



TOADS: An Introduction to Map Reading

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Grade Level 2-3
Duration 1- 2 class periods

Adapted from a lesson used by the National Geographic Society Education Foundation Alliance Network

ELL Adaptation by Gail Gorry

SIOP Elements		
Preparation Adapting content Linking to background Linking to past learning Strategies used	Scaffolding Modeling Guided practice Independent practice Comprehensible input	Grouping Option Whole class Small groups Partners Independent
Integrating Processes Reading Writing Speaking Listening	Application Hands on Meaningful Linked to objectives Promotes engagement	Assessment Individual Group Written Oral

Arizona ELP Standards

ELL Stage II

Basic

Reading

Standard 4: The student will analyze text for expression, enjoyment, and response to other related content areas. The student will demonstrate knowledge of reading comprehension by:

B-8: identifying external text features (*e.g., charts, maps, diagrams, illustrations, tables, and timelines*) of text.

B-20: identifying words (nouns) that the author selects in a literary selection to create a graphic visual image with instructional support.

Writing

Standard 1: The student will express his or her thinking and ideas in a variety of writing genres. The student will express his or her thinking and ideas by using a variety of writing genres, as demonstrated by:

B-4: creating expository text (*e.g., labels, lists observations, and journals*) using key words and phrases based on research, observation, and/or experience with instructional support.

B-5: creating a variety of functional texts (*e.g., classroom rules, letters, notes, messages, directions, etc.*) using key words and phrases with instructional support.

ELL Stage III

Basic

Reading

TOADS: An Introduction to Map Reading

Standard 4: The student will analyze text for expression, enjoyment, and response to other related content areas. The student will demonstrate reading comprehension by:

B-7: identifying the main idea and two-to-three details from text.

B-24: locating specific information from external text in nonfiction text for a specific purpose.

Writing

Standard 1: The student will express his or her thinking and ideas in a variety of writing genres. The student will express his or her thinking and ideas in a variety of writing genres, as demonstrated by:

B-6: writing a variety of functional text that address audience, stated purpose and context:

- Letters
- Thank-you notes
- Messages
- Invitations.

Overview

Map skills are basic to geographic understanding. Students need a system to analyze and evaluate maps. TOADS provides a standard for such assessment and can be applied to commercial maps used in the classroom, as well as to maps generated by students.

Background Knowledge

Title, Orientation, Author, Date, and Symbols were selected as beginning elements to learn. These 5 elements are logical because students of this age already know books have Titles and Authors. They have learned about the calendar, so Date is appropriate. They have seen Symbols (restroom icons, stop signs, etc.) in their world and understand that Symbols represent a place, idea, or action. The one geography term to learn is Orientation which is essential to reading and creating maps. Most state standards have students creating and interpreting maps in the primary grades. It is suggested that a teacher of grades 2-4 add more elements as the students are ready. A logical progression would be to add Legend since they know about Symbols. A next step might be Grid since younger students have learned to use alphanumeric grids in math such as B-3, J-4. A cute way to express the new acronym beyond TOADS is Little (Legend) Green (Grid) TOADS. About 4th grade, students are expected to be skilled in measuring so add Scale. This then becomes Little Green TOADSS.

Key Vocabulary

title – name of a map

author – maker of a map

orientation – object showing directions on a map

date – year a map was made

symbol – small picture on a map that represents something instead of using words

Additional Materials Needed for ELLs

- Vocabulary Cards
- Toads Arrows
- Plastic toads to place on the map (optional)
- Student Dictionary (optional)

Procedures

1. Introduce the term "acronym" to the students and give examples that the students already know (i.e. name of school = Frontier Elementary School but the acronym is FES). (**Preparation: Adapting Content, Linking to background**) Explain that TOADS are animals (show a picture of one) (**Preparation: Adapting Content, Linking to past knowledge**) but in this lesson TOADS is an acronym that helps us talk about maps.

2. Project a map of the school or the neighborhood. (**Preparation: Adapting Content, Linking to background**) Ask students to find things they see on the map. (**Scaffolding: Guided practice, comprehensible input**) Explain that TOADS is a way of interpreting maps that should be used whenever a person uses a new map. Direct students to find the Title.

3. Continue with each letter in the word TOADS to explain the other parts of a map, showing a vocabulary card for each word in the acronym. T=Title, O=Orientation, A=Author (Cartographer), D=Date, and S=Symbol. (**Integrating Processes: Speaking, Listening**)

4. Distribute the TOADS Notetaking Worksheet. Project the TOADS Elements and Questions. Have students fill in their notetaking sheet with the

TOADS: An Introduction to Map Reading

questions. Then go back to the school or neighborhood map and point out the element on this map. Affix the correct arrow with the sticky dot so student see how the arrow points to the element.

4. Divide the students into pairs. **(Grouping: Partners)** Give each group a different map. Project the TOADS worksheet and tell each group to find the TOADS elements on their maps. **(Scaffolding: Modeling)** Students should point to the correct areas using the TOAD arrows or by placing plastic toads on each map area. **(Application: Hands on, Meaningful, Promotes engagement)**

5. Check the work of the pair of students and assist in correcting mistakes. Note: NOT all elements will be found on ALL maps.

6. Students should practice these identification skills on a different map (using arrows or plastic toads) and eventually complete a worksheet on their own as an assessment. **(Scaffolding: Independent practice; Application: Hands on, Linked to objectives, Assessment: Written, Individual)**

Note: for ease of grading, give all students the same map. A suggested map is Arizona's Cities with Compass Rose found at

http://geoalliance.asu.edu/sites/default/files/maps/Az_citiesCompassLatLong.PDF

Assessment

Mastery will be considered correctly identifying by writing or pointing to 4 of the 5 components.

Students could make a TOADS dictionary instead of completing the notetaking worksheet. Students will identify each letter of the acronym on a page of the dictionary along with its meaning and an illustration. Mastery for geography, reading, and writing will be

considered 4 of the 5 components identified correctly. **(Assessment: Individual, Written, and Oral)**

Extensions

Reinforce the procedure whenever new maps are used.

This activity can be done in learning centers.

Whenever students create their own maps, have them include the elements of TOADS or create new dictionary entries for each map they use.

Sources

This lesson originally distributed using the acronym "TOTALSIGS" (using only the TOADS elements) and was very popular with geography educators. All credit is due the originator(s) of this lesson.

Originators:

Anderson, Jeremy. Teaching Map Skills Through an Inductive Approach. Indiana, PA: National Council for Geographic Education, 1986

Smothers Marcello, Jody. Teaching Map Skills: An Active Learning Approach. Revised and Expanded by Jody Smothers Marcello. Washington, DC: National Council for Geographic Education, 2007. (Map Elements Lesson, pages 9-16.)

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