Teacher Work Sample Handbook

Black Hills State University

College of Education

"The Mission of the College of Education is to prepare competent, confident, and caring professionals."

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Notice: The materials in this document may not be used or reproduced without citing *Black Hills State University, Emporia State University* and *The Renaissance Partnership for Improving Teacher Quality Project*.

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Welcome to the Teacher Work Sample

Over the next year, all Teacher Education Candidates will explore best practices in assessment, planning and implementation of instruction, and reflection on their work. Candidates successfully completing the BHSU Teacher Education Program must demonstrate competence in their field. The Teacher Work Sample (TWS) provides data for individual candidates and is one of the program evaluation tools in the teacher education program at BHSU. The TWS allows Candidates to demonstrate competence in their ability to plan and deliver a series of instructional lessons that teach related learning outcomes, employ meaningful classroom assessments, impact P-12 student learning, and analyze and reflect on their experiences. The assignment also provides candidates with feedback on their performance.

What is the Teacher Work Sample?

The Teacher Work Sample is a completed instructional design project that employs six factors to effectively design, deliver, and assess instruction. The factors are:

1. Contextual Information and Learning Environment
2. TWS Goals and Learning Outcomes
3. Instructional Design and Implementation/Demonstration of Integration Skills
4. Description of Current Classroom Learning Environment and Planned Classroom Management and Motivation During Implementation of TWS
5. Analysis of Assessment Procedures and Impact on Student Learning
6. Reflection and Self-Evaluation

The TWS is *used* to assess each candidate's ability to do the following:

- plan and deliver effective lessons
- employ meaningful classroom assessments
- impact P-12 student learning
- analyze and reflect on their experiences

The Teacher Work Sample (TWS) is a required assignment to be completed during student teaching and practiced during earlier field experiences.

Acknowledgments

This document was developed based on the Teacher Work Sample from Emporia State University. The original document from Emporia State University was developed using information and materials created by the Renaissance Partnership for Improving Teacher Quality Project, the Kansas State Department of Education, teachers and students from USD 233 Olathe, and teachers and students from USD 253 Emporia.

The Renaissance Partnership for Improving Teacher Quality is a "federally funded Title II project "directed by Dr. Roger Pankratz http://fp.uni.edu/itq. For additional information about The Renaissance Group website visit: http://www.emporia.edu/rengroup/index.htm.

Assignment Requirements

During Student Teaching, candidates are required to design a series of instructional lessons that teach related learning outcomes. These lessons can be taught over several weeks and will follow the guidelines listed in each of the six factors described on pages 10-37.

Format Guidelines:

- ***Page Limits:***

  The completed TWS *must not exceed 25 pages* (12 point font, double-spaced with one-inch margins). *Scorers are instructed not to read material in pages past the 25 page limit.*

  All pages should be numbered.

- ***Cover Page:***

  Complete and attach the Cover Page as directed in this packet.

  Include your name on the Cover Page *only* (not on every page) so the TWS can be scored anonymously.

- ***Demographic Information Sheet***

  Complete the Demographic Information Sheet (p. 9) including:

  1. Certification/licensure level(s),
  2. Certification/licensure area(s),
  3. The content area or process area of the Teacher Work Sample (e.g., "Math," Social Science," etc…*"Reading", "Writing" and other "Language Arts" are not content areas, but rather processes which support learning in content areas*.
  4. The grade(s)/level of students in the classroom (check all that apply).

- ***Student Names:***

  Within the TWS, refer to students only by number or an alias.

- ***Format:***

  The document must be submitted in narrative/table format. Bullets and lists are acceptable and encouraged. Begin your TWS with a Table of Contents and clearly label each section of your TWS with the following Factor headings indicated in bold print (**suggested** page length in parentheses):

  1. *Contextual Information and Learning Environment* (2 pages)
  2. *TWS Goals and Learning Outcomes* (2 pages)
  3. *Instructional Design and Implementation/Demonstration of Integration Skills* (7 pages)
  4. *Description of Current Classroom Learning Environment and Planned Classroom Management and Motivation During Implementation of TWS* (4 pages)
  5. *Analysis of Assessment Procedures and Impact on Student Learning* (5 pages)
  6. *Reflection and Self-Evaluation* (5 pages)

- ***Questions:***

  Contact your university supervisor.

Submission Guidelines:

- ***Completed Teacher Work Sample may be submitted to the Office of Field Experiences in one of three ways:***

    1. Submit, **in electronic form as an attachment,** to Rhonda.Wolff@bhsu.edu, Office of Field Experiences OR
    2. Hand deliver one paper copy to Ms. Rhonda Wolff in Jonas 203A OR
    3. Mail one paper copy to BHSU, Office of Field Experiences, Attn: Ms. Rhonda Wolff, 1200 University Street, Unit 9038, Spearfish, SD 57799.

- *The TWS must be received **NO LATER THAN 4:00 p.m**. on the announced due date.*
- *Late penalties are described in the Irregularities and Penalties Procedures section of this handbook.*
- *All exceptions related to TWS must be approved by the Dean and Department Chair*.

IF SUBMITTING BY MAIL

Place the completed TWS in a soft two-pocket folder DO NOT STAPLE. Do not use plastic sleeves.

IF SUBMITTING ELECTRONICALLY

- ***Instructions for TWS Signatures when the TWS is Submitted by Email***

  The following email statements will serve as signatures for the cover page (page 9). There needs to be one email from the candidate and one from the cooperating teacher /clinical faculty.

- ***Candidate Signature and Information*:**

  State in an email to Ms. Rhonda Wolff:

  "I verify that the TWS is my own authentic work. I understand that any misrepresentation of facts may result in the denial or revocation of my license."

- ***Teacher Signature:***

  Clinical Faculty/Cooperating teachers will need to email Ms. Rhonda Wolff stating:

  This is verification that (insert student/intern's name) submitting the TWS is a student teacher/intern at this school and that to the best of my knowledge it is his/her own work.

  Emails are preferred. However, an alternative is to mail a cover page with signatures.
  The Teacher Work Sample will not be scored without proper signatures.

Tips for Success:

- ***Attachments and Table of Contents:***

  Attachments (Factor 5) and Table of Contents will not be included in the 25 page maximum.

- ***Checklists & Rubrics:***

  Review each checklist and rubric carefully. Note the difference between the two.

  Some Factor evaluations are divided into two parts - a checklist and an analytical rubric (see Factor 1 for an example). The checklist represents characteristics that are dichotomous (i.e. the characteristic is either present or absent) AND are considered essential requirements before an analytical rubric can be applied.

  Each "Indicator" of the rubric is weighted as indicated by the "Weight" column of the rubric. "Possible Score" for each "Indicator" is shown in the last column of the rubric.

- ***Terms:***

  Refer to ***Appendix 3: Glossary of Terms*** to clarify terminology.

- ***Page Limit***

  Remember! Only 25 pages allowed – not including attachments!

Scoring Guidelines:

- ***Evaluation:***

  The TWS scoring and assessment process will serve multiple purposes. University supervisors will score each factor when submitted by the student and give feedback. After the semester has been completed, university faculty will use TWS data for program evaluation and improvement.

- ***Mastery:***

  Candidates not achieving mastery will be required to re-write the TWS until mastery is achieved with the university supervisor.

- ***Appeal:***

  An appeal process is available if the candidate believes the TWS has been scored incorrectly (see Appendix 1).

Irregularities and Penalties Procedures
And Integrity Guidelines

Irregularities and Penalties

I. A score will not be given for a TWS submitted in the following circumstances:

   1. The TWS was not done in the candidate's area of endorsement.

   2. It is determined, after investigation, that there was a violation of academic integrity.

II. Fifteen points will be deducted the first day that the TWS is late, and an additional five will be deducted each day thereafter up to a maximum of 30 point deduction.

III. If a candidate attempts to obtain a passing grade on a TWS by falsification or misrepresentation, the candidate may be assigned a failing grade in a course and/or removed from the teacher education program.

Integrity Guidelines

Academic integrity means engaging in scholarly activity that is conducted honestly and responsibly. A teacher education candidate should uphold this principle and adhere to a commitment not to be involved in falsification, misrepresentation or deception in the preparation of the TWS. The TWS submitted must be the candidate's own work. Candidates are expected to act with personal integrity at all times.

Some Examples of Violation of Academic Integrity include:

- Submitting a TWS that was prepared by a person other than the candidate.

- Submitting a TWS that was previously submitted as a part of an earlier course.

- Submitting a TWS that was prepared by the candidate in a setting other than that of the present student teaching or internship placement.

- Fabricating contextual, numerical or other data.

- Extensively collaborating with others in preparing the TWS. Having someone else plan your teaching or write sections of your TWS is unacceptable. However, getting advice from more experienced candidates and collaborating with other candidates regarding best practice or integrative activities are acceptable forms of *collaboration* that improve teaching and facilitate professional development.

Candidate Assistance Policy

The purpose of the TWS is to assess each candidate's ability to do the following:

- plan and deliver effective lessons
- employ meaningful classroom assessments
- analyze and reflect on their experiences

The TWS not only provides data for individual candidates but is also a tool used in evaluation and improvement of the Teacher Education Program at Black Hills State University. Beyond the formative feedback provided as each factor is submitted, **supervisors and clinical faculty/cooperating teachers should not assist the candidate in the <u>actual construction</u> of evidence nor offer help for any task which is to be scored with the *checklist* or *rubric*.**

Appropriate Assistance:

- Because P-12 student learning is the ultimate goal, university supervisors and clinical faculty/ consulting teachers are encouraged to provide assistance (as noted in the table on page 7) on any part of the TWS that would significantly impact gain scores.

- The candidates have received previous instruction in the TWS process and format. Therefore, candidates should develop their own unique TWS lessons. This is not a collaborative assignment. The role of university supervisors and clinical faculty/consulting teachers is to provide appropriate assistance, as specified on the following page, when requested by candidates.

- The supervisor or clinical faculty/consulting teachers may help the candidate accurately classify the learning outcomes. Supervisors or mentor teachers should not, however, actually choose the learning outcomes, specify the number of learning outcomes in each category, or select the appropriate level of learning outcomes because these are related to the evaluation of the individual candidate.

- Clinical faculty/consulting teachers will confirm (on TWS cover page) that candidates completed all factors of the TWS in the mentor's classroom during the student teaching semester. They will also confirm that the data reported in the TWS are authentic and are based on the performance of students in the mentor's class.

Appropriate Assistance	Inappropriate Assistance
General: • Assist the candidate in selecting appropriate multiple instructional lessons that align with district and state standards • Discuss format, attachments, etc. • Discuss due dates, page length, and other document format requirements • Discuss rubric criteria and appeal process • Suggest sources to reference in creating lessons • Define terms	**General:** • Give a previous candidate's or teacher's TWS to use • Proofread, correct, and/or write portions of the TWS • Give specific "hints" on what to write in order to earn a more favorable rating.
FACTOR 1: • Provide community and classroom demographics, including School Improvement data. • Provide general examples of developmentally appropriate practices and adaptations	**FACTOR 1:** • Select and provide specific adaptations and approaches for the lessons.
FACTOR 2: • Provide district/state learning outcomes • Assist in classification of learning outcomes using Bloom's Taxonomy (cognitive, affective, psychomotor)	**FACTOR 2:** • Write the learning outcomes • Match instruction to the learning outcomes
FACTOR 3: • Suggest appropriate/clear graphics • Review progressive sequencing • Provide suggestions of ways to check for understanding (formative assessment) • Suggest general ways to integrate within and across content fields	**FACTOR 3:** • Choose assessment-based adaptations, teaching/learning strategies, grouping strategies, and technology • Match instruction to the learning outcomes • List specific integration techniques for the lesson being taught
FACTOR 4: • Discuss clinical faculty/consulting teacher management plan and rationale • Read and confirm accuracy of the management plan • Provide a copy of existing plan	**FACTOR 4:** • Clinical faculty/consulting teacher provides all alternate methods
FACTOR 5: • Suggest appropriate assessment adaptations • Discuss setting minimal levels of acceptable student performance • Discuss issues surrounding assessment validity • Discuss appropriateness of and designs relating to pre/post testing practices • Suggest appropriate/clear graphics • Check accuracy of gain scores • Check accuracy of percent mastering • Provide software for graphing or calculating	**FACTOR 5:** • Match the assessment to the learning outcomes • Choose or suggest the assessment format and assessment plan • Create the graphics • Calculate the gain scores • Calculate the percent mastering
FACTOR 6: • No assistance is appropriate. This should be a totally independent reflection.	**FACTOR 6:** • Suggesting ideas for reflection

Cover Page

Black Hills State University Teacher Work Sample Analysis of Student Learning

(Attach to the front of your TWS)

Candidate Name:	
Candidate Phone Number:	
Candidate ID Number:	
Name of School:	
TWS Content Area:	
Grade Level:	
Date Submitted: (to be filled in by BHSU staff)	
TWS Number: (to be filled in by BHSU staff)	

This is verification that the candidate submitting this TWS is a student teacher/intern at this school and that to the best of my knowledge this is the work of the candidate submitting the TWS.

Signature of Clinical Faculty/Consulting Teacher: _____

My signature verifies that this TWS is my own authentic work. I understand that obtaining, or attempting to obtain, a passing grade on a TWS by falsification or misrepresentation may result in a failing grade in a course or expulsion from the teacher education program. **You should NOT expect your clinical faculty/consulting teacher to verify your TWS without having an opportunity to review it.**

Signature of Candidate Submitting the TWS: _____

Remember: Completed TWS may be submitted to the Office of Field Experiences in one of three ways:

1. Submit, **in electronic form as an attachment,** to Rhonda.Wolff@bhsu.edu, Office of Field Experiences OR
2. Hand deliver one paper copy to Ms. Rhonda Wolff in Jonas 203A OR
3. Mail one paper copy to BHSU, Office of Field Experiences, Attn: Ms. Rhonda Wolff, 1200 University Street, Unit 9038, Spearfish, SD 57799. If mailing, place in a soft two-pocket folder. DO NOT STAPLE and do not use plastic sleeves.

- The TWS must be received NO LATER THAN 4:00 p.m. on the announced due date.
- Late penalties are described in the Irregularities and Penalties Procedures section of this handbook.

Demographic Information Sheet

(Attach to your completed TWS after the cover page)

STUDENT ID# _____

Certification/licensure level (check all that apply):

_____ Early Childhood (Birth – Age 8)

_____ K-8 Elementary Education

_____ 7-12 Secondary Education

_____ K-12 Education

Major area(s) for certification (check all that apply):

_____ ECE/Special Education

_____ K-8 Elementary

_____ K-12 Art

_____ K-12 Physical Educ

_____ K-12 Music - Instrumental

_____ K-12 Music - Vocal

_____ K-12 Special Education

_____ K-12 Spanish

_____ 7-12 Biology

_____ 7-12 Business

_____ 7-12 Chemistry

_____ 7-12 English

_____ 7-12 English Composite

_____ 7-12 History

_____ 7-12 Industrial Technology

_____ 7-12 Mathematics

_____ 7-12 Math/Sci. Composite

_____ 7-12 Science Composite

_____ 7-12 Social Science

_____ 7-12 Speech Comm.

_____ 7-12 Speech Comm. Composite

Teacher Work Sample Content Area & Grade Level(s)

Content Area _____

Grade Level(s) of the students in your classroom:

_____ Preschool

_____ Kindergarten

_____ Grade 1

_____ Grade 2

_____ Grade 3

_____ Grade 4

_____ Grade 5

_____ Grade 6

_____ Grade 7

_____ Grade 8

_____ Grade 9

_____ Grade 10

_____ Grade 11

_____ Grade 12

FACTOR 1: Contextual Information and Learning Environment

(Purpose: How does the context from which students come impact my planning and teaching?)

Suggested page length: 2 pages

The Task:

1. Candidates will gather contextual information regarding the following: the surrounding community, the learning environments in both the school and classroom, and the important characteristics of students in the classroom.
2. Candidates will ***create a table*** (required) which will include the information gathered in step one, sources of the information, and implications for TWS instruction.
3. Candidates will gather information about the assessment data on which the school improvement plan is based and the school improvement plan goals.
4. Candidates will **create a narrative** (required) which will include the information gathered in step three, as well as implications for TWS instruction.

Factor #1 Competency:

This factor demonstrates the candidate's understanding of how individuals learn, child and adolescent development, demonstrates knowledge of individual differences, and demonstrates the candidate's ability to describe instructional approaches affording learning opportunities for all learners. [INTASC Standards: 1, 2, 3, 4]

The following are specific elements to be included **in the table.**

A) Describe *community and district environmental* factors that affect planning, teaching, and learning. These should include such considerations as location (e.g., rural, intercity), socio-economic (e.g., high income level, low SES), unique characteristics of the population (e.g., drug problems, gang activity, highly motivated parents), district policies (e.g., district regulations about books,), etc.

B) Describe the *school and classroom environmental* factors that affect planning, teaching, and learning. These should include such considerations as available technology, the physical classroom setting (e.g. self-contained, portable, physical setting / small class with fixed tables), non-traditional students (e.g., handicapped), and the number of students in the school and in the classroom.

C) Describe the *important characteristics* of students in your classroom. These should include ethnic/cultural make-up, English Language Learners (ELL), gender make-up, school socio-economic status make-up, students with *special needs* and those at risk, gifted/advanced students, and *developmental characteristics* of students. Identify the groups for whom you will separate (disaggregate) data for analysis in Factor 5. Below are some websites to help better understand *developmental characteristics.*

Toddlers and kindergarten
http://www-personal.ksu.edu/~anippert/characteristics.html

Five and six year old
http://www.pnc.edu/ed/Eisenhauer/develcharact.html

Young adolescents
http://www.nmsa.org/Research/ResearchSummaries/DevelopmentalCharacteristics/tabid/1414/Default.aspx

All ages
http://www.dhr.state.md.us/cca/license/resource/dev.pdf
http://homepages.utoledo.edu/kpugh/5-7320/ITcomponents/development.html

D) In the third column of your table, describe implications specifically for your TWS instruction. In order to demonstrate quality in the table (evaluated by the rubric), be sure you consider implications of the learning environment; personal, demographic and background characteristics of students; and the knowledge, skill, cognitive capacities, dispositions and readiness of your students. Think about the learning needs of individual or clusters of students and how these considerations will influence your approach to instruction in order to address the learning and affective needs of all students in your class. These considerations will determine the implications listed in the third column of your table.

On page 12 is a GENERAL sample of the ***Contextual and Learning Environment Table*** with several illustrative examples. Candidate's actual table will be more specific to the TWS instruction, may have a different number of elements to address, *and may be entirely different than the sample.* The examples are provided only to help clarify the task, not to indicate a specific number of elements required or to provide an exhaustive list of elements.

Candidate's table ***may*** *be more than one page in length.*

The following are specific elements to be included **<u>in the narrative following the table, with each section titled.</u>**

E) **Assessment Tool** – Name and give information about the assessment tool that provides data on which your school improvement plan is based.

Assessment Results – Report results, comparing the school's performance to state scores and describing school progress. Follow example below using the most recent test results available.

Math Scores	2008	2009	State 2009	Reading Scores	2008	2009	State 2009
% Advanced				% Advanced			
% Proficient				% Proficient			
% Basic				% Basic			
% Below Basic				% Below Basic			

School Improvement Plan Goals – State the school improvement plan goals.

Instructional Implications for TWS – Give instructional implications specifically for your TWS, based on the assessment data and school improvement plan. In Factor 6, candidates will be asked to reflect on how they USED this information in the implementation of TWS lessons.

<u>Below are some possible sources for your data.</u>

School Improvement Plan
School Handbook
School Website
State Department of Education Website
Principal or Counselor
Classroom Teacher

Sample

Contextual and Learning Environment Table

FACTOR 1

Contextual and Learning Environment Elements	**Source of Information: *Community*, *District*, *School*, and *Classroom*** (You must include in your table elements from all four of the above sources.)	**Implications for Instruction Specific to Your TWS** (Implications listed below are generic in nature; your implications must specifically apply to your TWS.)
Many drug-related issues	Community	Include information about the dangers of drugs in as many lessons as possible, some unobtrusively.
District office specifies textbooks that can be used	District	Be sure all lesson resources meet district guidelines before using them in the classroom.
No air conditioning in the school	School and Classroom	Avoid strenuous activities on hot days; think of ways to provide air movement in the classroom.
350 students in school, 80% qualifying for free/reduced lunch	School	Identify concepts in lessons that might not be in students' background knowledge because of limited experience.
Classroom make-up 70% Hispanic, 30% Caucasian	Classroom	Provide opportunities for students to work in ethnically mixed cooperative learning groups.
12 boys, 13 girls	Classroom	Provide mixed gender grouping during cooperative learning activities.
1 student in wheelchair	School and Classroom	Adapt *psychomotor* activities to match student's physical ability to perform.
First graders' fine motor skills are still developing	Classroom	Provide opportunities for students to color and cut.
First graders are still egocentric	Classroom	Use small group size or pairs.
3 below, 17 at grade level, 5 above grade level	Classroom	Provide extra support for the students below grade level, and provide challenging work for students above grade level.

Scoring:

Checklist: Candidates Describe *Context Data* and *Environmental Factors:* **Y N**

Classroom physical setting and available technology 1 0
School population, including socio-economic status (SES) make-up 1 0
Classroom's ethnic/cultural make-up 1 0
Classroom's gender make-up 1 0
Classroom students with special needs/at-risk students 1 0

Score Possible for Checklist: 5

Rubric:

Rating → Indicator ↓	**2 Competency Met**	**1 Competency Partially Met**	**0 Competency Not Met**	**Weight**	**Possible Score**
Demonstrates an understanding of *community and district* environmental elements and the implications these have for planning, teaching, and student learning	Community and district elements are appropriately identified, and the candidate offers reasonable plans to meet individual student needs.	Sources and impact of community and district characteristics are adequately specified, but such considerations fail to be reflected in planning for the instructional needs of the students.	No identification of community and district elements	**1**	**2**
Demonstrates an understanding of the *school and classroom* environmental elements and the implications these have for planning, teaching, and student learning	School and classroom elements are appropriately identified, and the candidate suggests reasonable implications to meet individual student needs.	Sources and impact of school and classroom elements are adequately specified but are not adequately reflected in planning for the instruction of the students.	No identification of school and classroom elements	**1**	**2**
Demonstrates an understanding of *student characteristics* and the implications these have for planning, teaching, and student learning	Student characteristics are appropriately identified, and the candidate suggests reasonable implications to meet individual student needs.	Student characteristics are adequately specified but are not adequately reflected in planning for the instruction of the students.	No identification of student characteristics	**1**	**2**
Quality of information in narrative	Assessment tool, results, and school improvement plan information are provided, and the candidate suggests reasonable related implications for instruction specific to the TWS.	Assessment tool, results, and school improvement plan information are provided but are not adequately reflected in planning for the instruction of the students.	No identification of assessment tool, results, and school improvement plan information	**1**	**2**

Possible Score for Rubric: 8
Total Score Possible for FACTOR 1: 13

FACTOR 2: TWS Goals and Learning Outcomes

(Purpose: What are my students supposed to learn during my TWS instruction and why?)

Suggested page length: 2 pages

The Task:

1. Candidates will identify the *content area(s)* and *grade level*.
2. Candidates will identify the *goals* of the set of TWS lessons (the big picture, purpose).
3. Candidates will defend choice of the goals through a discussion (a *rationale*).
4. Candidates will list appropriate *state standards*.
5. Candidates will list and label all lesson plan *learning outcomes*.

Factor #2 Competency:

This factor demonstrates the candidate's ability to select the *desired results of the set of TWS lessons* and *learning outcomes* based upon knowledge of all students, subject matter, and curriculum outcomes.
[INTASC Standards: 1, 2, 7]

Procedures:

A) List the **content area and grade level(s)** of your Teacher Work Sample, as identified on the Demographic Information sheet.
Example:
Content Area**:** Social Studies
Grade Level: 3rd

B) List the desired results (**goals**) of the set of TWS lessons.
Example:
Goal(s): The goal of this TWS is for students to identify parts of the world, recognize commonalities within world cultures and use multiple methods to gain and communicate information about the world's community and their part in it.

C) Write a **rationale** by creating a narrative that would defend to students or parents the relevance of your goal(s) for the TWS lessons. To be acceptable, this rationale statement should convey why your students should know and/or be able to meet this goal; the rationale must be more than a statement that the goals are required by the school/state.
Example:
Rationale: The world is becoming more connected and more global with each passing year. The third graders of today will need to interact within a global framework when they are adults. Beginning to develop understanding, pride, and a sense of responsibility for their part within that community will help the students to function in the world of tomorrow.

D) Create a table (sample on page 15) which aligns the **state standards and six or more learning outcomes**, all of which align with the desired results (goals) for your TWS lessons. Learning outcomes must be developmentally appropriate, clearly stated, and focused *on measurable student performance*. Include two or more outcomes at each level (low, middle, and high), and label each outcome by level. Label each outcome also by domain (cognitive, affective, or psychomotor). Use *Bloom's, Krathwohl*, and *Bressan's adaptation of Jewett Taxonomies* to classify and label learning outcomes. (See resources on pages 15-16.)

- When creating learning outcomes, most will focus on the cognitive domain. However, including outcomes for the affective and psychomotor domain is appropriate and optional. *Psychomotor learning outcomes may be more prevalent in the content area of Physical Education and in addressing the needs of students with special needs.*

Sample Table

State Standard	Learning Outcome	Level and Domain
Social Studies: 3.US.2.1. Students are able to describe the characteristics of a community.	As a result of this lesson students will be able to list four characteristics of a community.	Low level - Cognitive.
Social Studies: 3.G.1.3. Students are able to locate the seven continents, 4 major oceans, major United States landforms, and state boundaries on a map or a globe.	As a result of this lesson students will be able to locate and name at least six of the seven continents and at least two of the four major oceans.	Low level - Cognitive
Math: 3.S.1.1. Students are able to ask and answer questions from data represented in bar graphs, pictographs and tally charts.	As a result of this lesson students will be able to use bar graphs, pictographs and tally charts to answer questions.	Middle level - Cognitive
Reading: 3.R.4.1. Students can respond to ideas and attitudes expressed in multicultural and historical texts by making connections.	As a result of this lesson students will be able to make personal connections between themselves and characters in multicultural literature.	Middle level - Affective
Social Studies: 3.US.2.1. Students are able to describe the characteristics of a community.	As a result of this lesson students will be able to compare world cultures they know about and predict at least one element that would be the same in communities anywhere in the world.	High level - Cognitive
Math: 3.S.1.1. Students are able to ask and answer questions from data represented in bar graphs, pictographs and tally charts.	As a result of this lesson students will be able to create questions based on data represented in a bar graph.	High level- Cognitive

Resources:

Following are the cognitive, affective, and psychomotor domains (listed low to high levels) and some websites that will provide additional information. You will find that there are numerous other websites if you need additional information.

Cognitive Domain (Bloom's Revised Taxonomy)*

- Remembering – Retrieving relevant knowledge from long-term memory (low level)
- Understanding – Determining the meaning of instructional messages, including oral, written, and graphic communication (low level)
- Applying – Carrying out or using a procedure in a given situation (middle level)
- Analyzing – Breaking material into its constituent parts and detecting how the parts related to one another and to an overall structure (middle level)
- Evaluating – Making judgments based on criteria and standards (high level)
- Creating—Putting elements together to form a novel, coherent whole or make an original product (high level)

*Bloom created a learning taxonomy in 1956. In 2001, Anderson and Krathworhl revised Bloom's original taxonomy by combining both the cognitive process and the knowledge dimensions.

Affective Domain (Krathwohl)*

- Receiving – Learner's sensitivity to the existence of stimuli—awareness, willingness to receive, or selected attention to the learning outcome (low level)
- Responding – Learner's motivation to learn, acquiescence, willing responses, feelings of satisfaction (middle level)
- Valuing – Learner's beliefs and attitudes of worth—acceptance, preference, commitment (middle level)
- Organizing – Learner's organization of values and beliefs; bringing together different values, resolving conflict between them and beginning to build a consistent value system (high level)
- Internalizing (Value Complex) – Learner's internalization of beliefs into a characterizing value system that determines behavior (high level)

**Based on: Krathwohl, D.R., Bloom, B.S. and Masia, B.B. (1964). *Taxonomy of Educational Objectives, Book II. Affective Domain*. New York, NY. David McKay Company, Inc.

Psychomotor Domain (Bressan's adaptation of Jewett)*

- Perceiving – Recognizing movement position or pattern (low level)
- Patterning – Reproducing movement position or pattern (low level)
- Accommodating – Using or modifying movement position or pattern (middle level)
- Refining – Demonstrating efficient control in performing pattern (middle level)
- Varying – Performing movement pattern in different ways (middle level)
- Improvising – Originating novel movement or movement combinations (high level)
- Composing – Creating unique movement pattern (high level)

***Bressan's adaptation of Jewett et al., "Educational change through a taxonomy for writing physical education objectives," *Quest 15*, 35-36, 1971.

Scoring:

Checklist: ***TWS Goals* and *Learning Outcomes***

	Y	N
Specifies the content area, grade level, and goal(s) of the TWS lessons	1	0
A rationale for the choice of the *goals* is provided (must be more than a statement that the goals are required by the school/state)	1	0
Lesson plan learning outcomes are correctly labeled by domain (cognitive, affective, psychomotor)	1	0
TWS learning outcomes are correctly identified as low, middle and high learning outcomes	1	0

Score Possible for Checklist: 4

Rubric:

Rating → Indicator ↓	**2 Competency Met**	**1 Competency Partially Met**	**0 Competency Not Met**	**Weight**	**Possible Score**
Alignment with standards	All learning outcomes are explicitly aligned with standards.	Some learning outcomes are explicitly aligned with standards.	Learning outcomes are not aligned with standards.	**2**	**4**
Developmentally appropriate for the grade level and classroom context	Most learning outcomes are appropriate for the developmental level; pre-requisite knowledge, skills, and experiences; and other student needs.	Some learning outcomes are appropriate for the developmental level; pre-requisite knowledge, skills, and experiences; and other student needs.	Learning outcomes are not appropriate.	**2**	**4**
Clarity	Most learning outcomes are clearly stated.	Some learning outcomes are clearly stated.	Learning outcomes are not clearly stated.	**2**	**4**
Focus of learning outcomes is on student performance	Focus of most learning outcomes is on what the student will specifically be able to do.	Focus of some learning outcomes is on what the student will specifically be able to do.	Focus of learning outcomes is not on what the student will specifically be able to do (e.g. might be an activity).	**2**	**4**

Possible Score for Rubric: 16

Total Score Possible for FACTOR 2: 20

FACTOR 3: Instructional Design and Implementation/ Demonstration of Integration Skills

(Purpose: How do I plan lessons and use appropriate instructional strategies that ensure student engagement and successful student learning?)

Suggested page length: 7 pages

The Task:

1. Candidates will create a *Design for Instruction Table* (see sample on pages 20 and 21) including a timeline, learning outcomes, instructional activities which include learning experiences either *across content fields or within the content field*, assessments tied to the outcomes, resources and appropriate adaptations.
2. Candidates will create the table by outlining the planned instructional lessons in *sequential order*.
3. Candidates will describe the *Pre-Assessment* at the beginning of the table. (The Pre-Assessment will be evaluated in factor #5 but should be described in the table as indicated.)
4. Candidates will describe the *Formative Assessments* within the table.
5. Candidates will describe the *Post-Assessment* at the end of the table, including criteria for proficiency.
6. Candidates will revise the table (if needed) before submission, in order to reflect instruction actually delivered.

Factor # 3 Competency:

This factor demonstrates the candidate's competency in the understanding and use of a variety of appropriate instructional strategies, including those that represent a wide range of technological tools, to develop students' learning. [INTASC Standard 4]

The candidate will demonstrate inclusion of *multiple instructional strategies, appropriate adaptations to the instructional design, active inquiry, adapted reading instruction, and the use of technology*.
[INTASC Standards: 4, 7]

The candidate will demonstrate the ability to integrate instruction either across or within content fields to enrich the curriculum, develop thinking skills, and facilitate all students' abilities to understand relationships between subject areas. [INTASC Standard 7]

When planning instruction, the candidate will demonstrate the use of factors in the students' environment outside of school to support all students' learning and well-being. [INTASC Standards: 2, 3, 4, 6, 7, 8, 10]

Procedures:

A) Provide a Design for Instruction Table (See sample on pages 20 and 21) outlining your instructional design for your TWS lessons in the order you plan to present the instructional activities. Include descriptions of pre-assessment, formative assessments, and post-assessment. (You may create this or any later tables using landscape page formatting if wider columns are needed).

B) Create interdisciplinary learning experiences either *across content fields or within content fields*. Evidence of integrated learning should be seen in the Design for Instruction Table, identifying content fields being integrated.

Examples of integration:

Across content fields: Civil War lessons taught in both literature and American history classes using common content and learning outcomes (i.e. reading Red Badge of Courage for both classes)

Within content fields: a lesson that discusses experimental procedures as they apply to both biology and chemistry; a lesson that discusses social science from the perspective of economics and political science; a math lesson that integrates measurement and geometry; a language arts lesson integrating literature and creative writing

C) Because this table is a work in progress, you may revise it. The final table should reflect the order in which you delivered the instruction.

D) Self evaluate by asking yourself if answers to the questions in the checklist below can be easily found in your instructional design table. Each of these areas will be evaluated (see the rubric).

Checklist for Instructional Design Table	**Yes**	**No**
1. Is your *instruction aligned* with the TWS goals and outcomes?		
2. Is your planning *progressively sequenced* in the table?		
3. Does your planning reflect *developmentally appropriate* activities and approaches?		
4. Did you include a *pre- assessment/ post-assessment tool that assesses every TWS learning outcome?*		
5. Did you include at least one *formative assessment* for each lesson?		
6. Are *multiple strategies* used in the design?		
7. Are there *adaptations considered* and are adaptations based on contextual information and /or *pre- assessment* and formative assessment data?		
8. Is there evidence of student use of *critical thinking* and problem solving and techniques used to foster *active inquiry, collaboration* (e.g., collaborative groups), social interaction and a supportive classroom environment?		
9. Are there accommodations for varied levels of *reading* skills and *adaptations* made for students who have *reading* difficulties?		
10. Is *available technology* integrated into your instruction (teacher use and student use) in ways that make meaningful contributions to learning?		
11. Is there evidence of how your plan uses the knowledge you gained in Factor 1 about your *students' community/district/school environments?*		
12. Did you provide activities to create an *integrated learning experience* (either across or within content fields? (Factor 3, Procedure B.)		

Factor 3: Sample Instructional Design Table

Timeline	Learning Outcomes & State Standards	Instructional Activities, including interdisciplinary activities	Assessments	Resources and Technology	Teaching and reading adaptations for specific students and subgroups, based on identified contextual and/or pre-assessment needs
Day 1	Pre- Assessment	N/A	The pre-test focuses on students being able to extend and create a pattern using a model.	Crayons or Markers Pre-test sheet	All students will have the pre-test read to them as a whole group.
Day 2	As a result of this lesson, students will be able to identify what comes next in a repeating pattern. (Cognitive, Low) As a result of this lesson, students will create and record two different patterns. (Cognitive, High) **1.A.4.1** **1.G.1.1** **1.LVS.1.1**	<u>Introduction: What Comes Next?</u> Create two cube trains that consist of two alternating colors on the promethean board. Distribute to each student a set of four cubes that match the colors of the two cube trains. Show the students the first repeating train and ask what they notice about it? Introduce the term repeating pattern and add it to the math word wall. Show the students the second alternating pattern train. Pull the cube train out of the cover screen on the promethean board so that only the first three cubes show. Ask the students to make a prediction on what cube might come next? Have the students hide the cube of that color in their lap. Ask a few students to explain why they selected that cube? Repeat this with a different alternating cube train. Continue revealing one cube at a time and asking students to predict the next cube. For the last pattern train, use a cube pattern such as ABC but only show the students the first two cubes. Again, ask the students to make a prediction and select a cube to put in their lap. If students make an incorrect selection explain that their answer could be possible from the information they have, but that is not the pattern behind the cover screen. Encourage the idea that we cannot always tell from the beginning of a repeating pattern how it will continue, and let students know when they have enough information to determine what comes next in the pattern. <u>Activity: Make Your Own Pattern:</u> Students will create patterns using 12 cubes. Students should create two different patterns and record them on the *Student Activity Book* page 1.	Anecdotal notes through Observation Student's activity sheet page 1.	Promethean Board: Cube train flip chart 300 Cubes Crayons or Markers *Student Activity Book* page 1 (25 copies)	High Leveled Learners: Students who easily create and record their repeating pattern, may extend their pattern train as long as their table. Incorporate Technology: Create a promethean flip chart with cube trains. Incorporate integration across content fields (Reading): Discuss and define the term repeating pattern. Make a card with a picture and add it to the math word wall. Reading adaptation: Meet with students as a small group to ensure understanding of context. Meet with individual students who have less support at home to foster a positive learning environment.

		Discussion: What Patterns Did You Make?: Ask students to bring one of their pattern trains to the carpet. Then, ask the students what makes their cube train a pattern? Is it a pattern that could continue? If it did continue, what would come next? Daily Number Talk :(1.G.1.1) Review plane figures with the students. Have the student describe the characteristics of a rhombus, square, and hexagon.			
Day 7	Post Assessment		The post-test is identical to the pre-test and focuses on students being able to extend and create a pattern using a model. For students to be proficient in the area of patterns they must complete the post-test with 80% accuracy.	Crayons or Markers Post-test sheet	All students will have the post-test read to them as a whole group.

This sample contains the pre-assessment, one day of TWS instruction, and the post assessment.

Scoring:

Checklist: Instructional Design Table elements:	**Y**	**N**
Are aligned with TWS goals and learning outcomes listed in Factor 2	1	0
Are progressively sequenced	1	0
Are developmentally appropriate (intellectually, socially and physically)	1	0
Include a pre-assessment and post-assessment of TWS learning outcomes	1	0
Include formative assessments aligned with TWS goals and learning outcomes listed in Factor 2	1	0
Include evidence of integrated learning either across or within content fields	1	0
Identify content fields that are being integrated	1	0
Score Possible for Checklist:	**7**	

Rubric:

Rating → Indicator ↓	**2 Competency Met**	**1 Competency Partially Met**	**0 Competency Not Met**	**Weight**	**Possible Score**
Multiple instructional strategies	Multiple instructional strategies are incorporated. (e.g., explicit/direct instruction application of the theories of multiple intelligences, learning styles, constructivist techniques, cooperative learning).	Only two instructional strategies are incorporated.	Only one strategy is used.	**2**	**4**
Provide and adapt instructional strategies	Adaptations address the specific identified contextual needs of the individuals, small group, or class. (Adaptations should be made for instruction of those groups in need of them as identified in Factor One.)	Adaptations are present but do not address the specific contextual needs of individuals, small group, or class.	No adaptations are considered or stated. (Referring a student to a specialist is not an appropriate strategy.)	**2**	**4**
Active inquiry and learner centeredness	TWS lessons include opportunities that actively engage students in questioning, developing their own learning strategies, seeking resources, and conducting independent investigations.	TWS lessons include opportunities for engaging students only in passive forms of inquiry which are candidate controlled (e.g. specific set exercises, a prescribed product).	TWS lessons provide no opportunities for active inquiry.	**2**	**4**

Reading instruction adaptations	Instructional plans include implementation of developmentally appropriate strategies to assist students in the use of reading materials related to the subject. These strategies address any identified reading concerns and abilities.	Instructional plans list adaptations for student use of reading materials related to the subject and to identified concerns; however, the adaptations are not implemented in the instructional activities.	Instructional plans do not include strategies/ adaptations for student use of reading materials related to the subject.	**2**	**4**
Technology	Instructional plans include use of available technology that makes a meaningful contribution to learning.	Instructional plans include limited use of available technology (e.g., one time, used for short period only), or technology is used without regard to learning outcomes (i.e., an add-on just to fulfill the requirement).	Instructional plans do not include available technology.	**2**	**4**
Knowledge of factors in the students' environment **(Clearly indicate in your design table where this is addressed.)**	Instructional design and implementation demonstrate knowledge of specific elements identified in Factor One.	Instructional design and implementation demonstrate knowledge of only SOME of the specific elements identified in Factor One.	Instructional design and implementation fail to demonstrate knowledge of the elements identified in Factor One.	**1**	**2**
Demonstrates the ability to integrate instruction either across or within content fields	There is evidence that the candidate creates interdisciplinary learning that integrates knowledge, skill, and methods of inquiry either across content fields or within content fields. The integration adds substance to and enhances effectiveness of the instruction.	There is evidence that the candidate is integrating knowledge either within or across content fields, but the integration is superficial and adds no substance to the instruction.	Evidence of creation and use of interdisciplinary or interrelated content area learning experiences are not present.	**2**	**4**

Possible Score for Rubric: 26

Total Score Possible for FACTOR 3: 33

FACTOR 4: Description of Current Classroom Learning Environment and Planned Classroom Management and Motivation During Implementation of TWS

(Purpose: How will I manage the classroom and motivate students to ensure student engagement and successful student learning?)

Suggested page length: 4 pages

The Task:

1. Candidates will describe specific elements of the environment in their assigned classrooms that affect classroom management and motivation.
2. Based on this analysis and the TWS lessons, candidates will develop a *comprehensive description of planned classroom management and motivation* to be implemented during their TWS instruction.

Factor # 4 Competency:

Candidates use an understanding of individual and group motivation and behavior, including effective verbal and nonverbal communication techniques, to create a positive learning environment that fosters *active inquiry*, supportive interaction and self-motivation in the classroom. [INTASC Standards: 5, 6]

Procedures:

Describe the current classroom learning environment. The following specific elements should be included in a narrative, with each section titled using the headings in italics below. (A-E assessed by checklist)

A) Describe *environmental factors* that affect learning in the classroom.

B) Describe *behavior management strategies* currently being used (nonverbal cues such as hand in air for quiet; verbal cue such as counting backward from 5).

C) Describe *techniques used to motivate* student engagement and learning (giving students choices in assignments, beginning lessons by connecting to real life situations)

D) Describe *verbal communication* currently occurring in classroom interactions among students and with the teacher.

E) Describe *nonverbal communication* currently occurring in classroom interactions among students and with the teacher.

Describe your planned management and motivation during implementation of the TWS. The following specific elements should be included in a narrative, with each section titled using the headings in italics below.
(F-J assessed by rubric.)

F) Describe at least THREE *management strategies* you plan to use during the implementation of the TWS.

G) Describe *motivational techniques* you will use to engage students in learning while implementing the TWS.

H) Describe how you will achieve *active student involvement in inquiry learning activities*. Include specific examples. Consider how you will provide a comfort level for students so they feel safe to ask and answer questions, how you will actively involve students in questioning and interacting with others, and how you will include self-motivation for each individual.

I) Describe how you plan to encourage *effective student-to-student communication* in learning activities.

J) Describe how you will actively involve all students in learning activities, especially through *cooperative learning or group work.*

Scoring:

Checklist: Candidates Describe **Y N**

Environmental factors that affect learning 1 0
Behavior management strategies currently being used..... 1 0
Techniques currently used to motivate student engagement and learning 1 0
Verbal communication among students and with teacher 1 0
N*onverbal communication* among students and with teacher 1 0

Score Possible for Checklist: 5

Rubric:

Rating → Indicator ↓	**2 Competency Met**	**1 Competency Partially Met**	**0 Competency Not Met**	**Weight**	**Possible Score**
Management strategies	The candidate presents at least three appropriate management strategies to be used during TWS implementation.	The candidate presents less than three appropriate strategies.	The candidate presents no evidence of appropriate strategies for management.	**2**	**4**
Motivation techniques	The candidate identifies appropriate motivational techniques to be used to engage students in learning, describing how they are to be applied in the TWS.	The candidate identifies appropriate techniques for student motivation but does not describe how they will be applied in the TWS.	There is no evidence of appropriate techniques to develop student motivation.	**2**	**4**
Creates a learning environment that encourages active involvement in inquiry learning	An environment is created that actively involves students in inquiry learning activities. Specific examples of inquiry learning are given.	Examples of inquiry learning are given but are not specifically incorporated in **learning** activities.	A learning environment encouraging active inquiry and student questioning is not evident.	**1**	**2**
Encourages effective communication among students	Evidence of effective student-to-student communication is evident and specific to the learning.	The candidate provides an opportunity for students to practice student-to-student communication techniques but does not facilitate effective student communication that is **specific to the learning**.	No evidence is provided of student-to-student communication.	**1**	**2**
Provides an environment supportive of student interaction in cooperative learning or group work	The candidate actively involves students in cooperative learning **or** group work.	The candidate promotes positive interaction among students but does not provide specific cooperative learning or group work.	The candidate does not encourage student interaction.	**2**	**4**

Possible Score for Rubric: 16

Total Score Possible for FACTOR 4: 21

FACTOR 5: Analysis of Assessment Procedures and Impact on Student Learning

(Purpose: What evidence do I have that demonstrates my teaching had a positive impact on all students' learning?)

Suggested page length: 5 pages

The Task:

Before Instruction Begins…

1. Candidates will select, modify, or design an assessment tool to use for both *pre-assessment* of students' prior knowledge and *post-assessment* of students' learning as a result of TWS instruction. **The assessment tool must assess all TWS outcomes. It does NOT need to assess learning in another content area being integrated.**
2. Candidates will administer the *pre-assessment*, which assesses students' prior knowledge of TWS learning outcomes.
3. Candidates will create a graphic representation of the *pre-assessment* data (with space allocated in the graphic representation to insert *post-assessment* data later).
4. Candidates will evaluate the *pre-assessment* data and write a summary explaining how the data related to each learning outcome will be used to develop instructional strategies.

During Instruction…

5. Candidates will implement at least one *formative assessment* per lesson to measure student progress (may be embedded in instructional activities).
6. Candidates will evaluate and use the results of *formative assessment* to adjust instructional activities.

After Instruction…

7. Candidates will administer the *post-assessment***,** which assesses student learning of TWS learning outcomes as a result of instruction.
8. Candidates will insert the data into the graphic representation created for *pre-assessment* data.
9. Candidates will evaluate data and student learning for each TWS learning outcome.
10. Candidates will create a Gain Scores Table.
11. Candidates will disaggregate data for subgroups, evaluate data, and describe student learning as a result of the TWS instruction.

Factor #5 Competency:

This factor demonstrates the candidate's ability to understand and use formal and informal assessment strategies to evaluate and ensure the continual development of all learners.[INTASC Standard 8]

Before Instruction Begins

Step 1: Select, Modify, or Design a Tool to be Used as a Pre-Assessment and a Post-Assessment

To assess the impact of your instruction on student learning, you will create an assessment tool which will be used to gather both pre-assessment (prior knowledge) data and post-assessment (impact of instruction) data **directly related to each TWS learning outcome. You do NOT need to assess learning in another content area being integrated. Indicate for every item on the assessment tool specifically which learning outcome it assesses.**

Assessment tools will vary depending on grade level and/or content. Examples of tools include a quantifiable rubric to assess performance or a product, a textbook/district-developed test, questions administered orally, a written test, etc.

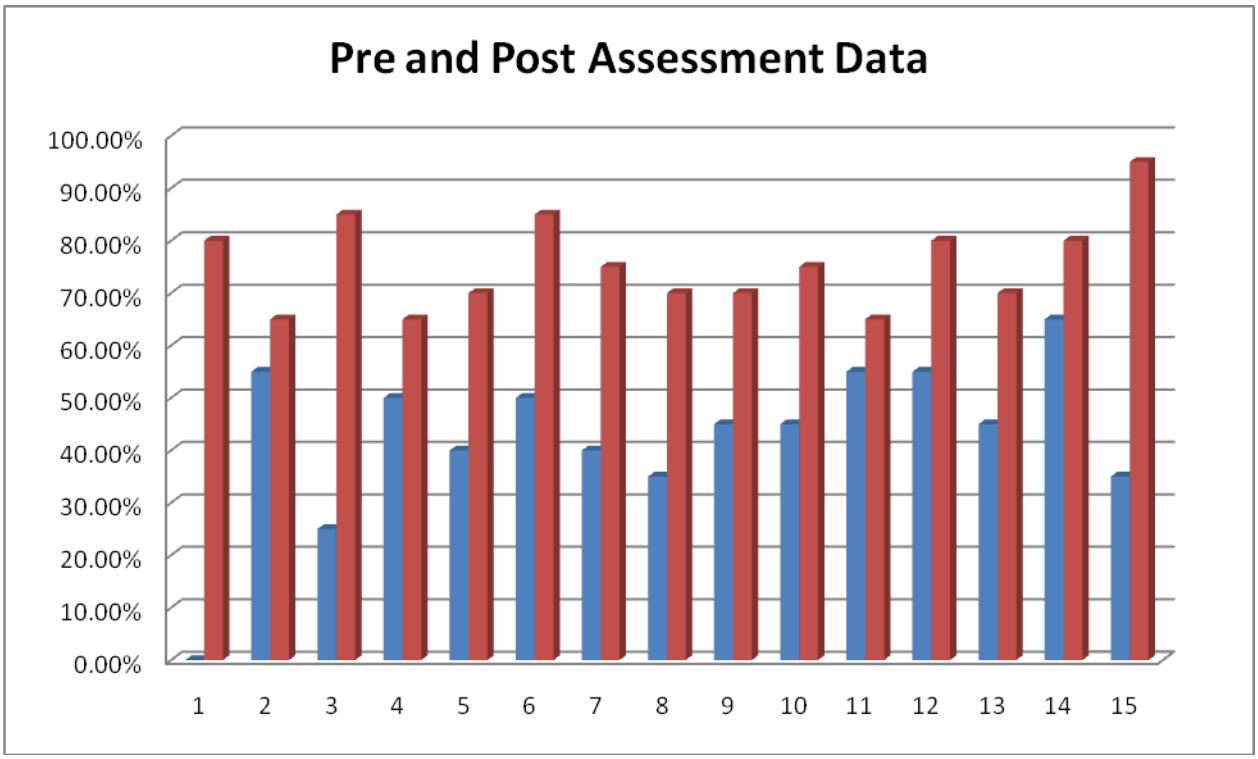
Include as *Attachment #1* at the end of your TWS a copy of your ***pre-assessment/post-assessment tool*** and a copy of the answer key(s) or scoring *rubric(s)*. A copy of your assessment tool with the correct answers included will serve both purposes**. At the bottom of the assessment tool, clearly state your criteria for proficiency (the score you expect for mastery).** Do not include any student work in your TWS.

Step 2: Administer the Pre-Assessment

Administer the Pre-Assessment, implementing adaptations identified in the Design for Instruction table in Factor Three.

Step 3: Create a Graphic Representation (chart, bar graph, table, etc.) of the Pre-Assessment Data

During step three, you will create a graphic representation of the pre-assessment data, showing the data for each individual student, ***with space allocated in the graphic representation to insert post-assessment data later.*** This graphic representation, followed by the narrative in step five, begins Factor Five. If students miss your pre-assessment, they will not be included in your graphic representation. Scores for students who miss either the pre-assessment or the post-assessment cannot be used, since there are not two sets of data to compare. (Sample includes both pre and post assessment data.)



Step 4: Analyze Informal and Formal Pre-Assessment Data

- ***Informal Assessment Data***: Analyze Factor One information and your own observations of the students as they relate to your TWS learning outcomes.
- ***Formal Assessment Data:*** Analyze Pre-Assessment results in your graphic representation. The Pre-Assessment serves as an appropriate formal measure of your students' prior knowledge of each TWS learning outcome.

During step four, use both informal and formal ***pre-assessment*** data to determine the emphasis of your instruction and identify students who:

- already have ***considerable knowledge of the TWS learning outcomes***
- may have ***"prior knowledge" deficits***
- ***demonstrate readiness*** for instruction as you have it planned.

Step 5: Develop Summary of Implications for Instruction Based on Pre-Assessment Data

During step five you will write a narrative that follows the graphic representation of Pre-Assessment data completed in step three. Using the information from your analysis and identification of student readiness levels in step four, develop a summary that includes:

- a ***description of your students' readiness*** for the planned instruction
- identification of ***instructional strategies for the distinct groups*** identified in Step four.

During Instruction

Step 6: Begin Instruction

Step 7: Implement Formative Assessment

During step seven, plan to implement at least one *formative assessment* for each lesson. Formative assessment provides evidence that you are monitoring student learning during teaching. **Use a variety of types of formative assessments.** Use the results of assessment to advise students of their progress and to adjust your instruction if needed. **Be sure you describe all formative assessments in the Design for Instruction table in Factor Three.**

Step 8: Develop Summary Based on Formative Assessment

Provide a narrative which describes how you monitored student progress with formative assessment in each lesson, and how you used your knowledge of student progress in instructional decision-making. In the narrative, do the following for each formative assessment:

- Describe the assessment and **justify** its use by explaining how it assessed certain TWS learning outcomes.
- Describe in detail the results of the formative assessment and how the results were used to alter or validate your instruction.

Your formative assessments may be embedded in your instructional activities or may be separate tasks. While all formative assessment yields "results," formative assessment may or may not yield quantitative data.

After Instruction

Step 9: Administer Post Assessment

At the end of the TWS instruction, administer the previously developed post-assessment (created in Step 1) and collect student results.

Step 10: Insert Post Assessment Data in Graphic Representation that Contains Pre-Assessment Data

During step ten, insert post-assessment data into the graphic representation of pre-assessment data that you created in Step three. This graphic representation allows you to compare pre and post assessment results when BOTH scores are available. Scores for students who miss either the pre-assessment or the post-assessment cannot be used, since there are not two sets of data to compare. (See sample in Step 3.)

Step 11: Develop a TWS Learning Outcomes Proficiency Table

During step eleven, develop a TWS Learning Outcomes Proficiency Table (see example below) that lists the *TWS learning outcomes* from Factor 2, sorted into low, middle and high sub-categories.

- Calculate and insert into table
  - √ the percentage of students achieving *proficiency* for each TWS learning outcome,
  - √ the average percentage of students achieving *proficiency* for each of the three levels of learning outcomes, and
  - √ the overall average percentage of students achieving *proficiency* for all *TWS learning outcomes*, and
  - √ the number of students who achieved *proficiency* with adaptations.

Example: TWS Learning Outcomes Proficiency Table

TWS Learning Outcomes	**Percentage of Students Achieving Proficiency on each TWS Learning Outcome**	**Average Percentage of Students Achieving Proficiency for each Level of Learning Outcomes**	**Number of Students Who Achieved Proficiency with *Adaptations***
***Low level learning outcomes*:**			
Identify/locate seven continents and four oceans. (*cognitive*)	95%		1
The student performs a music selection with correct notes and rhythms. (*psychomotor*)	83%		0
Average percentage of students achieving proficiency on *low level* outcomes		89%	
***Middle level learning outcomes*:**			
The student accurately performs a tennis serve with the correct spin and speed. (*psychomotor*)	80%		0
During a debate, the student will defend the right of scientists to conduct research in a three-minute statement. (*affective*)	75%		1
Average percentage of students achieving proficiency on *middle level* outcomes		77.5%	
***High level learning outcomes*:**			
Given a map with six distinct geographical features, students will be able to evaluate the best location for building a new city. (*cognitive*)	70%		1
Without assistance the student will use a telescope to find five objects in space using procedures of professional astronomers. (*psychomotor*)	80%		0
Average percentage of students achieving proficiency on *high level* outcomes		75%	
Average percentage of students achieving proficiency on all TWS learning outcomes (calculated by averaging percentages in the first column)	**80.5%**		

Step 12: Create a Gain Scores Table

During step twelve, create a gain scores table following the instructions and example in *Appendix 2: Sample Learning Gains Scores Calculation* and refer to the sample below. This table should include:

- pre- and post-assessment scores for each student when both scores are available (Scores for students who miss either the pre-assessment or the post-assessment cannot be used, since there are not two sets of data to compare.)
- calculated gain score for each student when both scores are available
- the group average gain score

A spreadsheet for calculating gain scores can be found on the TWS Gateway webpage:
http://www.emporia.edu/teach/tws/documents/TWSGainScoreCalculationR.xls

SAMPLE GAIN SCORES TABLE

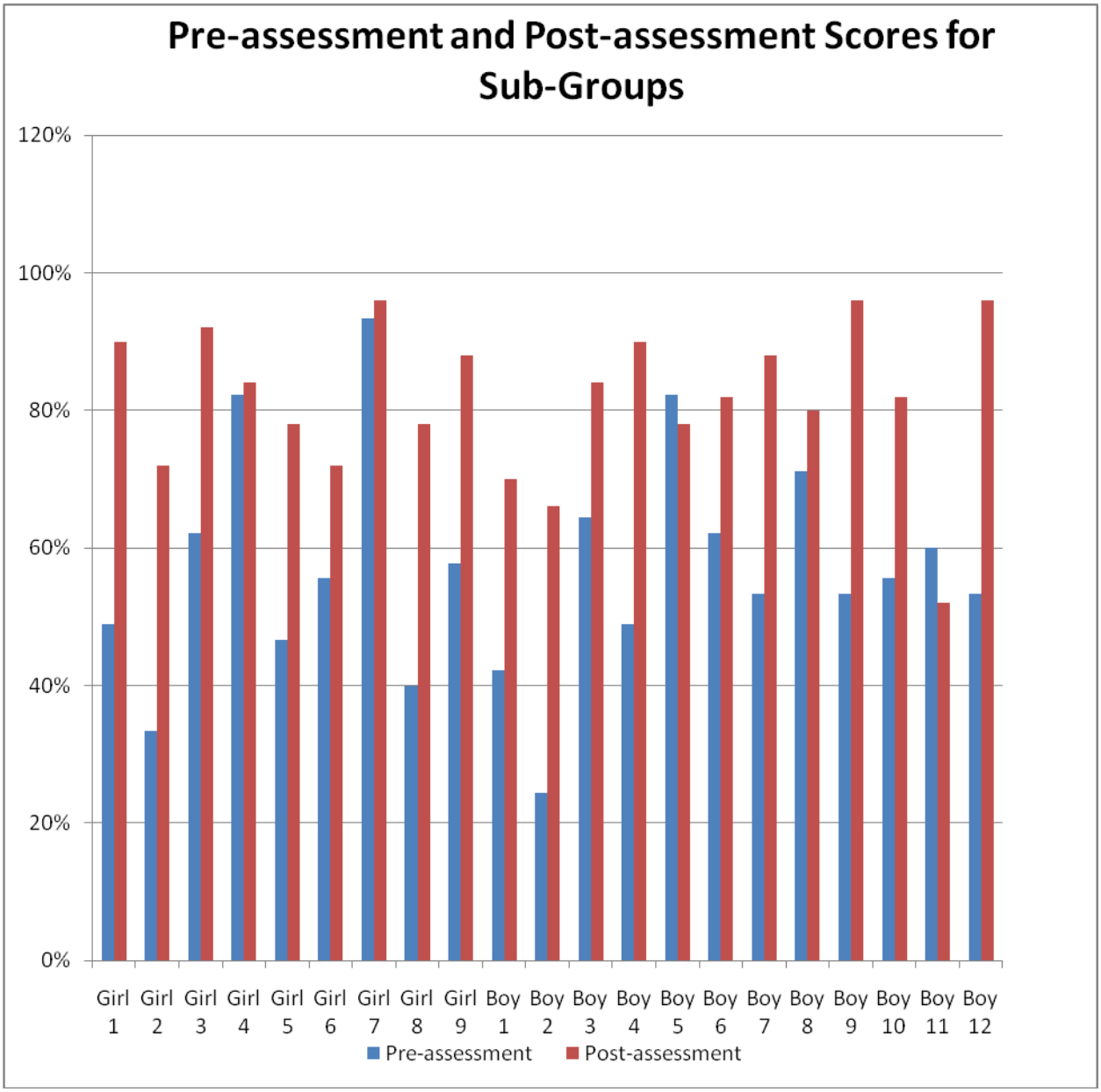
Gain Scores Table

Students	Pre-assessment			Post-assessment			Gain
	Score	Points Possible	% Score	Score	Points Possible	% Score	
Student 1	7	10	70%	10	10	100%	1.00
Student 2	9	10	90%	9	10	90%	-
Student 3	4	10	40%	9	10	90%	0.83
Student 4	5	10	50%	8	10	80%	0.60
Student 5	6	10	60%	9	10	90%	0.75
Student 6	6	10	60%	10	10	100%	1.00
Student 7	4	10	40%	8	10	80%	0.67
Student 8	7	10	70%	10	10	100%	1.00
Student 9	8	10	80%	10	10	100%	1.00
Student10	6	10	60%	9	10	90%	0.75
Student11	7	10	70%	10	10	100%	1.00
Student12	4	10	40%	9	10	90%	0.83
						Average Gain	0.79

Step 13: Create a Graphic Representation of the Disaggregation of Data

During step thirteen, create a graphic representation of the disaggregation of data (a bar, pie, or line graph or a table) for at least one pair of subgroups. You might disaggregate data for gender groups, for students with IEP's and without IEP's, for English Language Learners and English native speakers, or another pair of subgroups identified in Factor One. See sample below.

- The graphic representation should consist of *pre-assessment* and *post-assessment* data.
  - ✓ Tables, graphs, or other representations may use landscape page formatting if wider columns are needed.
  - ✓ Disaggregate data for at least one ***pair*** of subgroups (e.g., ESL vs. native speakers).



Step 14: Develop Summary Based on Disaggregation of Data

During step fourteen, address the following in a narrative:

- Describe whole group and subgroup performance on low, middle, and high level *TWS learning outcomes*.
- Compare performance of the two subgroups and evaluate the impact of your TWS instruction on student learning in the subgroups.
- Explain why you think subgroup performances are different or similar.
- Based on your description and comparison of subgroup performance, and your evaluation of the impact of TWS instruction, give suggestions for future instruction with these groups of learners.

Important Supporting Information Regarding the Pre/Post-Assessments

1. The *pre-* and *post-assessments* should specifically measure each of the *TWS learning outcomes* identified in Factor two.
2. The *pre-and post-assessments*, which measure all of the TWS learning outcomes, must be the same.
3. Don't automatically assume that the *post-assessment* has to be used for grading at the end.
4. *Pre-* and *post-assessment*s can be separate from the assessments given on which student grades are to be based.
5. It is possible to plan for and teach additional *learning outcomes* beyond those noted in Factor 2 and assessed on the *pre-/post-assessment*s.

Examples of Assessments:

Tests	**Alternative Assessments**
• Standardized (norm referenced) • South Dakota state tests • Criterion referenced tests Teacher or district developed tests Textbook tests • Types of test questions ✓ Multiple choice ✓ Short answer/essay ✓ True/false ✓ "Show your work" ✓ Matching ✓ Illustration ✓ Fill in the blank ✓ Concept map ✓ Diagram labeling ✓ Graphic organizer	• Products Work Sample Classwork and homework Writing Project • Portfolio • Performance tasks • Interviews, conferences • Observations • Questioning • Self- or peer-assessment

As you prepare assessments include the following:

1. Label assessment items or tasks with *TWS learning outcomes*.
2. Identify correct responses and assign point values.
3. Determine criteria for *proficiency*. Include a *rubric* if necessary. (See Scoring Assessments below.)

Scoring Assessments

Assessments that can be scored right/wrong or yes/no may be scored with an answer key, checklist, or anecdotal record. Assessments that can have varying degrees of correctness or quality should be scored with a *rubric* and the *rubric* should be included.

Scoring:

Checklist: Candidates **Y N**

Provide graphic representation of pre-assessment and post-assessment data (Steps 3 and 10)..... 1 0
Include Learning Outcomes Proficiency table with accurate percentages of students who attained proficiency for each learning outcome (Step 11) 1 0
Include average percentage of students achieving proficiency of low, middle, and high levels of TWS learning outcomes (must accurately calculate all three levels) (Step 11) 1 0
Include average percentage of students achieving proficiency of all TWS learning outcomes (Step 11) 1 0
Include the number of students who attained proficiency with adaptations (Step 11)..... 1 0
Include accurate calculation of gain scores in a table including overall average gain (Step 12) (see Appendix 2).... 1 0
Provide evidence of disaggregation of data for at least one pair of subgroups (Step 13) 1 0
Provide an explanation of why subgroup performances are different or similar (Step 14)..... 1 0

Score Possible for Checklist: 8

Rubric:

Rating → Indicator ↓	**2 Competency Met**	**1 Competency Partially Met**	**0 Competency Not Met**	**Weight**	**Possible Score**
Pre-assessment is utilized for instruction and evaluation (Step 5)	Pre-assessment data are collected and used appropriately in instruction and decision-making.	Appropriate student pre-assessment data are collected, but not used for instructional decision-making.	No pre-assessment data are collected, or the data/information collected is not appropriate for (aligned with) learning outcomes	1	2
Formative assessment is utilized for instruction and evaluation (Step 8)	Student progress is monitored by formative assessment data that are used in instructional decision-making.	Student formative assessment data are collected, but not used for instructional decision-making.	No formative assessment data are collected.	1	2
Post-assessment is utilized for evaluation and in planning for subsequent instruction (Step 14)	Post-assessment data are collected and used appropriately in instructional decision-making/planning for future instruction.	Appropriate student post-assessment data are collected, but not used for instructional decision-making/planning for future instruction.	No post-assessment data are collected, or the data/information collected is not appropriate for (aligned with) learning outcomes.	1	2
Variety of assessments	Multiple assessments are used and there are at least two different types of assessments used.	Multiple assessments are used but only one type of assessment is used.	Only one assessment and one type of assessment are used.	1	2

Alignment among TWS learning outcomes, instruction and assessment (evident in Design for Instruction Table in Factor 3)	Aligns all TWS learning outcomes with instruction and assessment.	Aligns only two of the three (learning outcomes, assessment, and instruction)	Does not align TWS learning outcomes, instruction, and assessment	2	4
Assessment criteria	Assessments include all three components below: <u>Measurable</u> – Descriptions of all assessments tell what performance is being measured. <u>Comprehensive</u> – Assess TWS learning outcomes <u>Criteria Level</u> – Specifies the point at which students successfully meet the attainment of the TWS learning outcome	Assessments include only two of the components listed in the first column.	Assessments include one or none of the components listed in the first column.	1	2
Justification of formative assessments (Step 8)	A specific explanation of the reason for formative assessments is given and is tied to the TWS learning outcomes.	An explanation of the reason for formative assessments is given but it does not relate to the TWS learning outcomes.	No explanation is given of why the formative assessments were chosen.	**1**	**2**
Justification of adaptations (See table in Factor Three.)	Needed adaptations were addressed and justifications for the adaptations used were provided.	Needed adaptations were addressed but no justifications for the adaptations used were provided.	Did not address needed adaptations.	**1**	**2**

Possible Score for Rubric: 18

Total Score Possible for FACTOR 5: 26

FACTOR 6: Reflection and Self-Evaluation

(Purpose: What have I learned about impacting student learning, meeting students' needs, and my practice?)

Suggested page length: 5 pages

The Task:

1. Candidates will reflect on the success of instruction, assessment, and contextual factors under their control (i.e. classroom management).
2. Candidates will use evidence to reflect on how their instructional decisions had an impact on student learning.
3. Candidates will discuss what they could do differently or better in the future to improve student learning.
4. Candidates will discuss how and in what context they have communicated with students, the classroom teacher, parents, and colleagues regarding their students' learning and assessment.
5. Candidates will discuss how knowledge about the school improvement plan and/or students' performance on state assessments provided them with sound information and data that they used in the implementation of their TWS lessons.
6. Candidates will describe at least two personal, professional learning goals that emerged from their insights while teaching these lessons.

Factor #6 Competency:

This factor demonstrates the candidate's ability to be a reflective practitioner who continually evaluates the effects of his/her choices and actions on others (students, parents, and other professionals in the learning community), actively seeks out opportunities to grow professionally and participates in the school improvement process. [INTASC Standards: 9, 10]

Procedures:

The following specific elements should be included in a narrative, with each section titled using the headings in italics below.

A) Review the instructional activities, assessments, and contextual factors under your control (i.e. classroom management), focusing on where the students were most successful. Briefly explain *what was successful* and discuss two or more reasons for the success. Consider your TWS learning outcomes, instruction, and assessments along with student characteristics and other contextual factors under your control (i.e. classroom management). Be sure your reasons are plausible.

B) Next, review the instructional activities, assessments, and contextual factors under your control (i.e. classroom management), focusing on where the students were least successful. Briefly explain *what was not successful* and discuss two or more reasons for the challenges. Consider your TWS learning outcomes, instruction, and assessments along with student characteristics and other contextual factors under your control (i.e. classroom management). Be sure your reasons are plausible.

C) Explain *how instructional decisions had an impact on student learning*, using evidence and data to support your conclusions. Include any mid-unit adaptations you made. Give multiple reasons why some students did not meet learning outcomes.

D) Discuss *what might be done differently or better* to improve your students' learning if you were to teach these lessons again. Provide at least **three** ideas for redesigning learning outcomes, instruction, or assessment; explain **why** these changes would improve student learning.

E) Discuss *communication*. Tell how and in what context you have communicated with students, the classroom teacher, and/or parents and other professionals about your decisions regarding students' learning and assessment.

F) Discuss how knowledge about the *school improvement plan and/or state assessment data* have provided you with sound information and data that you used in the implementation of your TWS lessons.

G) Reflect on your possibilities for *professional development*. Describe at least two personal professional learning goals that emerged from your insights and experiences as a student intern **while teaching these lessons**. Identify two specific activities you will undertake to improve your performance in the critical areas you identified.

Rubric:

Rating → Indicator ↓	**2 Competency Met**	**1 Competency Partially Met**	**0 Competency Not Met**	**Weight**	**Possible Score**
Success of instruction, assessment, and contextual factors under your control (i.e. classroom management) (Procedures A, B)	Identifies successful and unsuccessful activities, assessments, and/or procedures; provides plausible reasons for their success or lack thereof	Identifies successful and unsuccessful activities, assessments and/or procedures; superficially explores reasons for their success or lack thereof	Provides no rationale for why some activities, assessments, and/or procedures were more successful than others	**2**	**4**
Effects of instructional decisions on student learning (Procedure C)	Uses evidence and data to support conclusions that the candidate did impact student learning, including any mid-unit adaptations. Explores multiple (two or more) hypotheses for why some students did not meet subject matter learning outcomes.	Provides some data or evidence of candidate's impact on student learning, including any mid-unit *adaptations* but provides only one reason or hypothesis to support conclusions.	No evidence or reasons provided to support conclusions.	**2**	**4**
Implications for future teaching of these lessons (Procedure D)	Provides more than two appropriate ideas for redesigning learning outcomes, instruction, or assessment and explains why these changes would improve student learning	Provides at least two appropriate ideas for redesigning learning outcomes, instruction, or assessment but offers no rationale for why these changes would improve student learning	Provides less than two ideas or only inappropriate ideas for redesigning learning outcomes, instruction, or assessment	**2**	**4**
Communication with students, and classroom teacher; communication with parents, and/or other professionals if applicable (Procedure E)	Provides <u>specific</u> details of interactions with students and the classroom teacher; provides details of interactions with parents and/or other professionals if applicable	Provides only a general description of communication with students, the classroom teacher, parents, and/or other professionals but provides no specific details	Provides no information on communication with students, the classroom teacher, parents, and/or other professionals	**1**	**2**

Information from school improvement plan process and students' performance on state assessments (Procedure F)	Explains how knowledge about the school's improvement plan and students' performance on state assessments provided sound information and data that were used in implementation of TWS lessons	Explains how knowledge about the school's improvement plan **OR** students' performance on state assessments provided sound information and data that were used in implementation of TWS lessons	Provides no explanation addressing use of the school's improvement process or assessment results	**1**	**2**
Implications for professional development/ continuous learning (Procedure G)	Presents at least two professional development goals that clearly emerge from the insights and experiences as a student intern while teaching these lessons, and describe at least one activity to meet each goal	Presents one professional development goal that clearly emerges from TWS insights and experiences and describes at least one activity to meet the goal **or** presents two professional development *goals* that clearly emerge from TWS insights and experiences but no activity is described to meet each goal	Provides no professional development goals or activities that are related to TWS insights and experiences	**2**	**4**

Possible Score for Rubric: 20

Total Score Possible for FACTOR 6: 20

Appendixes

Appendix 1: Teacher Work Sample Appeal Procedures

If a candidate feels his/her Teacher Work Sample (TWS) was incorrectly scored, he/she may file an appeal with the Director of Field Experiences. The candidate must:

1. Construct a written appeal listing the specific area(s) of concern and the reason(s) why the candidate feels his/her TWS was scored incorrectly.

2. Include candidate's name, TWS#, phone number, mailing address, and, if possible, an email address with the appeal.

3. Submit a paper or email copy of the appeal to Director of Field Experiences no later than one week after the date the candidate receives his/her TWS score.

4. The Director of Field Experiences will assign an experienced scorer to rescore the TWS.

5. A score change, including justification for the score change, shall be submitted to the Director of Field Experiences.

6. The candidate will receive a written report of the outcome of the appeal within one week from the date of appeal. If necessary, the Director of Field Experiences will meet with the candidate to discuss any revisions to the score.

7. The results of the appeal will be final.

Appendix 2: Sample Learning Gain Scores Calculation

You must calculate a *learning gain score* using percentages for each individual student. Once you have figured every student's *gain score*, you must calculate the average *gain score* for the entire class as a whole.

Formula using percentage scores

Formula:

$$\frac{(\textit{Post-assessment} - \textit{Pre-assessment})}{(100\%^{*} - \textit{Pre-assessment})}$$

Interpretation

You are dividing the actual gain (numerator) by the potential gain (denominator). You are calculating how much the student gained out of the total possible that they could have gained from pre to *post-assessment*.

where: *Pre-assessment* is the **percent correct** on pre-unit assessment
Post-assessment is the **percent correct** on the post assessment

Example using percentage scores when a student score is higher on the *post-assessment* than on *pre-assessment*

Ex. for student #1 below:

$$\frac{70 - 45}{100 - 45} = \frac{25}{55} = .45$$

Interpretation

Student #1 demonstrated a gain of 25 percentage points out of a potential 55 percentage points that could have gained. Thus, Student #1 gained .45 (or 45%) of the possible percentage points they could have gained from pre to *post-assessment*.

Example using percentage scores when a student score is higher on the *pre-assessment* than on *post-assessment*

Ex. for student #2 below:

$$\frac{50 - 75}{100 - 75} = \frac{-25}{25} = -1.00$$

Interpretation

Student #2 could have gained up to 25 percentage points, but instead lost 25 percentage points (or 100%) of what could have been gained.

Student #	Pre Assessment Score	Post Assessment Score	Individual Student Gain Score
1	45%	70%	.45
2	75%	50%	-1.00
3	60%	80%	.50
4	40%	40%	.00
5	65%	70%	.14
6	90%	95%	.50
7	53%	59%	.13
8	60%	90%	.75
9	40%	95%	.92
10	42%	45%	.05
11	58%	88%	.71
12	24%	30%	.08
13	45%	89%	.80
GROUP AVERAGE GAIN SCORE			.31

(note: scores below are percentages, not raw scores)

(or a 31% average learning gain for the entire class)

Formula using raw score

Maximum score for this example is 50 points.

Formula: (*Post-assessment* - *Pre-assessment*) / (Maximum score* - *Pre-assessment*)

Interpretation

You are dividing the actual gain (numerator) by the potential gain (denominator). You are calculating how much the students gain out of the total possible that they could have gained from pre to *post-assessment*.

Where: *Pre-assessment* is the **raw/actual score** on pre-unit assessment
Post-assessment is the **raw/actual score** on the post assessment

Example using raw scores when a student score is higher on the *post-assessment* than on *pre-assessment*

Ex. for student #1 below:

$$\frac{40 - 35}{50 - 35} = \frac{5}{15} = 0.33$$

Interpretation

Student #1 demonstrated a gain up of 5 points out of a potential 15 points that could have been gained. Thus, Student #1 gained .33 (or 33%) of the possible points that could have been gained from pre to *post-assessment*.

Example using raw scores when a student score is higher on the *pre-assessment* than on *post-assessment*

Ex. for student #2 below:

$$\frac{41 - 45}{50 - 45} = \frac{-4}{5} = -0.80$$

Interpretation

Student #2 could have gained 5 points, but instead lost 4 points (or 80%) of what could have been gained.

Student #	Pre Assessment Score	Post Assessment Score	Individual Student Gain Score
1	35	40	0.33
2	45	41	-0.80
3	45	50	1.00
4	40	40	0.00
5	35	40	0.33
6	30	45	0.75
7	43	50	1.00
8	20	40	0.67
9	41	45	0.44
10	42	45	0.38
11	38	48	0.83
12	24	30	0.23
13	45	49	0.80
GROUP AVERAGE GAIN SCORE			0.46

(note: scores below are raw scores, not percentages)

(or a .46 average learning gain for the entire class)

Appendix 3: A Glossary of Terms

For the purpose of the Teacher Work Sample methodology, the following terms have these definitions:

Academic Performance and Achievement: Information about previous student performance that could be used to plan instruction (e.g., grades, standardized tests, cumulative folder, anecdotal records, etc.).

Active Inquiry: A teaching/learning strategy in which the students are active in the pursuit of knowledge. They are asking questions, researching, and answering their own and each other's questions. The candidate is a facilitator and guide but not the chief instructional agent. The use of inquiry does not have to be in every lesson, but it should occur often enough that it is a dominant instructional component of the unit.

Adaptations: Those adjustments in preparation and delivery of instruction and monitoring the learning environment that are made by a candidate to meet the special learning needs of any students. It also includes adjustments deemed necessary by the candidate to provide fair treatment of students during the assessments of learning.

Affective Domain: Includes the manner in which we deal with things emotionally, such as feelings, values, appreciation, enthusiasms, cooperation, motivations, and attitudes.

Appropriate Rationale: (*for doing or not doing something that is addressed in the rubric*)**:** A statement or description of educationally defensible reasons for not using a device or method called for in the rubric. The statement may also be used to explain why the candidate is doing something differently than what is called for in the rubric. To be complete, the rationale should include a statement of how the candidate's decision(s) will impact intended outcomes and their achievement together with a description of the learning benefits of the choice(s) that the candidate has made.

Classroom Environment: Information related to issues of culture, safety, classroom management, physical environment, and socio-personal interaction that have potential to influence the learning environment.

Cognitive Domain: Involves knowledge and the development of intellectual skills. This includes the recall or recognition of specific facts, procedural patterns, and concepts that serve in the development of intellectual abilities and skills.

Collaboration: The deliberate use by the candidate of educational strategies that require students to work together in pairs or other groupings to solve problems, accomplish tasks, or to achieve learning goals. Collaboration may include, but is not limited to, formal cooperative learning strategies.

Communication: Generally the sharing of meaning through the spoken and written word (also see "*nonverbal communication*")

Community: Information about the school district or city/town as well as the attendance center that defines the community of learners in the school or classroom. Such information should focus on <u>definitive student characteristics</u> to which the candidate ought to pay attention and use in planning and delivering instruction in order to help all students achieve the TWS goals and learning outcomes.

Context Data: The "Contextual Information" characteristics that are narrated in Factor One. (e.g., ethnic, gender, SES (socio economic status) special needs, varying developmental levels, varying intellectual/academic performance levels, emotional and/or behavioral deviations, etc.).

Critical Thinking/Problem Solving: Critical thinking/problem solving requires higher cognitive processing (e.g., using information in new ways, analyzing information/concepts and/or breaking into sub-parts or sub-concepts, making evaluations and judgments supported by *appropriate rationale*s, creating new constructs, processes or products, etc.). Students are not to perform tasks which rely simply on rote learning, list making, recitation, or on simplistic manipulation of numbers, facts, or formulae.

Developmental Characteristics: Learning outcomes, assessments and activities should be aligned with the skills, abilities, maturity, as well as the intellectual and emotional or behavioral characteristics of the typical student at the grade or level at which one is teaching. Deviations from providing instruction at the expected developmental level of a particular grade should be explained and documented as to rationale.

Diagnostic Assessment/Pre-assessment: The measurement of student ability, skills, or knowledge before formal instruction has occurred. Such an assessment determines students' previous knowledge in order to prepare or adjust learning outcomes appropriately and sets a baseline for the measurement of student achievement.

Disaggregation of Data: Organizing and reporting data from the pre-assessment and/or post-assessment to show the achievement (learning gain) for subgroups present in the classroom (ELL v. native speakers, males v. females, identified students v. non-identified students, low achievers on the pre-assessment v. those who did better, racial or ethnic groups v. majority, etc.).

Domain: Categories of learning, including cognitive domain, affective domain, and psychomotor domain.

Environmental Factors: Circumstances or conditions in the school, the district, the community and/or the classroom that might affect the students and their learning. For example, school practices, district policies or regulations, transience in the community, physical attributes of the classroom etc.

Formative Assessment: Those assessments of student performance, formal or informal, done during each lesson to give both the candidate and the student feedback regarding learning and the possible need for either enrichment or remediation.

Gain Score: The difference between pre- and post- assessment scores (same as *Learning Gain Score*).

Goals: General learning standards or outcomes. Goals are supported by more specific learning outcomes.

High Level Learning Outcomes: See *Low, Middle, and High Level Learning Outcomes*.

Integration: The candidate has the knowledge and ability to import appropriate content, information or processes from other disciplines (subjects) as a means of expanding student thinking, and/or understanding and showing relation and relevance between subject fields i.e., a social studies candidate integrates math skills into a geographic map lesson, an English candidate incorporates history lessons into a Renaissance Literature unit, an elementary candidate integrates math, science, social studies, and language arts into a unit.

Knowledge Learning Outcome: For the purposes of the TWS a lower level knowledge learning outcome requires students to define, list, memorize, name, recall, recognize, recite or record. Higher knowledge level learning outcomes may involve student comprehension where students demonstrate that they understand the meaning of what they have learned by describing, distinguishing between, discussing, explaining, expressing, identifying, locating, or reporting.

Learner-Centered Instruction: Classroom learning activities in which the learner and not the candidate is the center of focus. The candidate may serve as facilitator but not as presenter or director. The student works independently or in a small group that is in charge of the learning sequence, timing, goal setting, and production of evidence of learning.

Learning Context: Information about the school, community, or individual students that should impact the manner in which the candidate plans, executes, and assesses learning for all students in the class.

Learning Gain Score: The difference between *pre-* and *post-assessment* scores.

Low Level Learning Outcomes: See *Low, Middle, and High Level Learning outcomes*.

Low, Middle, and High Level Learning Outcomes: When Bloom (1956) originally presented his taxonomy, he described six cognitive learning outcomes as hierarchically arranged from low-level (knowledge, comprehension) to middle level (application, analysis) to high level (synthesis, evaluation), with higher-level learning outcomes building on the lower ones. Bloom's cognitive learning outcomes can be used when planning assessments. True/false, matching, multiple-choice, and short answer items are often used to assess knowledge and comprehension (low-level learning outcomes). Portfolios, student work products, and projects are especially good for assessing application, analysis (middle level learning outcomes). Essay questions, class discussions, position papers, and debates are especially good for assessing synthesis, and evaluations (high level learning outcomes). For middle and high level learning outcomes, however, the determination of the level is not so much on the type of assessment but on the specific expectation of the student (e.g., a project or an essay question could fit either level). NOTE: Bloom created this learning taxonomy in 1956. It was revised in 2001 by Anderson and Krathwohl. References to Bloom's Revised Taxonomy can be found in Factor 2.

Nonverbal Communication: The use of positive nonverbal strategies could include, but is not limited to the following: using hand or body movements to understanding, showing answers, using hands up or nodding, using eye contact, smiling, using hand gestures to indicate, for example, "Good job!" These nonverbal strategies fall generally into the categories of active listening use of positive body language and will complement such things as paying attention, facing the speaker, etc.

Nonverbal Communication Between and Among Students: Sharing of meaning through communication channels other than the spoken word that are used in student-to-student interaction or exchanges; nonverbal communication includes physical appearance (such as a t-shirt with an inappropriate quotation or multiple body piercings), gesture and movement (such as slouching or friendly hand wave), face and eye behavior (such as averting eye contact or a frown/smile/smirk), use of time (such as promptness or being perpetually tardy), vocal behavior (such as sarcasm or a fast rate of speech), touch, and the way we use the personal space and environment around us (see also "communication").

Proficiency: Meets the minimum level of competency set for a learning outcome.

Middle Level Learning Outcomes: See *Low, Middle, and High Level Learning Outcomes*.

Post-assessment/Summative Assessment: An assessment of student performance made at the conclusion of instruction which, when compared with the pre-assessment will define the student's gain in learning. Both pre- and post-assessments must use the same assessment device or at least use the same rubric or observation device to score performance.

Pre-assessment/Diagnostic Assessment: The measurement of student ability, skills, or knowledge before formal instruction has occurred. Such an assessment determines students' previous knowledge in order to prepare or adjust learning outcomes appropriately and sets a baseline for the measurement of student achievement.

Psychomotor Domain: Includes physical movement, coordination, and use of the motor-skill areas. Development of these skills requires practice and is measured in terms of speed, precision, distance, procedures, or techniques in execution.

Reading: Understanding the communication of written ideas through skills taught by every candidate across the curriculum. Every candidate should reinforce important reading skills by incorporating them into instruction every day. Some teaching strategies include vocabulary building; using content-based reading material to help students identify main ideas and supporting information; providing questions to generate interest in a reading passage; and many developed systems to teach reading skills such as QAR, SQ3R, and KWL, which all involve questioning and reviewing.

Reasoning Learning Outcome: A reasoning learning outcome requires students to analyze, synthesize and/or make judgments about (evaluate) information, knowledge and ideas. Students analyze, calculate, compare, criticize, differentiate, examine, create, organize, propose, compose, appraise, assess, and evaluate.

Rubric: An assessment tool that defines the quality of performance as well as identifying skills, knowledge, or concepts possessed by the student.

Skill/Performance Learning Outcome: A skill learning outcome requires students to apply the information that they have learned. Students apply, demonstrate, illustrate, practice, translate, interpret or dramatize. Lower skill learning outcomes may require students to reproduce simple behaviors. Higher skill learning outcomes are more authentic and require students to synthesize skills or apply a skill in a novel situation.

Post-assessment/Summative Assessment: The measurement of student ability, skills, or knowledge at the conclusion of formal instruction. Such an assessment is comprehensive in nature, provides accountability, and when compared with the pre-assessment, defines the student's gain in learning. Both pre- and post-assessments must use the same assessment device or at least use the same rubric or observation device to score performance.

Pre-assessment/Diagnostic Assessment: The measurement of student ability, skills, or knowledge before formal instruction has occurred. Such an assessment determines students' previous knowledge in order to prepare or adjust learning outcomes appropriately and sets a baseline for the measurement of student achievement.

Special Needs: A description of students with special needs should not be limited to IEP's. Students with social, familial, emotional, cognitive, language and/or other needs should also be addressed. Students who are functioning below grade level or who have difficulty in reading could be included in the special needs area.

Summative Assessment/Post-assessment: The measurement of student ability, skills, or knowledge at the conclusion of formal instruction. Such an assessment is comprehensive in nature, provides accountability, and when compared with the pre-assessment, defines the student's gain in learning. Both pre- and post-assessments must use the same assessment device or at least use the same rubric or observation device to score performance.

Technology: For the use of the Teacher Work Sample, technology includes a wide range of technological tools that a candidate can use to enhance instruction such as audio-visual devices, overhead projector, computers, calculators, adaptive technology, robotics, etc.

TWS Goals: The set of primary goals set by the candidate to guide the learning. The TWS goals are stated in terms of student performance. They may be supported by lessons that further subdivide the goal into its subordinate tasks.