



Appalachian Support for Specialized Education Training (ASSET)

Self-Paced, Online Professional Development for Educators

Where Research Meets Reality

(Award #: U423A170051)

Purpose

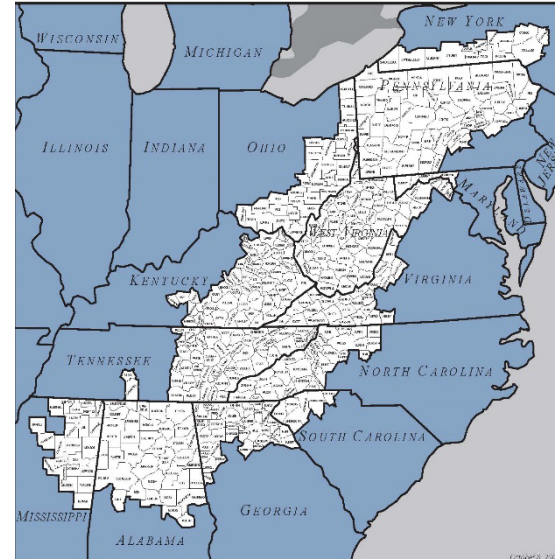
Make you aware of ASSET: a professional development program for your teachers and administrators and how we are building successful partnerships to reach those who will benefit from the ASSET program

100% free

100% online

Problem: Systemic Challenge in Schools

- Teachers in rural areas must meet a wide range of student needs in general education classrooms.
- These educators lack access to high quality professional development.



https://www.arc.gov/appalachian_region/CountiesinAppalachia.asp

Solution: ASSET Program

The ASSET program provides online, competency-based training to:

Provide *effective* and *engaging* professional development for teachers and administrators to reach and teach all students.



ASSET Advantage: Supported by US Department of Education

- Funded through the U.S. Department of Education's Supporting Effective Educator Development Grant (SEED) Program.
- Free, unlimited license for life of the grant (2017-2020) providing access to all ASSET content for Appalachia.



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ASSET: Developing Strategic Partnerships

- State Partnership Efforts: West Virginia Department of Education using ASSET for licensure renewal / Virginia Early Adopter Program (VEAP)
- Efforts to establish additional statewide partnerships
- Engagement with district level superintendents and curriculum leaders
- Grassroots outreach to principals and teachers to affect change in their schools and classrooms






ASSET Advantage: Effective and Engaging

- Learn *online at their own pace anytime and anywhere*.
- Join an active online community of practice to share their great ideas, ask questions, and celebrate their successes.
- Use *evidence-based* tools and resources from the Institute of Education Sciences (IES) What Works Clearinghouse (WWC) practice guides.





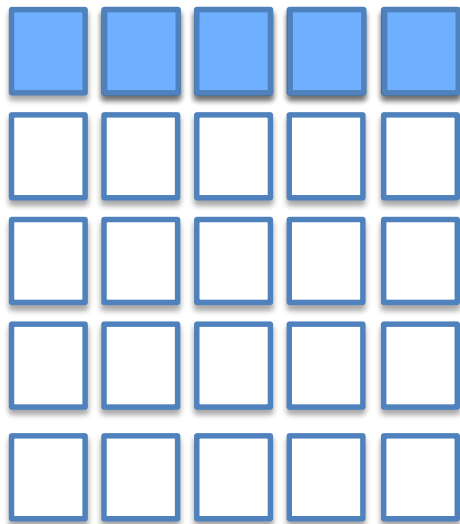
ASSET Advantage: Micro-credentials

- Micro-credentials result from short *online* professional development sessions (~10 hours) that are *self-paced* and *competency-based*.
 Online
Self-Paced
Competency-Based
- Micro-credentials can be combined or “stacked” with other micro-credentials providing flexibility, choice, and continuous improvement.
 Stackable
Personalized
Continuous Improvement
- Once learners complete a micro-credential, they receive an “Award of Completion” that can be shared to provide evidence of their competency.
 Shareable

<https://learningforward.org/wp-content/uploads/2017/08/micro-credentials-for-impact.pdf>

What is a stack?

A “stack” is a collection of related micro-credentials that can be combined to *personalize* professional development choices.



Inclusive Elementary Math

Inclusive Elementary Literacy

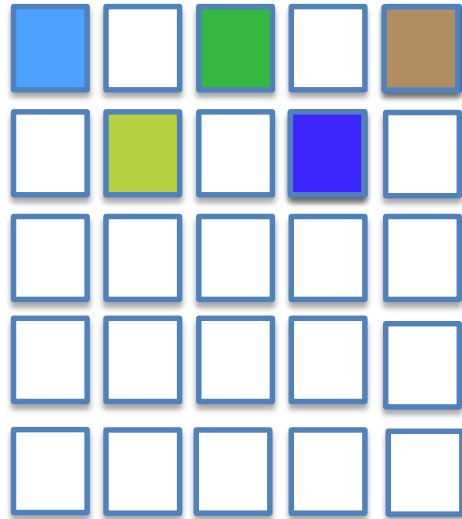
Inclusive Middle Math

Inclusive Secondary Math

Inclusive Secondary Literacy

What is a stack?

A “stack” is a collection of related micro-credentials that can be combined to *personalize* professional development choices.



Inclusive Elementary Math

Inclusive Elementary Literacy

Inclusive Middle Math

Inclusive Secondary Math

Inclusive Secondary Literacy

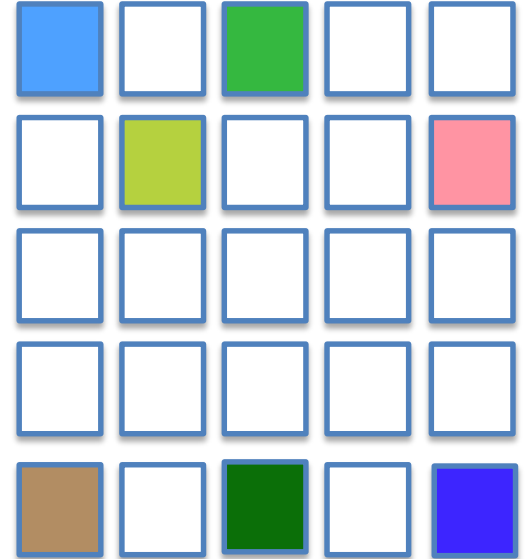


*Personalized
Stacks*



Micro-Credential Appeal

“One reason micro-credentials are appealing is that they *break down complex instructional skills* into fundamental parts. Educators can develop and demonstrate competence in each *bite-sized element of instruction*, and then weave together these skills to demonstrate mastery in complex skills.”



Source: <https://www.air.org/sites/default/files/downloads/report/Micro-Credentials-for-Teachers-September-2017.pdf>



ASSET Advantage: Micro-Credentials

Current ASSET micro-credentials are directly aligned with elementary (K-5) mathematics teaching. These micro-credentials are:

- Micro-credential 1: Strategies for Effective Word Problem Instruction
- Micro-credential 2: Effective Instruction for Inclusive Classrooms
- Micro-credential 3: Elementary Math Progression Towards Proportional Reasoning

COMING SUMMER 2019

Micro-credential 4 (Elementary Math): Number Sense

Micro-credential 1 (Elementary Literacy): Effective Literacy Instruction

Micro-credential 1 (Classroom Management): Addressing Behaviors (K-12)



ASSET Advantage: Micro-Credentials

This is 60 hours of free, online professional development for teachers who enroll now and reserve their seat.

Over the next year, we will develop and deliver 7 more micro-credentials in elementary (K-5) mathematics, classroom management, middle grades mathematics, and literacy.

These micro-credentials can be used as professional development points for licensure renewal & ASSET learners also receive graduate credit if they complete at least 5 micro-credentials.

Experience ASSET

<https://impactlms.radford.edu/d2l/login?noredirect=1>

Login ID: ASSET.Demo

Password: Radford1910

Clean user interface with explicit directions on where to go and what to do reduces “cognitive load”

Aligns with Quality Matters best practices:

QM: 1.1 Instructions make clear how to get started and where to find various course components.

QM 1.2 Learners are introduced to the purpose and structure of the course.

QM8.1 Course navigation facilitates ease of use.



The Vinod Chachra IMPACT Lab at Radford University delivers online, self-paced, competency-based education in high-demand workforce areas. IMPACT is a first-of-its-kind Lab among four-year public higher education institutions in Virginia. Our competency-based training approach teaches specific, job-related skills that will prepare you to get ahead in your field.

IMPACT currently offers professional development and academic credit in Education (ASSET), Cybersecurity, and Geospatial Intelligence.

To begin your professional development, please click on your course icon below. Thank you for partnering with IMPACT!

[Show All Announcements](#)

My Courses ▾



Making Sense of Word Problems (What Are They Asking Me to Do?)



No More Teaching to the Middle!
(Effective Instruction for Inclusive Classrooms)



We Are Working Towards What? (A deeper-level investigation into proportional reasoning)

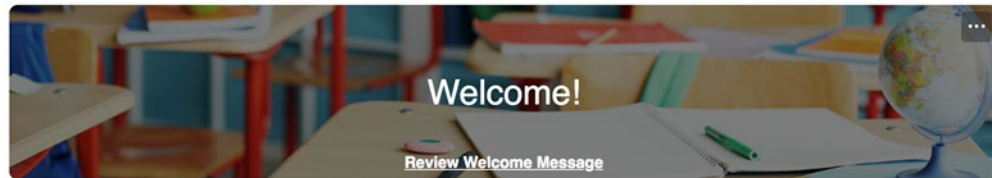
Micro-Credential Welcome Page

Use of “Roadmaps” or “Progression Maps” for navigation and to establish short and long terms goals.

Aligns with learning science and engagement best practices: "Break content down into small topic chunks that can be accessed at the learner's preferred rate using a continue or next button" (Clark and Mayer, 2016, p. 16)

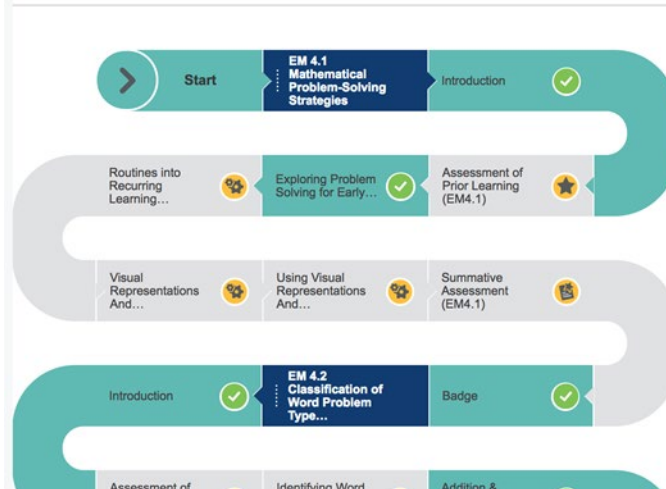
Segmenting Principle

What Are They Asking Me To Do? (Making Sense of Word Problems)



Micro-credential Roadmap

What Are They Asking Me To Do? (Making Sense of Word Problems)



Let's Get Started! ▾

The Micro-credential Roadmap is interactive and enables you to expand and collapse modules, and navigate directly to pages, activities or assessments.

To get started on your first module, click on the "Introduction."

What are they asking me to do?

Making Sense of Word Problems

Welcome to our ASSET Micro-credential, "What are they asking me to do? Making Sense of Word Problems." In this micro-credential you will learn about tools and strategies to address common challenges with teaching word problems with diverse learners.

Module Introduction Page

Approximately 5 modules
per micro-credential

Introduction of the content from the
professors and explicit statement of
competencies and objectives.

Stating the objectives directly aligns the
learning sciences, specifically
knowledge-centeredness (National
Research Council, 1999).

Assessment of prior learning

Continuation of the use of “Roadmaps”
or “Progression Maps”

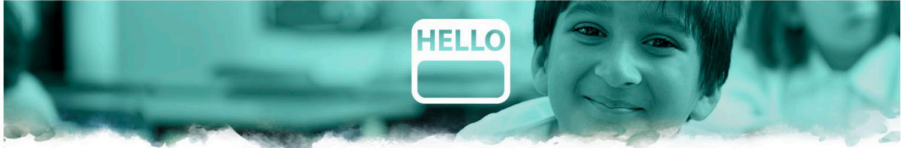
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Innovative. Mobile. Personalized.
Accelerated Competency Training

What Are They Asking Me To Do? (Making ...

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Table of Contents > EM 4.1 Mathematical Problem-Solving Strategies > Introduction

Introduction ▾



Mathematical Problem-Solving Strategies

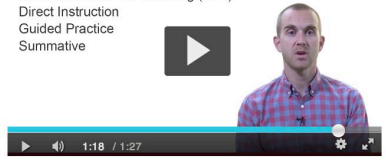
Welcome to the first module: *Mathematical Problem-solving With Early Learners*.

In this module, we will explore various Visual Representations and Manipulatives (VRM) and strategies you can use to help your students build their problem-solving skills.

Watch the introduction video and advance to the next page when you are ready to start the Assessment of Prior Learning.

Parts of the Module

Assessment of Prior Learning (APL)
Direct Instruction
Guided Practice
Summative



1:18 / 1:27

Competencies and Learning Objectives

- ▶ Select appropriate methods to teach early learners mathematical problem-solving strategies.
- ▶ Identify common classroom routines to enhance problem-solving skills.
- ▶ Identify how visual representations and manipulatives can be used to teach prerequisite problem-solving skills with early learners.

1 HELLO 2







Direct Instruction

This is where the majority of the instruction, teaching and training is located.

Primarily delivered via 5-10 minute videos





“multiple studies have shown that video, specifically, can be a highly effective educational tool (e.g., [Allen and Smith, 2012](#) ; [Kay, 2012](#)...”

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Accelerated Middle Personalized
Accelerated Competency Training

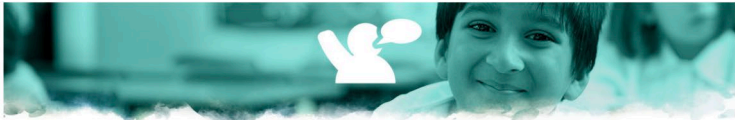
What Are They Asking Me To Do? (Maki...      Matt Dunleavy 

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[Table of Contents](#) > [EM 4.1 Mathematical Problem-Solving Strategies](#) > Direct Instruction: Exploring Problem Solving for Early Learners

Direct Instruction: Exploring Problem Solving for Early Learners    

▼



Direct Instruction: Exploring Problem Solving for Early Learners

Let's begin by examining how classroom routines can be converted into mathematics learning opportunities. We will also explore how visual representations and manipulatives (VRM) can assist early learners in building problem solving skills.


Module Objectives

- Identify processes for using common classroom routines to enhance problem-solving skills.
- Identify how visual representations and manipulatives (VRM) can be used to teach prerequisite problem-solving skills with early learners.


Video: Exploring Problem Solving for Early Learners

Watch the following video and advance to the next page when you are ready to start the Guided Practice.

Exploring Problem Solving for Early Learners

Anthony Dove, PhD 

RADFORD UNIVERSITY



0:00 / 4:00 Accelerated Competency Training (IMPACT) P...

Guided Practice

Learners see examples and practice the concepts.

Coaches support the learner throughout the ASSET professional development.

QM 3.4 The assessments used are sequenced, varied, and suited to the level of the course.

Guided Practice: Collections of Objects

Click or tab to each Hot Spot and select it by clicking or hitting the enter key to bring up a pop up activity relevant to the chosen object.



Summative Assessment

At the end of each module, a summative assessment determines mastery of the competencies.

Summative Assessment

Summative Assessment - Preview

Est. Length: 2:00:00

Jan Barth: Attempt 1

Questions

Note: It is recommended that you save your response as you complete each question.

0 of 24 questions saved

Page 1:

1	2	3
4	5	6
7	8	9
10	11	12
13	14	15
16	17	18
19	20	21
22	23	24

Legend

 Saved Response

 Unsaved Response

 Info Item

Quiz Started

Question 1 (1 point)

Based on best practices for teaching ratios, match each of the written ratios to either the Ratio as a Composed Unit Perspective or Ratio as Fixed Numbers of Variable Parts Perspective.

A batch requires mixing 3 cups of flour with 2 eggs

Use a 2 to 5 ratio for the number of cups of lemon juice to water

Run 40 yards in 5 seconds

1. Ratio as a Composed Unit

Purple paint is made by mixing blue and red paint in a 3 to 1 ratio

2. Ratio as Fixed Numbers of Variable Parts

There must be 2 girls for every 3 boys

Mix 2 parts vinegar to 9 parts water

Question 2 (1 point)

Based on best practices for teaching ratios, match each of the statements to either the Ratio as a Composed Unit Perspective or Ratio as Fixed Numbers of Variable Parts Perspective.

Ratio values are typically represented with strip diagrams

Ratio values are typically represented in a ratio table or double number lines

The parts are considered to be combined to create a whole batch or unit

1. Ratio as a Composed Unit

2. Ratio as Fixed Numbers of Variable Parts

Earning a Badge!

Once the learner scores 80% or higher on this objective assessment, they are awarded a badge and they unlock the next module.

The badge can be shared with audiences of the learner's choosing.

Badge ▾



You Earned a Badge!

Congratulations! You have successfully completed this module, and earned the Problem Solving badge!

Here are some questions to think about before you start the next module.

- What have you learned in this module that can help you use accommodations and modifications more effectively with all your students?
- What concern was addressed with the content presented in the module?
- What part of the module do you remember most?
- Did you learn a new skill or strategy?
- Where did you encounter a struggle recently, in your classroom, and what did you do to problem-solve your way through it?
- How have you been able to apply the information you were presented in your classroom, or in your non-work life?
- If you were to start the module over, what would you do differently?










Reflection Activity

After the summative assessment, learners are asked to reflect upon what they have learned and how they can use this information in their classroom practice.

Creating job embeddedness

This directly aligns the learning sciences, specifically community-centeredness as it will foster intellectual camaraderie and/or community in the LMS and connect the teacher to a larger community outside the classroom via FB (NRC, 1999).

   No More Teaching to the Middle! Refl...    

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[Table of Contents](#) > [Summative](#) > Reflection Activity

Reflection Activity ▾

Topic	Threads	Posts	Last Post
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Discussion Board 2 ▾

Must post first.

It's time to get real about Universal Design for Learning! You learned a lot in this micro-credential about the principles of UDL. I want you to think about how you might actually use it in your classroom. Get busy on Google and go find some resources you might actually want to use with your students. I'd love it if these were math resources, but you should always start applying new strategies in whatever content area is most comfortable for you. Find three that you really like and share them with your colleagues in your discussion board post. You can include links, lesson plans and materials, videos, whatever you find that you like. Make sure you explain what you like about each one, any questions you may have about making it work for your content or your kids, and any "tweaks" you might want to include to make it really rock in your own room. Make sure you point out how these resources relate back to what you have learned about UDL in this micro-credential.

Micro-Credential Structure

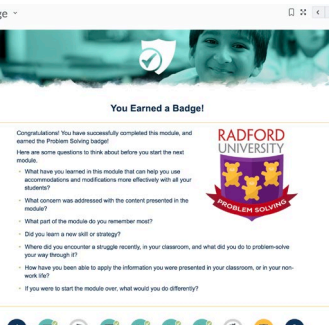
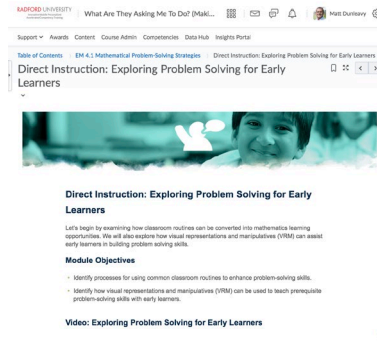
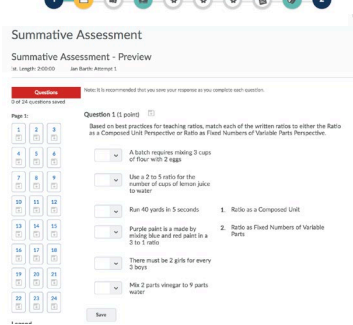
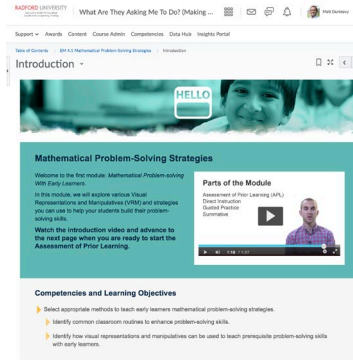
1. Micro Introduction page

- Module Introduction
- Assessment of Prior Learning
- Direct Instruction
- Guided Practice
- Summative Assessment
- Earning a Badge

2. Reflection Activity

3. Micro Award of Completion

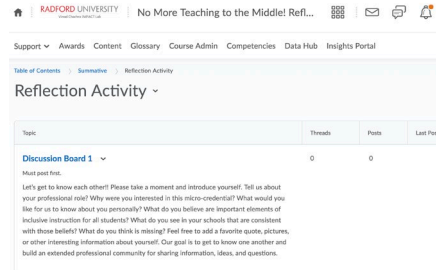
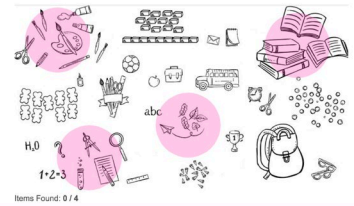
Repeat 5-7 times



Guided Practice: Collections of Objects

Many collections of objects can be used as a mathematical manipulative, with a little creative thinking (and appropriate supply of an object). The image below contains several objects and collections of objects. Identify objects that would make a suitable collection of objects **VRM**.

Click on tab to each Hot Spot and select it by clicking or hitting the enter key to bring up a pop up activity relevant to the chosen object.



Designed to create observable and replicable models

Results to Date...

- 1400 teachers and administrators enrolled across 6 states.
- 387 teachers have completed a micro-credential.
- 93% of participants report that the training will have some to a great deal of impact on their daily practices as teachers.
- Teachers rate it 8.6 out of 10.



Enrolling today is easy!

Enrolling in the program is easy:

1. Visit www.radford.edu/asset and click on “Enroll Now”
2. Send me a list of all the teachers you’d like to enroll with their emails
(ltompson74@radford.edu)

- Free seats are limited
- Enroll today to reserve your teachers’ spots!

