

***Using Blended  
Learning to Deliver  
Rigorous and  
Relevant Academic  
Content***



**2,203 Students**

**64 Sending Schools**

**43 Career Tech Programs**

**62 Staff**

**Ron Moag (616) 365 2319**

# Jackson Fox, M.S.

a.k.a The Math Guy

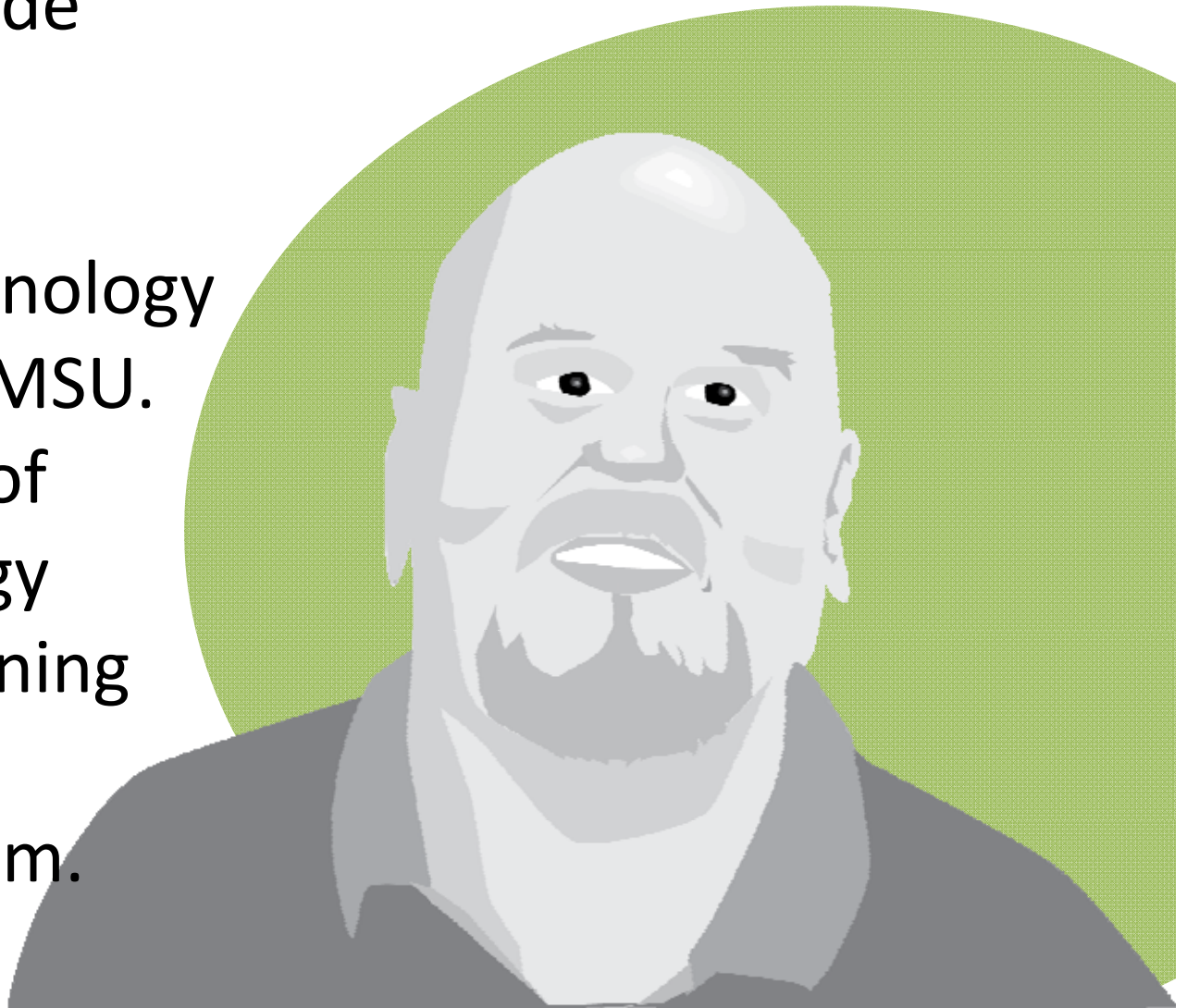
Jackson is a former mathematics teacher and pre-engineering instructor. He has been using technology to improve instruction for 12 years.



# Jason Kalis, M.Ed.

a.k.a. Science Dude

Jay holds an Educational Technology Certificate from MSU. He is the leader of KCTC's Technology professional learning community, the Teacher Tech Team.



# Deborah VanDyke, M.A., M.A.T.

a.k.a. That Lady

Deb holds Counseling and K-12 Reading Specialist degrees. She's helped hundreds of students love reading. Her favorite things to do are read and write.



# How it Began

End of Course Assessments

Increased Graduation Requirements

Michigan Merit Exam

Less time for

Industry Chasing Enrollment

Decreasing Effectives

# The Bright Idea



## RIGOR / RELEVANCE FRAMEWORK

KNOWLEDGE TAXONOMY

Evaluation	6		
Synthesis	5	<b>C</b> Assimilation	<b>D</b> Adaptation
Analysis	4		
Application	3	<b>A</b> Acquisition	<b>B</b> Application
Understanding	2		
Awareness	1		

	1	2	3	4	5
	Knowledge	Apply to a discipline	Apply across disciplines	Apply to real-world predictable applications	Apply to real-world unpredictable applications

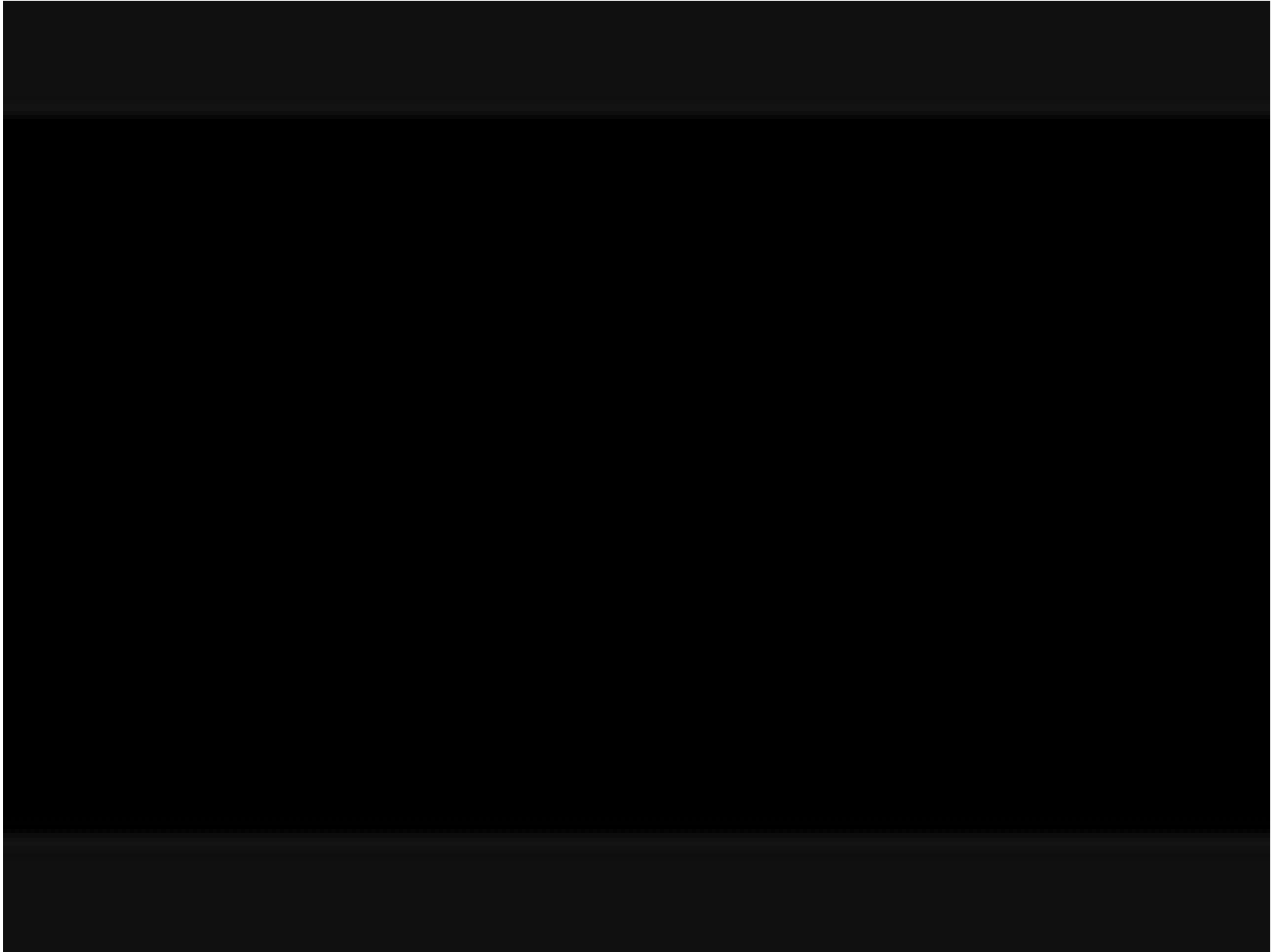
## APPLICATION MODEL

ICLE. (2008). Rigor, relevance, relationships. Retrieved 30 Nov 09 from <http://www.leadered.com/rrr.html>.



# Creating a Partnership

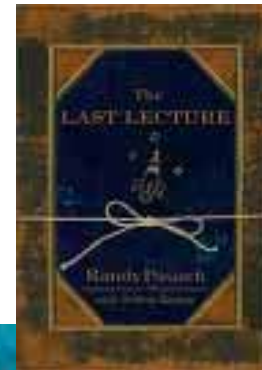
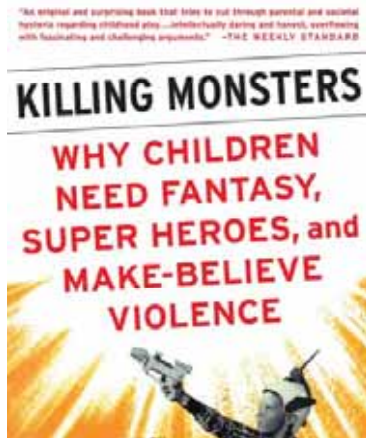
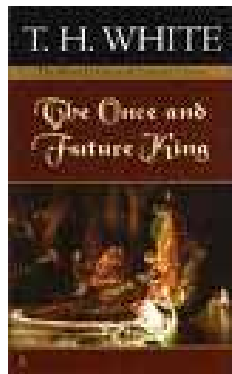




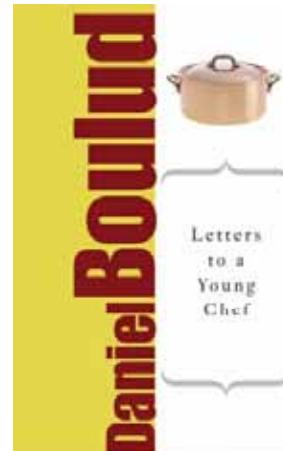
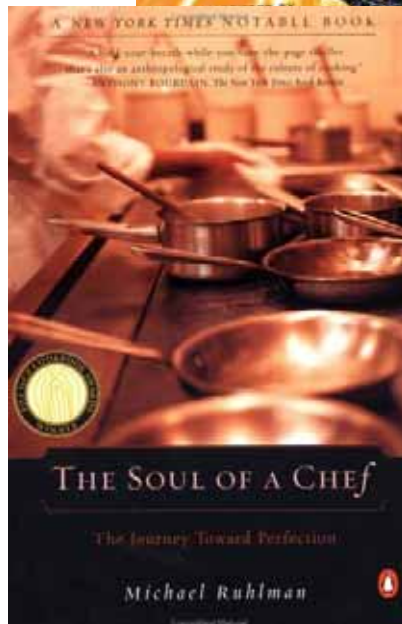
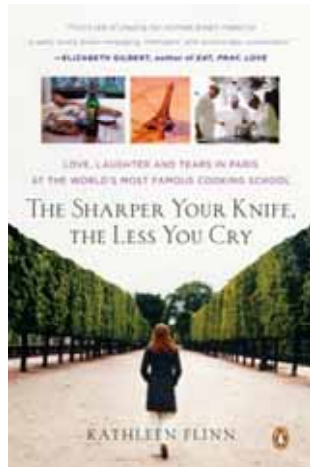
Mike Flanagan, Superintendent of Public Instruction, November 2007, January 2008

[http://michigan.gov/mde/0,1607,7-140-37818\\_45256-180053--,00.html](http://michigan.gov/mde/0,1607,7-140-37818_45256-180053--,00.html)

# Getting Creative



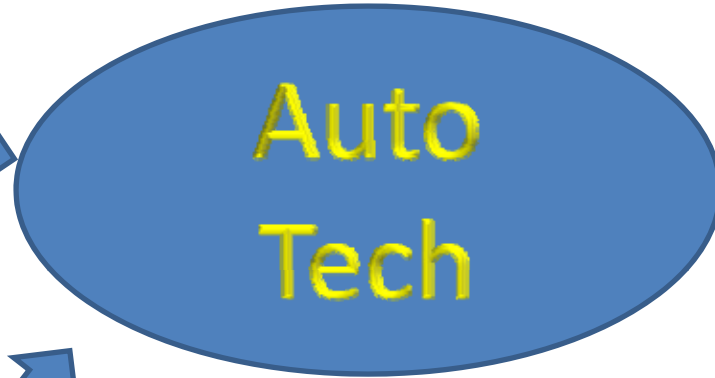
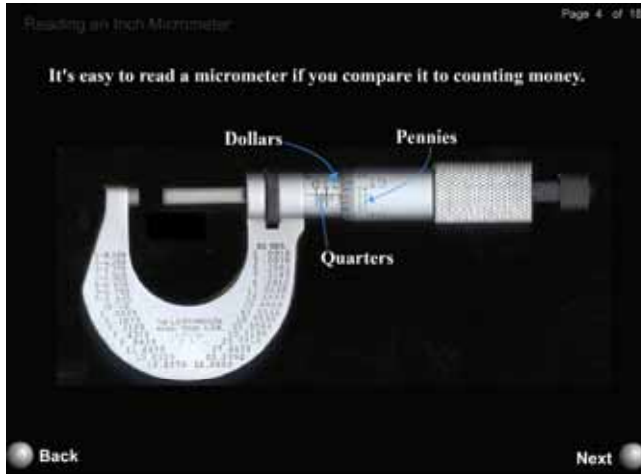
ATUL  
GAWANDE  
AUTHOR OF *COMPLICATIONS*



better  
A Surgeon's Notes on Performance

ATUL GAWANDE

# Making the Connection



## ADDING FRACTIONS

$$\frac{3}{8} + \frac{5}{8} = \frac{8}{8} = \boxed{1} \quad \text{COMMON DENOMINATOR}$$

$$\frac{3}{4} + \frac{1}{16} = \frac{12}{16} + \frac{1}{16} = \frac{13}{16} \quad 4 \div 16 \text{ BOTH GO INTO 16 EVENLY}$$

$$\frac{1}{3} + \frac{4}{7} = \frac{7}{21} + \frac{12}{21} = \frac{19}{21} \quad 3 \div 7 \text{ BOTH GO INTO 21 EVENLY}$$

$$3\frac{1}{4} + \frac{1}{5} = \left(\frac{13}{4}\right) + \frac{1}{5} = \frac{65}{20} + \frac{4}{20} = \frac{69}{20} = \boxed{3\frac{9}{20}}$$

CHANGE MIXED # TO IMPROPER FRACTION  
FIND COMMON DENOMINATOR  
ADD NUMERATORS

Number of slices:  CLEAR Shaded slices = 13

13 slices

0 5 10 15 20 25 30 35 40

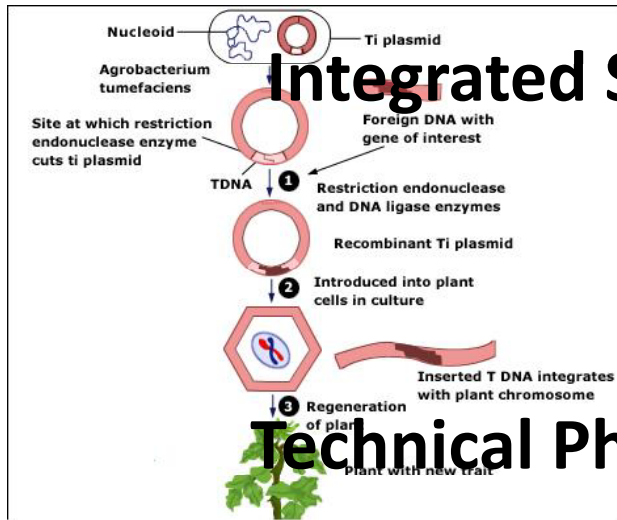
Scale of measurement  Show calculation of total shaded pies

Slices  Pies

$$\frac{13 \text{ shaded slices}}{5 \text{ slices per pie}} = \frac{5}{5} + \frac{5}{5} + \frac{3}{5} = 2 + \frac{3}{5} = 2\frac{3}{5} \text{ pies}$$

ExplorLearning

# Customizing the Content



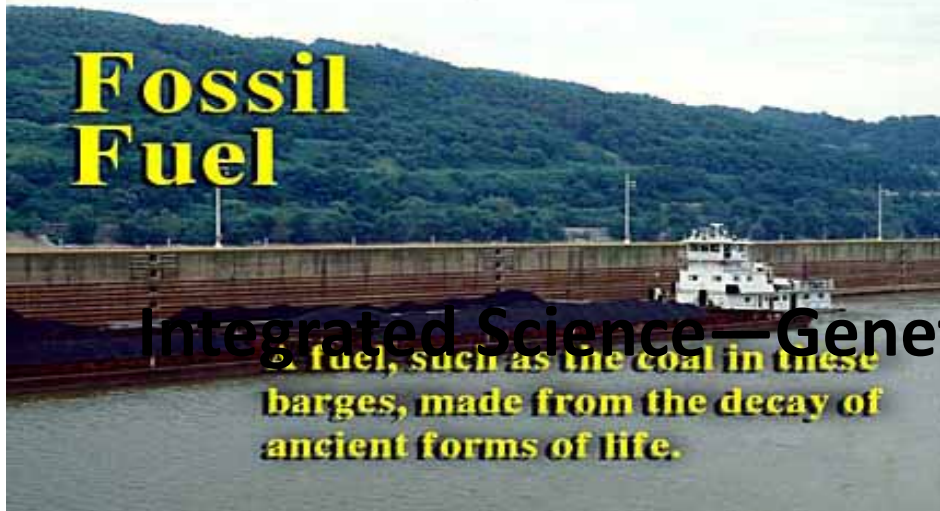
## Integrated Science—Earth's Systems



## Technical Physics—Combustion Engines



Electricity-generating windmills in California. Paul Fuqua (2003). Retrieved June 2, 2009, from <http://streaming.discoveryeducation.com>



## Fossil Fuel

## Integrated Science—Genetics—Transgenic Plants

Fossil fuel, such as the coal in these barges, made from the decay of ancient forms of life.

Fossil fuel, definition. Paul Fuqua (2004). Retrieved June 2, 2009, from <http://streaming.discoveryeducation.com/>

# Tools for Blended Instruction



**JING**



**Audacity**

**TeacherTube**  
Teach the World



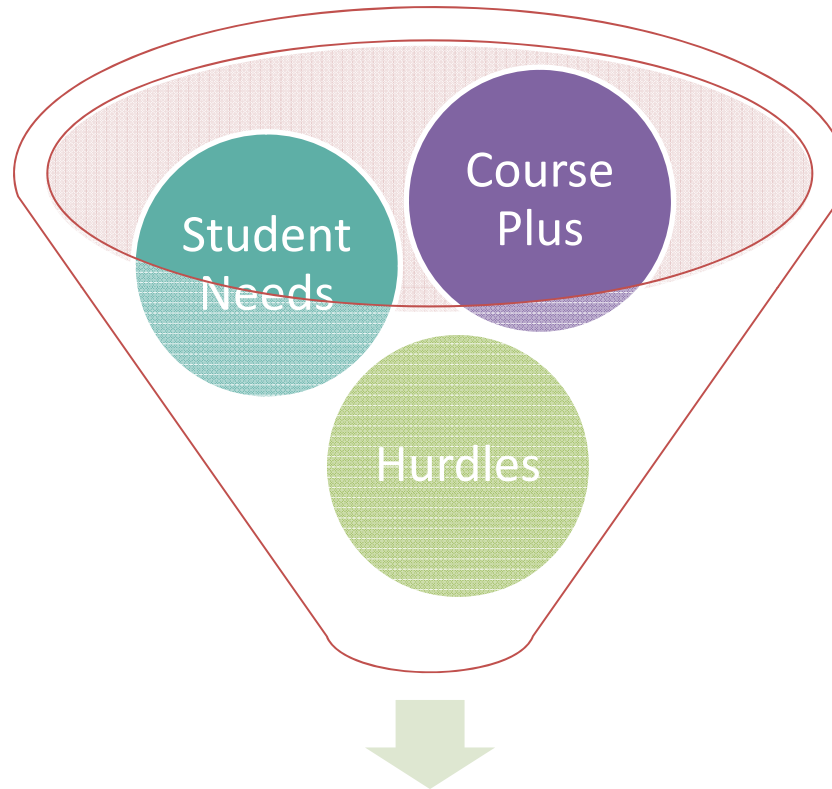
**ADOBE® CAPTIVATE® 4**  
AUTHOR RICH eLEARNING EXPERIENCES

**Discovery**  
  
**EDUCATION**



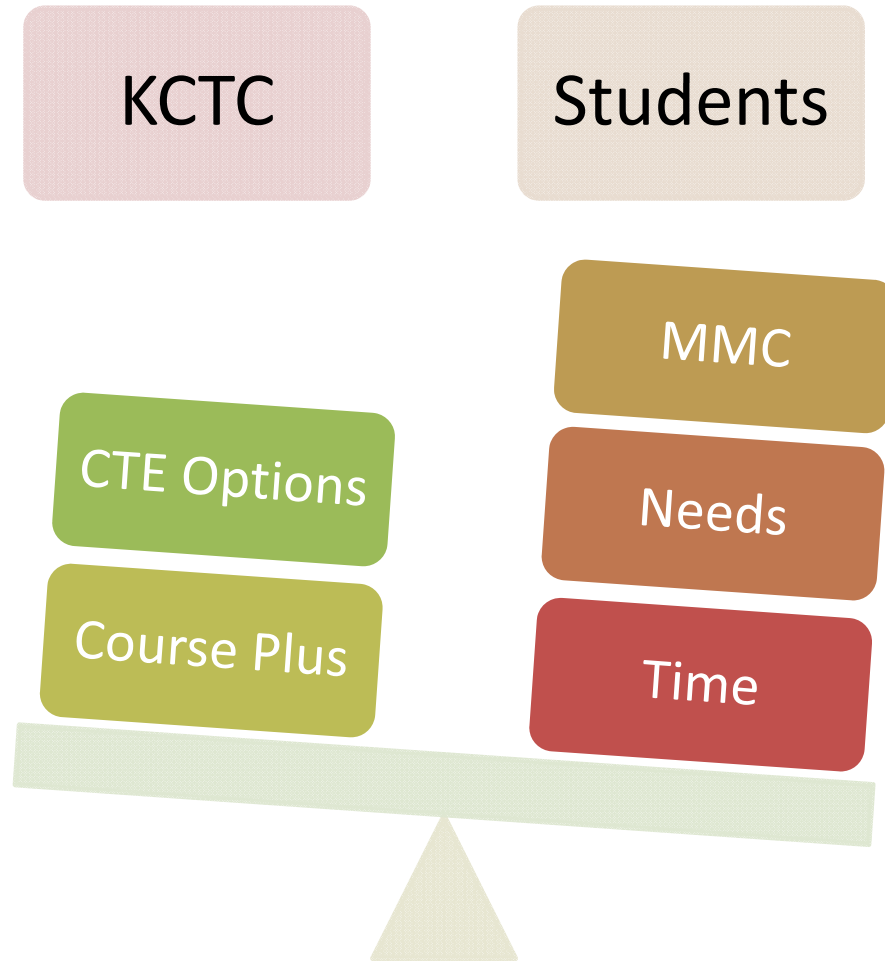
Blackboard

# Implementation

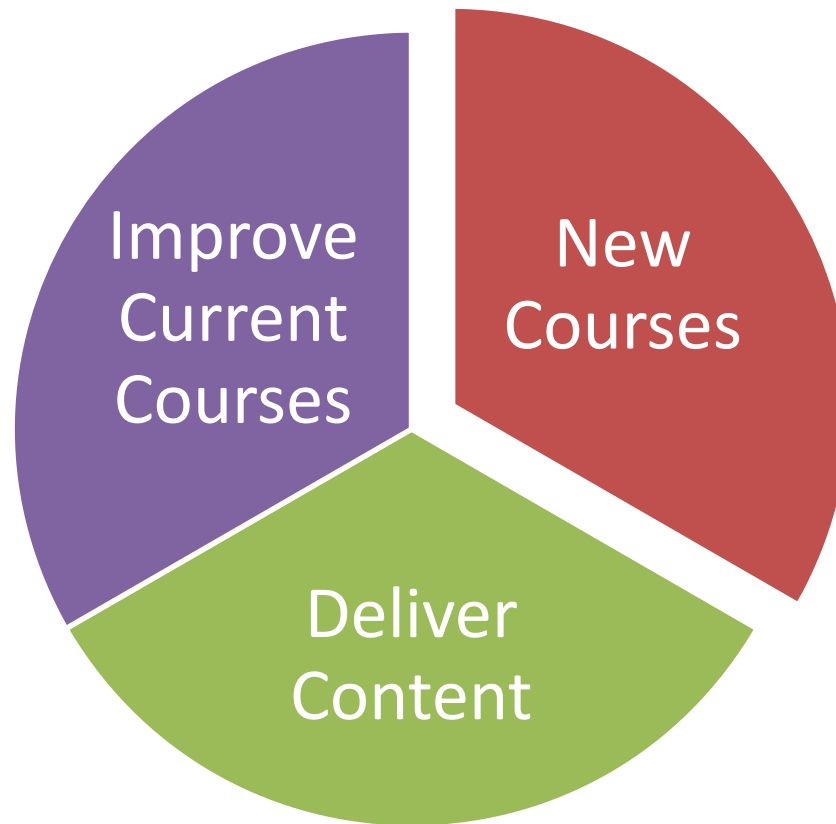


Continuous Improvement

# We are Learning



# The Future



# Course Plus

