

ITEM 1: Key Components of the Product ... UMathX

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Please list any key components and specific features that the product will supply.

- **UMathX, the 10th version of Understanding Math is a browser-based computer assisted learning system that blends a variety of approaches to help students develop deeper understanding of mathematics concepts from K to Algebra1.** It is a full service K to Alg1 learning environment, supporting a **growth mindset** within a **learning pit** encouraging students and teachers to **grapple** with concepts.
UMathX combines an on-line component with a related off-computer component referred to as a “framework for learning”, a model lesson ready to be used to help in implementing UMathX consisting of 3 part lessons – “Getting Started”, “Working At It” and “Reflecting and Connecting”, written on 2 pages which give directions and ideas for implementing the on-computer component. These 3 part lessons are often tiered to attend to the needs of the students. The student may be a visual or a tactile or other special learner with a need that can be addressed in the framework. The students must communicate effectively in small or large groups. The student interprets information and writes his/her thoughts honestly on knowledge as well as shares feelings on the learning environment. This helps the teacher in getting to know his or her students but also in preparing the next lesson.
- **UMathX is a Journey within a wide variety of learning environments** where students and teachers are encouraged to think through concepts, choose strategies and articulate ideas towards constructing understanding. UMathX attempts to transform what is often a “valley of despair” for many into productive struggling. **This Journey** is focused on the student along with the teacher, the professional who will be challenged to create a rich environment which leads to understanding of math concepts through implementation of **UMathX**. The content and exceptional teaching methodology result in use by many faculties of education in both increasing the mathematics content as well as the pedagogy of the future teacher.
- UMathX has 2 menus. UMathX is written to support the self-directed learner. The 2 menus attend to the needs of self-directed, responsible, life-long learner. The content menu covers concepts from K to Algebra1 without regard to grades. It covers the gaps in learning. The learner can also select the Texas TEKS Curriculum Menu which covers the curriculum at each grade level. The learner is encouraged to be responsible in making the choice of menu which is the best fit for a certain situation. The combination of the Content Menu, scaffolded to fill gaps, and the Curriculum Menu, to attend to concepts within grade levels helps to make sure that students are prepared for and hence will be successful in the next topic. The corresponding Content and Curriculum tests also develop this positive attitude.
- The authors and developers of UMathX have been encouraged and hence are very aware of diversity of culture, race and gender. For example, we have been adding more indigenous cultural information as well as interacting with the Director of Federal Schools, Indigenous and Northern Affairs Canada on this matter as well as with similar organizations in America and overseas.
- UMathX addresses the following **Principles of Learning**:
 - Interactive with audio;
 - Encourage “grappling” to support a “growth mindset” - learning from mistakes; (up to 3 hints for an answer)
 - Multiple representations of concepts;
 - Moving from concrete to pictorial to abstract;
 - Pacing controlled by the learner;
 - Using a wide variety of teaching strategies – options/suggestions within “Frameworks For Learning”
- Three types of assessments are available to check understanding:
 - **Curriculum Tests** – Items within a Curriculum Item designed to “show understanding”
 - **Content Tests** – cover items within a certain content area across grade levels
 - **Custom Tests** – are generated by the teacher by choosing specific content.In each of these tests, the learner is shown his/her answer and the correct answer. A suggested lesson is then presented to the student.
- Brochure ... [UMathX Brochure](#)

ITEM 2: Professional Development Services

Please provide a description of your professional development services that will be available to Klein ISD. Attach any relevant information regarding costs (i.e.: price sheet showing price breaks for group sizes, locations, etc.) in the Response Attachments tab.

FOCUS OF UMathX PROFESSIONAL LEARNING ... MINIMUM .. HALF DAY TO FULL DAY .. SEE BELOW

UMathX is the Gateway to:

1. **Understanding Math for the Teacher.**
2. **Expert Lesson Planning for the Teacher through:**
 - Content Menu and Curriculum Menu
3. **Exceptional Content and Teaching Methodology**
4. **Teacher Support through:**
 - Model Lessons
 - [UMathXSeminars-7KeyTopics-KtoAlg1](#) ...HALF DAY



6 pages of 3 hour to 6 hour PD
Pathway for Access to and Effective Use of UMathX for K to Alg1(10)

[UMathXGatewaytoUnderstandMath-TEXAS](#) ... 1 hour ... Preparing for the Journey **HALF DAY.**
... 2 hour ... Beginning the Journey

Webinar and Info: info@umathx.com /866 429 6284



ITEM 3: Texas School Districts who have trained with UMathX

San Antonio ISD	Round Rock ISD	El Paso ISD
Austin ISD	NorthEast ISD	Houston ISD
Fort Bend ISD	Fort Worth ISD	Lewisville ISD
Victoria ISD	NorthWest ISD	Garland ISD
Mission ISD	Cypress Fairbanks ISD	Conroe ISD
Northside ISD	Irving ISD	Mesquite ISD
Pflugerville ISD	Brownsville ISD	Katy ISD
Denton ISD	Aldene ISD	Rockwall ISD
Farmer's Branch ISD	Dallas ISD	Spring Branch ISD
Midland ISD	Pasadena ISD	