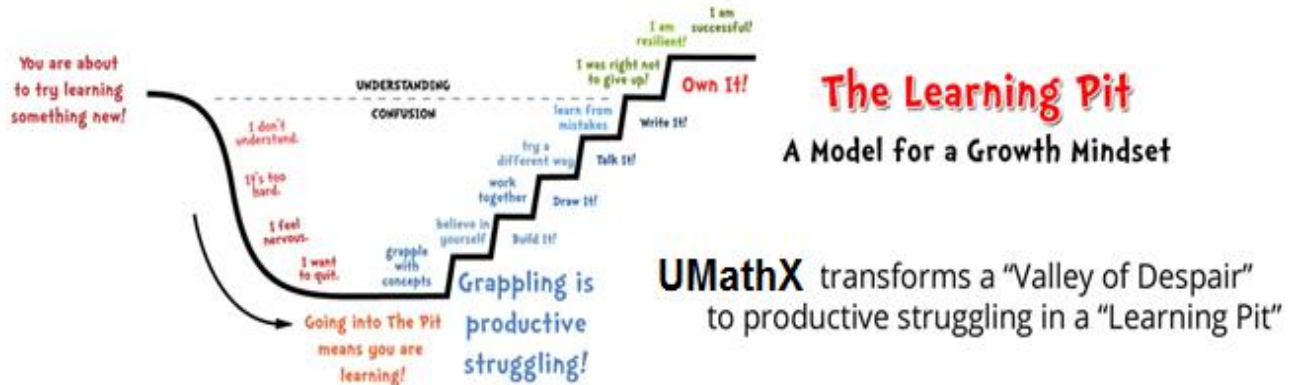


Components of ... UMATHX

May 2018

- 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(10). It is a full service learning environment, supporting a **growth mindset** within a **learning pit** encouraging grappling.



- UMATHX “Constructs Understanding” by modeling lessons **online** as well as **on paper**. It combines an on-line component with a related off-computer component referred to as a “**Framework for Learning**”, a model lesson ready for use to help to implement UMATHX. The framework consists of 3 part lessons – “Getting Started”, “Working At It” and “Reflecting and Connecting”. These 3 part lessons are often tiered in order to attend to the needs of the student. When appropriate, STEAM needs are addressed. **Support Sheets** offer additional opportunities for implementing UMATHX.
- 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**”. **This Journey** is focused on the student along with the teacher. Content and exceptional teaching methodology within UMATHX results in it’s use by faculties of education in order to increase the mathematics content as well as the pedagogy of the future teacher.
- UMATHX has **2 menus**. The 2 menus attend to the needs of the self-directed, life-long learner as well the teacher-student partnership with students working individually, in small groups and other learning environment. **The Content menu** covers concepts from K to Algebra1(10) without regard to grades. It attends to gaps in learning. The learner can also select a **Curriculum Menu** which covers the curriculum at each grade level. **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 grow in understanding of content.** **Content and Curriculum Tests** and followup directions to specific lessons are valuable.
- UMATHX Developers are **aware of diversity of culture** and have added examples and graphics regarding Indigenous Culture.
- 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 in a wide variety of learning environments.
 - Suggest a wide variety of teaching strategies – within online lessons, “Frameworks For Learning” and Support Sheets.
- **Three types of assessments** are available to check growth in 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, the correct answer and then a suggested lesson.
- Brochure ... [UMATHX Brochure](#)

Professional Learning – 1 hr or 3 hr or 6 hr –

UMathX, 10th version of “Understanding Math”

- will **Construct Understanding** in model lessons on **Paper and Online**
- will focus on **Content Development** for teacher and student
- will help in **Teaching Methodology – K to Algebra1(10)**



Modeling to Make Thinking Visible
Core Instruction - Supplementary Resource
Develop Deep Conceptual Understanding



1. Click on [UMathXTrainingANYWHERE](#) . Print the appropriate outline.
 - Prepare for the Journey ... pgs 1,2; Video ... “UMathX, What is it?” at www.umathx.com/videos
 - Contact us for Webinar or Session - Begin/Continue the Journey ... pgs 2,3,4 ... Navigate Lessons
2. Training Options / Resources at www.umathx.com
 - ***NEW** Frameworks ... Model Lessons; ***NEW** Support Sheets ... on Paper and Online
 - [UMathX Summer Seminars](#)
3. Model UMATHX in Today’s Lessons at your School
4. A Plan for your School/District
 - Focus on Content & Curriculum - The First Lessons
 - Tests – Bookmarks – Data Analysis - [UMathX Pricing&Professional Learning](#)

UMathX Training Sites ... 2000 to 2018

San Antonio ISD	Round Rock ISD	Six Nations of The Grand, On	EPS Elizabeth NJ	Bayonne, NJ
Austin ISD	NorthEast ISD	Houston ISD	Polk County, FL	El Paso ISD
Fort Bend ISD	Fort Worth ISD	Lewisville ISD	Abu Dhabi, UAE	Baton Rouge, LA
Victoria ISD	NorthWest ISD	Garland ISD	Orange Cty/Osceola, FL	Memphis, TN
Mission ISD	Cypress Fairbanks ISD	Conroe ISD	Collier Cty, FL	Richmond, VA
Northside ISD	Irving ISD	Mesquite ISD	Pinellas Cty, FL	Arlington, VA
Pflugerville ISD	Brownsville ISD	Katy ISD	Clover, SC	Washington, DC
Denton ISD	Aldene ISD	Rockwall ISD	Va Beach, VA	Anne Arundel, MD
Farmer’s Branch ISD	Dallas ISD	Spring Branch ISD	TVDSB, On	Baltimore, MD
Midland ISD	Pasadena ISD	Halifax, NS	NYC DOE	Louisville, KY
Charlottetown, PE	Montgomery Cty, MD	PGCPS, MD	Lafayette, LA	Rankin Cty, MS
Kilamonjaro, Tanzania	Victoria BC	St. Johns NL	East China/Lapeer, MI	Jonesboro, AK
Santo Domingo, DR	Hilo, Hawaii	Kosrae, Micronesia	Temple ISD	Greenville, SC
TDSB, On	Volusia Cty, FL	Shelby Cty, TN	Atlanta, GA	Marlboro, SC
LaGrange, GA	Mobile, AL	Daphne, AL	Lancaster ISD	Knoxville, TN

“UMathX helps students gain conceptual understanding better than any other program.
Content and Teaching Methodology are exceptional.” Master Teachers, Faculty of Ed., LSU

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