

Mathematics Program Philosophy

The philosophy of the Brownville Independent School District secondary school mathematics program is to provide a sequence of courses that will prepare students for daily mathematics applications for future vocational needs. Problem solving is an emphasis in all courses, and students successfully completing the program should have problem-solving skill which will be useful to them throughout life. The use of manipulative materials plays an important role in secondary school mathematics. Manipulatives aid in introducing new concepts and in remediating deficiencies. Experience with calculators and computers is integrated as appropriated as part of the mathematics curriculum.

Introduction

Texas Legislation requires that all Texas school districts develop, implement, and evaluate a comprehensive educational program aimed at student mastery of the Texas Essential Knowledge and Skill as defined in Chapter 111.

The purpose of this Secondary Mathematics Curriculum Framework is to key learning objectives to the Texas Essential Knowledge and Skills, provide a suggested sequence of objectives, and align the tested objectives—TAKS—to the Texas Essential Knowledge and Skills.

In addition, this document includes objectives to be taught in each course. These objectives are intended to ensure consistency in instruction throughout the district. It should further serve to avoid overemphasis in one area while neglecting another, and thus, focus on student needs.

Adaptations for special populations will be made as needed but the basic curriculum is the same for all students.

This developmentally sequenced secondary mathematics curriculum framework is designed to correlate the Texas Essential Knowledge and Skills with the various concepts and skills found in the current state adopted textbook materials.

District Curriculum Framework

This curriculum framework is primarily a working document that gives both structure and direction to the educational program. The philosophy of the grade level or course is consistent with the stated philosophy of the campus and the school district. This curriculum framework prescribes what is to be taught in a given subject or area of study. It broadly defines the educational program in terms of philosophy, goals, and objectives. As a legal document, it is an official statement of the curriculum and teacher's guide to introduction.

Recommendations

The Curriculum Framework was developed with the intention of aligning the instructional objectives of BISD with the tested objectives of BISD and the State of Texas. In order to facilitate this alignment the following recommendations are being made.

1. The teacher needs to follow the Curriculum Framework to provide consistency of instruction in the district and to ensure that all Texas Essential Knowledge and Skills (TEKS) and TAKS objectives are taught for each grade level or course.
2. The teacher should utilize effective teaching strategies.
3. The teacher should integrate reading and writing into the mathematics curriculum.
4. The teacher should utilize the Curriculum Framework as the basis for weekly lesson planning, co-planning within and across grade levels.
5. The teacher should supplement and enrich the Curriculum Framework with other materials.
6. Special Program personnel and regular instructional personnel should work together for the effective delivery of instruction to students comprising “special populations.”
7. The teacher should provide an on-going feedback to the Curriculum/Instruction Department regarding this Curriculum Framework.