Teacher Leader Learning Through Participation in and Facilitation of Professional Development Addressing Problems of Practice

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Research-Practice Partnership (RPP) Team

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University/District Partnership Coordinator

UUSD Team

- STEM Director
- Program Administrator for Mathematics
- Mathematics Content Specialists
- 9 Middle Grades Math Coaches
- 40 Mathematics Teacher Leaders

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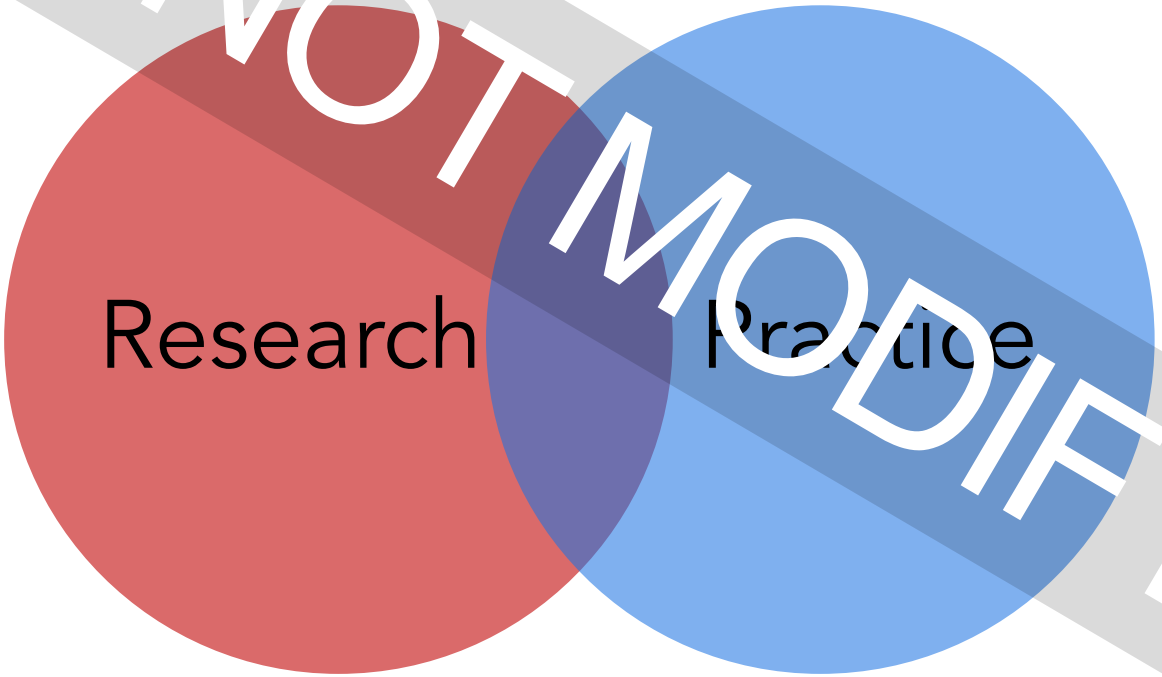
Overview of the Session

- Context of Research-Practice Partnership
- Teacher Leader Learning Models
- Data Sources & Selection
- Findings from One School Site

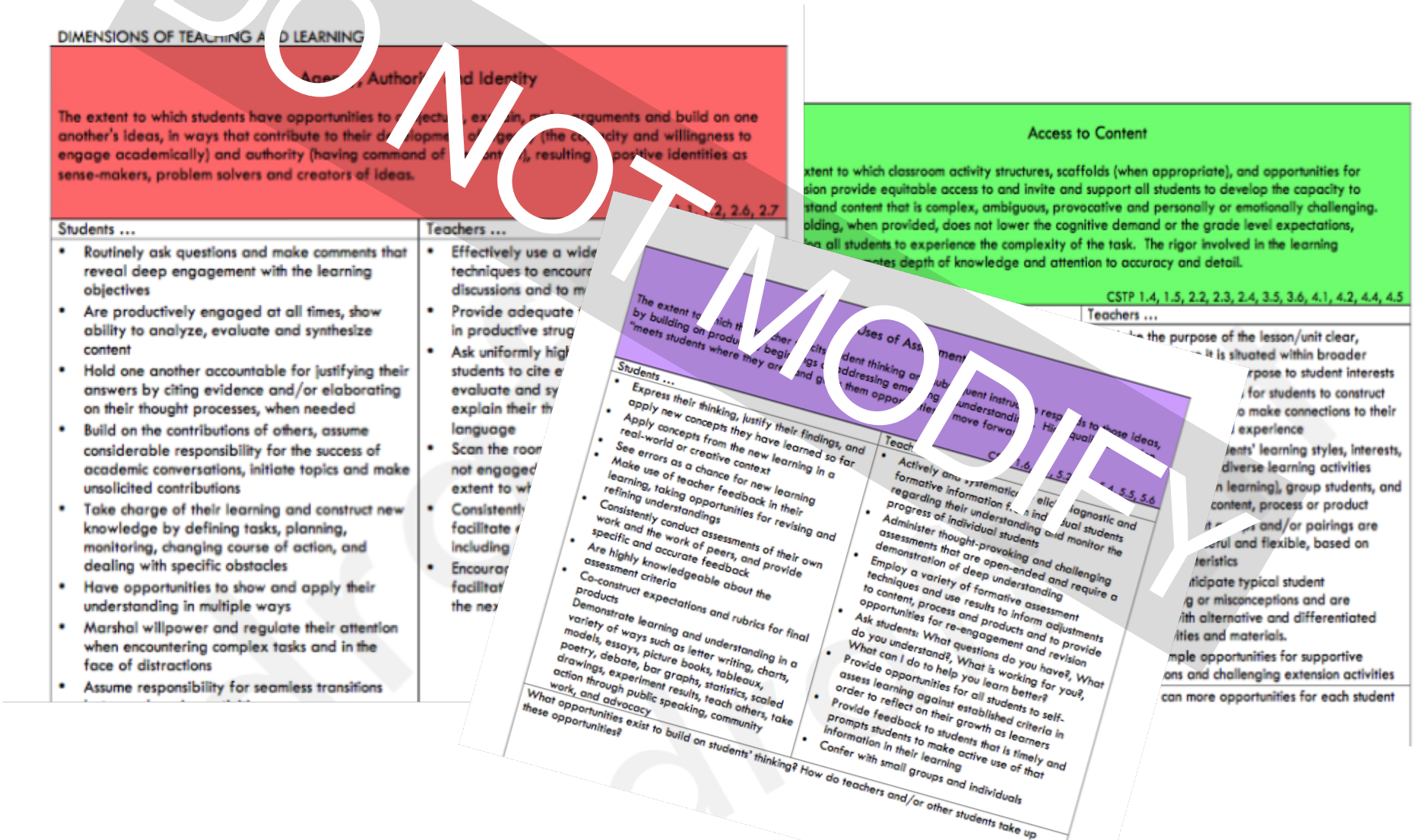
Context of Research-Practice Partnership (RPP)



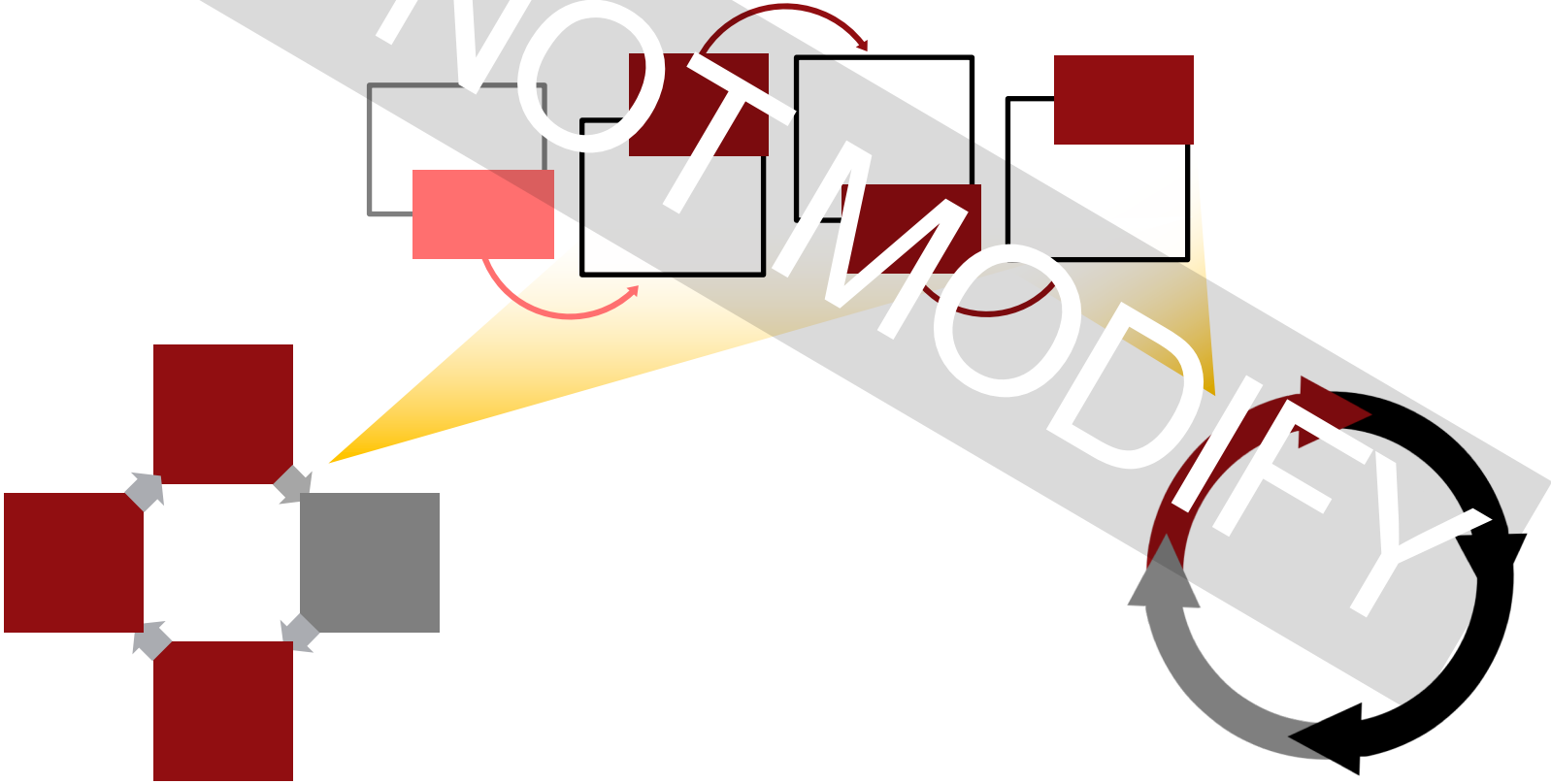
The Starting Point

- UUSD
  - Dimensions of Teaching and Learning
  - New task-based Mathematics Core Curriculum
- CSET
  - Problem-Solving Cycle (PSC) Model
  - Teacher Leader Preparation (TLP) Model

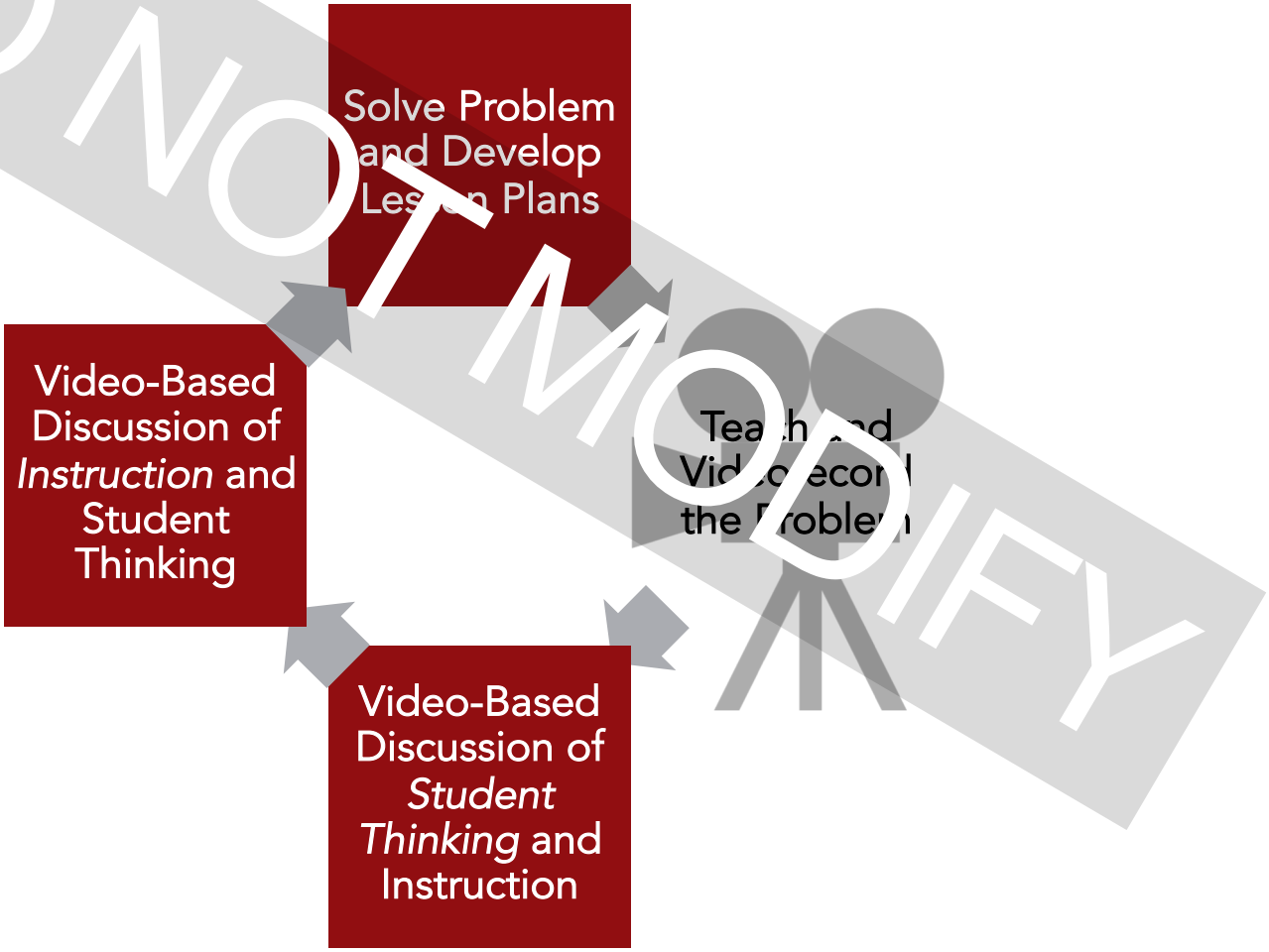
UUSD's Dimensions of Teaching and Learning



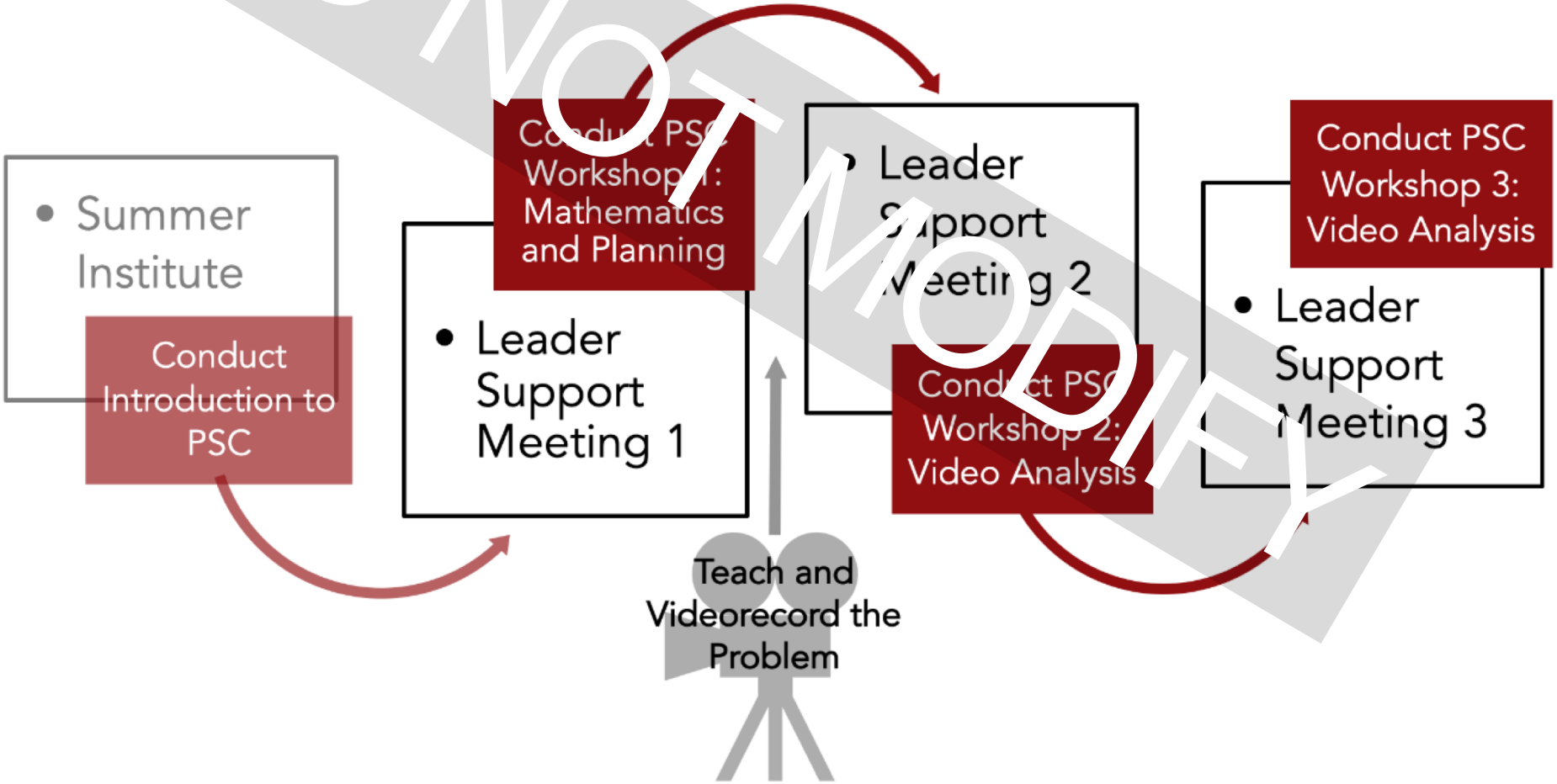
Teacher Leader Learning Models



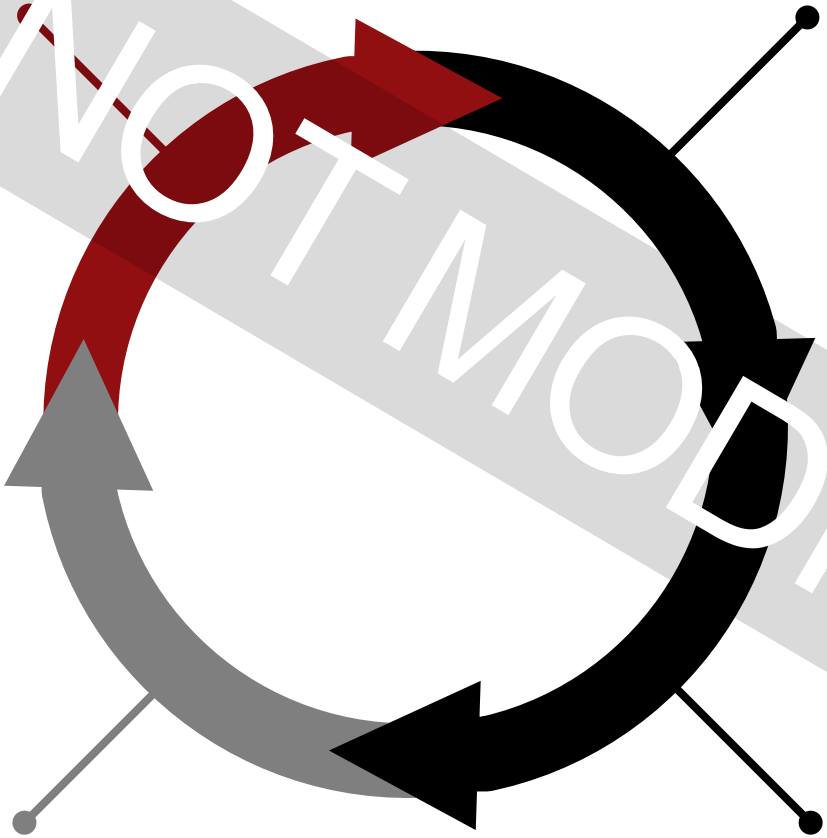
The Problem-Solving Cycle
(2× per School Year)



The Problem-Solving Cycle
Teacher Leadership Preparation Model



Learning to Lead Model



PSC Workshop

Facilitation

TLs facilitate PD at own school site

Leader Support Meeting

Modeling

TLs participate as learners

Conduct PSC Workshop 3: Video Analysis

- Leader Support Meeting 3

Debriefing or "Pulling Back the Curtain"

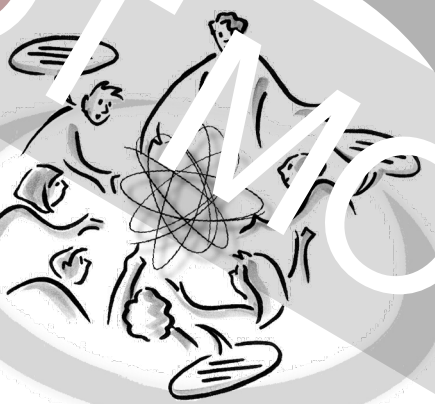
TLs as facilitator learners

Planning and Rehearsal

TLs plan and rehearse to facilitate a PSC Workshop

Leader Support Meeting: Modeling

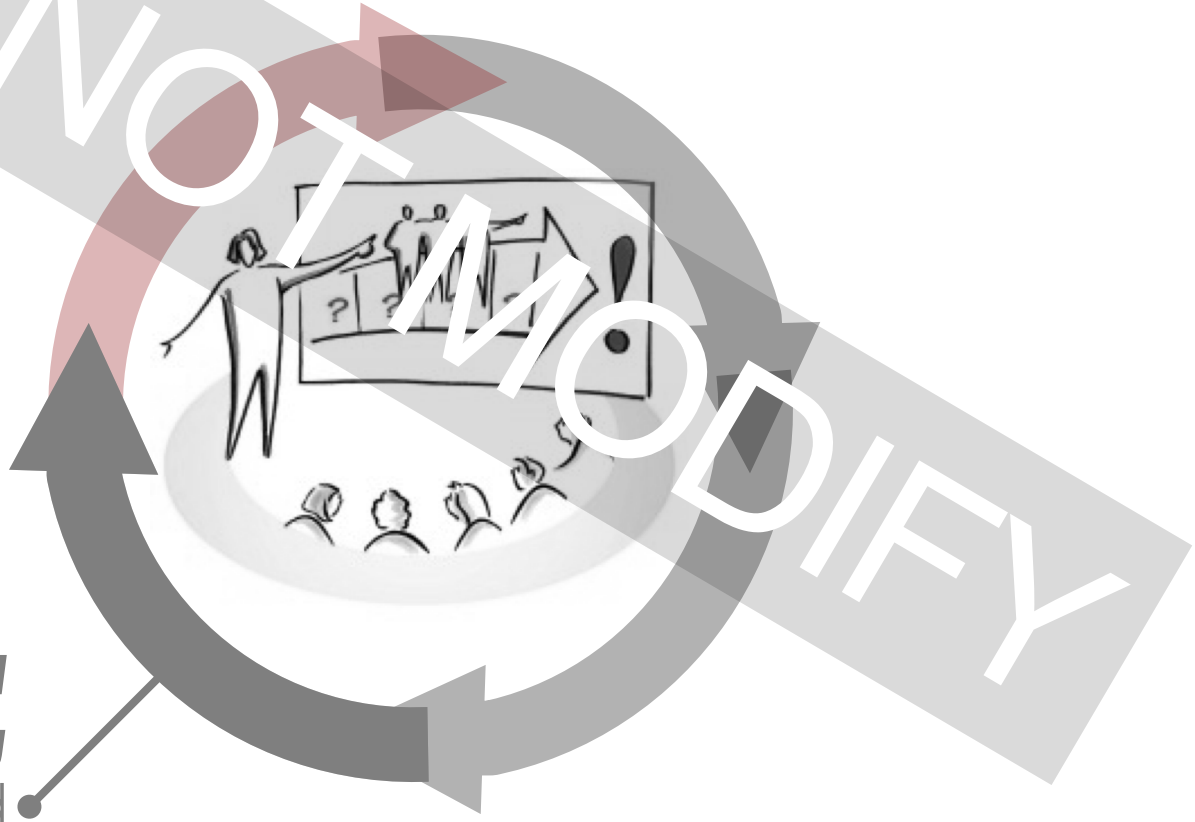
Leader Support Meeting: Debriefing



Debriefing or "Pulling Back the Curtain"

- TLs as facilitator learners

Leader Support Meeting: Rehearsing

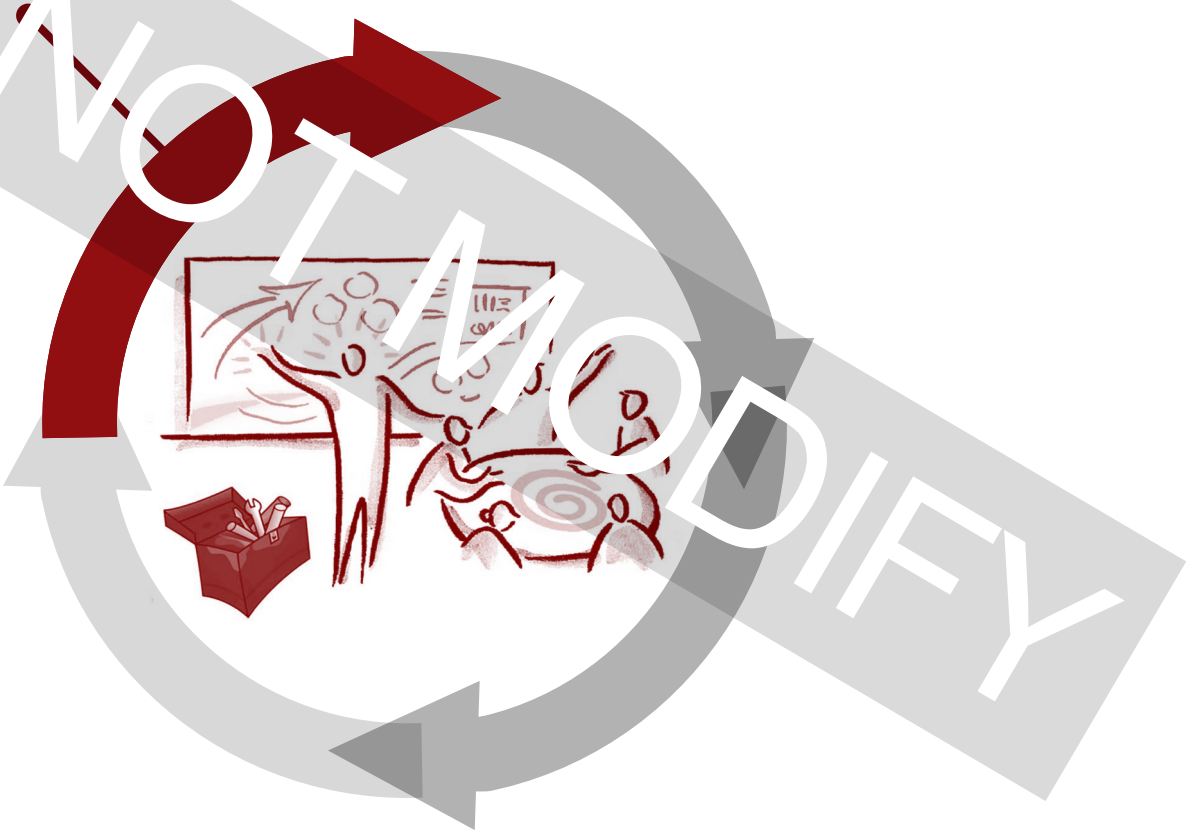


Rehearsal and Planning
TLs plan and rehearse facilitation

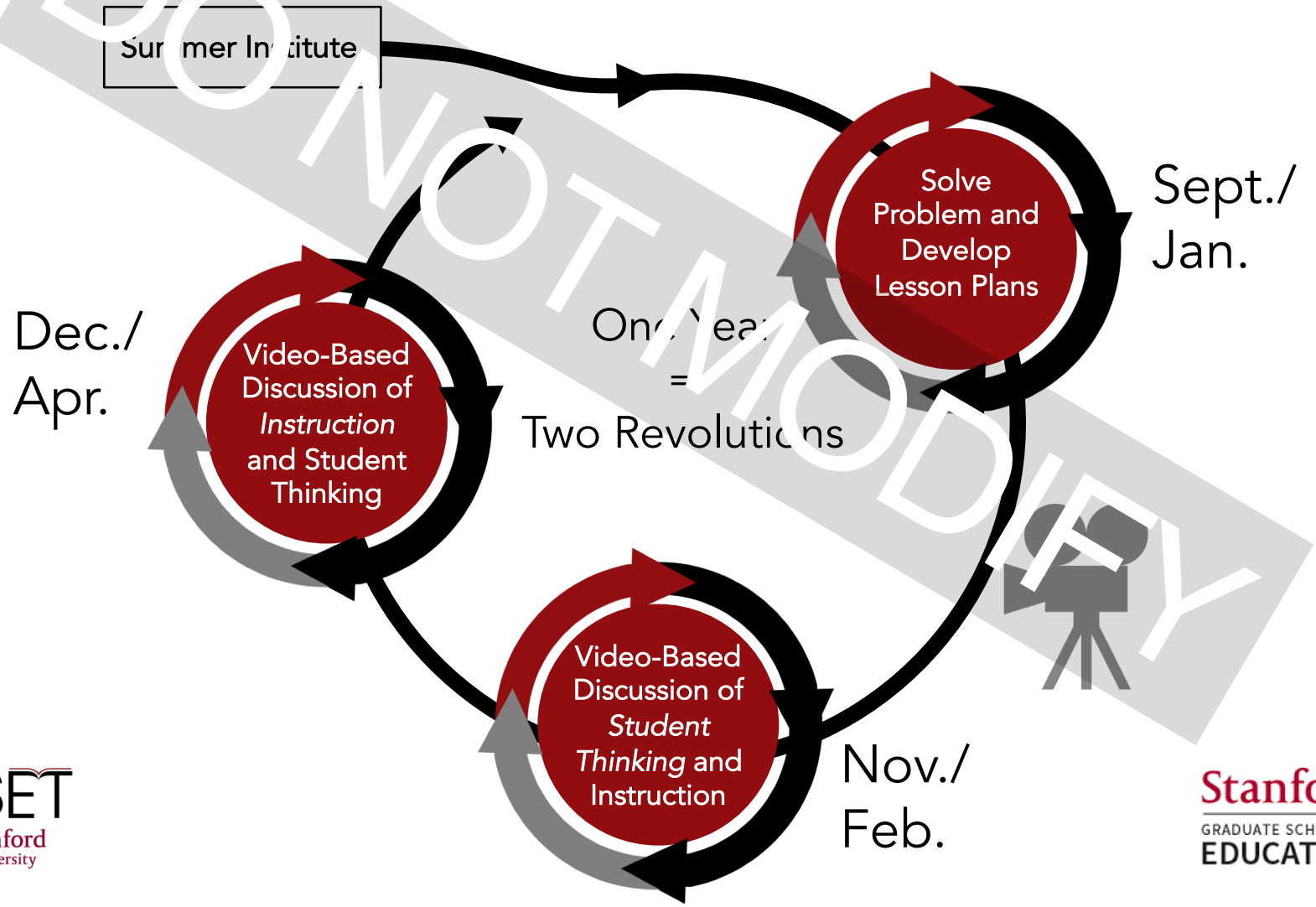
Problem-Solving Cycle Workshops: Facilitation

Facilitation c

TLs facilitate PD at
own school site



Teacher Leader Preparation Model



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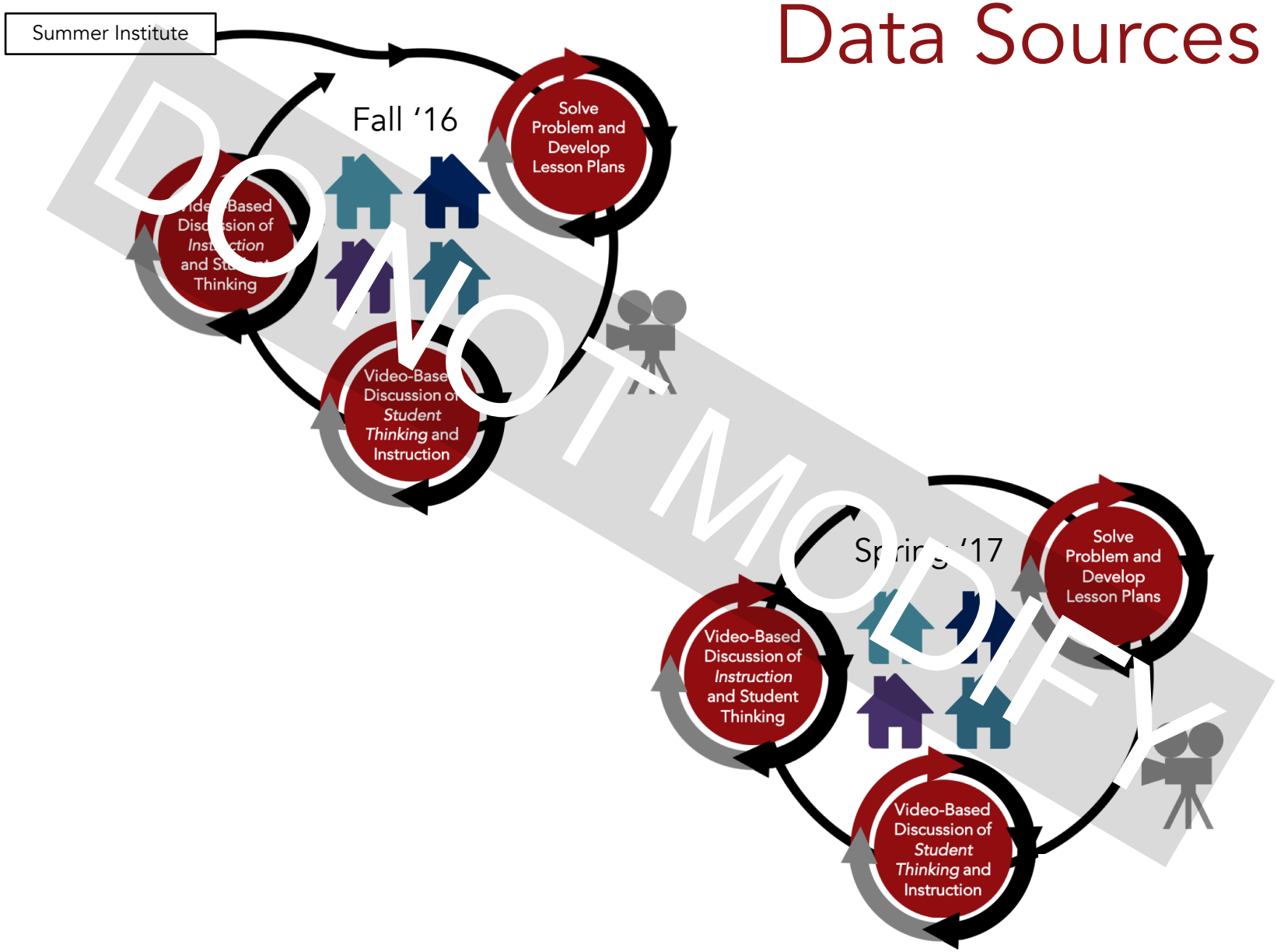
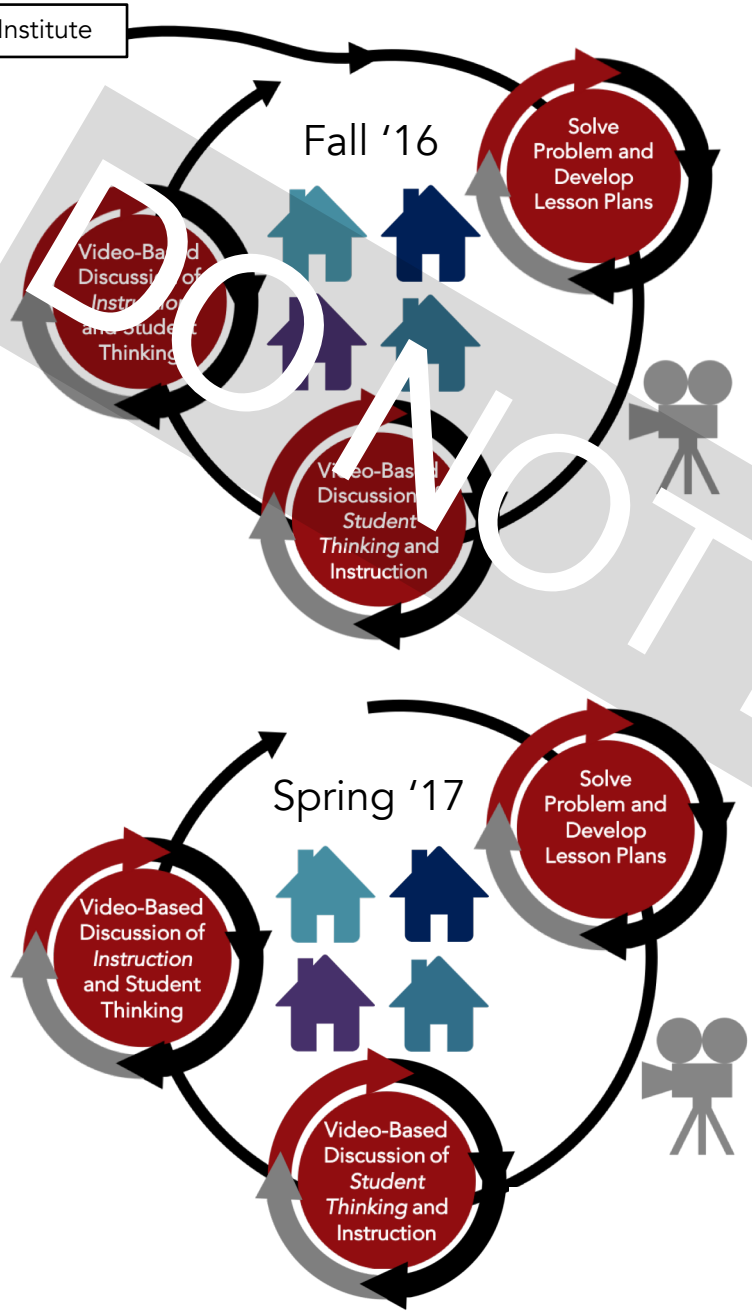
Research Questions

1. What was the nature of the activities, practices, and facilitation moves that were modeled in the TLPs?
2. How were components adopted and adapted during rehearsals and PSC workshops?

Data Sources



Summer Institute



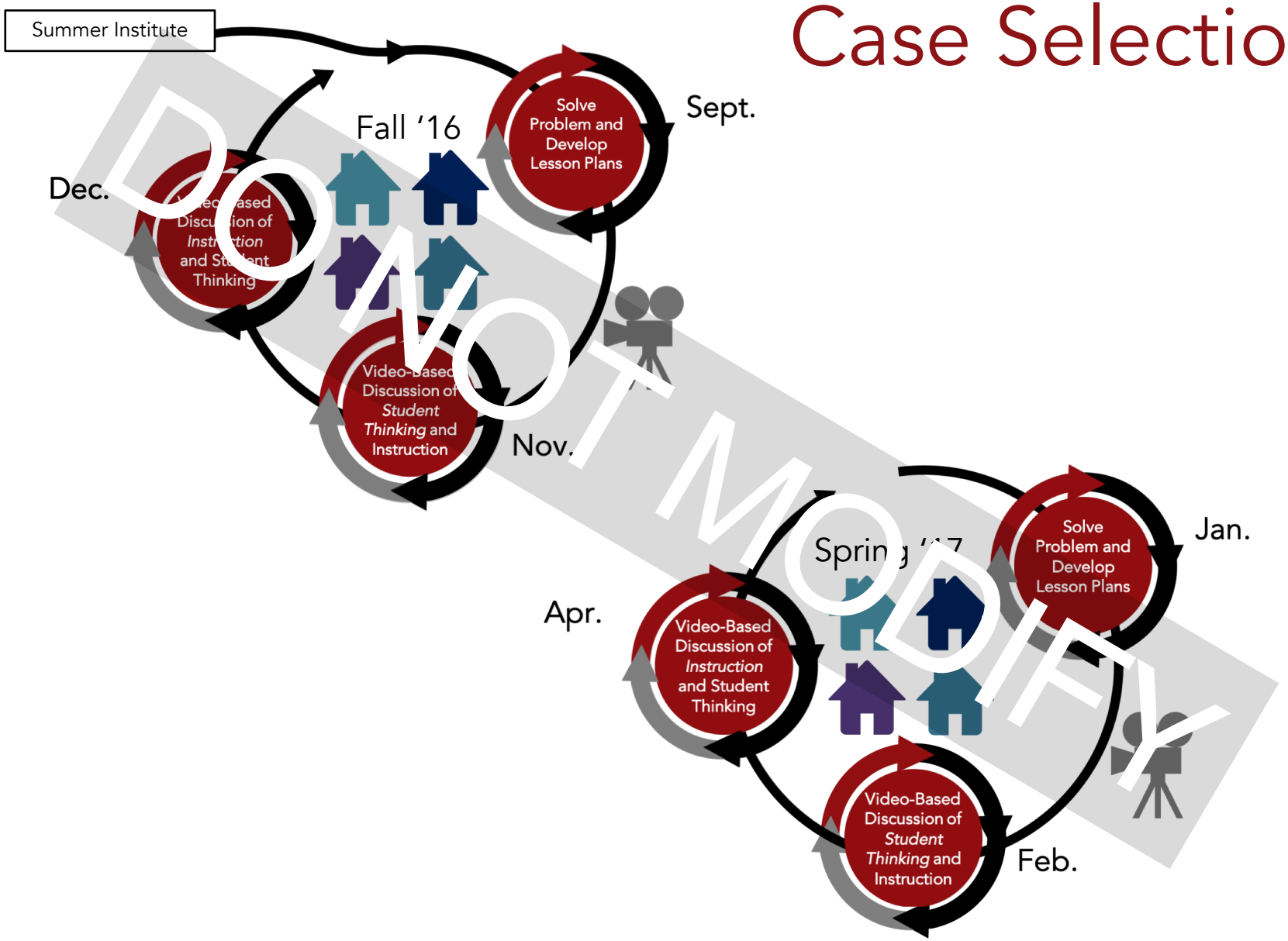
Data Analysis

- Task Selection
- Participation Structures
- Artifacts of Practice
  - Video Clip Selection
  - Student Work

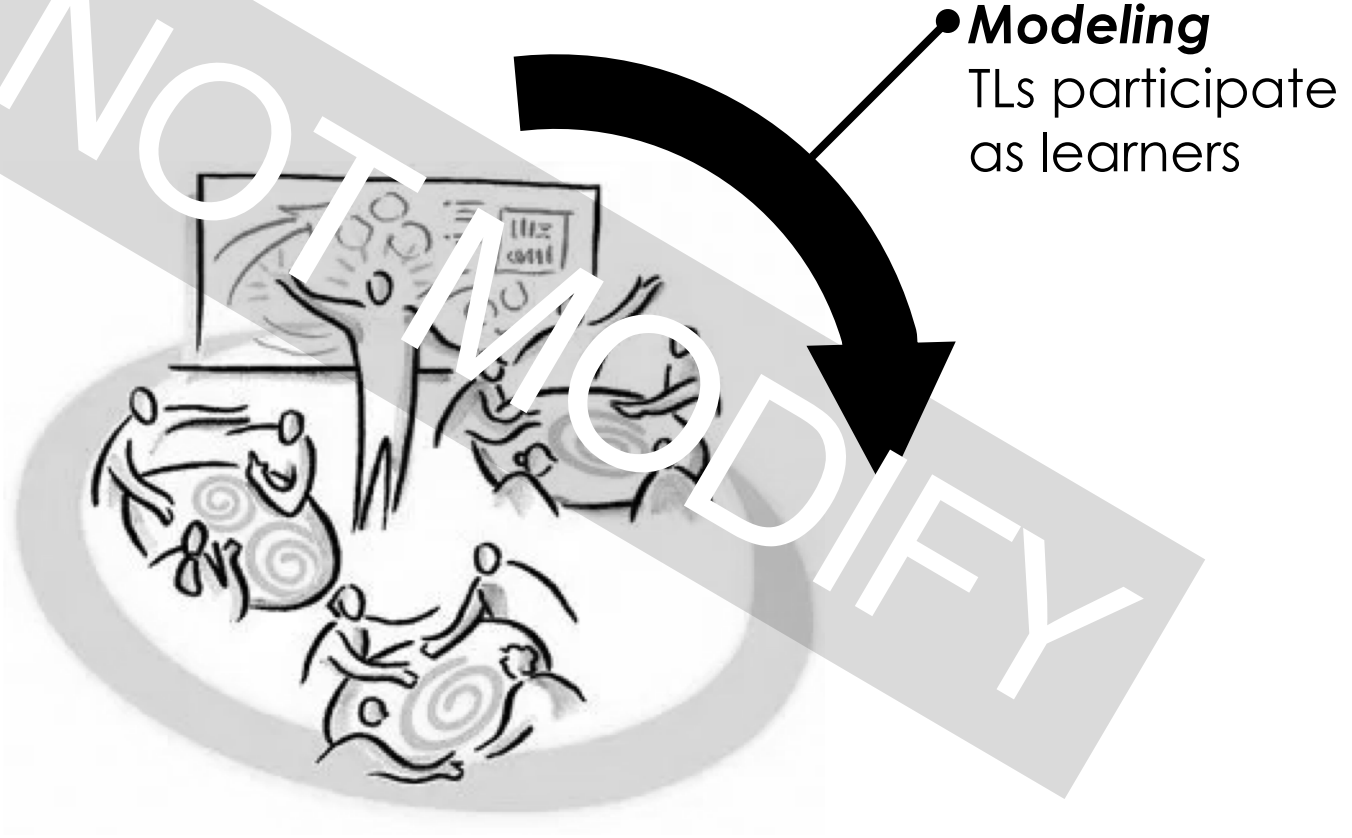
Language

- Focal Question(s)
- Facilitation Moves

Case Selection

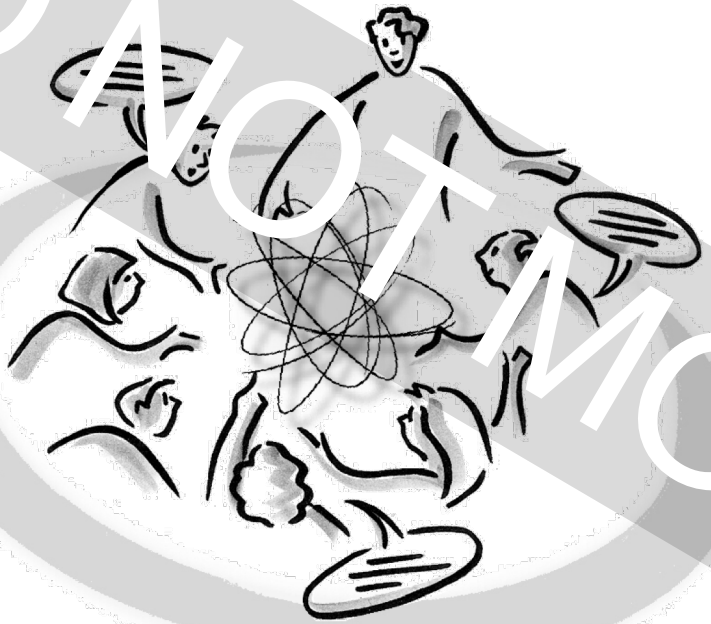


Leader Support Meeting: Modeling



Modeling

Leader Support Meeting: Debriefing



Debriefing or "Pulling Back the Curtain"

- TLs as facilitator learners

Debriefing

Leader Support Meeting: Rehearsing

Rehearsal and Planning

TLs plan and rehearse facilitation

Rehearsing

Problem-Solving Workshops: Facilitation

Facilitation of

TLs facilitate PD at their own school site

Use of Dimensions

Agency, Authority and Identity The extent to which students have opportunities to conjecture, explain, make arguments and build on one another's ideas, in ways that contribute to their development of agency (the capacity and willingness to engage academically) and authority (having command of the content), resulting in positive identities as sense-makers, problem solvers and creators of ideas. CSTP 1.1, 1.2, 2.6, 2.7	
Students …	Teachers …
• Routinely ask questions and make comments that reveal deep engagement with the learning objectives • Are productively engaged at all times, show ability to analyze, evaluate and synthesize content • Hold one another accountable for justifying their answers by citing evidence and/or elaborating on their thought processes, when needed • Build on the contributions of others, assume considerable responsibility for the success of academic conversations, initiate topics and make unsolicited contributions • Take charge of their learning and construct new knowledge by defining tasks, planning, monitoring, changing course of action, and dealing with specific obstacles • Have opportunities to show and apply their understanding in multiple ways • Marshal willpower and regulate their attention when encountering complex tasks and in the face of distractions • Assume responsibility for seamless transitions between learning activities	• Effectively use a wide variety of questioning techniques to encourage student-to-student discussions and to move student thinking forward • Provide adequate time for students to engage in productive struggle and formulate responses • Consistently ask high quality questions that require students to cite evidence, analyze content, evaluate and synthesize information and clearly explain their thought processes using academic language • Scan the room making note of when students not engaged and take action or monitor the extent to which students re-engage • Consistently use instructional techniques that facilitate equitable, active student participation, including opportunities for hands-on learning • Encourage student independence in learning, facilitating seamless transitions from one task to the next
What opportunities do students have to take charge and make sense of their learning and to grapple with problems and construct new ideas? How can more of these opportunities be created?	

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PSC Facilitation

Findings

– TLs took up modeled activity structures
  - Do the Math
  - Video-based discussions

– TLs used district tools from to support UUSD's vision
  - Task-Based Curriculum
  - Dimensions of Teaching and Learning

Discussion

- Leader Support Meetings appeared to support TLs in facilitating PSC workshops around problems of practice.

- CURRENT ANALYSES:
  - Expand analysis to all 9 school sites
  - Expand analysis over all four years of the project.

- FUTURE ANALYSES:
  - Identify cases to do a deeper analysis about the nature of adaptations