re.IMAGINE EDUCATION

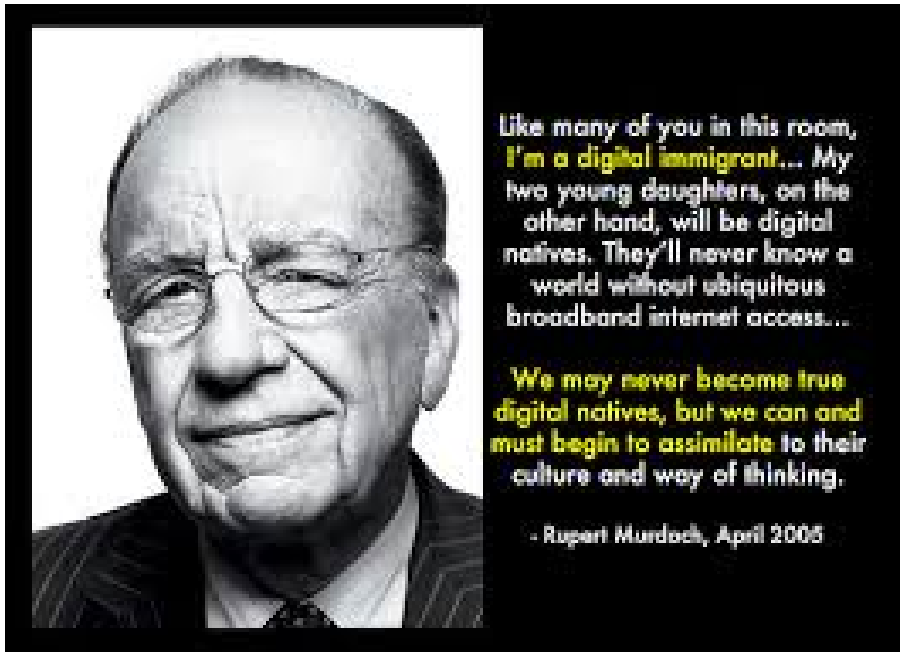
iPrepMath

2013-2014

COACHES' INSTITUTE

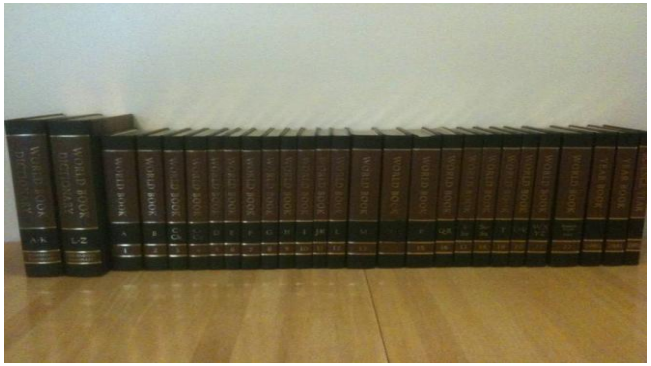
DO YOU RECOGNIZE ME?
THE DIGITAL NATIVE

[The Digital Native Video]



"Technology affords me the ability to affect a wide variety of students with different learning styles and abilities."
- Manuel Abreu
Miami Springs Middle School

DIGITAL NATIVE OR DIGITAL IMMIGRANT



DIGITAL NATIVE OR DIGITAL IMMIGRANT

iPrepmath MODEL

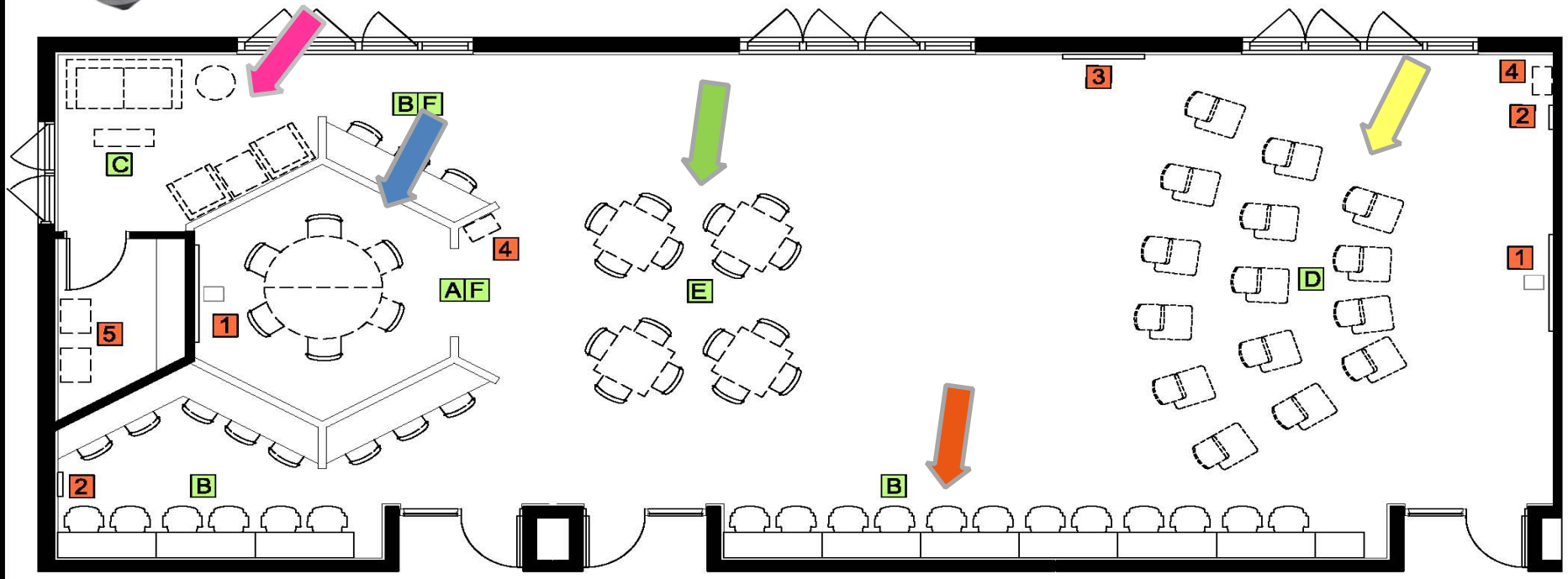
- 21st century personalized and blended learning environment
- 49 traditional middle schools
- Approximately 11,800 middle school students across Miami-Dade County Public Schools in grades 6, 7, and 8
- Choice-driven program with voluntary participation of schools, teachers, and students
- Doors open in the fall of 2013-2014
- Curriculum aligned with the goals of the Common Core State Standards in Mathematics (CCSSM) with a blended curriculum for year one of NGSSS and CCSSM
- Wrap-around services provided to students through academic and behavioral counseling programs
- College and career preparation skills provided by ConnectEDU to all students in the school
- Model implementation fidelity monitored through External Evaluators

49 TRADITIONAL MIDDLE SCHOOLS

- ✓All middle schools with grades 6 -8 configuration
- ✓No K-8 Centers
- ✓No 6-12 Centers
- ✓240 students per school
- ✓60 students per period (4 teaching periods/2 planning periods or in a 4x4 model, 5 teaching periods/3 planning periods of which 2 are dedicated to iPrep Math.)
- ✓2 Full-time teachers
- ✓1 Part-time certified math teacher working four hours a day/20 hours a week
- ✓Extra teaching period supplement for each full-time teacher

"This format of learning is leading the new century of learners in allowing them to develop conceptual understanding. iPrep is preparing students to become global learners in a

REIMAGINE CLASSROOMS



Learning Hubs

- A INTERVENTION /TUTORING
- B INDIVIDUALIZED/COMPUTER-BASED INDEPENDENT COURSEWORK
- C LEISURE SEATING
- D LARGE GROUP INSTRUCTION
- E COLLABORATIVE AREA/GROUP PROJECTS
- F LARGE GROUP PROJECT/PRESENTATION

- 1 INTERACTIVE WHITE BOARD
- 2 LED CLOCK
- 3 FLAT SCREEN TELEVISION
- 4 TECH CENTER
- 5 CHARGING CHARTS

iPREP MATH

2,152 S.F.

Re-imagine YOUR Classroom

RE-IMAGINE LEARNING

Small Group Intervention

Project-based Activities

Student Collaboration

Adaptive Software

Student-Centered teaching

COMPLEX PROBLEM SOLVING

Reflex
reflexmath.com

Carnegie Learning

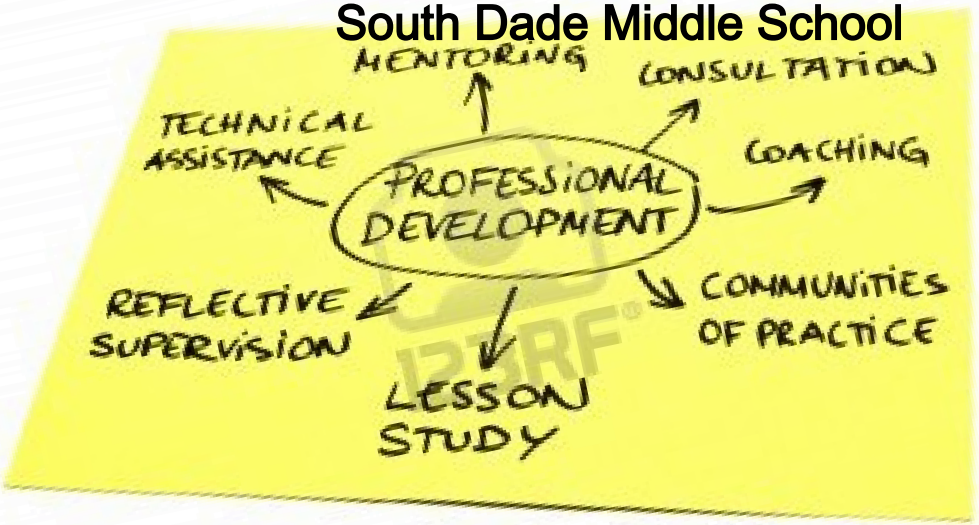
INDIVIDUAL STUDENT LEARNING

RE-IMAGINE TEACHING

"Older math programs are teacher-driven and are limited to whole-group instruction which often leads to 'boring' classrooms where students feel un-engaged by the "talking head" at the front of the room."

- Stephanie Martin
South Dade Middle School

- Innovative instruction
- Student-centered learning
- Data-driven decision making
- Blended with online content
- Team teaching
- Common planning
- Extra planning time with compensation



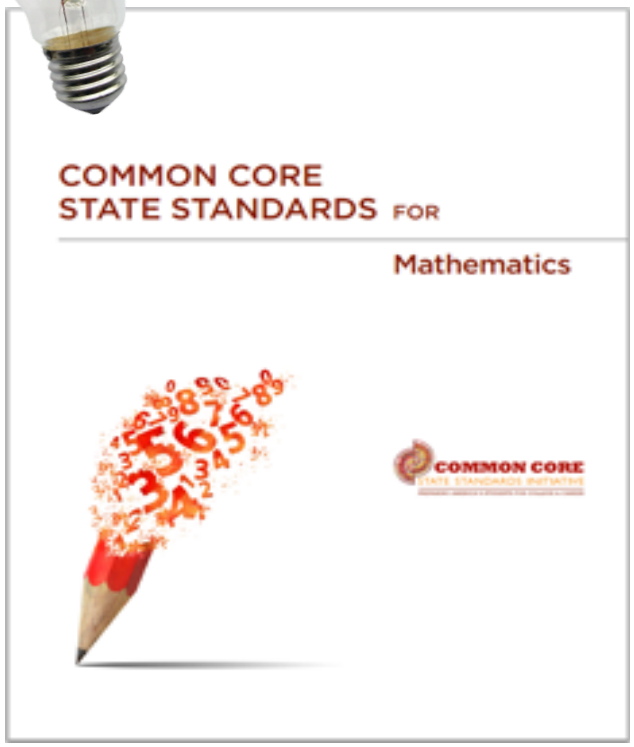
RE-IMAGINE CLOSING ACHIEVEMENT GAPS

- Student access to Highly Effective and Effective Teachers
- Access to all students, regardless of mathematical abilities
- Differentiated learning through adaptive software technology
- Part-time interventionist to provide small group, explicit instruction
- Reflex software to increase math fluency
- Address behavioral and academic barriers through counseling services and outside resources
- Expose middle school students to college and career planning

Progress Monitoring

- Daily progress monitoring reports of the data produced by the adaptive software (MATHia)
- Benchmark testing within the software program.
- Topic assessments (administered by the end of each quarter as students complete their topics of study)
- District Interim Assessments (administered within the testing window)
- Teacher-created assessments
- Project-based learning activities

RE-IMAGINE EVERY STUDENT PREPARED TO SUCCEED IN COLLEGE AND CAREERS



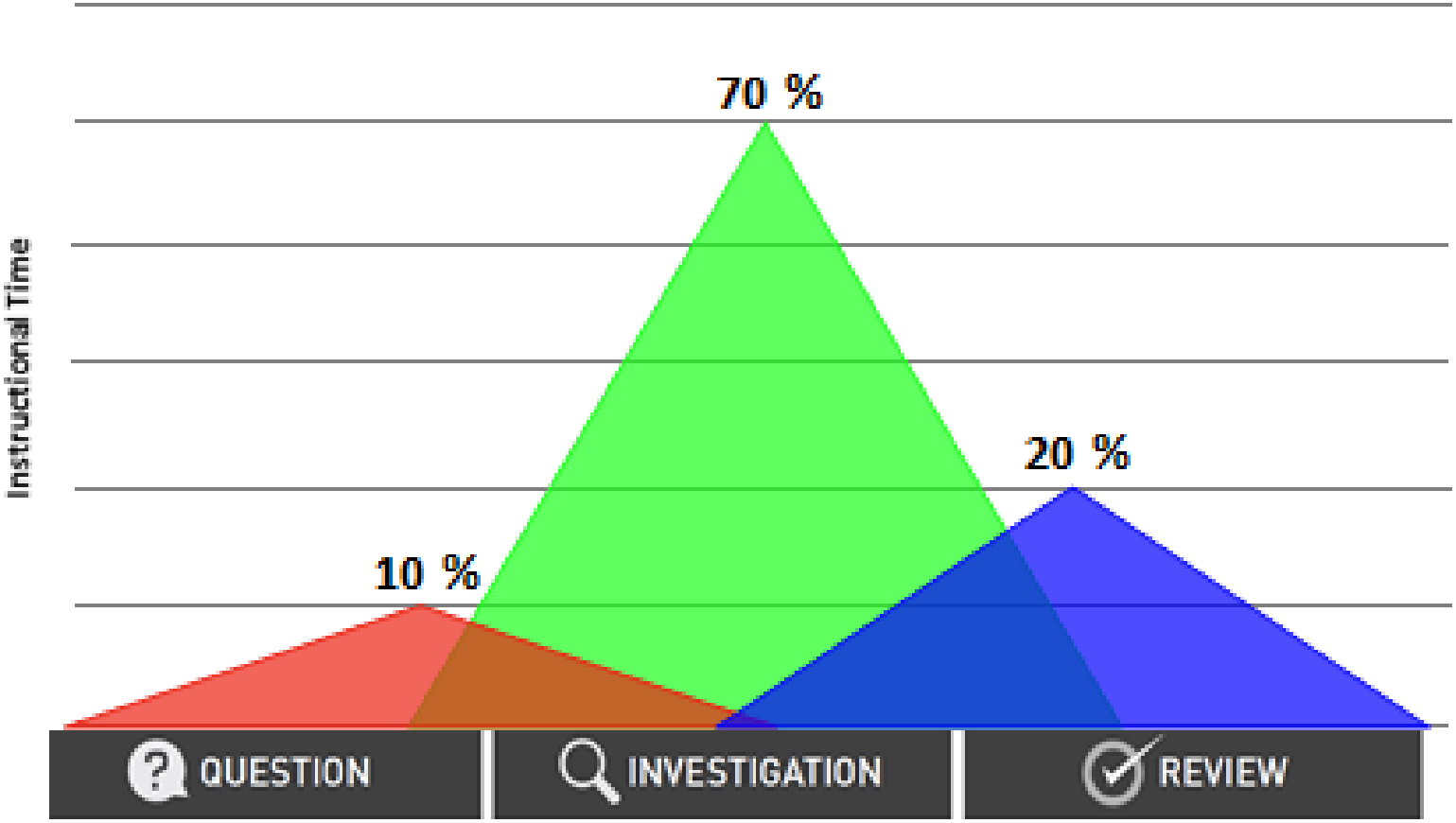
21ST CENTURY SKILLS

connectedu
EDUCATION and CAREER MANAGEMENT

"DIGITAL TRENDS SHIFTING THE ROLE OF TEACHERS"

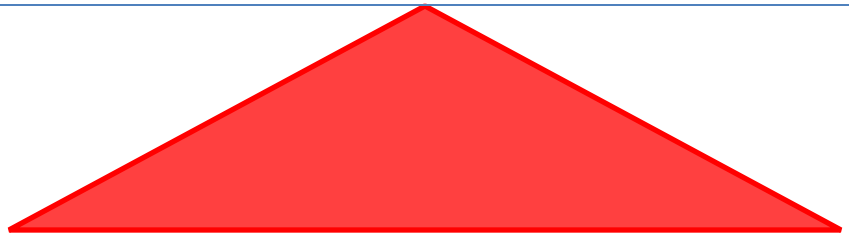
- **From teacher-centered to student-centered** "because when students have access to the same amount of information as a teacher, teaching has to change"
- From an "explainer-in-chief to more of an **orchestrator of learning**"
- **Masters of their content** where "the teachers who have been the most successful [in a digital classroom] didn't necessarily know anything about technology"
- **View "students as a team** and often rely on their expertise [in technology] to help fill in the gaps"
- **Help students** evaluate information to "help them figure out what's true, what's relevant, what's accurate" on the Internet
- **Create "a more complex learning environment**, because students can do much of their own work"
- **A connected educator** who is "comfortable with collaborative learning, social media, and sharing ideas online"

iPREP.MATH
INSTRUCTIONAL FRAMEWORK



INSTRUCTIONAL TIME

10%

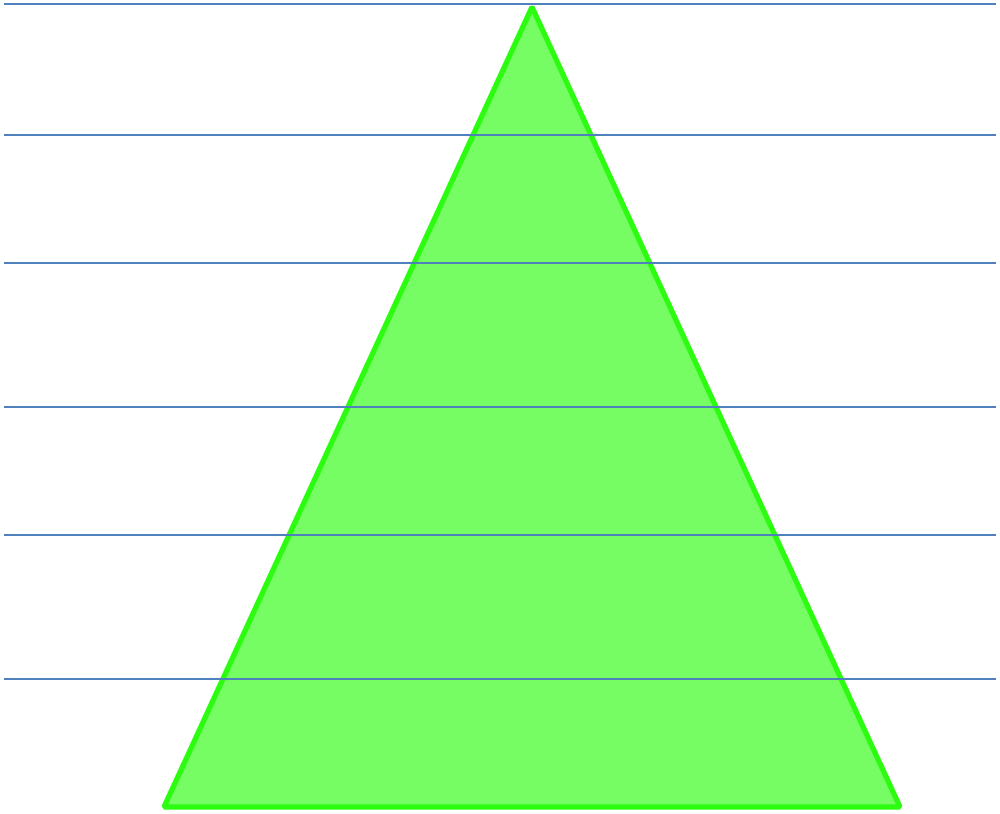


QUESTION

- Driven by a relevant essential question.
- Aligned to the district's pacing guide and NGSSS/CCSS.
- Embedded in the module to guide student investigation.
- Generate interest by offering a creative grabber or hook using images, videos, music, etc.

INSTRUCTIONAL TIME

70%

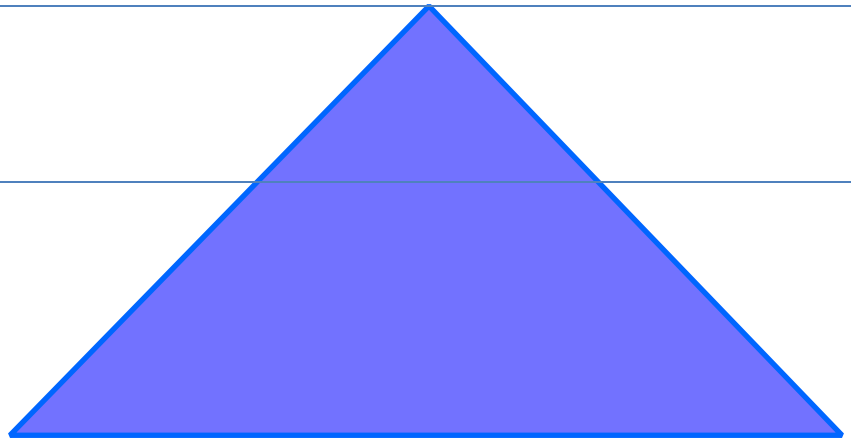


INVESTIGATION

- **Let the learning begin!** Students work individually or in collaborative groups to find answers online to the essential question and teacher selected, rigorous, real-world problems.
- Students take part in Project Based Learning (PBL) activities in order to demonstrate a deeper understanding of the content.
- Teachers are facilitators and "roaming conductors" available to guide students when needed.
- Students request a workshop with the teacher(s) in order to further personal or group understanding.

INSTRUCTIONAL TIME

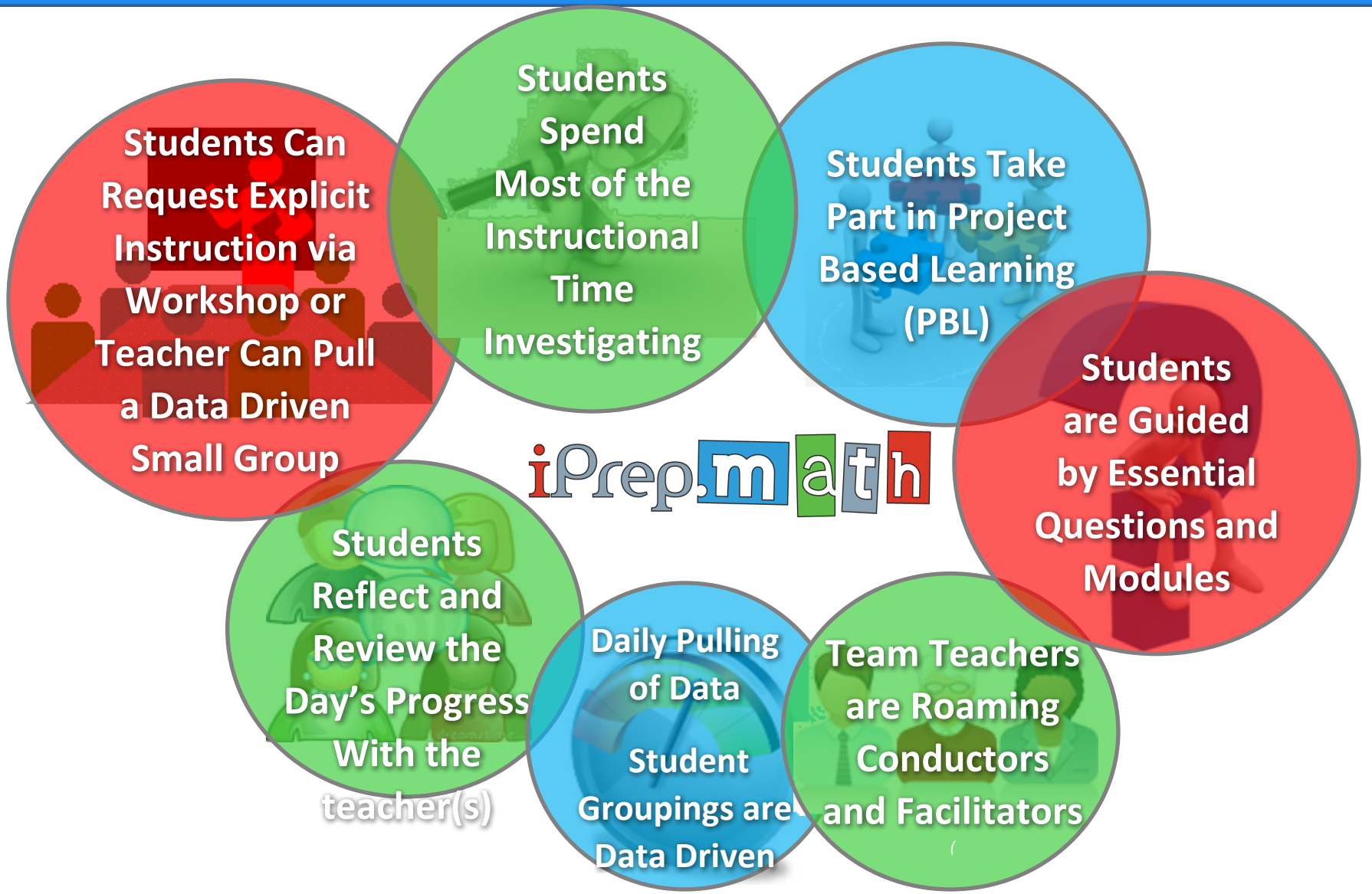
20%



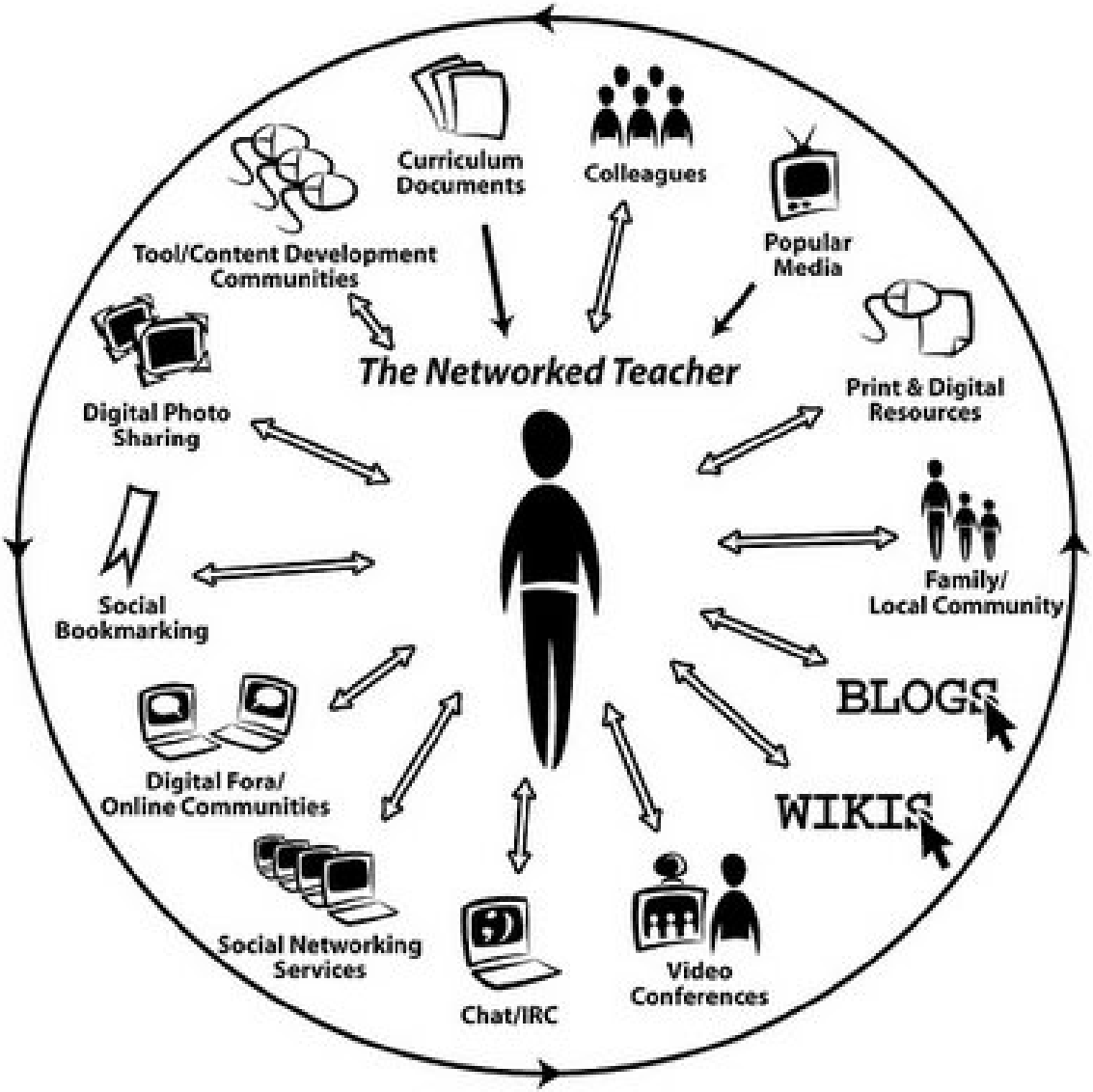
REVIEW

- Students reflect and review the day's progress with the teacher(s).
- Teachers facilitate a discussion about the essential question and the student's investigation process.
- Teachers engage students in their own review by asking questions such as: What would they do differently next time, both individually and as a group? What did they think they or others did really well?
- Teachers gain qualitative data from these debriefs to guide future student tasks, assignments, and if needed remediation or acceleration.

COMPONENTS OF THE INSTRUCTIONAL FRAMEWORK



ELEMENTS OF COMMON PLANNING: iPLAN



ELEMENTS OF iPREP PLANNING: iPLAN

- Daily Pulling and Disaggregation of Data
- Group Students Based on Data (WWW form)
- Planning of Project Based Learning Activities
- Planning of Modules
- Alignment of Pacing Guides to Modules
- Planning of Team Teaching Roles

PLANNING FOR INVESTIGATION: iMODULE

iPrep math

iModule:

Focus:

Essential Question:

Start Date:

Deadline:

Activities to be completed:

Assessment:

Follow-Up:

iPrep math

iModule: Area of rectangles, triangles, and trapezoids

Focus: MA.6.G.4.2

Essential Question: How do you find area of rectangles, triangles, and trapezoids?

Start Date: June 21, 2013

Deadline: June 28, 2013

Activities to be completed:

- Mathia Software Unit 39
- Warm-ups – Student text 13.2, 13.3, 13.4
- Problem Solving – Student Text 13.2, 13.3, 13.4 problem 1
- Project Based Learning – Rug Distributor
    - Create a digital rug in the shape of a triangle, rectangle, or trapezoid (your choice). You can create the rug using Microsoft Word, Excel, or Power Point. The rug must fit the area of your customer's desired space at their home (provided by teacher).
    - Research local rug companies to determine a price for your customer. Write an explanation of how your group priced the rug.
    - Post your rug on Edmodo.

Assessment: Project Based Learning

Follow-Up: Reflect on the essential question, and post what you would do differently and what you did well on Edmodo.

PLANNING FOR INVESTIGATION: iMODULE

iPrepmath

iModule :	Area of rectangles, triangles, and trapezoids
Focus:	MA.6.G.4.2
Essential Question:	How do you find area of rectangles, triangles, and trapezoids?
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PLANNING FOR INVESTIGATION: iMODULE

Activities to be completed:

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Assessment:	Project Based Learning
Follow-Up:	Reflect on the essential question, and post what you would do differently and what you did well on Edmodo.

PLANNING FOR INVESTIGATION: PERSONALIZATION

Module: _____

What	Who	Why

WHAT: THE INITIAL ACTIVITY THE TEACHER(S) SELECTS THE STUDENT(S) TO BEGIN WITH

WH0: WHICH STUDENTS WILL BEGIN ON THE INITIAL ACTIVITY SELECTED BY THE TEACHER(S)

WHY: WHAT DATA WAS USED (QUANTITATIVE OR QUALITATIVE) TO DRIVE THE DECISIONS OF INITIAL PLACEMENT AND GROUPINGS

PLANNING FOR INVESTIGATION: PERSONALIZATION

Module: Area of Rectangles, Triangles, and Trapezoids

What	Who	Why
Project Based Learning	Chris Anderson Kevin Durant Ray Allen Brittany Spears Kris Jenner Khole Odom John Elway Christina Aguilera William Levy Celo Green Usher Raymond Derek Jeter Alex Rodriguez Cameron Diaz Alex Fernandez Michael Jackson Olema Herrera	Students scored 70-89% on pre-requisite module

STUDENT SELF-GUIDING TOOLS FOR INVESTIGATION

What i Know	What i Need to Know

Where i Can Find What i Need to Know

Carnegie Learning

KHANACADEMY

TeacherTube

SCHOOL TUBE .com

Google

math.com
The World of Math Online

YouTube

Youtube.com/education

Math Open Reference

www.mathopenref.com

Fellow Classmate or Group

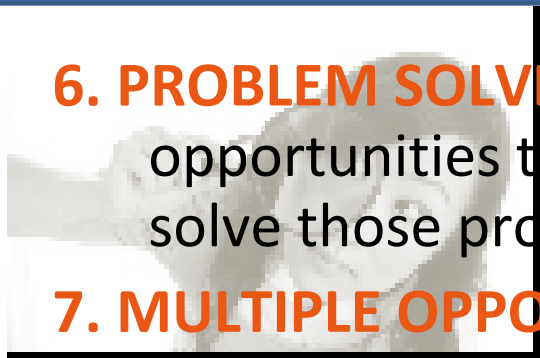
Teacher Workshop

DIGITAL CLASSROOM "LOOK FORS"

1. **VOICE** – Learners have the opportunity to not only learn from others but also share their learning with others.
2. **CHOICE** – Learners choose how they learn, and what they will learn about.
3. **TIME FOR REFLECTION** – Learners have time to connect and reflect on what is being learned to give them a better opportunity to have a deeper understanding.
4. **OPPORTUNITIES FOR INNOVATION** – Learners are creating things that are new and better
5. **CRITICAL THINKERS** – Learners are able to ask questions and challenge what they see, but always in a respectful way.

21st Century Education.mp4

DIGITAL CLASSROOM "LOOK FORS"



6. PROBLEM SOLVERS/FINDERS

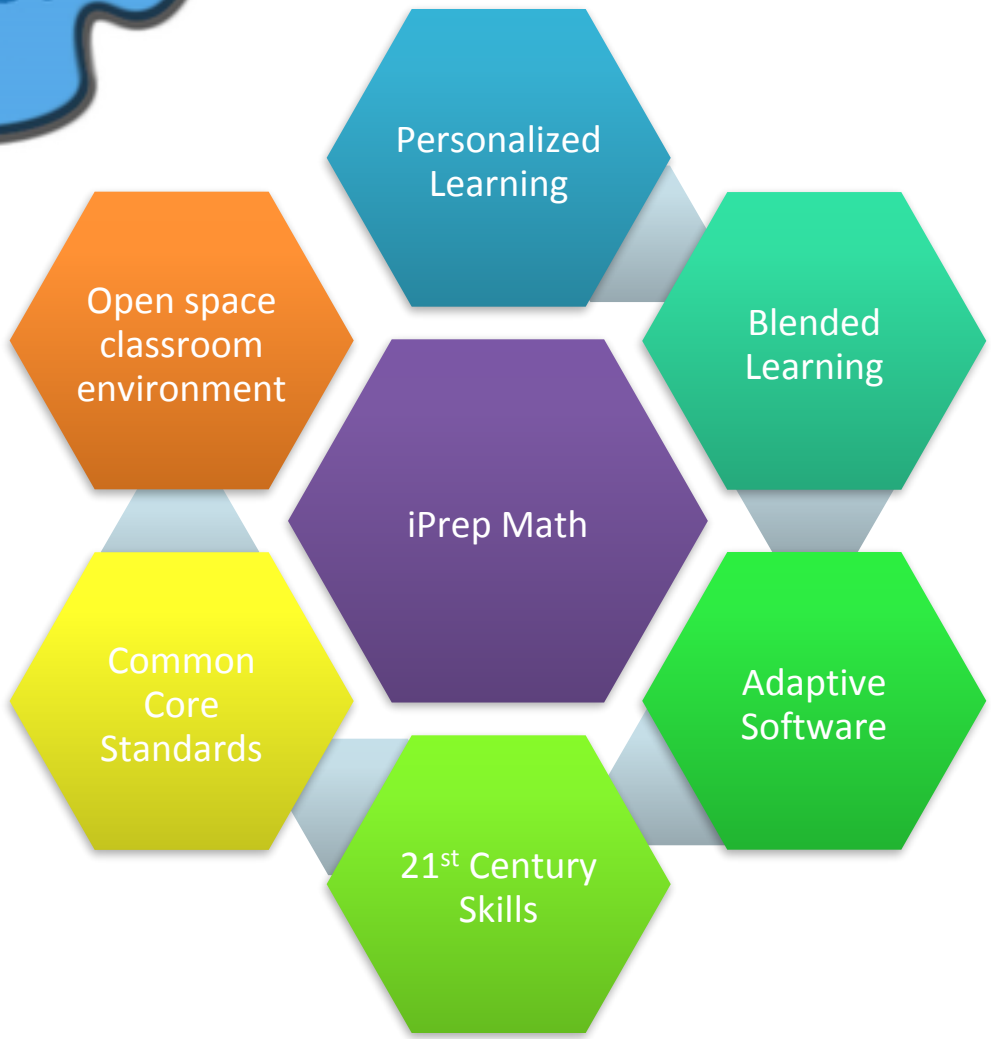
opportunities t
solve those pro

7. MULTIPLE OPPORTUNITIES FOR MASTERY

8. SELF-ASSESSMENT

9. CONNECTED LEARNING


Any
Questions


Personalized Learning
Blended Learning
Open space classroom environment
iPrep Math
Common Core Standards
Adaptive Software
21st Century Skills

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