triumphs.</td>
</tr>
<tr>
<td>Artifact #10: Participating in a Culture of Professional Inquiry (The Research Poster) (due approximately week 13 of student teaching)</td>
<td>The TC will create a professional research poster that includes introduction, methods, results, discussion, and references sections along with a QR code link to an electronic version of the poster.</td>
<td>The REP coach will be providing feedback on this poster in order to get it ready for the final presentation. The TC, however, will want to show clinical mentors this product summarizing his or her work in the classroom over the four-lesson sequence.</td>
</tr>
<tr>
<td>Research Presentation</td>
<td>The culmination of the REP project will be presenting the research poster and celebrating a semester of research.</td>
<td>The TC will need mentor assistance in putting heart into the research story. Anecdotes, journals, and collaborative conversations can all enrich the actual presentation (10 minutes). The TC may need help in recalling some of these and in putting together a picture of his or her work during the REP project that expresses to an audience what was learned in the process of teaching.</td>
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</table>
Figure 3: Levels of Support

Artifacts

1 Researching Teacher and Learner Context: Artifact #1
For Artifact #1, the TC will complete two templates: one on teacher/learner context and the other describing the REP topic and aligned content standards. Artifact #1 also includes a discussion question.

Requirements:
TCs will complete two templates:

1. **Teacher & Learner Contextual Template**: a collection of information about the TC and all students in the classroom, including their:
   - ...strengths:
     - Interests & preferences.
     - Academics & skills.
     - Socialization & behavior.
   - ...an observed classroom need.
   - ...the level of support required to meet that need.
     - Level I: support appropriate for all students every day.
     - Level II: any needed support above Level I but not designated by Level III.
     - Level III: designated support through IEP, 504, MTSS behavior plan, etc.

2. **REP Topic Template**: a preview of the topic for an REP four-lesson sequence, including:
   - One Common Core ELA, math, or Next Generation Science Standard, along with 1-2 additional relevant core or content standards (no more than 3 maximum) that will be covered in the lessons.
   - A concise description of the REP Topic. Note: REP lessons will need to be:
     - ...aligned with 1-3 standards (include one Common Core ELA or math, or one Next Generation Science Standard).
     - ...individually pre-assessed before instruction.
     - ...formatively assessed for individual progress after each lesson.
     - ...summatively assessed for each learner at the end of instruction.

Resources:
1. TC documented objective observations* (not opinions)
2. Student questionnaires
3. Cooperating teacher collaborative conversations
4. School personnel (administrators, counselors, aides, etc.) collaborative conversations
5. Personal associate conversations (for TC strengths and needs)
6. REP coach discussions
Discussion Question (2-3 sentences):
Most seasoned teachers will tell you that every time they present a lesson, the presentation changes based on the character of the students they are teaching. You have just finished getting to know some of your students’ interests, skills, preferences, and needs. Talk about one or two ways some of this information might transform how you teach your REP topic.

Timing:
See student teaching calendar. Due approximately at the end of student teaching week 3.
Designing Professional Inquiry: Artifact #2

Artifact #2 requires three REP Goal-setting forms completed by the CT, FS, and TC from one observed and videoed lesson. Using mentor feedback and video, the TC completes one template documenting a professional goal, its Danielson alignment, a goal-based research question, and two professional articles on the goal topic. Artifact #2 incorporates one discussion question including the selection of a case-study student.

Requirements:

1. **REP Goal-setting Observation Form (Appendix B): 3 copies completed during one observation (videoed for the TC)**
   - TC schedules the first observed lesson requesting both the CT and FS to observe that same lesson, provides them each a copy of the REP Goal-setting Observation Form (See Appendix B) and asks for notes in the Danielson categories listed on the form, including:
     - whole-class responses.
     - individual student responses.
   - TC arranges to have that same observed lesson videoed.
   - TC completes a third REP Goal-setting Observation Form on own instruction by viewing the video.
   - TC studies all three forms, highlights, makes notes, looking for themes, recurring comments, etc.

2. **Designing Professional Inquiry Template:**
   - TC uses the 3 REP Goal-setting Forms and consults with the CT to determine a professional goal for the four REP lessons.
   - TC aligns this professional goal with one of the Danielson elements on the REP Professional Goal-setting Form. (There are 2-4 elements under each Danielson component—see REP Goal-setting Form, REP Templates.)
   - TC uses the research stems in REP Appendix D to write an REP Professional Development Research Question (RQ) to study the effects of TC professional goal development on student responses. This research question must have two parts:
     - ...a statement of the professional goal (developing positive behavior management strategies, providing clearer instructions, creating more efficient transitions, etc.).
     - ...a measurable student response (types of student behaviors, numbers of students asking questions about instructions, student time spent transitioning, etc.).
   - TC examines the work of other researchers on the same or similar topic by:
     - ...studying at least two professional, peer-reviewed journal articles*.
     - ...citing and annotating (creating a relevant summary of) the two articles in the Designing Professional Inquiry Template.

Resources:

1. CT and FS observations of lesson and collaborative conversations
2. Discussions with REP coach; designing research questions and how to collect data can be challenging. The coach will take an extra week to help you refine these.
3. Marianne Hansen: Education Research Services, 406-994-3162  mhansen@montana.edu
Before beginning this assignment, remember the following about developing a strong research question:
1. Develop a professional goal/research question that interests you!
2. Develop a professional goal/research question that you can measure. Be sure you can determine a type of measurable data you could collect to answer the question.
3. Develop a question/research question that relates to student outcomes.
4. Develop a professional goal/research question can be completed by a pre-service teacher in your student teaching context. (Remember, you are analyzing only four lessons.)

HAVE FUN!

### Discussion Question (2-3 sentences):
Describe the type of data you will need to collect in order to answer your research question. It could be counting whole-class and case-study contributions, ranking types of student responses, recording the number of minutes it takes the class and your case-study student to transition, etc. Along with the type of data you plan to collect, think about a student who will spur your growth toward this professional goal. We often learn the most from students who challenge our development. Briefly describe a student in your class who could fill this role. (This student is likely the best candidate for your REP case study, and you will want to make specific notes and collect targeted data on this student during the REP lessons. (It is also OK if you end up with a different case study student at the end. The goal is to get you thinking.)

### Timing:
See student teaching calendar. Due approximately at the end of student teaching week 4 in the D2L assignment drop box. Dialogue for this artifact will go for an additional week in the appointed discussion forum.

### Three REP Goalsetting Feedback Forms

![Figure 5: Artifact #2 Forms and Template](image)

Align your goal to any of the REP Goal-setting Form categories. (Form available in REP Templates)

See research stems in Appendix D.

See APA citation requirements at [https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/general_format.html](https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/general_format.html)
Aligning & Designing Instruction I: Artifact #3
The TC includes one template that begins blueprinting the four REP lessons by taking content standards from Artifact #1 and adding four, lesson-level instructional outcomes/lesson objectives in alignment with those standards, as well as pre- and summative assessments to measure each outcome/objective. A discussion question accompanies Artifact #3.

Requirements:

1. **Aligning & Designing Instruction I Template:**
   This template must include:
   - ...the Professional Development Research Question (RQ) copied from Designing Professional Inquiry Template (Artifact #2).
   - ...the standards copied from the REP Topic Template (Artifact #1).
   - ...four lesson titles aligned with the standards they cover (listed by number only, ex: CCSS: R.5.2).
   - ...four, two-part instructional outcome/lesson objectives—one for each of the four REP lessons; please design them using the dual prompt:
     - Students will learn that...
     - Students will be able to...
   - ...a description of a pre-assessment that assesses student knowledge prior to instruction of all four outcomes/objectives (can be part of a larger pre-assessment).
   - ...a description of a summative assessment that measures student knowledge of all four outcomes/objectives after instruction (can be part of a larger summative assessment), needs to include:
     - ...an explanation of proficiency criteria* (student readiness to move forward).
     - ...a description of assessment tools* to measure complex assessments.
   - ...an alignment of each outcome/objective with a portion of the summative assessment that measures that outcome/objective (listed by sections, question numbers, etc.).
   - ...a signature from CT approving this instructional design and alignment.

Resources:
1. TC collaboration with cooperating teacher
2. REP coach discussions

Discussion question (2-3 sentences):
*When planning a lesson, transforming one standard into a class-appropriate learning goal (instructional outcome/lesson objective) becomes a task that only a teacher who understands the strengths and needs of a unique classroom of students can do well. Select one of your four instructional outcome/lesson objectives. Why do you feel that this is the best application of the standard for your group of students at this point in their learning? Provide evidence that shows your understanding of the classroom.*

Timing:
See student teaching calendar, approximately at end of student teaching, week 6
### Aligning & Designing Instruction I Template

**Professional Development Research Question:**

**Standards:**

**Description of Pre-assessment:**

**Description of Summative Assessment:**

**Description of Proficiency:**

**Description of Assessment Tools for complex assessments:**

<table>
<thead>
<tr>
<th>Lesson numbers, titles, and standards numbers</th>
<th>Instructional outcome: Students will learn that... (SWLT)</th>
<th>Lesson objective: Students will be able to... (SBWAT)</th>
<th>Segment of summative assessment measuring outcome/objective</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

CT, please sign below to approve standards, pre-assessment, instructional outcomes/lesson objectives and summative assessment.

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**Figure 6: Artifact #3 Template**
Aligning & Designing Instruction II & Constructing Data Collection Tool: Artifact #4

For the Artifact #4 template, the TC will continue the four-lesson sequence design by adding to Artifact #3 four formative assessments and four primary lesson strategies. Artifact #4 also requires the candidate to develop a data collection tool that will help answer the research question from Artifact #2. A discussion question accompanies Artifact #4.

Requirements:

1. **Aligning & Designing Instruction II Template**
   This template must include:
   - ...the REP Professional Development Research Question (RQ) copied from Designing Professional Inquiry Template (Artifact #2).
   - ...four lesson titles aligned with the standard numbers they cover, copied from Artifact #3.
   - ...four, two-part instructional outcome/lesson objectives copied from Artifact #3.
   - ...a description of four formative assessments*; each should measure individual student achievement of one instructional outcome/lesson objective. Include with the artifact:
     - ...a statement of how proficiency (student readiness to move forward) will be determined.
     - ...explanations of any needed assessment tools.
   - ...a summary of four primary instructional strategies (student activities); each should support student learning of one instructional outcome/lesson objective. (Limit to one primary strategy per REP lesson; more will be documented in lesson planning.)
   - ...a signature from CT approving this instructional design and alignment.

2. **REP Professional Development Data Collection Tool**
   Based on the research question and the kind of data that will answer it, the TC will design a tool that will allow an observer to collect this information during teaching of the four REP lessons. This tool will appear different for each candidate depending on his or her research question; it may be charts of numbers of student responses, options for types of responses, or time stamps for transitions. REP coaches will help with its development. Samples of possible tools can be viewed in Appendix A, Artifact #7.
   Although the look will differ, each tool must provide spaces for:
   - ...professional development research question.
   - ...title and number of lessons.
   - ...name of data collector.
   - ...brief description of any professional development strategies being tried during lesson
   - ...the actual data to be recorded by collector during each REP lesson.
     - ...whole-class responses to your professional development strategies.
     - ...case-study student responses to your professional development strategies.

**Resources:**
- TC collaboration with cooperating teacher
- Dialogue with REP coach

Begin planning for data collectors. You will need one collector for each of the REP lessons, or you can video 1-2 lessons to collect your own.
Discussion question (2-3 sentences):
Formative assessments are designed even more for instructors than for students. These assessments “take the classroom temperature” after each lesson and inform the teacher how to continue instruction to best leverage student strengths to meet their continuing needs. Take one of your formative assessments and describe how the design of that assessment will help you assess the effectiveness of your teaching for that lesson.

Timing:
See student teaching calendar, approximately at end of student teaching week 7.

Aligning & Designing Instruction II

<table>
<thead>
<tr>
<th>Professional Development Research Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesson numbers, titles and standard(s) numbers</td>
</tr>
</tbody>
</table>

Figure 7: Artifact #4 Template
Constructing Lesson Plans: Artifact #5

In Artifact #5, the TC builds on the four-lesson blueprint from Artifacts #3 and #4 and uses the REP Lesson Template to fully design four lesson plans focused on differentiation. A discussion question accompanies Artifact #5.

Requirements:

1. **Four Complete Lesson Plans using the REP Lesson Plan Template:**
   - Each lesson plan must include:
     - Introductory Material
       - TC Name  Lesson title
       - Class  Date
       - REP Sequence Topic
     - Relationship of Lesson to REP Sequence
       - How does this lesson relate to the lesson(s) before and the ones to follow?
     - Content
       - Standards (copied from Artifact #1)
       - Any applicable Essential Understandings of Montana Indians*
     - Instructional Outcomes/Lesson Objectives
       - Copied from Artifact #3
     - Differentiation Strategies: for each lesson-level strategy describe:
       - What is the strategy? Make sure to address relevant changes for:
         - Level II.
         - Level III.
       - Where is the strategy implemented? (...which part of the lesson plan...outcomes, assessments, instructional strategies, materials?)
       - Why is this strategy being implemented? Specifically reference student strengths and needs for support from Artifact #1.
     - Formative Assessment (include proficiency description and remediation plan)
       - Copied from Artifact #4
     - Management Strategies
       - Strategies specific to this lesson—**not** copied and pasted from other lessons
     - Methods & Instructional Strategies (time stamped), including:
       - Opener or anticipatory set
       - Relevant adaptations of “I do, you do, we do” instructional strategies
       - Meaningful closure (revisits instructional outcomes—not a clean-up signal)
     - Materials & Resources
       - Including special-needs technologies and physical aids
     - CT Signature of Approval
Resources:
• TC collaboration with cooperating teacher (Coaches will pass the lesson plans without dialogue as long as all four lessons have the CT signature.)

Discussion Question:
Designing a lesson is like blueprinting a house. Even the best plan must be adjusted due to the unexpected. Now that you have gone through the demanding process of creating four, detailed lesson plans, reflect briefly about what you will do if one of your strategies falls flat or does not produce the results you had hoped. How can you move past feelings of failure and turn these inevitable moments of deflation into learning opportunities?

Timing:
See student teaching calendar, approximately at end of student teaching week 8.

(Note: For better view, see Appendix A: REP Samples)
Adjusting Instruction Using Evidence: Artifact #6

Artifact #6 occurs while the TC instructs the REP four-lesson sequence. The TC completes one template compiling formative assessment results after each lesson along with red reflections about those results. For each red reflection, the TC makes a green adjustment to the next lesson before it is taught. Artifact #6 includes a discussion question.

Requirements:

1. Adjusting Instruction Using Evidence Template:
   This template includes:
   - Green adjustments to each lesson before teaching it (except for first lesson in sequence) corresponding to red reflections from each prior lesson:
     - ...for Level I students (whole class).
     - ...for Levels II & III students.
   - Whole-class proficiency data for each formative assessment
   - Red Comments reflecting on formative assessment results for each lesson after teaching it:
     - ...for Level I students (whole class).
     - ...for Levels II & III students.

Resources:
- TC collaboration with cooperating teacher
- Dialogue with REP coach

Discussion Question:
Your red/green comments tell much of your research story. Look at one red comment and its corresponding green adjustment to the next lesson. What did this specific transaction teach you about your own educator growth? Did you get the results you expected?

Timing:
This reflection occurs during actual teaching of REP lessons. The artifact is due approximately at the end of student teaching week 9.

Adjusting Instruction using Evidence Template

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Level I (Whole-class) Adjustments</th>
<th>Adjustments for specific students/student groups (Level II, III, or students not showing growth)</th>
<th>Percentage of Whole-class (# of students)</th>
<th>Registrations</th>
<th>Adjustments for specific students/student groups (Level II, III, or students not showing growth)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 9: Artifact #6 Template
**Engaging in Professional Inquiry: Artifact #7**

Artifact #7 is also completed while the TC instructs the four REP lessons. The templates include four completed Professional Development Data Collection Tools that were designed as part of Artifact #4. The TC will need to arrange for four data collectors and/or videos for self-collection. Artifact #7 includes a discussion question.

**Requirements:**

1. **Four Completed Data Collection Tools (designed in Artifact #4)**

Artifact #7 will look different for each teacher candidate, but must include the following:

- ...professional development research question.
- ...title and number of lessons.
- ...name of data collector.
  - TC will arrange for individuals to collect professional development data during each of the REP Lessons (CT, FS, other TCs, admin, etc.).
  - If no data collector is available, the TC will video the lesson and collect data from the video.
- ...brief description of any professional development strategies being tried during lesson.
- ...actual data recorded by collector during each REP lesson. This data should focus on both:
  - ...whole-class responses to your professional development strategies.
  - ...case-study student responses to your professional development strategies.

**Resources:**

- Cooperating teacher
- Field supervisor
- Other teacher candidates
- Administrators
- Other school personnel
- Dialogue with REP coach

**Discussion Question: (2-3 paragraphs)**

*Summarize what you learned about your own teaching as you studied the professional development data. How does this data answer your research question? Discuss how this information inspires or drives further areas of research into your own practice?*

**Timing:**

Data will be collected during instruction of the REP lessons. This artifact is due approximately at the end of student teaching week 10.

Please see Appendix A, Artifact #7 for possible data collection samples.
Analyzing Whole-class Achievement & Growth: Artifact #8
Artifact #8 comprises one template with each individual student’s pre-, formative, and summative achievement scores for the REP sequence of lessons. Included is a 2-3 paragraph discussion question.

Requirements:
1. Whole-class Achievement & Growth Template
   The TC must complete one template, including:
   - code designation for each student.
   - each student’s pre-assessment score.
   - achievement data for the four formative assessments labeled as one of three levels:
     - Proficient.
     - Almost Proficient.
     - Not proficient.
   - each student’s summative assessment score and whether this score was proficient.
   - a statement regarding each student’s growth structured in three levels:
     - Yes (growth).
     - Inconsistent.
     - No (no growth detected).

Resources:
- TC collaboration with cooperating teacher
- Dialogue with REP coach

Discussion Question (2-3 paragraphs):
Place Artifact #7, your professional development data, side by side with Artifact #8, which presents student achievement data. Carefully study the two documents. Did your professional development encourage student achievement? If you can demonstrate a correlation between your growth as a teacher and student achievement, please present that evidence. If you do not see a correlation (which is very possible after only four lessons), what further avenues of research will you want to pursue that could leverage your growing educator skills to support increased student learning achievement and growth? Be sure to keep this discussion response, as you will need to include this reflection in your final research poster discussion section and reference it in your presentation.

Timing:
See student teaching calendar. Due approximately at the end of student teaching week 11.
<table>
<thead>
<tr>
<th>Student</th>
<th>Pre-assessment Score</th>
<th>Formative #1 P, AP, NP</th>
<th>Formative #2 P, AP, NP</th>
<th>Formative #3 P, AP, NP</th>
<th>Formative #4 P, AP, NP</th>
<th>Summative score</th>
<th>Summative Proficiency Yes/No</th>
<th>Overall Growth: Yes/No/Inconsistent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student A</td>
<td>4/10</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>49/50</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Student B</td>
<td>3/10</td>
<td>NP</td>
<td>AP</td>
<td>AP</td>
<td>38/50</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

P = Proficient  
AP = Almost Proficient  
NP = Not Proficient

Figure 10: Artifact #8 Template
Analyzing One Case: Artifact #9

For Artifact #9, TCs will complete one template with all gathered information on the case-study student, including all pre-, formative, and summative assessment results, contextual information, RQ data, and documentation of strategies tried with the student. Artifact #9 includes a 2-paragraph discussion question.

Requirements:

1. **Case-study Student Template**
   
   Template must include:
   
   - ...student code name.
   - ...student strengths (copied from Artifact #1).
   - ...student observed need for support (copied from Artifact #1).
   - ...student’s level of needed support for that need (copied from Artifact #1).
   - ...student’s pre-assessment score (copied from Artifact #8).
   - ...whether the student was proficient on each of the four formative assessments (copied from Artifact #8 and accompanied by number of each lesson).
   - ...student’s summative assessment score and whether proficient (copied from Artifact #8).
   - ...the professional development RQ data for the case-study student (copied from Artifact #7).
   - ...a concise summary of strategies tried with this student.

Resources:

- Synthesizing data from previous artifacts
- Dialogue with REP coach

Discussion Question (2 paragraphs):

You chose the case-study student as a learner whose particular needs would help drive your professional development. Describe what this student has taught you about your own teaching. Talk specifically about how studying this student may have altered or even transformed your student/teaching relationship.

Timing:

See student teaching calendar. Due approximately at the end of student teaching week 12.

---

### Analyzing the Case Template

<table>
<thead>
<tr>
<th>Professional Development Research Question</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student</strong>:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Student Strengths</th>
<th>Needs for Support</th>
<th>Tier Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pre-assessment Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Formative Assessment Scores: Proficiency? (Yes/No)</th>
<th>RQ Data</th>
<th>Summary of strategies tried with this student:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Summative Assessment Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

**Figure 11: Artifact #9 Template**
Sharing a Culture of Professional Inquiry (The Research Poster): Artifact #10

Artifact #10 is the culminating artifact and involves designing and completing a professional research poster using a template and rubric. There is no discussion question for Artifact #10, but you will be submitting peer edits for two other peer’s posters.

Requirements:

1. Research Poster

Research poster requirements include:

- ...professional presentation, including: title, at least two APA journal references, a QR code link to an electronic copy of the research poster, and professional writing.

- ...Introduction, including:
  - ...a brief summary of why the research direction was chosen.
  - ...reference to REP Goal-setting Form data.
  - ...two cited references to both professional journal articles.
  - ...restatement of the research question.

- ...Methods
  - ...a description of the research sample.
  - ...a summary of the research context.
  - ...the REP topic.

- ...Results
  - ...graphic for Professional Development data RQ.
  - ...graphic for Student Achievement data.
  - ...case study data chart (from Artifact #9).

- ...Discussion
  - ...a clear summary of findings.
  - ...how those findings will personally affect TC professional development.
  - ...relevance of those findings to pre-service teaching in general.

Note: There are dozens of QR code generators available. One that worked with a google doc was:

https://www.the-qrcode-generator.com/
2. Research poster rubric:

Table #2: Grading Rubric for Final Poster (Artifact #10) 50 pts possible

<table>
<thead>
<tr>
<th>Poster Item</th>
<th>1-3 pts</th>
<th>4-6 pts</th>
<th>7-10 pts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professionalism (includes title, formatting, APA, and professional writing criteria)</td>
<td>Little to no evidence of revisions based on REP coach suggestions, urgent need to correct or add multiple and significant revisions in the areas of: • spelling, grammar, or formatting errors, • APA labeling of graphics, • APA citations of at least two scholarly, peer-reviewed journal articles, • QR code link to electronic poster.</td>
<td>Some evidence of moderate revisions based on REP coach suggestions, moderate need to correct or add multiple revisions in the areas of: • spelling, grammar, or formatting errors, • APA labeling of graphics, • APA citations of at least two scholarly, peer-reviewed journal articles, • QR code link to electronic poster.</td>
<td>Significant evidence of revisions based on REP coach suggestions, but project may still have a very few minor adjustments needed in the areas of: • spelling, grammar, or formatting, • APA labeling of graphics, • APA citations of at least two scholarly, peer-reviewed journal articles, • QR code link to electronic poster.</td>
</tr>
<tr>
<td>Introduction</td>
<td>Two or more items missing: • Clear research rationale statement backed by at least one reference to Goal-setting Observation Form, • Rationale backed by two professional sources (in-text citations of 2 journal articles), • Research Question written out clearly.</td>
<td>One or multiple parts of item(s) missing: • Clear research rationale statement backed by at least one reference to Goal-setting Observation Form, • Rationale backed by two relevant, professional sources (in-text citations of 2 journal articles), • Research Question written out clearly.</td>
<td>Part of one item or no items missing: • Clear research rationale stated backed by at least one reference to Goal-setting Observation Form, • Rationale backed by two professional sources (in-text citations of 2 journal articles), • Research Question(s) written out clearly.</td>
</tr>
<tr>
<td>Methods</td>
<td>Two or more items missing: • Data collection methodology described, • High-level information about sample provided, • Topic of REP sequence stated.</td>
<td>One or multiple parts of item(s) missing: • Data collection methodology described, • High-level information about sample provided, • Topic of REP sequence stated.</td>
<td>Part of one item or no items missing: • Data collection methodology described, • High-level information about sample provided, • Topic of REP sequence stated.</td>
</tr>
<tr>
<td>Results</td>
<td>Two or more items missing: • One graph providing measurable, at-a-glance data for Prof. Dev. RQ, • One graph providing measurable, at-a-glance data for whole-class achievement, • One table summarizing all relevant case study contextual data, • A one-sentence summary caption for each graph/table.</td>
<td>One or multiple parts of item(s) missing: • One graph providing measurable, at-a-glance data for Prof. Dev. RQ, • One graph providing measurable, at-a-glance data for whole-class achievement, • One table summarizing all relevant case study contextual data, • A one-sentence summary caption for each graph/table.</td>
<td>Part of one item or no items missing: • One graph providing measurable, at-a-glance data for Prof. Dev. RQ, • One graph providing measurable, at-a-glance data for whole-class achievement, • One table summarizing all relevant case study contextual data, • A one-sentence summary caption for each graph/table.</td>
</tr>
<tr>
<td>Discussion</td>
<td>Two or more items missing • Findings clearly summarized, including effects of professional development on student achievement, • Findings related to personal, professional practice, • Findings related to teacher candidate professional practice as a whole.</td>
<td>One or multiple parts of item(s) missing: • Findings clearly summarized, including effects of professional development on student achievement, • Findings related to personal, professional practice, • Findings related to teacher candidate professional practice as a whole.</td>
<td>Part of one item or no items missing: • Findings clearly summarized, including effects of professional development on student achievement, • Findings related to personal, professional practice, • Findings related to teacher candidate professional practice as a whole.</td>
</tr>
</tbody>
</table>

Resources:
- Professional journal articles
- Dialogue with REP coach

Discussion Question:
No discussion question this week; instead use the above rubric to provide feedback for two assigned peer posters.

Timing:
See date in student teaching calendar, approximately student teaching week 13.
Sharing a Culture of Professional Inquiry: Research Poster Presentation

The culmination of the REP project will be presenting the research poster and celebrating a semester of research. Please remember that your presentation is ungraded. Enjoy sharing your work without being concerned about scores. The audience will include faculty, staff, students, clinical personnel, and potential employers and will occur during the final student teaching symposium. The presentation is not about your success at making a perfect poster. It is about you—a reflective educator at the gateway of a new career. Strive to connect with your audience as a unique, pre-service teacher. Inspire curiosity as you tell your story, and invite interaction as your audience members’ experiences will, almost without fail, connect in some way to yours. Avoid trying to present yourself as a highly successful master teacher. Enjoy being a novice; celebrate your questions; be excited about the growth ahead of you that this project has inspired.

Make sure you enrich your quantitative, measurable data with two or three rich stories, or qualitative data, about your study. These can be anecdotes about individual students (with identities carefully masked) or “ah ha” moments that you experienced along the way as you studied your own instruction and how students responded. The discussion questions at the end of each artifact (also posted in D2L) have been designed to help prompt this kind of thinking and can help you create an interesting presentation. Other sources of qualitative information might be journals that you relay to field supervisors, collaborative conversations with colleagues, or interactions with students. Make sure to write these down and keep them as part of your portfolio, so that as you talk about your research results, you can also tell your research story.

Requirements:

1. **Bring a Large Visual of your Poster**
   MSU University Printing Services can provide you a professional poster with a relatively short turn-around time: **(406) 994-5708** Costs will vary depending on size, etc., so plan ahead to provide them with a pdf copy of your poster if you choose professional printing. If you are unable to afford a more professional version, you can carefully create a poster using locally available materials and copied visuals. Strive for concise neatness and visual appeal.

2. **Come Prepared**
   a. Have water available to support your voice during the presentation.
   b. Dress professionally; administrators as well as MSU staff and faculty will be part of your audience.
   c. Arrive early so that you to see how to set up your poster using the presentation structures provided.
   d. Remember that your poster is only a tool. You are the focus of this presentation. Avoid blocking your poster; refer to it as you tell your research story, but remember that you are the center of attention, not the poster. Use eye contact, voice inflection, and natural, non-verbal expressions to tell your story in your own unique way.
   e. Engage as a listener as well as a presenter. You will present your poster in a group setting, so you will function as both audience and presenter. In both roles, strive to be curious, polite, and enthusiastic.
3. **Present your Research and Pre-service Teacher Story:**
   a. Plan on keeping your presentation not more than 10 minutes in length. Practice in advance with a makeshift audience or in front of a mirror.
   b. Follow the organization you created through your poster.
      - Introduce the title and talk about who you are as a pre-service teacher.
      - Tell what led to this project—what inspired and drove your research question—clearly state those questions for the audience.
      - Very briefly (and anonymously) describe your sample of students and the context in which you did this research.
      - Present your results. Do more than summarize your graphics. Share a few personal details that will make this work come alive to your audience, including surprises, detours along the way, and challenges you had to overcome. Present your case-study research vividly, but take great care alter or mask any details that could possibly make this student identifiable. (Switch gender or alter other details if necessary and use student code rather than name or initials.) If you have questions about this, check with your REP coach.
      - Conclude by discussing the impact of your results on your own values and goals as a brand-new educator as well as implications for other pre-service teachers and pre-service programs in general.
      - Thank those who supported you throughout the project.
      - Invite your audience into the discussion by encouraging questions and dialogue about your research and how you plan to move forward. This question/dialogue period should fit into your 10-minute time frame, so limit the number of questions you answer. Offer to discuss any additional questions after all presentations are completed. Have ready your portfolio to provide evidence for your answers.
      - Engage as an audience member during and after all presentations. Plan to stay afterward to congratulate others and to answer additional questions about your own work.
### Sample of Artifact #1:

**Teacher and Learner Contextual Chart**

<table>
<thead>
<tr>
<th>Students (coded, no names)</th>
<th>Interests/Preferences</th>
<th>Areas of Individual Strength</th>
<th>Needed Support(s)</th>
<th>Support Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Candidate</td>
<td>I love running in the mountains (TC).</td>
<td>My best grades were always in English and in writing-intensive courses (TC).</td>
<td>In groups, I usually end up doing all the work because quality is important to me (TC).</td>
<td></td>
</tr>
<tr>
<td>Student A</td>
<td>In her words, “I love drawing.” (Student A)</td>
<td>Strong reading skills (Star Reading Score is above benchmark) (J. Jones, professional conversation, 2019)</td>
<td>Works well with almost any other student (CT)</td>
<td>Student A needs a way to contribute in class (J. Jones, personal communication, 2019)</td>
</tr>
<tr>
<td>Student B</td>
<td>Talks frequently about favorite video games (CT)</td>
<td>Says he is great at “building things.” (Student B)</td>
<td>Brings exuberance into the classroom (G. Green, personal communication, 2019)</td>
<td>Student B needs a way to channel his exuberance so that it supports rather than distracts from learning. (J. Jones, personal communication, 2019)</td>
</tr>
<tr>
<td>Etc. for all students</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### REP Topic Template

<table>
<thead>
<tr>
<th>1-3 Standards covered by these lessons (include one Common Core ELA or math standard, or a NextGen Science Standard)</th>
<th>REP Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCSS.ELA-Literacy.RL.5.2: Determine the theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic: summarize the text. CCSS.ELA-Literacy. RL.5.9 Compare and contrast stories in the same genre (e.g., mysteries and adventure stories including traditional and contemporary stories by and about American Indians) on their approaches to similar themes and topics.</td>
<td>My topic involves helping students understand how historical fiction and history connect via common themes but also the significance of how the two genres differ</td>
</tr>
</tbody>
</table>
Sample of Artifact #2: Designing Professional Inquiry

Reflective Educator Project Goalsetting Observation Form

(Danielson Framework)

<table>
<thead>
<tr>
<th>Domain 2: The Classroom Environment</th>
<th>Unsatisfactory</th>
<th>Developing</th>
<th>Proficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>2c: Managing Classroom Procedures</td>
<td>☐ Procedures not established</td>
<td>☑ Procedures inconsistently implemented</td>
<td>☐ Procedures consistently implemented</td>
</tr>
<tr>
<td>• instructional groups</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• transitions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2d: Managing Student Behavior</td>
<td>☐ Little-to-no behavior management</td>
<td>☑ Uneven behavior management</td>
<td>☐ Consistent behavior management</td>
</tr>
<tr>
<td>• expectations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• monitoring student behavior</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• response to student misbehavior</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes on Managing Classroom Procedures

Initial transition into the classroom took 10 minutes. Students were...etc.

Notes on Managing Student Behavior

I noticed that I kept giving students extra chances rather than following through on expectations. Also, I did not lay out consequences for expectations, and my expectations were not clearly and confidently stated. Student D received 6 warnings during this lesson, and I missed other instances of off-task behavior...etc.

<table>
<thead>
<tr>
<th>Domain 3: Instruction</th>
<th>Unsatisfactory</th>
<th>Basic</th>
<th>Proficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>3a: Communication with Students</td>
<td>☐ Major content errors; student confusion</td>
<td>☐ Minor content errors; basic student understanding</td>
<td>☑ Solid content; solid student understanding</td>
</tr>
<tr>
<td>• expectations for learning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• directions for activities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• explanations of content</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3b: Using Questioning and Discussion Techniques</td>
<td>☐ Low-level, rapid-fire questions</td>
<td>☐ Inconsistently engaging questions</td>
<td>☑ Engaging questions</td>
</tr>
<tr>
<td>• quality of questions/prompts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• discussion techniques</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• student participation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3c: Engaging Students in Learning</td>
<td>☐ Poor pacing; little-no intellectual engagement; teacher centered</td>
<td>☑ Uneven pacing; inconsistent intellectual engagement; teacher/student centered</td>
<td>☐ Effective pacing; consistent intellectual engagement; student centered</td>
</tr>
<tr>
<td>• activities &amp; assignments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• grouping of students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• instructional materials and resources</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• structure and pacing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3d: Using Assessment in Instruction</td>
<td>☐ No or untimely teacher feedback</td>
<td>☑ Inconsistent teacher feedback</td>
<td>☐ Consistent, timely teacher feedback</td>
</tr>
<tr>
<td>• assessment criteria</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• monitoring of student learning, feedback to students</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes on Communication with Students

I was confident about the content. No students evidenced confusion about content when I did an informal assessment...

Notes on Using Questioning and Discussion Techniques

Writing out questions ahead of time seemed to work. Student response was...

Notes on Engaging Students in Learning

My pacing appeared somewhat slow for Students C, H, & R. They asked why were we doing this...

Notes on Using Assessment in Instruction

Student I did not seem to understand my feedback and appeared to disengage after he got back his homework. In the video, I can hear him muttering about it not even being worth trying...
Designing Professional Inquiry Template

Goal:  
My goal is to increase student participation when I am teaching.

Alignment to Danielson
Danielson 3b: Using Questioning and Discussion Techniques: Student participation

Professional Development Research Question
How will encouraging all contributions as part of a class exploration (rather than focusing on students giving me “right” answers to questions) affect whole-class participation and the participation of one targeted student?

Student Achievement Research Question
How will encouraging all contributions as part of a class exploration (rather than focusing on students giving me “right” answers to questions) affect whole-class achievement and the achievement of one targeted student.

Professional Article Citation
2-3 Sentence Annotation of Professional Article


Kagan suggests that teacher candidates, anxious about their own success, grow “custodial and controlling” (p. 154). He also states that this immature stage may be a necessary part of growth toward becoming a mature educator.

Sample of Artifact #3: Aligning & Designing Instruction I

Aligning & Designing Instruction I Template

Professional Development Research Question:
How will encouraging all contributions as part of a class exploration (rather than focusing on students giving me “right” answers to questions) affect whole-class participation and the participation of one targeted student?

Standards
CCSS.ELA-Literacy.R.5.2: Determine the theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic: summarize the text.

CCSS.ELA-Literacy. R.5.9 Compare and contrast stories in the same genre (e.g., mysteries and adventure stories including traditional and contemporary stories by and about American Indians) on their approaches to similar themes and topics.

Description of Pre-assessment
Students will answer 4 questions that align with the four sections of the summative assessment; questions are attached.

Description of Summative Assessment:
Cumulative multiple choice (3 sections) and short essay section

Description of Proficiency:
85% accepted responses

Description of Assessment Tools for complex assessments:
Essay portion is graded with a rubric (provided)

Lesson numbers, titles, and standards numbers

Instructional outcome:
Students will learn that... (SWLT)

Lesson objective
Students will be able to... (SWBAT)

Segment of summative assessment measuring outcome/objective

L #2: Fact vs. Fiction.
Students will learn that historical fiction texts contain elements of both fact and fiction.
Students will be able to distinguish between historical fact and fiction in a film adaptation of an historical event.
Section 1 (Questions 1-5) has students mark either “historic” or “fictional” after summaries of key book events

L #3: Connections between Factual and Fictional Themes
Students will learn that the theme presented in The Watson’s Go to Birmingham connects to themes in today’s modern society.
Students will be able to make an authentic connection between a theme in Watson’s to an event from their experience.
Section 4 (Essay) has students write how a Watson’s connects with some aspect of life at Montana Middle School

L #4

L #5
Sample of Artifact #4: Aligning & Designing Instruction II

**Instructional Design & Alignment II**

**Professional Development Research Question:**

*How will encouraging all contributions as part of a class exploration (rather than focusing on students giving me “right” answers to questions) affect whole-class participation and the participation of one targeted student?*

<table>
<thead>
<tr>
<th>Lesson Titles And Standard(s) number</th>
<th>Instructional Outcomes/Lesson Objectives: Students will learn that... Students will be able to...</th>
<th>Formative Assessment Description: Includes how proficiency will be measured; provide copies of assessment tools to CT and REP Coach</th>
<th>One Instructional Strategy Scaffolding this Outcome/Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>L #1: Historical Fiction: CCSS.ELA-Literacy.RL.5.9</td>
<td>Students will learn that historical fiction texts contain elements of both fact and fiction. Students will be able to distinguish between fictional and actual events in a text segment of historical fiction.</td>
<td>Worksheet summarizing events from Chapter 3. Students mark either “historical” or “fictional” after reading each event. Proficiency: 9 out of 10 accuracy</td>
<td>Teacher will have on board several summaries of Chapter 2 events. Small groups will discuss whether these are historic or fictional and will have to present evidence to support this. (Phones used for research; TC and para oversight)</td>
</tr>
<tr>
<td>L #2: Comparing Themes: CCSS.ELA-Literacy.RL.5.2</td>
<td>Students will learn that the theme presented in <em>The Watson’s Go to Birmingham</em> connects to themes in today’s modern society. Students will be able to make an authentic connection between a theme in Watson’s to an event from their experience.</td>
<td>Students will select and record a Watson’s theme. They will write a 3-sentence connection to a personal or family experience; rubric attached.</td>
<td>Teacher will have current event from this week’s newspaper on screen. Students will silently read article as bell work. They will then turn and talk to a partner about how this connects to Watson’s and share findings</td>
</tr>
</tbody>
</table>

CT, please sign below to indicate that the outcomes/objectives, formative assessment, and instructional strategy are appropriate for this lesson

X

**Data Collection Tool**

These will vary according to each research question. View a few possible ideas in Artifact #7 (p. 31)

Though they will differ, each tool should include:

- ...professional development research question.
- ...title and number of lessons.
- ...name of data collector.
- ...brief description of any professional development strategies being tried during lesson
- ...a place/structure for actual data to be recorded by collector during each REP lesson.
  - ...whole-class responses to your professional development strategies.
  - ...case-study student responses to your professional development strategies.
Sample of Artifact #5: Constructing Lesson Plans

DANIELSON-BASED MODEL LESSON TEMPLATE

InTASC Standard #7: Planning for Instruction

Name:

Class: Montana Elementary 7th
Date: 06/13/2019

REP Sequence Topic: History and Fiction
Lesson Title: Connections

RELATIONSHIP TO SEQUENCE
(InTASC #5: Application of Content; Danielson 1e: Designing Coherent Instruction: Lesson and unit structure)

Relationship to REP Structure:
• How does this lesson support selected content standards, enduring understandings, and goals of the unit?
• How does this lesson build on the previous in this instructional sequence?
• How does this lesson support the next lesson in this instructional sequence?

In this sequence, students are comparing historical texts to fiction texts via studying elements of historical fiction. In the last lesson, we discussed the differences between fact and fiction. In this lesson, we examine how both elements co-exist in a work of historical fiction (in this case a film). After this lesson, we will talk about the meaning of theme and how fiction often echoes themes derived from actual historical events. Ultimately, we will begin to understand the differences between the two genres but how historical fiction leverages the best parts of each.

CONTENT
(Danielson 1a: Demonstrating Knowledge of Content and Pedagogy)

Content Standard Alignment:
Script the content standards to which lessons will be aligned. Include an ELA/math Common Core standard: http://www.corestandards.org/read-the-standards/
If applicable, write out one of the seven Essential Understandings of Montana Indians that will help students make a meaningful cultural connection between IEFA and the content. http://opi.mt.gov/Educators/Teaching-Learning/Indian-Education

CCSS.ELA-Literacy. RL.5.9 Compare and contrast stories in the same genre (e.g., mysteries and adventure stories including traditional and contemporary stories by and about American Indians) on their approaches to similar themes and topics.

EU #5: History is a story most often related through the subjective experience of the teller. With the inclusion of more and varied voices, histories are being rediscovered and revised. History told from American Indian perspectives frequently conflicts with the stories mainstream historians tell.

INSTRUCTIONAL OUTCOMES
(Framework Domain 1C: Setting Instructional Outcomes)

Instructional Outcome (Learning)
(Danielson 1c: Setting Instructional Goals)
Use the SWLT prompt: Students will learn that... to “identify exactly what the students will be expected to learn” (Danielson, 2013)
In this portion, consider the primary cognitive change you hope students to achieve as a result of the lesson, whether it is internalizing a skill in order to better control a ball or whether it might be making real-world connections with a piece of literature.

Students will learn that...

Students will learn that themes presented through works of historical fiction connect to common historical themes across history and society.

...so...

Instructional Outcome (Application), AKA: Lesson Objective:
(Danielson 1c: Setting Instructional Goals)
Use the SWBAT prompt, Students will be able to... Use clear, specific sentences containing desired behavior and content for one primary lesson objective. Write from the perspective of Bloom’s/Webb’s taxonomies, and make sure to include objectives from the higher levels of Bloom’s or deeper levels of Webb’s

Students will be able to...

...they will be able to...[Bloom’s verb]

Students will be able to make an authentic connection between a photo from a work of historical fiction to an historical theme relevant to today’s world and their experience.
DIFFERENTIATION STRATEGIES
(Framework Domain 1b: Demonstrating Knowledge of Students)

<table>
<thead>
<tr>
<th>Level II</th>
<th>Level III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodating by using photos instead of text</td>
<td>All Level III students should be able to participate in the lesson using the Level II accommodation</td>
</tr>
<tr>
<td>Formative assessment, materials</td>
<td>I had thought of this strategy for my student who loves video games. This would help him move into writing by retaining a pictorial aspect. However, the whole class liked the idea of using film in Lesson 1, so I am continuing using a visual component along with writing.</td>
</tr>
</tbody>
</table>

MANAGEMENT
(Framework Domain 2D: Managing Student Behavior)

Lesson-specific Targeted Management Strategies
Danielson 2d: expectations, monitoring student behavior, response to student misbehavior)

Address management strategies that will be important for this lesson. Whole-class activities will require different strategies than stations, for example. What expectations will you need to outline for students during this lesson? What will you need to monitor as the lesson proceeds? What responses have you planned for any student inability to follow the expectation?

My classroom culture emphasizes teamwork and collaboration. Although everyone will produce his/her own representation of theme, I will encourage students to work in groups or pairs if they like during the research phase. They know they are to use this collaboration as a springboard to an authentic, unique project. However, they also know that this collaborative time must be focused on content. Anyone abusing that privilege receives one warning and then is deemed unable to maintain focus for that day working collaboratively and will complete the project on his/her own in a designated space near the back of the classroom.

METHODS AND INSTRUCTIONAL STRATEGIES
(Framework Domain 1e: Designing Coherent Instruction)

Introduction, AKA: Anticipatory Set or Focusing event (Time Stamp): Describe the specific question, story, video clip, scenario, skit, etc. you will use to capture students’ attention. Focus on engagement.

(2:30 – 2:40) I will enter class with my cowboy boots, hat, and jeans. I will ask students how to describe my clothing. Then, I will ask students what they associate with my clothing—a way of life, values, profession, etc. I will then ask them to talk in groups about the difference between description (fact) and theme. Groups will share ideas.

Instructional Strategies/Activities (Time stamp each segment): Create a detailed (sufficient for a substitute teacher) and carefully sequenced outline of the content you intend to explore during the class session. In the outline:

- The "I do, we do, you do" format can help you with sequencing
- Make sure to use varied instructional strategies to convey the content of your lesson(s)
- Identify the questions, illustrations, examples, vocabulary, types of student participation, etc. you have planned for use in your lesson
- Explain how you will provide opportunities for students to apply the content.

(2:40-2:42) I do: I will write on the board a definition of theme and give a brief, exampled description

(2:42 – 3:00) We do: I will have them read aloud (volunteers) from several passages from our text I have chosen in advance. We will talk about the descriptive aspects of text and then I will ask them to write down what theme might be represented by each one. These, they will share with the whole group, and I will invite a certain degree of debate. What is the right answer about theme? There likely isn’t one. Multiple themes are possible in various scenes of any piece of fiction or work of history. These depend largely on point of view, and we will illustrate and discuss how point of view affects theme.

(3:00 – 3:20) You do: After that discussion, students will work on completing their formative assessments.

Wrap Up/Synthesis/Closure (Time stamp): How will you bring your class to a close by revisiting the goal for your lesson? (reviewing key points, doing a final check for understanding, targeting connections between previous and future lessons, etc.) Focus on continuing engagement. This closure should not be working on an assignment, cleaning up, etc.

(3:20 – 3:25) Volunteers will share their photos and read the captions they wrote. They will describe how these captions do more than just describe photos. They will summarize the theme in one or two words.
### Sample of Artifact #6: Adjusting Instruction Using Evidence

**Adjusting Instruction Using Evidence Template**

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Tier I (Whole-class) Adjustments</th>
<th>Adjustments for specific students/student groups (Tier II, III, or students not showing growth)</th>
<th>Whole-class Proficiency (25 learners)</th>
<th>Tier I (Whole-class) Reflections</th>
<th>Adjustments for specific students/student groups (Tier II, III, or students not showing growth)</th>
</tr>
</thead>
<tbody>
<tr>
<td>L #1</td>
<td></td>
<td>This strategy will work well for most Tier II students, including my three students who have trouble contributing, since pictures are easier for them to share than speech. I will ask an aide to encourage two Tier III students to do the caption on their own, if possible, but they will need assistance organizing and generating a theme. Both of their IEPs would allow a 1-sentence theme with assistance rather than 3 sentences.</td>
<td>96% proficient</td>
<td>I had decided to differentiate by using film instead of text for some learners but thought it might be beneficial for the entire class. I did a class poll, which was overwhelmingly in favor of using the film clip. My class proficiency rate was high—a 96% proficiency rate, so we will move forward as a class.</td>
<td>Even my Tier III non-proficient student stated that he really enjoyed this type of assessment, and he received an 8/10. We are moving into a theme, which might be harder than fact vs. fiction, so I will be having aides work closely with two of my Tier III students and will make sure to modify requirements according to their IEP.</td>
</tr>
<tr>
<td>L #2</td>
<td>Because of L #1 results, I changed using text to find historical theme to having them find a still photo from the film, “12 Strong.” They will write, however, by providing a caption for each photo as well as three sentences about an historical theme suggested by this photo. (I chose 3 sentences to encourage more than dashing off one quick thought.)</td>
<td>Most of the class (Tier I) had trouble generalizing theme from a still photo. Their initial response was to describe. It helped to associate theme with their personal experience. They needed prompting, both with the western clothes and with the battle photos to go beyond “war” or “battle” into themes that encompass struggling against seemingly impossible odds. They are not yet ready to do this on their own.</td>
<td>84% proficient</td>
<td>Most of the class (Tier I) had trouble generalizing theme from a still photo. Their initial response was to describe. It helped to associate theme with their personal experience. They needed prompting, both with the western clothes and with the battle photos to go beyond “war” or “battle” into themes that encompass struggling against seemingly impossible odds. They are not yet ready to do this on their own.</td>
<td>Tier II &amp; III responded positively to visuals but had trouble generating an abstract theme. Two students immediately grasped the concept and tended to disengage after. Prepare differentiated areas for group work next REP lesson. Each group will deduce theme from text, but the pieces of text will vary in complexity.</td>
</tr>
</tbody>
</table>

L #3

L #4
Sample of Artifact #7: Engaging in Professional Inquiry

Because all data collection tools will vary based on research question, we have provided a few possible samples below:

### Professional Development Research Question:

*How will encouraging all contributions as part of a class exploration (rather than focusing on students giving me “right” answers to questions) affect whole-class participation and the participation of one targeted student?*

<table>
<thead>
<tr>
<th>Lesson #</th>
<th>Data Collector</th>
<th>Professional Development Strategies:</th>
<th>RQ Data Collection Class contribution numbers for each student:</th>
</tr>
</thead>
</table>
| Lesson #1: Historical Fiction | CT, Jane Jones | Today I will begin class with a timeline of all the “inventions” that have led to the modern smart phone. I connected early innovations such as Roman fire signaling and, Alexander Graham Bell’s early experiments with how all student ideas help move us toward the goal of learning. Some ideas will be “correct” others may not, but all are important to us get where we want to go. | Student A: 0  
Student B: IIII  
Student C: IIII  
Etc. |
| Lesson #2: Comparing Themes | Video self-collection | For this lesson, for every incorrect answer a student gave, I will respond with a version of, “Jane, thank you so much for your idea! Now, Class, how can we use Jane’s idea to help us understand more about….” | Student A: 0  
Student B: IIII  
Student C: IIII  
Etc. |
| Lesson #3: Point of View | FS, John Johnson | For Lesson #3, I have found stickers of various old-time telephones (relating back to our timeline in Lesson #1.) Every time a student contributes, I will give him/her one of those stickers. | Student A: II  
Student B: IIII  
Student C: IIII  
Etc. |
| Lesson #4: Fiction & Society | Administrator, Paul Paulson | | |

### Transition Time Collection Sheet

**Directions:** Use a stopwatch to record the start and end times of transition. Then, calculate the total duration for that occurrence.

<table>
<thead>
<tr>
<th>Transition</th>
<th>Transition Start</th>
<th>Transition End</th>
<th>Total Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial transition</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Transition to carpet</td>
<td></td>
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<td></td>
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<tr>
<td>Transition to desks</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Transition to stations</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Transition to hallway</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Sample of Artifact #8: Analyzing Whole-class Achievement & Growth

Sample Artifact #8: Student Achievement & Growth Data

<table>
<thead>
<tr>
<th>Student</th>
<th>Pre-assessment Score/__</th>
<th>Formative #1 P, AP, NP</th>
<th>Formative #2 P, AP, NP</th>
<th>Formative #3 P, AP, NP</th>
<th>Formative #4 P, AP, NP</th>
<th>Summative score/__</th>
<th>Summative Proficiency Yes/No</th>
<th>Overall Growth: Yes/No/Inconsistent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student A</td>
<td>4/10</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>49/50</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Student B</td>
<td>3/10</td>
<td>NP</td>
<td>AP</td>
<td>AP</td>
<td>38/50</td>
<td>No</td>
<td>Yes</td>
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<tr>
<td>Etc. for all students</td>
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</tbody>
</table>

Sample of Artifact #9: Analyzing One Case

Case Study Contextual, Achievement, & Growth Data

Professional Development Research Question:
How will encouraging all contributions as part of a class exploration (rather than focusing on students giving me “right” answers to questions) affect whole-class participation and the participation of one targeted student?

Student: Student A

Student Strengths

- In her words, “I love drawing.”
- Strong reading skills (Star Reading Score is above benchmark)
- Works well with almost any other student

Needs for Support

- Student A needs a safe way to contribute in class.

Tier Designation

- Tier I but needs Tier II-type interventions for contributing in class

Pre-assessment

- 4/10

Lesson | Formative Assessment Scores Proficiency? (Yes/No) | RQ Data | Summary of strategies tried with this student:
---|-----------------------------|---------|--------------------------------------------------
L #1 | 8/10 No                     | 0       | While I carefully monitored her proficiency throughout the REP lessons, my primary goal for Student A was increasing her participation. To do this I put her in a group of three and had her do the illustration for her group project. When her group presented, she said very little, but I pointed out how important were her illustration to the group idea and talked briefly about how every class team (small group or whole class) would learn best by valuing the unique contributions of each part of the team. By Lesson #4, Student A went from no voluntary contributions to contributions to two voluntary contributions. |
L #2 | 10/10 Yes                   | 0       | |
L #3 | 9/10 Yes                    | 0       | |
L #4 | 10/10 Yes                   | 2       | |
Summative Assessment | 49/50 Yes |
A Teacher Candidate Learns NOT to Control the Classroom: A Study of Student Exploration vs. Teacher Candidate Control

Gini Mohr
Montana State University

INTRODUCTION:
Kagan suggests that teacher candidates, anxious about their own success, grow "controlling and restricting." (Kagan, 1992, p. 154. Reid, 2013) likewise cautions educators about being overly eager for closure and exhibiting "a spasm of rich questioning...a tendency for questions to become closed, to seek solution quickly, and to problem solve towards a speedy outcome" (p. 23). In line with this research, my CT suggested after my first observed lesson that I should "encourage more student contributions" (Smith, c. personal conversation, 2019) in my teaching. This feedback prompted my research question:

Research Question: How does encouraging exploration, rather than controlling student responses, affect student class participation?

METHODS:
Data Collection: occurred during four lessons, gathered by CT, PS, administrator, and self-observation of video during week 9 of student teaching.
Sample: 25 sixth graders in a Class "B" Montana middle school with a population of 145 students in grades 6-8
Topic: Comparing theme between history and historical fiction

Discussion: By "caring" too much about correct student responses, I was promoting competition instead of cooperation, curtailing a class culture of exploration, and even possibly shutting some students down almost completely. My study results showed me that avoiding the tendency of new educators to seek quick closure of student ideas and, instead, encouraging a culture of collaborative exploration during pre-service teaching can support increased and more diverse student participation. Although I did not see a direct correlation between student achievement and increased student participation in this study, I plan to continue researching the connection between student engagement and achievement. Pre-service teachers and their mentors should consider emphasizing growth over exact correctness—both for pre-service teachers themselves as novice educators and for their learners—in order to inspire authentic, engaged participation in learning.

References:

Results:

Figure 1: Professional Development Analysis: Appropriately prepared numbers (5-4 per lesson) indicated through students engaging in the role of response from the case study student.

Figure 2: Student Achievement Analysis: Whole-class achievement did not appear to be either positively or negatively influenced by my work to increase student participation.

Table 1: Case Study Data Analysis

My case study student exhibited significant difficulty with participating in class; however, she generally knew the content and also brought advanced skills in art as strengths in learning. My professional development work did not negatively affect her achievement.
### Teacher & Learner Context Template

<table>
<thead>
<tr>
<th>Students (coded, no names)</th>
<th>Areas of Individual Strength</th>
<th>Needed Support(s)</th>
<th>Level of Support</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Interests/Preferences</td>
<td>Academics/Skills</td>
<td>Socialization/Behavior</td>
</tr>
<tr>
<td>Teacher Candidate</td>
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<td>Student</td>
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<tr>
<td>Etc. for additional students</td>
<td></td>
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</tr>
</tbody>
</table>

**REP Topic Template**

1-3 standards covered by these lessons; include one Common Core ELA or math standard OR one Next Generation Science standard.

<table>
<thead>
<tr>
<th>REP Topic</th>
<th></th>
</tr>
</thead>
</table>
Designing Professional Inquiry: Artifact #2
Reflective Educator Project Goalsetting Observation Form Template

**Reflective Educator Project Goalsetting Observation Form**  
*(Danielson Framework)*

<table>
<thead>
<tr>
<th>Student Teacher:</th>
<th>Observer/Role:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Date:**

**School:**

Scores of basic (2) or proficient (3) are considered appropriate for student teaching; Complete rubric: https://www.montana.edu/dfpa/rubric

<table>
<thead>
<tr>
<th>DOMAIN 2: THE CLASSROOM ENVIRONMENT</th>
<th>Unsatisfactory</th>
<th>Developing</th>
<th>Proficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>2c: Managing Classroom Procedures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- instructional groups</td>
<td>☐ Procedures not established</td>
<td>☐ Procedures inconsistently implemented</td>
<td>☐ Procedures consistently implemented</td>
</tr>
<tr>
<td>- transitions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2d: Managing Student Behavior</td>
<td>☐ Little-to-no behavior management</td>
<td>☐ Uneven behavior management</td>
<td>☐ Consistent behavior management</td>
</tr>
<tr>
<td>- expectations</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>- monitoring student behavior</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- response to student misbehavior</td>
<td></td>
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</tbody>
</table>

| Notes on Managing Classroom Procedures | |
|-----------------------------------------| |

<p>| Notes on Managing Student Behavior | |
|-----------------------------------| |</p>
<table>
<thead>
<tr>
<th><strong>DOMAIN 3: INSTRUCTION</strong></th>
<th>Unsatisfactory</th>
<th>Basic</th>
<th>Proficient</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3a: Communication with Students</strong></td>
<td>☐ Major content errors; student confusion</td>
<td>☐ Minor content errors; basic student understanding</td>
<td>☐ Solid content; solid student understanding</td>
</tr>
<tr>
<td>• expectations for learning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• directions for activities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• explanations of content</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3b: Using Questioning and Discussion Techniques</strong></td>
<td>☐ Low-level, rapid-fire questions</td>
<td>☐ Inconsistently engaging questions</td>
<td>☐ Engaging questions</td>
</tr>
<tr>
<td>• quality of questions/prompts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• discussion techniques</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• student participation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3c: Engaging Students in Learning</strong></td>
<td>☐ Poor pacing; little-no intellectual engagement; teacher centered</td>
<td>☐ Uneven pacing; inconsistent intellectual engagement; teacher/student centered</td>
<td>☐ Effective pacing; consistent intellectual engagement; student centered</td>
</tr>
<tr>
<td>• activities &amp; assignments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• grouping of students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• instructional materials and resources</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• structure and pacing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3d: Using Assessment in Instruction</strong></td>
<td>☐ No or untimely teacher feedback</td>
<td>☐ Inconsistent teacher feedback</td>
<td>☐ Consistent, timely teacher feedback</td>
</tr>
<tr>
<td>• assessment criteria</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• monitoring of student learning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• feedback to students</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes on Communication with Students

Notes on Using Questioning and Discussion Techniques

Notes on Engaging Students in Learning

Notes on Using Assessment in Instruction
### Designing Professional Inquiry Template

<table>
<thead>
<tr>
<th>Goal:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Alignment to Danielson</td>
<td></td>
</tr>
<tr>
<td>Professional Development Research Question</td>
<td></td>
</tr>
<tr>
<td>Professional Article Citation</td>
<td></td>
</tr>
</tbody>
</table>

**2-3 Sentence Annotation of Professional Article**

### Aligning & Designing Instruction I: Artifact #3

**Aligning & Designing Instruction I Template**

**Professional Development Research Question:**

<table>
<thead>
<tr>
<th>Standards:</th>
<th></th>
</tr>
</thead>
</table>

**Description of Pre-assessment**:

**Description of Summative Assessment**:

**Description of Proficiency**:

**Description of Assessment Tools** for complex assessments:

<table>
<thead>
<tr>
<th>Lesson numbers, titles, and standards numbers</th>
<th>Instructional outcome: Students will learn that... (SWLT)</th>
<th>Lesson objective: Students will be able to... (SWBAT)</th>
<th>Segment of summative assessment* measuring outcome/objective</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CT, please sign below to approve standards, pre-assessment, instructional outcomes/lesson objectives and summative assessment.

X
Aligning & Designing Instruction II: Artifact #4

Aligning & Designing Instruction II Template

**Professional Development Research Question:**

<table>
<thead>
<tr>
<th>Lesson numbers, titles and standard(s) numbers</th>
<th>Instructional outcome: Students will learn that... (SWLT)</th>
<th>Lesson objective: Students will be able to... (SWBAT)</th>
<th>Formative Assessment Description: Includes how proficiency will be measured; provide copies of assessment tools to CT and REP Coach</th>
<th>One Instructional Strategy Scaffolding this Outcome/Objective</th>
<th>CT, please sign below to indicate that the outcomes/objectives, formative assessment, and instructional strategy are appropriate for this lesson</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>So</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

**RQ Data Collection Template**

Because each TC will design his or her own data collection tool in collaboration with the REP coach according to the selected research question, no template is available for this tool. A few possible samples are provided in Appendix A under Artifact #7. Each tool should include:

- professional development research question.
- title and number of lessons.
- name of data collector.
- brief description of any professional development strategies being tried during lesson
- a place/structure for actual data to be recorded by collector during each REP lesson.
  - whole-class responses to your professional development strategies.
  - case-study student responses to your professional development strategies.
Constructing Lesson Plans: Artifact #5

REP Lesson Template

InTASC Standard #7: Planning for Instruction

<table>
<thead>
<tr>
<th>Name:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class:</td>
<td></td>
</tr>
<tr>
<td>REP Sequence Topic:</td>
<td>Lesson Title:</td>
</tr>
</tbody>
</table>

RELATIONSHIP TO SEQUENCE
(InTASC #5: Application of Content; Danielson 1e: Designing Coherent Instruction: Lesson and unit structure)

<table>
<thead>
<tr>
<th>Relationship to REP Structure:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• How does this lesson support selected content standards, enduring understandings, and goals of the unit?</td>
</tr>
<tr>
<td>• How does this lesson build on the previous in this instructional sequence?</td>
</tr>
<tr>
<td>• How does this lesson support the next lesson in this instructional sequence?</td>
</tr>
</tbody>
</table>

CONTENT
(Danielson 1a: Demonstrating Knowledge of Content and Pedagogy)

<table>
<thead>
<tr>
<th>Content Standard Alignment:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Script the content standards to which lessons will be aligned. Include an ELA/math Common Core standard: <a href="http://www.corestandards.org/read-the-standards/">http://www.corestandards.org/read-the-standards/</a></td>
</tr>
</tbody>
</table>

If applicable, write out one of the seven Essential Understandings of Montana Indians that will help students make a meaningful cultural connection between IEFA and the content. [http://opi.mt.gov/Educators/Teaching-Learning/Indian-Education](http://opi.mt.gov/Educators/Teaching-Learning/Indian-Education)
**INSTRUCTIONAL OUTCOMES**  
*(Framework Domain 1C: Setting Instructional Outcomes)*

| Instructional Outcome (learning)  
*(Danielson 1c: Setting Instructional Goals)* | Students will learn that... |
|------------------------------------------|-----------------------------|
| Use the SWLT prompt: **Students will learn that**... to “identify exactly what the students will be expected to learn” *(Danielson, 2013)*  
In this portion, consider the primary cognitive change you hope students to achieve as a result of the lesson, whether it is internalizing a skill in order to better control a ball or whether it might be making real-world connections with a piece of literature. |  
...so... |

| Instructional Outcome (application), AKA: Lesson Objective:  
*(Danielson 1c: Setting Instructional Goals)* |  
...they will be able to...[Bloom’s verb] |
|------------------------------------------|-----------------------------|
| Use the SWBAT prompt, **Students will be able to**....  
Use clear, specific sentences containing desired behavior and content for one primary lesson objective. Write from the perspective of Bloom’s/Webb’s taxonomies, and make sure to include objectives from the higher levels of Bloom’s or deeper levels of Webb’s |  
|  

---

**DIFFERENTIATION STRATEGIES**  
*(Framework Domain 1b: Demonstrating Knowledge of Students)*

| What?  
*(Describe the differentiated strategy you are proposing. Is it an accommodation or a modification?)* | Where?  
*(List the parts of the lesson plan that will be changed.)*  
Assistive technologies can be noted as changes to materials/resources. | Why?  
*(Use student achievement along with relevant student strengths and needs from Artifact #1—to explain the reason for this strategy.)* |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Level II</td>
<td>Level III</td>
<td>Level II</td>
</tr>
<tr>
<td>Level III</td>
<td>Level III</td>
<td>Level II</td>
</tr>
</tbody>
</table>
### ASSESSMENT

*Framework Domain 1f: Designing Student Assessments*

**Assessment (Formative):**

Briefly describe the lesson-level formative assessment for learning (generally non-graded) that you can review after each lesson in order to adjust your instruction for the following lesson to meet needs of individuals or groups of students. This assessment could be very simple (exit ticket, yes/no checklist, etc.), but it must be objective and equal across all students. (Class discussions would not work since all students would not equally address the same criteria.)

Answer the following questions:

1. How will you measure proficiency (readiness to move on) for each individual student?
2. How will you determine proficiency (readiness to move on) for the class as whole?
3. If you determine that the class is proficient, how will you remediate those who have not met individual proficiency standards?

### MANAGEMENT

*Framework Domain 2D: Managing Student Behavior*

**Lesson-specific Targeted Management Strategies**

*Danielson 2d: expectations, monitoring student behavior, response to student misbehavior*

Address management strategies that will be important for this lesson. Whole-class activities will require different strategies than stations, for example. What expectations will you need to outline for students during this lesson? What will you need to monitor as the lesson proceeds? What responses have you planned for any student inability to follow the expectation?
## METHODS AND INSTRUCTIONAL STRATEGIES
*(Framework Domain 1e: Designing Coherent Instruction)*

<table>
<thead>
<tr>
<th>Introduction, AKA: Anticipatory Set or Focusing event <em>(Time Stamp)</em>:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe the specific question, story, video clip, scenario, skit, etc. you will use to capture students’ attention. Focus on engagement.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Instructional Strategies/Activities <em>(Time stamp each segment)</em>:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create a detailed (sufficient for a substitute teacher) and carefully sequenced outline of the content you intend to explore during the class session. In the outline:</td>
</tr>
<tr>
<td>• The “I do, we do, you do” format can help you with sequencing</td>
</tr>
<tr>
<td>• Make sure to use varied instructional strategies to convey the content of your lesson(s)</td>
</tr>
<tr>
<td>• Identify the questions, illustrations, examples, vocabulary, types of student participation, etc. you have planned for use in your lesson</td>
</tr>
<tr>
<td>• Explain how you will provide opportunities for students to apply the content.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wrap Up/Synthesis/Closure <em>(Time stamp)</em>:</th>
</tr>
</thead>
<tbody>
<tr>
<td>How will you bring your class to a close by revisiting the goal for your lesson? (reviewing key points, doing a final check for understanding, targeting connections between previous and future lessons, etc.) Focus on continuing engagement. This closure should <em>not</em> be working on an assignment, cleaning up, etc.</td>
</tr>
</tbody>
</table>

## MATERIALS/RESOURCES
*(Framework Domain 1d: Demonstrating Knowledge of Resources)*

<table>
<thead>
<tr>
<th>Instructional Materials/Resources:</th>
</tr>
</thead>
<tbody>
<tr>
<td>List all materials and resources required by teacher and/or students, include anything you will need to collect and use: e.g. paper-based materials (such as text books or instruction sheets), technology equipment, science equipment or supplies, and art materials.</td>
</tr>
</tbody>
</table>
Adjusting Instruction Using Evidence: Artifact #6

Adjusting Instruction Using Evidence Template

<table>
<thead>
<tr>
<th>Professional Development Research Question:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Level I (Whole-class) Adjustments</th>
<th>Adjustments for specific students/student groups (Level II, III, or students not showing growth)</th>
<th>Percentage of Whole Class (# of students) Reaching Proficiency</th>
<th>Level I (Whole-class) Reflections</th>
<th>Adjustments for specific students/student groups (Level II, III, or students not showing growth)</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

Engaging in Professional Inquiry: Artifact #7

Templates are designed by TCs and will vary in appearance but should include:

- ...professional development research question.
- ...title and number of lessons.
- ...name of data collector.
  - TC will arrange for individuals to collect professional development data during each of the REP Lessons (CT, FS, other TCs, admin, etc.).
  - If no data collector is available, the TC will video the lesson and collect data from the video.
- ...brief description of any professional development strategies being tried during lesson.
- ...actual data recorded by collector during each REP lesson. This data should focus on both:
  - ...whole-class responses to your professional development strategies.
  - ...case-study student responses to your professional development strategies.
Analyzing Whole-class Achievement & Growth: Artifact #8

Whole-class Achievement & Growth Template

Professional Development Research Question:

<table>
<thead>
<tr>
<th>Student</th>
<th>Pre-assessment Score/___</th>
<th>Formative #1 P, AP, NP</th>
<th>Formative #2 P, AP, NP</th>
<th>Formative #3 P, AP, NP</th>
<th>Formative #4 P, AP, NP</th>
<th>Summative score/___</th>
<th>Summative Proficiency Yes/No</th>
<th>Overall Growth: Yes/No/Inconsistent</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

P = Proficient
AP = Almost Proficient
NP = Not Proficient
### Analyzing One Case: Artifact #9

#### Analyzing One Case Template

**Professional Development Research Question:**

**Student:**

<table>
<thead>
<tr>
<th>Student Strengths</th>
<th>Needs for Support</th>
<th>Tier Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I/P</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A/S</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S/B</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Pre-assessment Score**

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Formative Assessment Scores: Proficiency? (yes/no)</th>
<th>RQ Data</th>
<th>Summary of strategies tried with this student:</th>
</tr>
</thead>
<tbody>
<tr>
<td>L#</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L#</td>
<td></td>
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<td></td>
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<td>L#</td>
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<tr>
<td>L#</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L#</td>
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</tr>
</tbody>
</table>

**Summative Assessment Score**
Participating in a Culture of Professional Inquiry: Artifact #10

Research Poster Template

There are several websites with free research poster templates that you can use. Microsoft has one created with power point that you can customize: https://www.posterpresentations.com/free-poster-templates.html

The sample below shows you the required pieces for your REP poster; the arrangement is up to you. Strive for as little clutter as possible; use concise summaries rather than lengthy explanations:

<table>
<thead>
<tr>
<th>Introduction:</th>
<th>Title:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your “Introduction” must include:</td>
<td>TC Name</td>
</tr>
<tr>
<td>o ...a brief summary of why the research direction was chosen.</td>
<td>Montana State University</td>
</tr>
<tr>
<td>o ...two cited references to both professional journal articles.</td>
<td></td>
</tr>
<tr>
<td>o ...reference to REP Goal-setting Form data.</td>
<td></td>
</tr>
<tr>
<td>o ...restatement of the research question.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Methods:</th>
<th>Graphic presenting your Professional Development RQ data.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your “Methods” must include:</td>
<td>Figure 1: Professional Development RQ Data</td>
</tr>
<tr>
<td>o ...a description of the research sample.</td>
<td>Caption for Graphic #1: Summary of results and significance.</td>
</tr>
<tr>
<td>o ...a summary of the research context.</td>
<td>Graphic presenting your whole-class achievement data.</td>
</tr>
<tr>
<td>o ...the REP topic.</td>
<td>Figure 2: Whole-class Achievement Data</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Discussion:</th>
<th>Table 1: Case-study Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your “Discussion” must include:</td>
<td>Graphic presenting your case-study data.</td>
</tr>
<tr>
<td>o ...a clear summary of findings.</td>
<td>Caption for Graphic #3: Summary of results and significance.</td>
</tr>
<tr>
<td>o ...how those findings will personally affect the professional development of the TC.</td>
<td></td>
</tr>
<tr>
<td>o ...relevance of those findings to pre-service teaching in general.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Two References:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="https://doi.org/xx.xxx/yyyy">https://doi.org/xx.xxx/yyyy</a></td>
<td></td>
</tr>
</tbody>
</table>
### Appendix C: REP Rubric

**Reflective Educator Project Rubric: 100 points possible**

#### Dialogue points (Reduction for all late artifacts assigned by MSU FPLO)

<table>
<thead>
<tr>
<th>Dialogue for Artifact #1</th>
<th>5 pts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dialogue for Artifact #2</td>
<td>5 pts</td>
</tr>
<tr>
<td>Dialogue for Artifact #3</td>
<td>5 pts</td>
</tr>
<tr>
<td>Dialogue for Artifact #4</td>
<td>5 pts</td>
</tr>
<tr>
<td>Dialogue for Artifact #5</td>
<td>5 pts</td>
</tr>
<tr>
<td>Dialogue for Artifact #6</td>
<td>5 pts</td>
</tr>
<tr>
<td>Dialogue for Artifact #7</td>
<td>5 pts</td>
</tr>
<tr>
<td>Dialogue for Artifact #8</td>
<td>5 pts</td>
</tr>
<tr>
<td>Dialogue for Artifact #9</td>
<td>5 pts</td>
</tr>
<tr>
<td>Dialogue for Artifact #10</td>
<td>5 pts</td>
</tr>
<tr>
<td><strong>Total Dialogue Points</strong></td>
<td>50 pts</td>
</tr>
</tbody>
</table>

#### Grading Rubric for Final Poster 50 pts possible

<table>
<thead>
<tr>
<th>Poster Item</th>
<th>1-3 pts</th>
<th>4-6 pts</th>
<th>7-10 pts</th>
</tr>
</thead>
</table>
| Professionalism (includes title, formatting, APA, and professional writing criteria) | Little to no evidence of revisions based on REP coach suggestions, urgent need to correct or add multiple and significant revisions in the areas of:  
- spelling, grammar, or formatting errors,  
- APA labeling of graphics,  
- APA citations of at least two scholarly, peer-reviewed journal articles,  
- QR code link to electronic poster. | Some evidence of moderate revisions based on REP coach suggestions, moderate need to correct or add multiple revisions in the areas of:  
- spelling, grammar, or formatting errors,  
- APA labeling of graphics,  
- APA citations of at least two scholarly, peer-reviewed journal articles,  
- QR code link to electronic poster. | Significant evidence of revisions based on REP coach suggestions, but project may still have a very few minor adjustments needed in the areas of:  
- spelling, grammar, or formatting,  
- APA labeling of graphics,  
- APA citations of at least two scholarly, peer-reviewed journal articles,  
- QR code link to electronic poster. |

| Introduction | Two or more items missing:  
- Clear research rationale statement backed by at least one reference to Goal-setting Observation Form,  
- Rationale backed by two professional sources (in-text citations of 2 journal articles),  
- Research Question written out clearly. | One or multiple parts of item(s) missing:  
- Clear research rationale statement backed by at least one reference to Goal-setting Observation Form,  
- Rationale backed by two relevant, professional sources (in-text citations of 2 journal articles),  
- Research Question written out clearly. | Part of one item or no items missing:  
- Clear research rationale stated backed by at least one reference to Goal-setting Observation Form,  
- Rationale backed by two professional sources (in-text citations of 2 journal articles),  
- Research Question(s) written out clearly |

| Methods | Two or more items missing:  
- Data collection methodology described,  
- High-level information about sample provided,  
- Topic of REP sequence stated. | One or multiple parts of item(s) missing:  
- Data collection methodology described,  
- High-level information about sample provided,  
- Topic of REP sequence stated. | Part of one item or no items missing:  
- Data collection methodology described,  
- High-level information about sample provided,  
- Topic of REP sequence stated. |

| Results | Two or more items missing:  
- One graph providing measurable, at-a-glance data for Prof. Dev. RQ,  
- One graph providing measurable, at-a-glance data for whole-class achievement,  
- One table summarizing all relevant case study contextual data,  
- A one-sentence summary caption for each graph/table. | One or multiple parts of item(s) missing:  
- One graph providing measurable, at-a-glance data for Prof. Dev. RQ,  
- One graph providing measurable, at-a-glance data for whole-class achievement,  
- One table summarizing all relevant case study contextual data,  
- A one-sentence summary caption for each graph/table. | Part of one item or no items missing:  
- One graph providing measurable, at-a-glance data for Prof. Dev. RQ,  
- One graph providing measurable, at-a-glance data for whole-class achievement,  
- One table summarizing all relevant case study contextual data,  
- A one-sentence summary caption for each graph/table. |

| Discussion | Two or more items missing:  
- Findings clearly summarized, including effects of professional development on student achievement,  
- Findings related to personal, professional practice,  
- Findings related to teacher candidate professional practice as a whole. | One or multiple parts of item(s) missing:  
- Findings clearly summarized, including effects of professional development on student achievement,  
- Findings related to personal, professional practice,  
- Findings related to teacher candidate professional practice as a whole. | Part of one item or no items missing:  
- Findings clearly summarized, including effects of professional development on student achievement,  
- Findings related to personal, professional practice,  
- Findings related to teacher candidate professional practice as a whole. |
Appendix D: REP Research Stems

Developing your Research Question(s)

Since creating a good research question is crucial to a quality study but difficult to do, we have provided some possible stems and examples for your reference and have aligned them to the Danielson elements in your Goal-setting Observation Form. Remember that you will need an accurate method of measuring results for each of these questions:

Question Stems:
- How do... respond?
- How frequently...?
- What is the relationship between?
- How do... affect?
- How much...?
- How many...?
- What are the effects of...?
- How do... differ?
- How often?
- What is the relationship between...?
- Under what conditions...?
- What percentage...?
- To what extent...?
- What factors effect?
- What proportion?

Danielson 2c: Managing Classroom Procedures (transitions)

Goal: My goal is to implement better transitions.

Possible research question:

**What are the effects of** more carefully structured transitions on how efficiently students move from one activity to the next during a sequence of four REP lessons?

Measurement: timing transitions through your four lessons

Secondary research question:

**What are the effects of** more carefully structured transitions on student achievement during a sequence of four REP lessons?

Danielson 2d: Managing Student Behavior (response to misbehavior)

Goal: My goal is to respond more positively to student misbehavior

Possible research question: **How does** referencing each student’s strength during behavior corrections **affect** his/her behavior in the classroom?

Measurement: Have a tracking system for responses to correction + = responds positively, behavior ceases, - = responds negatively, behavior continues, 0 = response is neutral, behavior stops but repeats later

Secondary research question: **How does** referencing each student’s strength during behavior corrections **affect** whole-class achievement and the achievement of one case-study student?
Danielson 3a: Communication with Students (clear directions)

Goal: My goal is to give clearer directions so that I do not have to answer so many student questions once individual practice begins

Possible research question:

What is the relationship between providing step-by-step instructions in two formats, with modeling and assessment of student understanding on the number of questions students ask during individual work time?

Measurement: You could count how many questions you answered in the video of your first lesson. Implement strategies to make these clearer in your REP Lessons and have someone count how many follow-up questions you needed to answer in those lessons

Secondary research question: What is the relationship between providing step-by-step instructions in two formats, with modeling and assessment of student understanding on student achievement scores—both for the whole class and for one case-study student?

Danielson 3b: Using Questioning and Discussion Techniques (effective questions and prompts)

Possible research question:

To what extent does implementing higher-level questions and follow-up clarifying questions extend the length and depth of all student responses in class and the responses of one case-study student?

Measurement: You could have the observer time the number of seconds of each students’ response. Depth could be suggested by how many clarifying, follow up questions are answered, as you are asking students to go deeper when you ask them.

Secondary research question:

To what extent does implementing higher-level questions and follow-up clarifying questions improve whole-class student achievement results and the results of one case-study student?

Danielson 3d: Using Assessment in Instruction (feedback to students)

Possible research question:

How do students respond when I provide timely feedback that focuses on the positive and how individual strengths can impact improvement?

Measurement: In this case, you might want to track whether or not students make changes that improve their work based on that feedback. You probably don’t need a secondary research question here because this response will likely be measured in improved achievement.
**Assessment Tools**

Assessment tools convert ranges of student work into measurable results. They can range from very simple (yes/no checklist) to complex rubrics. In general, the more complex and open-ended the assessment, the more complex the assessment tool. For example, an exit ticket might have an answer that is either correct or not (yes/no). However, an essay would require a more complex rubric to measure elements like organization, mechanics, use of sources, etc.

**Differentiation, Accommodation and Modification:**

Differentiation: Implements varied instructional strategies according to the many student needs and preferences in a classroom.

Accommodation: Changes how a student (or groups of students) learn the material, according to their special needs, but the learning goal remains the same.

Modification: Changes the learning goal for a student to better match his/her special needs.

*Essential Understandings Regarding Montana Indians*

The seven guiding principles behind Montana’s “Indian Education for All” law adopted in 1999 and encouraging all Montanans to learn about their indigenous predecessors in a culturally responsive manner and to help school personnel to respectfully relate to all members of Montana Indian Tribes. More information is available at:

https://opi.mt.gov/Portals/182/Page%20Files/Indian%20Education/Indian%20Education%20101/essential_understandings.pdf
**Objective observations**: ...measured observations with pre-determined parameters undertaken for a specific purpose over a specified time. Casually observing that some students are quieter than others is not an objective observation. Tracking the number of times each student contributes during a 30-minute period of time in class would qualify as an objective observation.

**Peer-reviewed, research journal articles**: ...an article that has been published in a reputable research journal after being reviewed by other experts in the field. Google Scholar does not mark which articles are peer-reviewed, but MSU library does. For example, I typed into Google Scholar the following query: “pre-service teacher classroom management” and found an interesting-looking article by EH Stoughton titled, “How will I get them to behave?”. Pre service teachers reflect on classroom management

When I did a Cat search for the same article in the MSU library, this is what I found:

![Article image]

This article is not only peer-reviewed, but the full text is available through the MSU library website. I can download the article easily!

**Pre-, Formative, and Summative Assessment Measures**:

Pre-assessment Measures: Pre-assessments are designed to survey basic student knowledge of the material about to be taught. Make sure to include pre-assess knowledge of all REP instructional outcomes/lesson objectives—even if not in as much detail as the summative assessment. Also, be prepared to alter or differentiate your lesson planning based on pre-assessment results.

Formative Assessment Measures: Formative assessments include a range of formal and informal procedures employed by teachers during the learning process in order to modify teaching and learning activities to improve student attainment. Formative measures provide ongoing assessment embedded within effective teaching to guide instructional decisions (Creative Commons, 2019).

Summative Assessment Measures: Summative measures assess learning and summarize the development of learners at a particular time (e.g. following a period of work such as a unit test at the end of two weeks or end of a quarter or semester). For example, and end-of-level or Criterion Reference Test (CRT) is administered near the end of the school year to provide an overall assessment of the effectiveness of the instructional program (Creative Commons, 2019).

**Proficiency**: “...students demonstrating that they have learned the knowledge and skills they are expected to learn as they progress through their education...” (sufficient knowledge to continue moving forward successfully) [https://www.edglossary.org/proficiency-based-learning/](https://www.edglossary.org/proficiency-based-learning/)
Qualitative & Quantitative Data

**Quantitative** data are used when a researcher is trying to quantify a problem. It is data that can either be counted or compared on a numeric scale. This data are usually gathered using instruments.

**Qualitative** data describes qualities or characteristics. It is collected using questionnaires, interviews, or observation, and frequently appears in narrative form. Qualitative data may be difficult to precisely measure and analyze.

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