

# **Overview of Math Model at TBAISD Career-Tech Center**

**10:00 – 10:50 AM**

**Rooms 202 - 203**



## Math can present problems for our students.....

- **We are faced with students who are confused about how to work with numbers! (*Maybe not as much as Ma and Pa Kettle...*)**
- **In the General Session, we provided you with an overview of our academics in CTE model. What does it look like specifically in math?**

# Michigan Merit Curriculum Math Offerings at TBAISD CTC

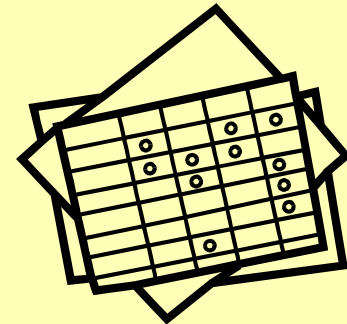
Over the past ten years, the academic offerings have evolved.....

- Prior to 2009, LEAs accepted math credit, based on Michigan Curriculum Framework alignment.
- In past several years, granting of math credit required HQ'ed math teacher and delivery of HSCEs.



# As a result, TBAISD develops a Michigan Merit Curriculum Offerings Chart

This chart is posted on the TBAISD  
Career-Tech Center website and  
has been distributed to all LEAs'  
counselors.





# Math-Focused Programs

- **Allied Health II**
- **Automotive Technology**
- **Construction Trades**
- **Culinary Arts**
- **Drafting/Design**
- **Electrical Occupations**
- **Manufacturing Tech Academy**
- **Power Equipment Technology**
- **Precision Machining Technology**
- **Skilled Trades**
- **Visual Imaging Technology**
- **Welding and Fabrication**

# Instructional Services – Math Staff

- **Laura Bogen, Algebra II, Math Essentials, 4<sup>th</sup> Year Math support**
- **Joel Carpenter, Algebra II, Geometry, Math Essentials, 4<sup>th</sup> Year Math support**
- **Deb Menchaca, Algebra II, 4<sup>th</sup> Year Math support, MTA math instruction**



# Manufacturing Technology Academy

- **Extended day model – established in 1996**
- **Algebra II, Trigonometry, Pre-Calculus, Calculus, FSU Calculus I/II (Direct Credit)**



# 4<sup>th</sup> Year Math Pilot

## *Early Pioneers – 2004-2005*

- **Deb Menchaca and Chuck Hunt, Welding/Fabrication program**
- **Deb Menchaca and Tim VanderMeulen, Electrical Occupations program**



# Algebra II/Geometry Pilot



*Next Wave of Pioneers - 2007 -  
2008*

- Second full-time math instructor, Joel Carpenter, pilots ½ year of Algebra II in Precision Machining Technology and Geometry in Construction Trades and Drafting/Design Technology
- HSCEs are taught and assessed.

# **In Addition to Providing Academic Credit Options....**

**CTC recognized its role in helping the LEAs make certain “no child is left behind” and make AYP and has established two academic achievement goals.....**



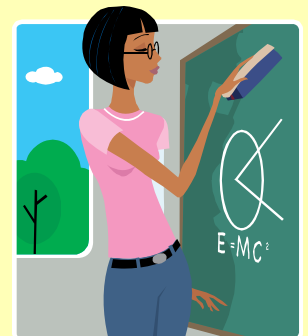
# Formation of Math Goal Teams Focused on Student Achievement


- Jason Jeffrey met with all technical instructors to determine student achievement focus.
- Goal Teams Formed – 2007 – 2008
- ACT WorkKeys Applied Math Test to be used for measuring student achievement increase.



# Student Achievement – Math Goal

- **95% of students within math-focused programs will increase achievement on the ACT WorkKeys Applied Math Test from the fall of their junior year to the spring of their senior year.**





# ACT WorkKeys Applied Math

- All math and technical instructors take on-line ACT WK Applied Math practice test.
- All math and technical instructors access KeyTrain Applied Math instructional materials.
- All math and technical instructors are given Applied Math Targets for Instruction.

# **Math Goal Team works to develop classroom interventions....**

- **Use of KeyTrain as part of math instruction**
- **Math Warm-Ups**
- **Math Essentials program**



# Curriculum Camp 2009

- **Technical and academic instructors work separately and together to accommodate HSCEs and technical segments and standards in curriculum.**
- **Blended instruction via Moodle is introduced.**
- **Two Algebra II instructors develop common pacing guides and assessments.**

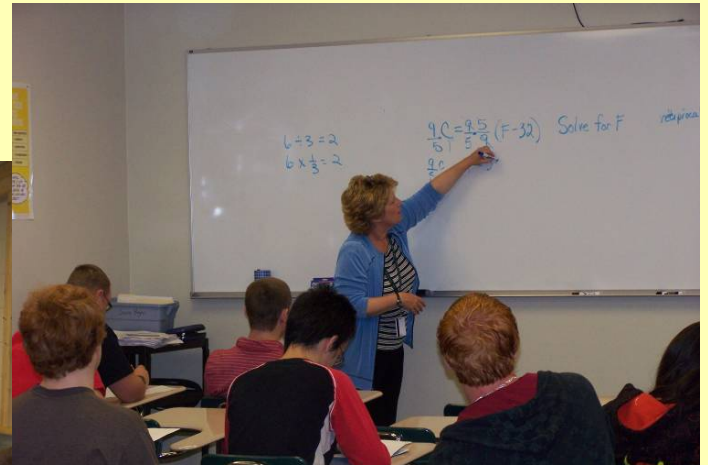


# **2009-2010 brings exciting new change....**

- **Algebra II (over two years) and Geometry delivered in Construction Trades, Drafting/Design Technology, Electrical Occupations, Precision Machining Technology, and Skilled Trades, using thematic approach**

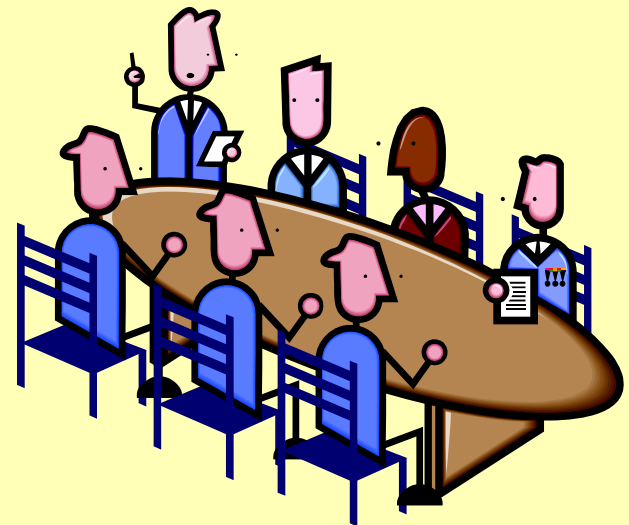


# Collaborative Teaching - Algebra II and Geometry



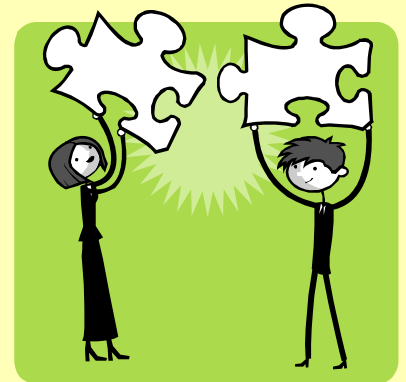
# Extending Relationships

- **TBAISD Career-Tech Center math teacher serves on blended math instruction team, as part of TBAISD grant, along with local math teachers.**



# What's Next for 2010-2011?

- **Second half of Algebra II will be offered, completing the course's content expectations.**
- **Curriculum Camp 2010 in June.**



# Questions?



# Where do I go now?

- #1 Delivering 12<sup>th</sup> Grade ELA in Accounting/Office Tech, Early Childhood Education, and Public Safety/Protective Services (*Room 115*)**
- #2 Delivering 12<sup>th</sup> Grade ELA in Allied Health, Agriscience/Natural Resources, and Automotive Technology (*REMC Interactive Room*)**
- #3 ELA Goal Team Professional Learning Community (*Work-Based Learning Lab*)**
- #4 Delivering Algebra II and Geometry at TBAISD CTC (*Learning Center*)**
- #5 Math Essentials Program/Delivering 4<sup>th</sup> Year Math at TBAISD CTC (*Math Essentials Classroom*)**
- #6 Math Goal Team Professional Learning Community (*T & I Computer Lab*)**

**Concurrent Sessions  
11:00 - 11:50 AM**

