

# **Learning Labs and Micro Teaching: Forging a Research-Based Path to Improved Outcomes**



**Steve Ventura**  
**Author/Consultant**  
**Advanced Collaborative Solutions**  
[www.steveventura.com](http://www.steveventura.com)  
[steve@steveventura.com](mailto:steve@steveventura.com)  
X: @smventura  
805.975.3853

## What is Micro Teaching?

**Micro Teaching is a teacher training technique that helps the trainee teacher to master the teaching skill. It requires the teacher to:**

- ☐ To use a specified teaching skill
- ☐ To teach a single concept
- ☐ To teach for a short time
- ☐ To teach a small number of students

## What is a Learning Lab?

A Learning Lab is a structure for collective engagement in learning through teaching. In Learning Labs, teams of teachers engage in learning about and trying out an instructional activity in a classroom with students. Collaborative enactment of practice is central to the design.

## Why are these two skills important?

In many schools today, teachers are engaged in activities that are being called PLCs that are really something else—perhaps professional working communities (PWCs). The purpose of an Achievement Team is geared toward getting teachers to ask the question, “What do students need us to learn?”

Achievement Teams maintains the position that ongoing assessment provide the rationale to guide teachers to learn what students need and instructional coaches can further promote this thinking.

***Learning Labs increase positive teacher emotions by creating a no-fault reflection process where teachers can learn from mistakes, therefore enabling them to experiment with instructional strategies they may not be familiar with.***



## Learning Lab Information Sheet

### Background:

Advanced Collaborative Solutions actively promote the use and function of learning labs. Learning labs in schools can be conducted in various ways depending on the specific goals, resources, and preferences of the school or educational institution. Here's a general overview of how schools might conduct learning labs:

- ☐ **Planning and Preparation:** The school identifies the need for a learning lab based on educational goals, student needs, or curriculum requirements. This involves determining the objectives, content, and resources required for the lab.
- ☐ **Designing Curriculum:** Educators design the curriculum for the learning lab, which may include specific learning objectives, activities, assessments, and resources tailored to the topic or subject area.
- ☐ **Setting up the Lab:** The physical space for the learning lab is prepared. This could involve arranging desks or tables, setting up equipment or materials, and ensuring that the space is conducive to the planned activities.
- ☐ **Selecting Tools and Resources:** Educators choose the tools, resources, and materials needed for the lab activities. This could include textbooks, digital resources, software applications, laboratory equipment, or other learning aids.
- ☐ **Instruction and Facilitation:** Teachers or instructors lead the learning lab sessions, guiding students through the planned activities, providing instruction, facilitating discussions, and offering support as needed.
- ☐ **Hands-on Activities:** Learning labs often involve hands-on activities or experiments that allow students to apply concepts learned in the classroom. This could include conducting experiments, solving problems, working on projects, or engaging in collaborative activities.
- ☐ **Group Work and Collaboration:** Students may work individually or in groups, depending on the nature of the activities. Collaboration is often encouraged as it promotes teamwork, communication skills, and critical thinking.
- ☐ **Feedback and Assessment:** Throughout the lab sessions, educators provide feedback to students on their progress and understanding of the material. Assessments may be conducted to evaluate student learning and mastery of the concepts covered in the lab.
- ☐ **Reflection and Review:** At the end of the learning lab, students may be asked to reflect on their learning experiences, discuss their observations and insights, and review key concepts or takeaways from the session.
- ☐ **Follow-up and Extension:** Depending on the outcomes of the learning lab, educators may plan follow-up activities or extensions to further reinforce learning or explore related topics in more depth.

## Microteaching in the Feedback Process

Microteaching, a research-based strategy with roots in teacher training programs, was first used to improve knowledge and understanding of instructional practice.

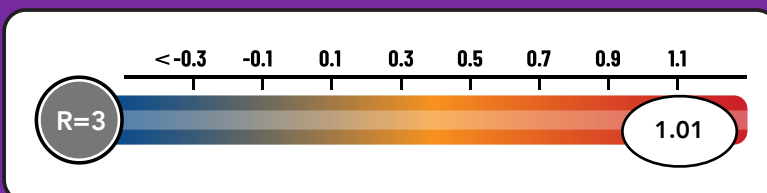
The term refers to practice teaching in which a student teacher's teaching of a small class is videotaped for subsequent evaluation. It's now a common strategy in schools because of its effect on student learning and its ease of use for teachers and teams. When used effectively and deliberately, microteaching can double the speed of learning (Hattie, 2009, 2012); it also accelerates the practice of individual teachers while also affecting the level of collective teacher efficacy. The goal of microteaching is similar to that of instructional rounds. Its beauty is in its use of video or direct observation from peers.

Jim Knight (2014) advocates for the use of video as a powerful tool to improve professional learning. "When we record ourselves doing our work," he writes, "we see that reality is very different from what we think" (p. 2). We're sometimes disappointed by what we see, but often we're delighted. Either way, video helps us capture teacher and student behaviors that we might otherwise overlook. Teachers can use video individually to improve their practice, **but it's most powerful when used with a colleague and when dialogue and feedback accompany it.**

When leaders use collaboration to bridge the gap between high- and low-impact teachers, everybody wins.



### Microteaching/Visible Learning



- Confidence in findings when **R** is 3 or greater
- When **R** is less than 3, more studies are needed

An effect size of  $d=1.0$  indicates an increase of one standard deviation on the outcome - in this case the outcome is improving school achievement. A one standard deviation increase is typically associated with advancing children's achievement by two to three years, improving the rate of learning by 50%.

**A 1.0 effect also indicates that this practice exceeds 84% of the schools not receiving this treatment**

Number of studies: 426    Number of people: 39,208

## Steps for Creating a Learning Lab

1. A teacher from each grade level chooses an instructional strategy that they would like to practice and then receive feedback from peers.
2. A good place to start with the selection of high yield instruction is referring to our instructional strategy flip book.



The Achievement Teams Instructional Strategy Play Card organizes all instructional strategies listed in this flip book into five instructional domains.

This play card was created in partnership with Ashley Toplin and Devin Venturo.

Teacher Led	Connect or Introduce	Collaborative Learning	Reflect on Learning	Build Independence	Focus Questions for Observational Data
Graphic Organizers	Anchor Activities	Jigsaw/Jigsaw II	Error Analysis	Menus	1. What are the assessment results strengths and gaps?
Scaffolding	Card Sort	Numbered Heads Together	GIST Summarizing Activity	Contractor/Independent Projects	2. What skills and concepts were achieved from the learning target and what still needs to be learned?
Study Skills	Concept Mapping	Reciprocal Teaching	Exit Card/ Journal Prompts	Practice and Challenge by Choice	3. Who did we teach effectively and who still needs help?
		Send-A-Problem	Inquiry Writing	Self-reported Grades	4. Which strategies were used effectively and which ones were not?
		Round Robin	Feedback	Success Criteria	
		Think-Ink/Pair-Share	RAFT	Tuned Assignments	
			Single Point Rubric		

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3. The teacher wishing to practice an instructional strategy needs to create a 15 - 20 minute lesson that will be taught to a small number of students (4-6).
4. The lesson must be engaging and student centered so the students can demonstrate understanding of the lesson. This can be accomplished by setting up a learning station after the lesson to let students apply their learning.
5. During the actual lesson, other teachers, coaches, administrators observe the lesson, recording valuable pieces of information that will be use to provide feedback to the teacher modeling the lesson.
6. When the learning lab is complete and the students are returned to their classroom, the peer feedback session begins.
7. Each observing teacher/coach/administrator shares information that has been recorded on a feedback form. Feedback should include commendations and recommendations.
8. After the feedback session, the teachers on the same grade level team plan to implement the strategy to all of the students at that grade level.

Teacher Observing:	Teacher Observation:	What is the student doing?
<input type="checkbox"/> Did the teacher explain what to do in the steps? <b>Domain 1: Instruction</b> <b>Communicating with students</b> -Expectations for learning -Directions and procedures -Explanations of content -Use of oral and written language		
<input type="checkbox"/> Did the teacher ask questions using academic vocabulary, e.g., part, part, whole? <b>Domain 2: Using questioning and discussion techniques</b> -Quality of questions -Discussion techniques -Student participation <b>Student Engagement</b> -Activities and assignments -Grouping of students -Instructional material and resources -Structure and pacing		
<input type="checkbox"/> Did the teacher provide students with feedback? <b>Domain 3: Using assessment in instruction</b> -Assessment criteria -Monitoring of student learning -Feedback to students -Student self-assessment and monitoring of progress -Lesson adjustment		
<b>Commendations:</b>		
<b>Recommendations:</b>		

## Feedback for Learning Lab Participants

Providing teachers with feedback after a learning lab is crucial for their professional development and improvement in teaching practices. Here's a structured approach you can follow to give effective feedback:

### 1. Start with Positive Feedback:

- ☐ Begin by highlighting what went well during the learning lab.
  - ☐ Acknowledge the teacher's strengths, efforts, and achievements.
  - ☐ Positive reinforcement can boost confidence and create a receptive environment for constructive feedback.
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### 2. Be Specific:

- ☐ Provide specific examples of what you observed during the learning lab.
  - ☐ Instead of general statements like "good job," say something like "I noticed how you engaged all students by using different questioning techniques."
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### 3. Focus on Areas of Improvement:

- ☐ Address areas where the teacher could improve or try different strategies.
  - ☐ Frame suggestions as opportunities for growth rather than criticism.
  - ☐ Use phrases like "Have you considered..." or "You might try..." to offer suggestions.
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### 4. Use a Constructive Tone:

- ☐ Ensure your feedback is delivered in a positive and supportive manner.
  - ☐ Avoid using negative language or making the teacher feel defensive.
  - ☐ Be respectful and empathetic in your communication.
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### 5. Encourage Reflection and Self-assessment:

- ☐ Encourage the teacher to reflect on their own performance during the learning lab.
  - ☐ Ask open-ended questions to stimulate self-assessment, such as "How do you think that activity engaged the students?" or "What could you do differently next time?"
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## 6. Provide Resources or Additional Support:

- ☐ Offer resources, materials, or training opportunities that can help the teacher improve in specific areas.
  - ☐ Provide opportunities for the teacher to observe other experienced educators or participate in professional development workshops.
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Remember, the goal of providing feedback after a learning lab is to support the teacher's growth and improvement. By offering specific, constructive, and supportive feedback, you can help teachers enhance their teaching practices and ultimately benefit their students' learning experiences.

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