Instructional Design

Expectations
and
Rubric for Effectiveness*
In Planning Instruction

**Topic:** Broad enough to include areas of focus outlined by TEKS

**Objective(s):** Conditions to be demonstrated (TAKS format, STAARS format using resources provided by the Texas Education Agency), written behaviorally specifying observable behavior (TEKS), and criterion to be used to evaluate mastery.

**Pre Assessment:** the assessment reflects the behavior described in the Objective and is aligned with the TEKS in the lesson and presented in TAKS format, STAARS format using resources provided by the Texas Education Agency.

**Domain:** Content area as determined by TEKS-EC-4 Generalist: Science, Mathematics, English/Language Arts; English/Language Arts and Reading 4-8; Mathematics 4-8.

**Standard(s):** Must identify Standard corresponding to the Competencies to be used in planning the lesson. Competency 013-Standard I: The **mathematics** teacher understands and uses numbers, number systems and their structure, operations and algorithms, quantitative reasoning, and technology appropriate to teach the statewide curriculum (Texas Essential Knowledge and Skills [TEKS]) in order to prepare students to use mathematics. Standard II: The mathematics teacher understands and uses patterns, relations, functions, algebraic reasoning, analysis, and technology appropriate to teach the statewide curriculum (Texas Essential Knowledge and Skills [TEKS]) in order to prepare students to use mathematics.

**Standard I:** The **science** teacher manages classroom, field, and laboratory activities to ensure the safety of all students and the ethical care and treatment of organisms and specimens. Standard II. The science teacher understands the correct use of tools, materials, equipment, and technologies. Standard III. The science teacher understands the process of scientific inquiry and its role in science instruction. Standard IV. The science teacher has theoretical and practical knowledge about teaching science and about how students learn science. Standard V. The science teacher knows the varied and appropriate assessments and assessment practices to monitor science learning.

**Standard VI:** The science teacher understands the history and nature of science. Standard VII. The science teacher understands how science affects the daily lives of students and how science interacts with and influences personal and societal decisions.

**Standard I. Oral Language:** Teachers of students in grades 4–8 understand the importance of oral language, know the developmental processes of oral language, and
provide a variety of instructional opportunities for students to develop listening and speaking skills.

Standard I. Number Concepts: The **mathematics** teacher understands and uses numbers, number systems and their structure, operations and algorithms, quantitative reasoning, and technology appropriate to teach the statewide curriculum (Texas Essential Knowledge and Skills [TEKS]) in order to prepare students to use mathematics.

Standard II. Patterns and Algebra: The mathematics teacher understands and uses patterns, relations, functions, algebraic reasoning, analysis, and technology appropriate to teach the statewide curriculum (Texas Essential Knowledge and Skills [TEKS]) in order to prepare students to use mathematics.

Standard III. Geometry and Measurement: The mathematics teacher understands and uses geometry, spatial reasoning, measurement concepts and principles, and technology appropriate to teach the statewide curriculum (Texas Essential Knowledge and Skills [TEKS]) in order to prepare students to use mathematics.

Standard IV. Probability and Statistics: The mathematics teacher understands and uses probability and statistics, their applications, and technology appropriate to teach the statewide curriculum (Texas Essential Knowledge and Skills [TEKS]) in order to prepare students to use mathematics.

**Competency(ies):** The competency must be described:

Competency 013 (Number Concepts, Patterns, and Algebra) The teacher understands concepts related to numbers and number systems and demonstrates knowledge of patterns, relations, functions, and algebraic reasoning.

Competency 014 (Geometry, Measurement, Probability, and Statistics) The teacher understands concepts and principles of geometry and measurement and demonstrates knowledge of probability and statistics and their applications.

Competency 020 (Science Instruction) The teacher uses knowledge of science content and methods to plan effective, engaging, and safe instruction and to assess learning.

Competency 001 (Oral Language) The teacher understands the importance of oral language, and provides children with varied opportunities to develop listening and speaking skills.

Competency 013 (Number Concepts, Patterns, and Algebra) The teacher understands concepts related to numbers and number systems and demonstrates knowledge of patterns, relations, functions, and algebraic reasoning.

Competency 014 (Geometry, Measurement, Probability, and Statistics) The teacher understands concepts and principles of geometry and measurement and demonstrates knowledge of probability and statistics and their applications.
Technology Strand(s): A standard(s) must be selected and a description of how the standard will be illustrated must be given:

Standard I. All teachers use technology-related terms, concepts, data input strategies, and ethical practices to make informed decisions about current technologies and their applications.

Standard II. All teachers identify task requirements, apply search strategies, and use current technology to efficiently acquire, analyze, and evaluate a variety of electronic information.

Standard III. All teachers use task-appropriate tools to synthesize knowledge, create and modify solutions, and evaluate results in a way that supports the work of individuals and groups in problem-solving situations.

Standard IV. All teachers communicate information in different formats and for diverse audiences.

Standard V. All teachers know how to plan, organize, deliver, and evaluate instruction for all students that incorporates the effective use of current technology for teaching and integrating the Technology Applications Texas Essential Knowledge and Skills (TEKS) into the curriculum.

Purpose- how the information can be used by the learner considering developmental appropriateness, and the students’ immediate real world use of the skill/application/competency.

Focus- the attention of the student’s must be attained in a way that isn’t distracting to the students; preferably there is a relationship to the topic to be addressed.

Learner Expectations/Outcomes- what will the students be able to do after they complete the lesson. After they have mastered the objectives, how will they be able to demonstrate utilization of the skills included in the objective(s) they have mastered?

Instructional Input/Differentiated Instruction- the teacher provides the instructional input with verbal explanation(s), utilizes metacognition, varied strategies and visuals to demonstrate the academic expectations the students are to be able to do.

Modeling- the teacher demonstrates the behavior that students will be required to perform. This modeling is done with the students participating in the discussion, activity, behaviors, and expectations. The teacher gives the critical attributes of the academic behaviors the student is expected to master. The teacher gives examples, checks to see if the students are able to participate in the discussion, interactions, and respond to the questions posed by the teacher. Choral responses may be used.

Checking for Understanding- students are given many opportunities to demonstrate their understanding of the information (knowledge and skills) presented. The teacher uses varying assessments to ascertain whether the students have grasped the information and
whether they are able to construct their own meanings rather than to regurgitate the information given.

**Reteaching**—the teacher explains, illustrates, demonstrates, and models the same knowledge and skills taught previously using different strategies. The teacher **Checks for Understanding and reteaches** until at least 85% of her students demonstrate a mastery of the objective(s). Those students that have not achieved mastery must be retaught until mastery is demonstrated.

**Guided Practice**—the teacher provides an opportunity for individual students to demonstrate their mastery of the knowledge and skills taught. Reteaching continues until mastery is attained.

**Independent Practice**—the behavior that has been taught (behavioral objectives based on TEKS and taught, retaught, and demonstrated in guided practice is assessed by having the student work on his own. No new information should be assigned for independent practice.

**Post Assessment**: the assessment reflects the behavior described in the Objective and is aligned with the TEKS in the lesson, and presented in TAKS format and/or STAARS format using resources provided by the Texas Education Agency). In addition, the post assessment is either analogous, equivalent, or the same as the Pre assessment, whether a prerequisite or entry skill, and does not include any information that has not been previously taught.

**Closing**—the behavioral objectives (taken from TEKS) are reviewed and restated by both the teacher and the student(s).

**TAKS/STAARS Assessment**—utilize the format of the TAKS test and/or STAARS format using resources provided by the Texas Education Agency), to design an assessment of the objectives taught. Be sure to describe in the conditions of each objective, the means to be used to assess whether the student has mastered the objective. For example—*given an example of a …*, the student will be able to…; given an example … is the description of how the achievement of the objective will be measured.

**Expansion and Enrichment**—opportunities are provided that allow the student(s) to utilize the information gained. The outcomes expected may be assigned and students are given the opportunity to apply the new knowledge in a different setting.
TECHNOLOGY APPLICATIONS STANDARDS

**Standard I.** All teachers use technology-related terms, concepts, data input strategies, and ethical practices to make informed decisions about current technologies and their applications.

**Standard II.** All teachers identify task requirements, apply search strategies, and use current technology to efficiently acquire, analyze, and evaluate a variety of electronic information.

**Standard III.** All teachers use task-appropriate tools to synthesize knowledge, create and modify solutions, and evaluate results in a way that supports the work of individuals and groups in problem-solving situations.

**Standard IV.** All teachers communicate information in different formats and for diverse audiences.

**Standard V.** All teachers know how to plan, organize, deliver, and evaluate instruction for all students that incorporates the effective use of current technology for teaching and integrating the Technology Applications Texas Essential Knowledge and Skills (TEKS) into the curriculum.

**Standard VI.** Teachers of technology applications are not responsible for this standard.

**Standard VII.** The desktop publishing teacher has the knowledge and skills needed to teach the Foundations, Information Acquisition, Work in Solving Problems, and Communication strands of the Technology Applications Texas Essential Knowledge and Skills (TEKS) in desktop publishing, in addition to the content described in Technology Applications Standards I–V.

**Standard VIII.** The digital graphics/animation teacher has the knowledge and skills needed to teach the Foundations, Information Acquisition, Work in Solving Problems, and Communication strands of the Technology Applications Texas Essential Knowledge and Skills (TEKS) in digital graphics/animation, in addition to the content described in Technology Applications Standards I–V.

**Standard IX.** The multimedia teacher has the knowledge and skills needed to teach the Foundations, Information Acquisition, Work in Solving Problems, and Communication strands of the Technology Applications Texas Essential Knowledge and Skills (TEKS) in multimedia, in addition to the content described in Technology Applications Standards I–V.

**Standard X.** The video technology teacher has the knowledge and skills needed to teach the Foundations, Information Acquisition, Work in Solving Problems, and Communication strands of the Technology Applications Texas Essential Knowledge and Skills (TEKS) in video technology, in addition to the content described in Technology Applications Standards I–V.

**Standard XI.** The Web mastering teacher has the knowledge and skills needed to teach the Foundations, Information Acquisition, Work in Solving Problems, and Communication strands of the Technology Applications Texas Essential Knowledge and Skills (TEKS) in Web mastering, in addition to the content described in Technology Applications Standards I–V.
Exhibit 3.3.f.10

Skills (TEKS) in Web mastering, in addition to the content described in Technology Applications Standards I–V.
### Assessment Rubric

<table>
<thead>
<tr>
<th>Exceptional/Exceeds Expectations</th>
<th>Meets Expectations</th>
<th>Acceptable</th>
<th>Needs Improvement</th>
<th>Unacceptable</th>
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<tbody>
<tr>
<td><em>Plans in accordance with the description above: Includes Pre and Post Assessment in TAKS format, STAARS format using resources provided by the Texas Education Agency, collects sample work to illustrate value added. Is able to utilize plan to deliver the lesson. Removes student's names to ensure confidentiality. The cooperating teacher and university supervisor are able to follow the design without explanation from the candidate.</em></td>
<td>Addresses each category in the description but is inconsistent in the quality of the descriptions, student work is included for pre and post assessment. Is able to utilize plan to deliver critical categories in the lesson. The cooperating teacher and university supervisor are not able to follow the design without explanation from the candidate.</td>
<td>Omits TExES categories and Technology TEKS, but includes others with thorough descriptions, student work is included for pre and post assessment. Is able to utilize most descriptions of categories in the plan to deliver the lesson. The cooperating teacher and university supervisor are not able to follow the design without explanation from the candidate.</td>
<td>Includes Pre-Assessment but not in TAKS format, STAARS format using resources provided by the Texas Education Agency, Objective, TEKS, Instructional Input, Differentiated Instruction, &amp; Modeling, however, descriptions are not clear and do not reflect the actual implementation of the lesson. Includes Post Assessment but not in TAKS format, STAARS format using resources provided by the Texas Education Agency, The cooperating teacher and university supervisor are not able to follow the design without detailed explanation from the candidate.</td>
<td>Omits Objective, all TExES categories, and does not model behavior expected of students, fails to include pre-/post assessment; doesn't utilize plan to deliver the lesson. The cooperating teacher and university supervisor are not able to follow the design without detailed explanation from the candidate. Is unable to utilize most descriptions of categories in the plan to deliver the lesson. Design must be completely rewritten.</td>
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