Teacher Work Sample Guidelines

July 2013
The Renaissance Partnership

For Improving Teacher Quality

The June 2002 Teacher Work Sample, prompt and scoring rubric was revised by representatives from the eleven Renaissance Partnership Project sites: California State University at Fresno, Eastern Michigan University, Emporia State University, Idaho State University, Kentucky State University, Longwood College, Middle Tennessee State University, Millersville University, Southeast Missouri State University, University of Northern Iowa, Western Kentucky University.

Notice: The materials in this document were developed by representatives of the Renaissance Partnership Institutions and may not be used or reproduced without citing The Renaissance Partnership for Improving Teacher Quality Project http://fp.uni.edu/itq

The Renaissance Partnership for Improving Teacher Quality is a Title II federally funded project with offices at Western Kentucky University. Director: Roger Pankratz roger.pankratz@wku.edu

In September 2003, The Department of Teacher Education at Brigham Young University made some modifications to the original Renaissance Teacher Work Sample document to reflect the specific outcomes relative to the Educator Preparation Program (EPP) at BYU. In addition, the Interstate Teacher Assessment and Support Coalition (InTASC, 1992) Principles/Standards have been incorporated in the Teacher Work Sample. Permission to modify was granted by Roger Pankratz, August 2003, in a verbal conversation and via email. In August 2006 the prompts and rubrics were further refined and the evaluation scale was broadened to 0-5. It is anticipated that revisions will continue to be made periodically to continue to reflect the EPP at Brigham Young University.

Overview of Teacher Work Sample (TWS)

1. Identify a topic/unit that aligns with what you are expected to teach during student teaching or internship.

2. Prepare a work sample:
   • describing the contextual factors that may influence student learning,
   • identifying learning goal(s) based on state and/or district content standards,
   • creating an assessment plan designed to measure student performance before (pre-assessment), during (formative assessment) and after (post-assessment) the sample lessons, and
   • design instruction (lessons) based on your overall learning goal.

3. Teach the lessons you have prepared.

4. Report results:
   • describe your instructional decision-making,
   • report student learning using the results from the post-assessments,
   • reflect upon and evaluate your teaching and analyze what caused students to learn.

5. Finalize the preparation of your TWS using the format guidelines below.
   - **Cover Page.** Include (a) your name and BYU ID# (b) grade level and subject taught, (c) semester
   - **Charts, Graphs and Attachments.** Charts, graphs and assessment instruments are required as part of the TWS document. A few samples of student work may also be included. Be selective and make sure your attachments provide clear evidence of your performance or student learning.
   - **Length.** A suggested page length is given at the end of each section. The total length of your document (excluding items in the Appendix A) typically will be 18-20 pages, double-spaced, 12-point font, 1” margins.
   - **References and Credits.** If you referred to another person’s ideas or material in your narrative, you should cite these in a separate section at the end of your narrative under References and Credits. You may use any standard form for references.
   - **Anonymity.** To ensure the privacy of students in your class, do not include any student names in any part of your TWS.
   - **Comprehensiveness of the TWS.** All TWS must be submitted in complete form including required appendices, charts, graphs, student work samples, etc. Incomplete documents will be returned to the candidate ungraded.

6. You will need to submit an electronic copy of your document in LiveText or MyLink. First, use the mathematics education department template to create your TWS on your own computer. Then go into LiveText or MyLink and select the TWS link. Put your name and TWS title on it and just attach your entire document to the LiveText or MyLink document as an attachment.

7. Scoring will be done using the following scale:
   - 3 = Advanced Competence - Above Basic Requirement
   - 2 = Basic Competence – Meets Requirement
   - 1 = Deficient - Requires Intervention – Sections receiving a 1 will need to be redone.

**Seven Teaching Processes Assessed by the Renaissance Teacher Work Sample**

1. **Contextual Factors**
The teacher uses information about the learning-teaching context and student individual differences in setting learning goal(s) and planning instruction and assessment.

- Knowledge of community, school, and classroom factors
- Knowledge of characteristics of students
- Implications for instructional planning and assessment

2. **Learning Goals**
The teacher sets significant, challenging, varied and appropriate learning goal(s) based on state/district content standards.

- Clarity of learning goals
- Alignment with national, state or local standards (Common Core State Standards)
- Complexity of thinking (i.e. Bloom’s Taxonomy)
- Appropriateness of objectives for students

3. **Assessment Plan**
The teacher uses multiple assessment modes aligned with learning goal(s) to assess student learning before, during and after instruction.

- Multiple modes
- Clarity of criteria and standards for performance
- Adaptations based on the individual needs of students
- Quality of Assessments

4. **Design for Instruction**
The teacher designs instruction for specific learning goal(s) that address characteristics and needs of students, and the learning context.

- Use of contextual information
- Quality of the instructional strategies
- Use of technology
- Adaptations based on the individual needs of students
- Unit Outline

TEACH YOUR UNIT

5. **Instructional Decision-Making**
The teacher uses ongoing analysis of student learning to make instructional decisions.

- Modifications based on analysis of student learning from pre-assessments
- Sound professional practice

6. **Report of Student Learning**
The teacher uses assessment data to profile student learning and communicate information about student progress and achievement.

- Clarity and accuracy of profile
- Summary of the tables/charts
- Evidence of impact on student learning

7. **Reflection and Self-Evaluation**
The teacher analyzes the relationship between his or her instruction and student learning in order to improve teaching practice.

- Interpretation of student learning
- Insights on effective instruction and assessment
- Implications for future teaching
- Implications for professional development
**TWS 1**

**Contextual Factors**
UETS Standard 2: Learning Differences  
InTASC Standard 2: Learning Differences

**PURPOSE:** To help you identify contextual factors in your classroom that will influence your instruction.

- Use the Utah State Office of Education website to identify relevant data on the racial/ethnic breakdown of your school.
- Use city websites, documents, etc. to identify your community’s history and relevant data for the community. You need to know information about your school’s larger community.
- Interview your cooperating teacher to identify relevant contextual factors that affect the classroom and possibly your instruction. Also peruse your school’s website to glean additional information on the school contextual factors.
- Submit your Field Experience Demographic (FED) report on LiveText or MyLink.
- Write the Contextual Factors narrative. Put the narrative into your TWS in the appropriate section.

**COMPLETE THE FED FORM**

Complete the FED Form and submit it on LiveText or MyLink

**INTERVIEW YOUR COOPERATING TEACHER, FACILITATOR, OR MENTOR**

Arrange to have an interview with your cooperating teacher. This interview will help you to get more information regarding student demographics, needs, and characteristics.

Cooperating Teacher: Name _________________________________

Fill out this chart for the classes you will be teaching. Obtain the information from your cooperating teacher:

- Total Number of Students in Your Classes
- Number of African American Students in Your Classes
- Number of American Indian Students in Your Classes
- Number of Asian Students in Your Classes
- Number of Hispanic Students in Your Classes
- Number of Pacific Islander Students in Your Classes
- Number of White Students in Your Classes
- Number of English Language Learners in Your Classes
- Number of Students with Disabilities in Your Classes  
  (Students with active IEPs, Students with physical/mental/emotional handicaps with 504 status)
- Number of Students in Accelerated Programs in Your Classes  
  (Gifted and Talented, Honors, Advanced Placement)

**Discuss the following questions with your cooperating teacher:**

- How do the location of the school, the community and school populations, the socio-economic profile, and the racial/ethnic demographic influence the classroom environment?
- What types of support does the school receive from parents and from the community?
- What specific help does your school have from the district or Federal Government to help with special populations in your school?
- How do the following factors affect the instructional process? How do they enhance or detract from the effectiveness of the instruction?
Physical features of the school or classroom
Access to technology and equipment
School and class rules, schedules, and routines
Student characteristics (levels of development, achievement, and prior knowledge)
Exceptional students
Students’ varying learning modalities

How is curriculum developed because of the above factors?
In what areas of the class curriculum do the students excel?
In what areas of the class curriculum do the students struggle?
On which areas of the class curriculum should I focus my attention when deciding upon a possible teaching unit for my teacher work sample?
Which areas of the class curriculum should I avoid when deciding upon a possible teaching unit for my teacher work sample?

NARRATIVE
Using the information compiled thus far about the classroom, school, and community you are student teaching or completing your internship in, write up a 1-2 page detailed narrative explaining the data gathered on the contextual factors. Describe how the data gathered affects your instructional choices.

Scoring Guide:

<table>
<thead>
<tr>
<th>Contextual Factors</th>
<th>3-Advanced competence</th>
<th>2-Basic competence</th>
<th>1-Deficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Candidate displays relevant knowledge of the characteristics of the community, school, and classroom that may affect learning.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Candidate displays an understanding of student differences (e.g., development, interests, culture, abilities/disabilities) that may affect learning.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Candidate provides implications for instruction and assessment based on student individual differences and community, school, and classroom characteristics.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TWS 2
Learning Goals
UETS Standards 1: Learner Development; 2: Learning Differences; and 6: Instructional Strategies
InTASC Standards 1: Learner Development; 2: Learning Differences; and 7: Planning for Instruction

PURPOSE: To help you create a framework for your teaching unit informed by the contextual factors and student needs that you have previously identified.

Decide on a unit of study to teach. Name the unit.
Craft overall educational learning goals for your unit.
Align the unit goals with the National Standards for your content area.
Label and briefly describe the learning levels (e.g., Bloom’s Taxonomy, see Appendix A) represented in the unit goals.

Write the learning goals narrative.

**LEARNING GOALS**
List the learning goals (not the activities) that will guide the planning, delivery, and assessment of your unit.
The goals should reflect the big ideas or structure of the discipline. Number each learning goal so you can reference them later.

**ALIGNMENT**
Show how the goals are aligned with local, state, or national standards. Identify the source of the standards.

**LEVEL OF THINKING OF EACH GOAL**
Describe the level (e.g., Bloom’s Taxonomy, see Appendix A) of each learning goal.

**APPROPRIATE**
Discuss how your learning goals are appropriate in terms of mathematical level of students in your classes. Include the unit title and how the unit goals align with national or state standard(s). Discuss the levels of learning (e.g., Bloom’s Taxonomy, see Appendix A) of your learning goals.

**NARRATIVE**
For each learning goal describe how it reflects a big idea of the discipline, and how it aligns with local, state, or national standards. Discuss the variety of levels of learning that are addressed by the goals. Discuss how your defined goals are appropriate for the expected mathematical levels of the students.

Scoring Guide:

<table>
<thead>
<tr>
<th>Learning Goals</th>
<th>3 Advanced competence</th>
<th>2 - Basic competence</th>
<th>1-Deficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The goals reflect the big ideas, concepts and procedures relative to the mathematics of this unit.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>The goals align with identified local, state, or national standards.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>The goals reflect a variety of levels of learning (e.g. Bloom's taxonomy)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Goals are appropriate for the mathematical level of the students.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TWS 3
Assessment Plan
UETS Standards 1: Learner Development; 4: Content Knowledge; and 5: Assessment
InTASC Standards 1: Learner Development; 4: Content Knowledge; and 6: Assessment

PURPOSE: To help you develop a variety of methods for assessing the learning goals for your teaching unit and align the assessments with the level of learning of each goal.

Identify how you will assess students’ learning and growth as it relates to each learning goal.
Align the assessment with the level of learning of each goal.
Identify appropriate performance criterion for the assessment method.
Discuss potential adaptations you will need to consider for each assessment based on contextual factors and student needs.
Defend the quality of your assessments in narrative.

ASSESSING THE LEARNING GOALS
Structure a pre-assessment, formative, and a post- (or final) assessment for each unit goal to adequately measure student growth. Include a discussion of how will you learn what prior knowledge students have and how will you determine whether or not the students have mastered the learning goal?

ALIGNMENT
The assessment method aligns with the level of learning of the identified learning goal.

PERFORMANCE CRITERION
Identify the performance criterion for the assessment method which should include how you will evaluate students’ performance on the assessments and the indicator of proficiency.

POTENTIAL ADAPTATIONS
For each individual assessment goal you have listed above, brainstorm the possible adaptations you will need to make based on contextual factors and specific student needs. Consider the range of factors throughout the unit. You can add this to the information already created for the individual goals in this document.

NARRATIVE
Write a 1-2 page narrative explaining your assessment plan. Why did you choose the particular method of assessment? Does it assess what you want your students to learn? Does it help you see where your students are at the beginning of the unit (pre-assessment, screening for prior knowledge, or discovering misconceptions)?
How will the assessment show growth in the students?

Scoring guide:

<table>
<thead>
<tr>
<th>Assessment Plan</th>
<th>3- Advanced competence</th>
<th>2 - Basic competence</th>
<th>1-Deficient</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>There is good alignment of assessment with instructional tasks and activities. Planned summative assessment is consistent with anticipated student learning experiences and is mathematically significant.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Modes of mathematics assessment are appropriate and varied and include problem-solving contexts and opportunities for student self-assessment.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Formative assessments provide indicators for evaluation of students’ mathematical argumentations, representations, ideas, or misconceptions and are sufficient to guide instruction and make appropriate modifications.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Summative assessments (a) are aligned with unit objectives and student learning experiences; (b) accommodate the needs of all students; (c) offer students an opportunity to demonstrate conceptual understanding and procedural competency; (d) clearly articulate expectations for students; (e) employ detailed rubrics; and (f) provide appropriate feedback and opportunities for student self-assessment.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
UETS Standards 2: Learning Differences; 3: Learning Environments; and Standard 6: Instructional Planning; and 7: Instructional Strategies
InTASC Standards 2: Learner Differences; 3: Learning Environments; 7: Planning for Instruction; and 8: Instructional Strategies

PURPOSE: To help you design your unit instruction related to learning goals, students’ characteristics and needs, and the specific learning context.
  - Design lessons that address contextual factors and student needs.
  - Select a variety of appropriate instructional strategies that focus on student learning.
  - Include technology that will enhance the instruction and that students can use as part of the learning process.
  - Describe how your instruction might integrate with a variety of content areas (e.g., literacy, art, music, mathematics, science).
  - Identify adaptations to customize your instruction for specific special needs and exceptional students in your classroom.
  - Write your lesson plans for the entire unit. Include supplements and assessments with the lesson plans.

PREPARE LESSON PLANS
Create each lesson and lesson materials that will support the unit goals already developed. Use a variety of appropriate instructional strategies. Include technology that will enhance the instruction and that students can use as part of the learning process. Describe how your instruction will integrate with a variety of content areas (e.g. literacy, art, music, mathematics, science).

REVIEW FOR INTEGRATION AND ADAPTATIONS
After designing your lessons, examine the sequence of events or steps in your lesson plan and determine where integration with other content areas might occur, technology might enhance student learning, literacy strategies are used (how students access, analyze, evaluate, and create), and adaptations in instruction for special needs are needed.

NARRATIVE
Write a 1-2 page narrative analyzing your lessons based on how they support unit goals, integrate with other content areas if possible, utilize technology, and include literacy strategies where appropriate. Discuss the ways in which your instruction is designed to meet the needs of all learners including students with disabilities and English Language Learners.

Scoring guide:

<table>
<thead>
<tr>
<th>Design for Instruction</th>
<th>3 Advanced competence</th>
<th>2 - Basic competence</th>
<th>1-Deficient</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1 | The mathematics of the unit is important and substantive allowing mathematical ideas to be communicated effectively with a variety of representations, reasoning, argumentations, and justifications. Learning opportunities are provided that promote critical thinking, problem solving, conceptual understanding and procedural competency.

2 | Launching of tasks for student inquiry is well conceived. Conceptually and appropriately challenging tasks are open-ended and motivate the need for fundamental mathematics. Activities are designed to facilitate mathematics discourse, student-directed inquiry, and student involvement. Appropriate tools are made available to support productive student exploration of the mathematics elicited by the task.

3 | The unit is planned in a way that will anticipate and build on students' ideas in ways that support their personal understandings and allow appropriate unpacking and analyzing of students' mathematics, including 1) common ways that students think about and do mathematics; 2) common misconceptions and factors that impede mathematical understanding; and 3) differences in student approaches to learning and solution processes.

4 | Pedagogically useful descriptions of how state core curriculum and NCTM standards apply to this unit are clearly presented.

5 | Instructional design provides strong evidence, with a variety of representations, of the pre-service teacher's understandings of and ability to communicate the central concepts, tools of inquiry, and structures of the discipline of mathematics, and how mathematical ideas in the unit are connected and embedded within that structure.

6 | Lessons are logically sequenced, student interest/engagement would be high.

---

**TWS 5**

**Instructional Decision-Making**

Based on formative assessments.

UETS Standards 4: Content Knowledge; and 7: Instructional Strategies
PURPOSE: To describe the ways you modified your original design for instruction based on formative assessment. Be specific in what caused you to modify your teaching "midstream."

FORMATIVE ASSESSMENT
How did formative assessment help you identify which students were “getting the concept,” and which students needed intensified instruction?

CHANGES TO INSTRUCTION
How did you modify instruction or use supplemental instruction to improve the learning of all students?

NARRATIVE
Write a 1-2 page narrative discussing evidences which suggested that modifications were needed and describing the modifications that were made. Discuss the effectiveness of the modifications and how they supported the achievement of the learning goals.

Scoring guide:

<table>
<thead>
<tr>
<th>Instructional Decision Making</th>
<th>3- Advanced competence</th>
<th>2 - Basic competence</th>
<th>1-Deficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Modifications were based on evidence provided by formative assessment and analysis of student learning.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Modifications supported achievement of the learning goals.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TWS 6
Summative Report of Student Learning
UETS Standard 5: Assessment InTASC Standard 6: Assessment

PURPOSE: To analyze student assessment data, including screening and formative assessments to determine students’ progress related to the unit learning goals. Use graphic representations and narrative
to communicate the performance of the whole class and two individual students. Conclusions drawn from this analysis should be provided in the “Reflection and Self-Evaluation” section.

**COLLECT AND ANALYZE DATA OF STUDENT LEARNING**

**Whole class**— To analyze the progress of your whole class, create a graphic summary that shows the extent to which your students made progress (from initial instruction to final instruction) toward the performance criterion that you identified for each learning goal identified in your Assessment Plan section.

**Supplemental Instruction or Individual Accommodation**: Select one or two students that required supplemental instruction or individual accommodations based on the assessment data. Create spreadsheets, graphs, or tables that show the performance of the students on the assessments on one or more unit learning goal. Include samples of student work to illustrate the need for individual adaptations or accommodations and/or impact of the adjustments that were made.

**NARRATIVE**

Write a 1-2 page summary of the students’ learning during your unit of instruction. Summarize what the graphs or other documents tell you about students' learning in this unit for the whole class (e.g., the number of students who met the criterion). Explain why you selected the students who received supplemental instruction or individual accommodations based on the student data and summarize their learning in this unit.

---

**Scoring guide:**

<table>
<thead>
<tr>
<th>Report of Student Learning</th>
<th>3- Advanced competence</th>
<th>2 - Basic competence</th>
<th>1- Deficient</th>
</tr>
</thead>
</table>
Evidence of student learning is presented and analyzed in relationship to the fundamental mathematical concepts which were taught.

A detailed scoring rubric is provided including analyses of student work samples for each level in the rubric.

Detailed analysis of student learning indicates students' abilities to communicate mathematical ideas effectively using a variety of appropriate representations.

Through appropriate unpacking and building on student ideas, all students demonstrated growth in mathematical thinking (problem solving; reasoning, justification and proof; clarity in communication and argumentation; connections between strategies and multiple representations).

Examples are presented of specific students' mathematics observed during formative assessment in relationship to corresponding state core objectives and NCTM Principles and Standards.

Based on student performance, the summative assessment was consistent with student learning experiences and was mathematically significant.

**TWS 7**

**Reflection and Self-Evaluation**

UETS Standard 8: Reflection and Continuous Growth; 9: Leadership and Collaboration; and 10: Professional and Ethical Behavior

InTASC Standards 9: Professional Learning and Ethical Practice; and 10: Leadership and Collaboration

**PURPOSE:** To evaluate your performance as a teacher and link your performance to student learning results.

**NARRATIVE**

Write a 2-3 page narrative that will reflect on your performance in teaching the unit and identify future action that could have a positive impact upon your teaching and professional growth. You could, but are not required to, use some or all of the following prompts to help you construct your narrative. You may also share other ideas or insights of your own.
Select the learning goal where your students were most successful. Provide two or more possible reasons for this success. Consider your goals, instruction, and assessment along with student characteristics and other contextual factors under your control.

Select the learning goal where your students were least successful. Provide two or more possible reasons for this lack of success. Consider your goals, instruction, and assessment along with student characteristics and other contextual factors under your control. Discuss what you could do differently or better in the future to improve your students’ performance.

Reflection on possibilities for professional development. Describe at least two professional learning goals that emerged from your insights and experiences with the TWS. Identify two specific steps you will take to improve your performance in the critical area(s) you identified.

Scoring Guide:

<table>
<thead>
<tr>
<th>Reflection and Self-evaluation</th>
<th>3-Advanced competence</th>
<th>2 - Basic competence</th>
<th>1-Deficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Detailed and meaningful reflection on whether the mathematics tasks were conceptually and appropriately challenging, open-ended and motivated the need for making sense of fundamental mathematics.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Detailed and meaningful reflection on whether the unit supported productive student exploration of the mathematics elicited by the tasks, facilitated meaningful mathematics discourse, student-directed inquiry, and student involvement. Detailed discussion of student willingness to engage and sense of accountability for their own learning is included.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Insights on effective instruction and assessment are presented in pedagogically useful ways. Perspectives and new insights on learning and teaching, with implications for future teaching, are explored in depth. Discussion of constraints and affordances for using teaching methods that may not be standard practice in your field experience classroom is included.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The overall quality of the TWS will be assessed using this scoring guide:

<table>
<thead>
<tr>
<th>Overall Quality</th>
<th>3- Advanced competence</th>
<th>2 - Basic competence</th>
<th>1-Deficient</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## APPENDIX A

### Bloom’s Taxonomy

<table>
<thead>
<tr>
<th>Competence</th>
<th>Skills Demonstrated</th>
<th>Question Cues</th>
<th>Teaching Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Remembering</strong></td>
<td>• observation and recall of information&lt;br&gt;• knowledge of dates, events,</td>
<td>list, define, tell, describe, identify, show, label, collect, examine, tabulate, quote,&lt;br&gt;</td>
<td>CD’s, films, videos, models, events, media, diagrams,&lt;br&gt;</td>
</tr>
<tr>
<td>(knowledge from)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Spelling, grammar, capitalization, punctuation and sentence structure are correctly done.

2. Sections are well organized and required information is clearly presented.

3. TWS reflects the typical professional thought and effort expected in a culminating teacher education assignment.

---
| **long-term memory** | places | knowledge of major ideas | mastery of subject matter | name, who, when, where, repeat, specify, relate, recognize, recall, state | books, written records, etc. |
| **Understanding** (determining meaning) | understanding information | grasp meaning | translate knowledge into new context | interpret facts, compare, contrast, order, group, infer causes, predict consequences | summarize, describe, interpret, contrast, predict, associate, distinguish, estimate, differentiate, discuss, extend, explain, put in your own words, express, retell, compare, paraphrase, demonstrate, outline | Trends, consequences, tables, cartoons, etc. |
| **Applying** (making use of the knowledge) | use information | use methods, concepts, theories in new situations | solve problems using required skills or knowledge | apply, demonstrate, calculate, complete, illustrate, show, solve, examine, modify, relate, change, classify, experiment, discover, use, dramatize | Collection of items, diary, photographs, sculpture, illustration, etc. |
| **Analyzing** (taking apart the known) | seeing patterns | organization of parts | recognition of hidden meanings | identification of components | explain, connect, classify, arrange, divide, compare, select, explain, infer, choose, organize, investigate | Graph, survey, diagram, chart, questionnaire, report, etc. |
| **Evaluating** (judging outcomes) | compare and discriminate between ideas | assess value of theories, presentations | make choices based on reasoned argument | verify value of evidence | assess, decide, rank, grade, test, measure, recommend, convince, select, judge, explain, discriminate, support, conclude, compare, summarize | Letters, discussion panel, court trial, survey, self-evaluation, value, allusions, etc. |
| **Creating** (putting things together in another way) | use old ideas to create new ones | generalize from given facts | relate knowledge from several areas | predict, draw conclusions | Synthesize, combine, integrate, modify, rearrange, substitute, plan, create, design, invent, what if?, compose, formulate, prepare, generalize, rewrite | Article, radio show, video, puppet show, inventions, poetry, short story, etc. |