



Active Learning Workshop

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Today:

1. Where we are now
2. Presentation on Active Learning
3. Evaluating and Selecting Active Learning Strategies
4. Our Commitments Going Forward

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In 25 minutes, you will work with a partner to review a list of active learning approaches.

Your task will be to identify approaches that have the greatest potential to benefit students in your class.

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“Active Learning is an approach...



... I don't know very much about yet.



... I am actively skeptical about using.



... I know about but do not use.



... I'm using a little.



... I'm already using extensively.

Today:

1. Where we are now

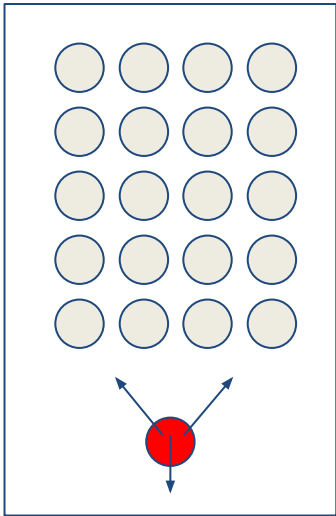
2. Presentation on Active Learning

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Consider the following common approaches:

“Passive Students” approach



The instructor teaches a concept, poses a problem, and then solves it.

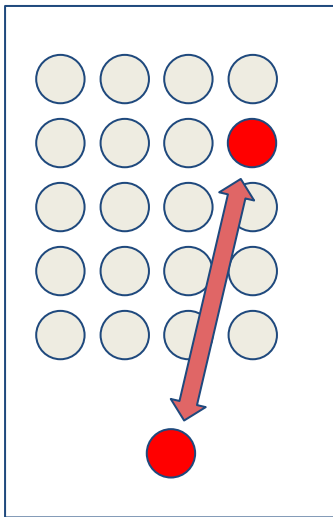
Students follow along and copy the solution but do not do the work themselves or discover whether they understand what's being taught.

During class time, they listen and take notes.

They apply their knowledge to solve problems only when doing homework outside of class.

Consider the following common approaches:

“One Active Student” approach



The instructor poses a problem.

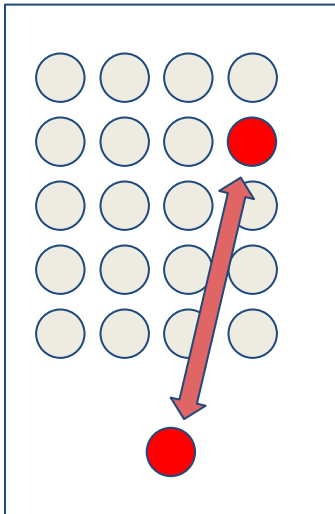
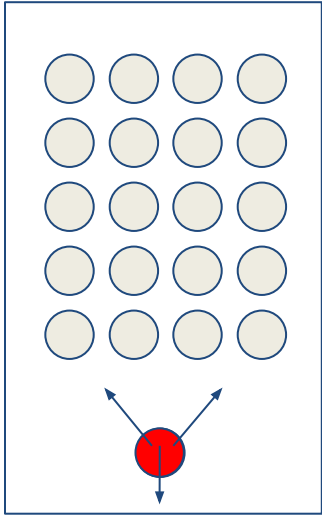
Some students raise their hands.

The instructor calls on one student, who provides an answer.

(Other students either stop paying attention or learn little because they did not commit to an answer.)

So, what's the problem?

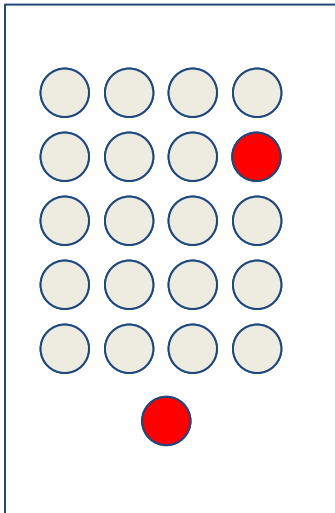
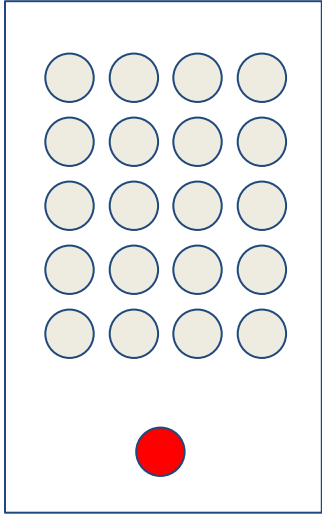
1.



What's the Problem?

Students

- ... retain too little information.
- ... learn to memorize but may not think about or understand the material.
- ... don't learn to apply their knowledge.
- ... discover misunderstandings only *after* lecture.
- ... don't learn other skills (communication, collaboration, explanation, entrepreneurial skills).
- ... become disengaged.
- ... lose interest in the subject.



Active Learning Approaches

-Instructors shift some of their focus from content to a focus on what students are **doing** with that content.

-Instructors plans **multiple moments** during each class when **all** students are actively engaged.

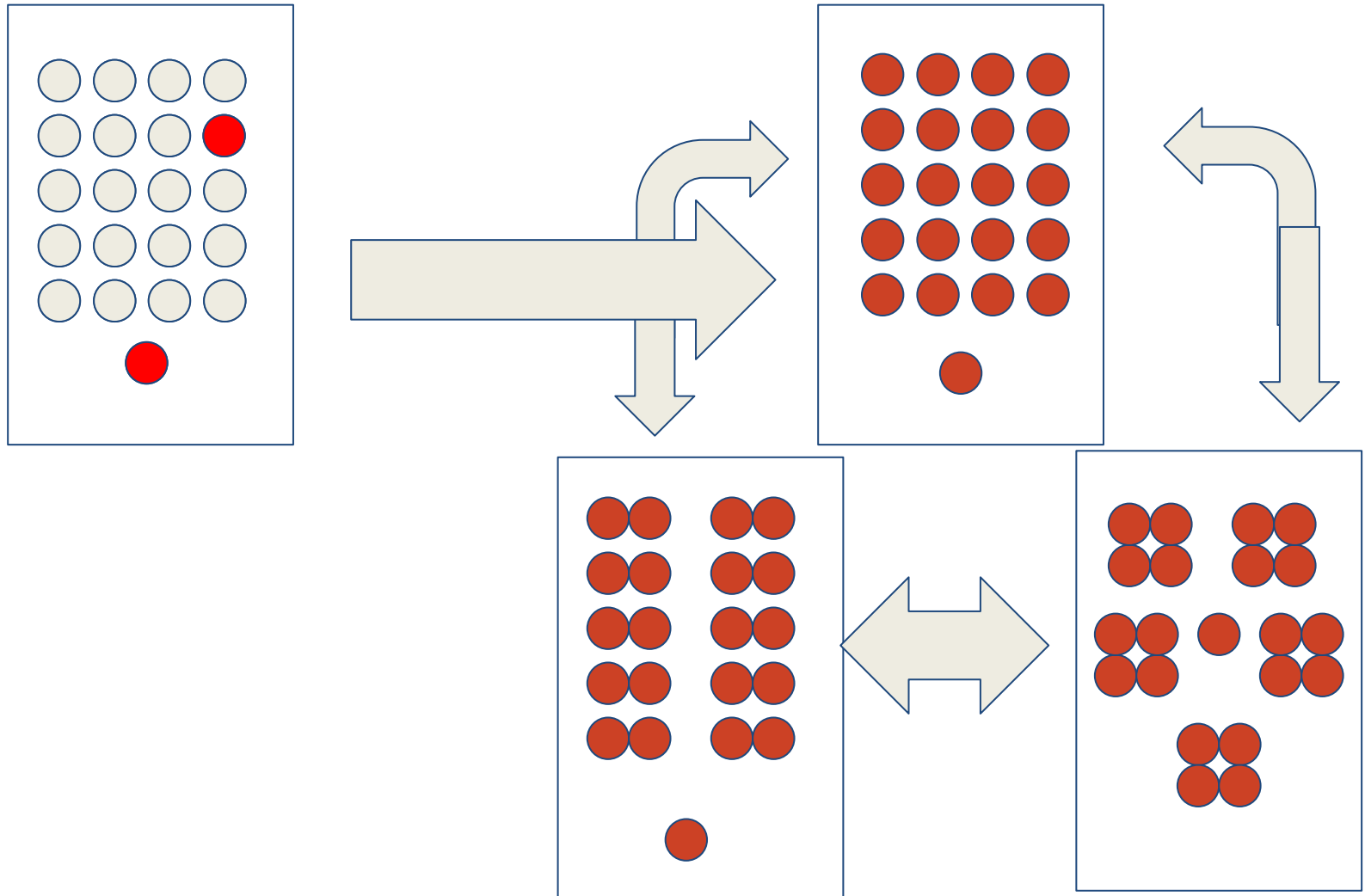
-‘Actively engaged’ here means: solving problems; committing tentatively to solutions; critically evaluating solutions (their own and others’); communicating, analyzing, and revising ideas; applying and testing ideas; learning to think and work with others; connecting to and caring about their subjects.

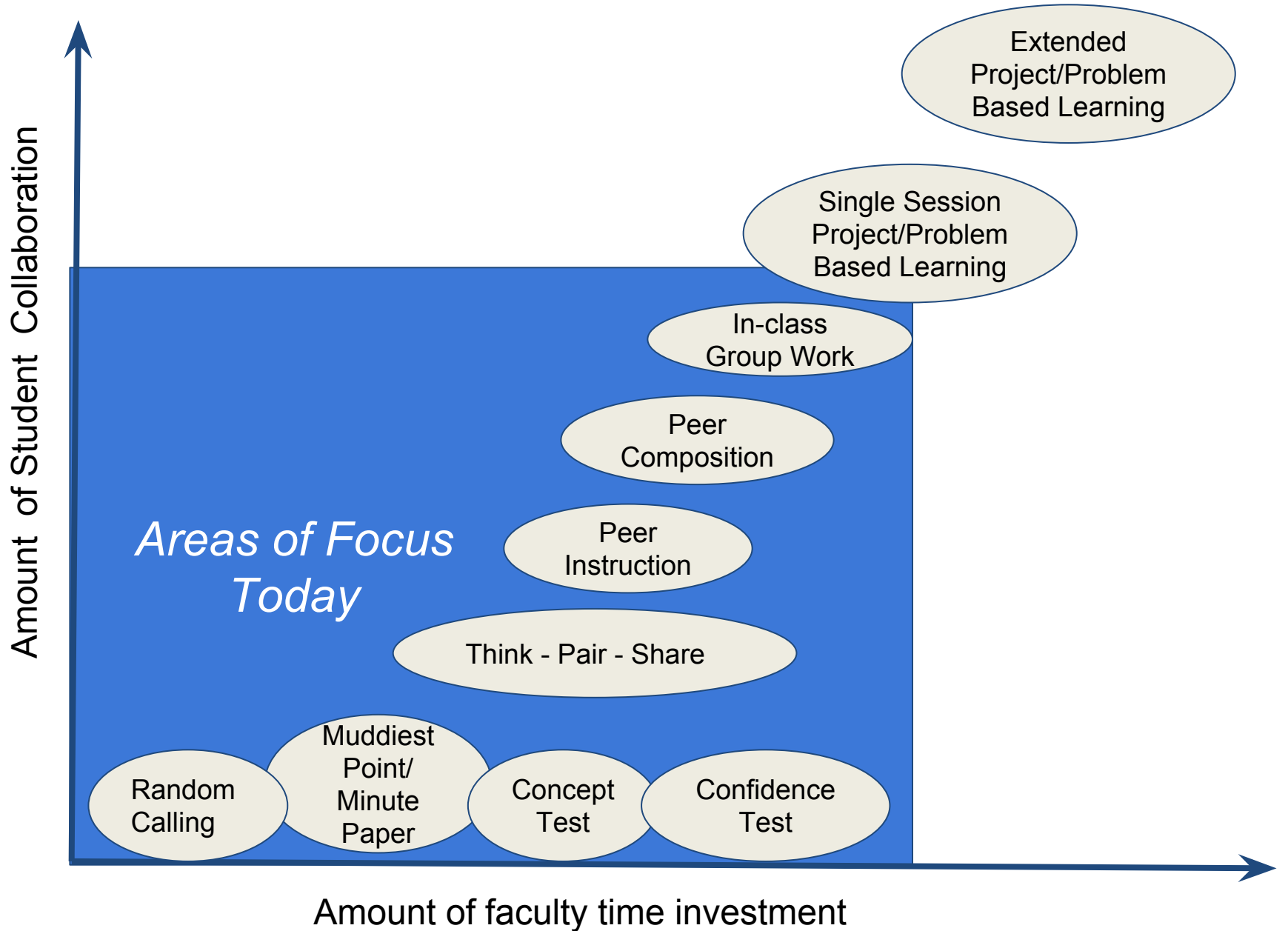
Benefits of Active Learning

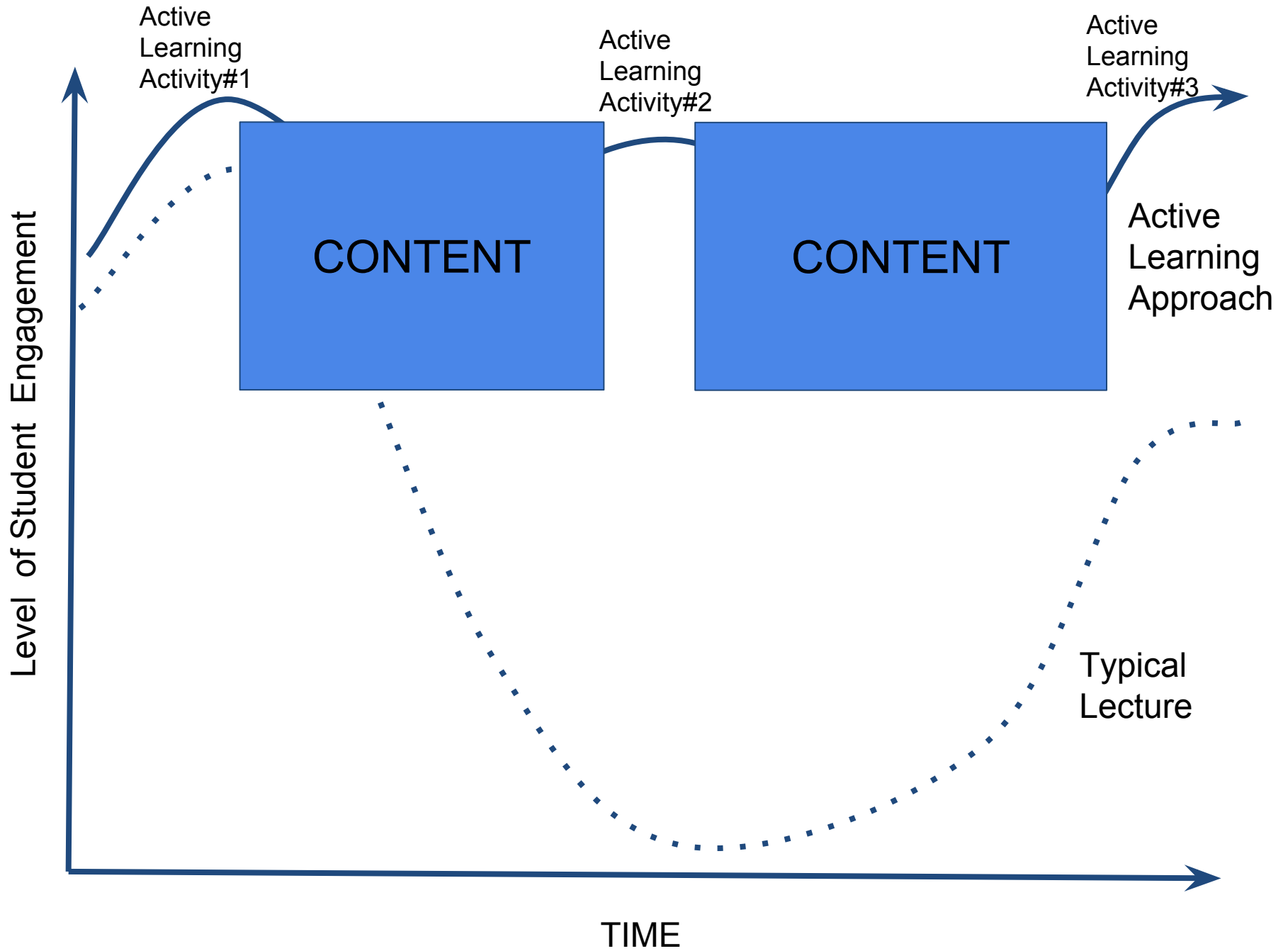
“As with most of the other faculty who tried these I became an instant fan. I would scan the [muddiest point] cards immediately after lecture and give feedback on the two or three most important/most frequent comments at the beginning of the subsequent lecture. This meshed well with my usual lecturing technique of beginning each lecture with a reprise of the key points from the previous lecture.”

(MIT Faculty Survey Respondent, *Adoption of Active Learning in a Lecture-Based Engineering Class*. Hall et al.)

Active Learning Approaches







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Step 1: Spend 5 minutes working individually

(a) reading this list of active learning approaches,

(b) place a “?” to any you have questions about and a star next to those you think have the greatest potential to benefit students in your class, and

(c) writing a few sentences in the following form: “I think this approach is most promising because...”

Step 2: Spend 5 minutes, in discussion with a partner, explaining to each other which approaches you selected and why.

Step 3: 10 minutes reporting back to the whole group.

(Questions: Which approaches did you select? Did you select the same approaches as your partner? Were your reasons similar? What questions do you have?)

Barriers to Change

(Optional, if time permits)

So...why aren't we all doing this? What are 2-3 key barriers to change you and other faculty face?

What specifically will you do address these challenges?

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4. Our Commitments Going Forward

On your handout, write:

New Active learning approaches I plan to implement.



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