

Conceptual Learning at the FBISD Gifted and Talented Middle School Academy



Fort Bend ISD District Goals



District Goal 1

Fort Bend ISD will provide an equitable learning environment that provides all students access to the FBISD curriculum.

District Goal 2

Fort Bend ISD will ensure students own and are responsible for their learning, behavior, and progress through the FBISD curriculum.



District Goal 3 Fort Bend ISD will provide an inclusive, collaborative, and fluid learning environment with opportunities for both isk-taking and success.



District Goal 4

Fort Bend ISD will develop students' social-emotional, academic, literacy, language, and life skills in a safe and secure Collaborative Community at every school.



GTA Academy Difference: Instructional Philosophy

As teachers and leaders, it's our responsibility to ensure our practice honors the FBISD curriculum so that we support young people to develop core knowledge and essentials skills in their learning.

Through Concept-Based Instruction, rigor is embedded in understanding the universal concepts, as interdisciplinary connections are a logical result. Because many gifted children are global thinkers, using a universal concept is a more natural way for them to learn. It is more abstract and complex. Universal concepts stimulate a sophisticated level of understanding and provide opportunities to differentiate in all curriculum content areas. Additionally, generalizations about universal concepts apply within and across disciplines over time.



Conceptual Learning at GTA

- Educators who are experts in their content, and have specialized training in gifted education, facilitate GTA courses in Math, Science, Social Studies, English and Spanish.
- GTA grade level instruction is framed around generalizations and guided by essential questions to engage learners in critical thinking and problem solving.
- GTA students ponder these macro concepts, which are transdisciplinary, as well as work together and independently to acquire discipline-specific micro concepts from the TEKS and FBISD curriculum.
- Conceptual learning focuses on the big picture as well as the classical questions in each discipline.
- Throughout their course of study, learners participate in field experiences and create sophisticated products, performances and/or solutions using the PBL.

Getting the Big Idea: Concept-Based Teaching and Learning (The Research)

Getting the Big Idea: Concept-Based Teaching and Learning

"Transforming Learning Environments through Global and STEM Education" August 13, 2013

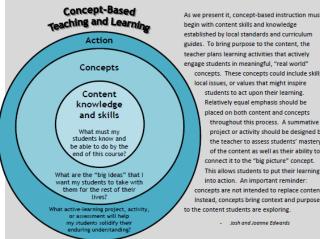
What is concept-based instruction?

Concept-based instruction is driven by "big ideas" rather than subject-specific content. By leading students to consider the context in which they will use their understanding, concept-based learning brings "real world" meaning to content knowledge and skills. Students become critical thinkers which is essential to their ability to creatively solve problems in the 21st century

- By introducing students to universal themes and engaging them in active learning, concept-based instruction:
 - creates connections to students' prior experience.
 - brings relevance to student learning
 - · facilitates deeper understanding of content knowledge.
 - acts as a springboard for students to respond to their learning with action. (Erickson 2008)

Why is it worth our time?

Concept-based instruction, by placing the learning process in the "big picture" context of a transdisciplinary theme, leads students to think about content and facts "at a much deeper level" and "as a practitioner would in that discipline" (Schill & Howell 2011). According to the International Baccalaureate Organization (IBO), teaching and learning that is driven by overarching concepts necessitates that students transfer their knowledge between personal experiences, learning from other disciplines, and the broader global community. Thus, concept-based instruction mandates more critical thinking at increasingly higher levels of Bloom's taxonomy (Erickson 2012)



As we present it, concept-based instruction must concepts. These concepts could include skills

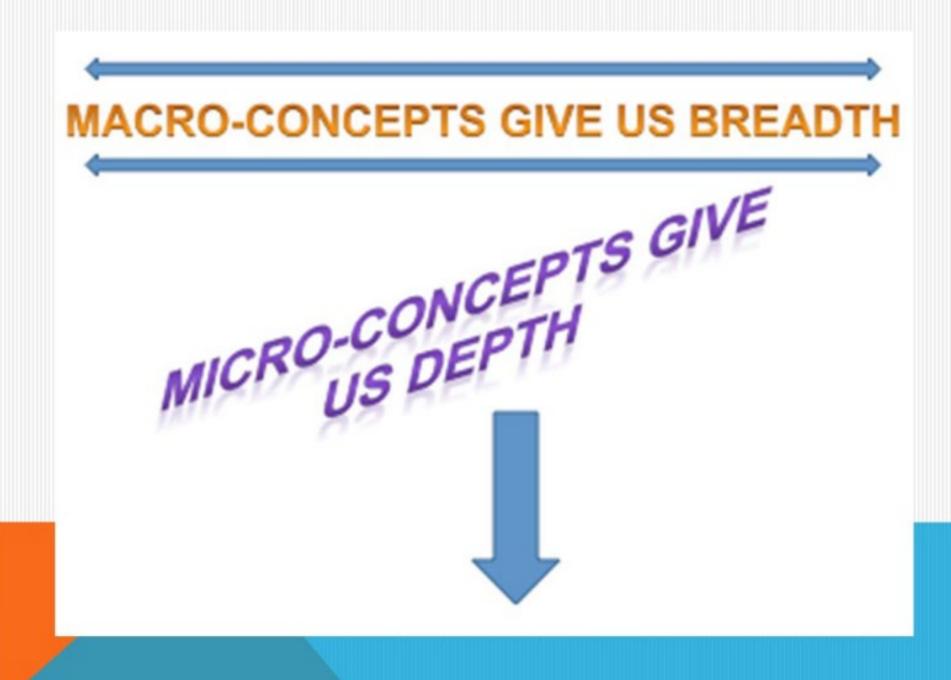
project or activity should be designed by the teacher to assess students' mastery

- Read this short handout • summarizing the value of **Concept-Based Teaching and** Learning
- https://drive.google.com/file/d /1eHRD85WDKSdqwHxPPPf8_Z IZCXwHH2Iu/view?usp=sharing

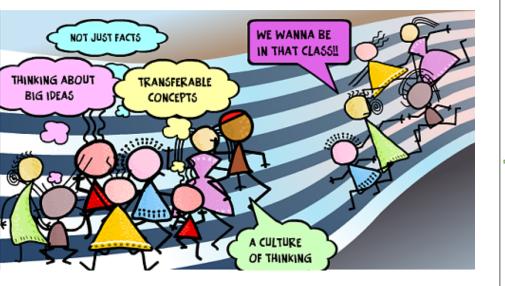


GTA Universal Concepts

	GTA 6	GTA 7	GTA 8
1 st nine weeks	Foundations and Patterns	Influence and Motivation	Perspectives and Interactions
2nd nine weeks	Processes	Power and Relationships	Mindfulness and Connections
3 rd nine weeks	Perspectives	Structure and Order	Transformations and Balance
4 th nine weeks	Communities and Interactions	Change and Exploration	Transformations and Balance







A CULTURE OF SYNERGISTIC THINKING

The conceptual mind uses facts and processes as tools to discern patterns, connections, and deeper, transferable understandings.



What is Concept-Based Learning?

 It approaches content area standards from the perspective of an over-arching concept.

Understand	 Concept and Generalizations- Transferable understandings Example: Patterns are everywhere.
Know	 Factual and Critical Knowledge- Non-Transferable Example: Understand holidays of various cultures.
Be Able to	 Skills and Processes- Transfer within and sometimes across disciplines. <i>Example:</i> compose a poem (to a repetitive beat)

Erickson, H.L. (2008)