

STRAND 2: LINEAR FUNCTIONS**TOPIC 2.0: CLASSROOM CONNECTIONS****Topic Notes****Mathematical focus**

The purpose of this activity is to help participants reflect on typical Algebra I textbook questions used to study linear functions and compare those questions to what is called for in the TEKS.

Topic overview

In this activity, participants will be asked to think about the typical textbook activities assigned to high school Algebra I students. The purpose of this is to allow the participants to recognize how the activities in this strand are different from the typical textbook problems while maintaining mathematical integrity.

TE_xES standards focus**TE_xES Standard VI.020 Mathematical learning, instruction and assessment.**

The teacher understands how children learn mathematics and plans, organizes, and implements instruction using knowledge of students, subject matter, and statewide curriculum (Texas Essential Knowledge and Skills [TEKS]). The beginning teacher:

- (A) Applies research-based theories of learning mathematics to plan appropriate instructional activities for all students.
- (C) Uses students' prior mathematical knowledge to build conceptual links to new knowledge and plans instruction that builds on students' strengths and addresses students' needs.
- (D) Understands how learning may be enhanced through the use of manipulatives, technology, and other tools (e.g., stop watches, scales, rulers).
- (E) Understands how to provide instruction along a continuum from concrete to abstract.
- (F) Understands a variety of instructional strategies and tasks that promote students' abilities to do the mathematics described in the TEKS.
- (H) Understands a variety of questioning strategies to encourage mathematical discourse and to help students analyze and evaluate their mathematical thinking.

Materials

Task 1	
Handout	X
Chart paper	X
Markers	X

Procedure

Break the class into groups of three. Give each group a sheet of chart paper and markers. Have the groups brainstorm 3-5 typical textbook style activities that are normally used during a school year. Have each group present their list of activities to the class and discuss the goals of each. Maintain the groups' lists for use with the last topic of this strand.

Strand: Linear Functions
Topic 0: Classroom Connections

There are many activities in textbooks that one might consider “typical” for the linear section of Algebra I. List 3-5 such activities and the goals of each.