BUILDING THINKING CLASSROOMS

SFU SIMON FRASER UNIVERSITY
ENGAGING THE WORLD

Peter Liljedahl
@pgliljedahl

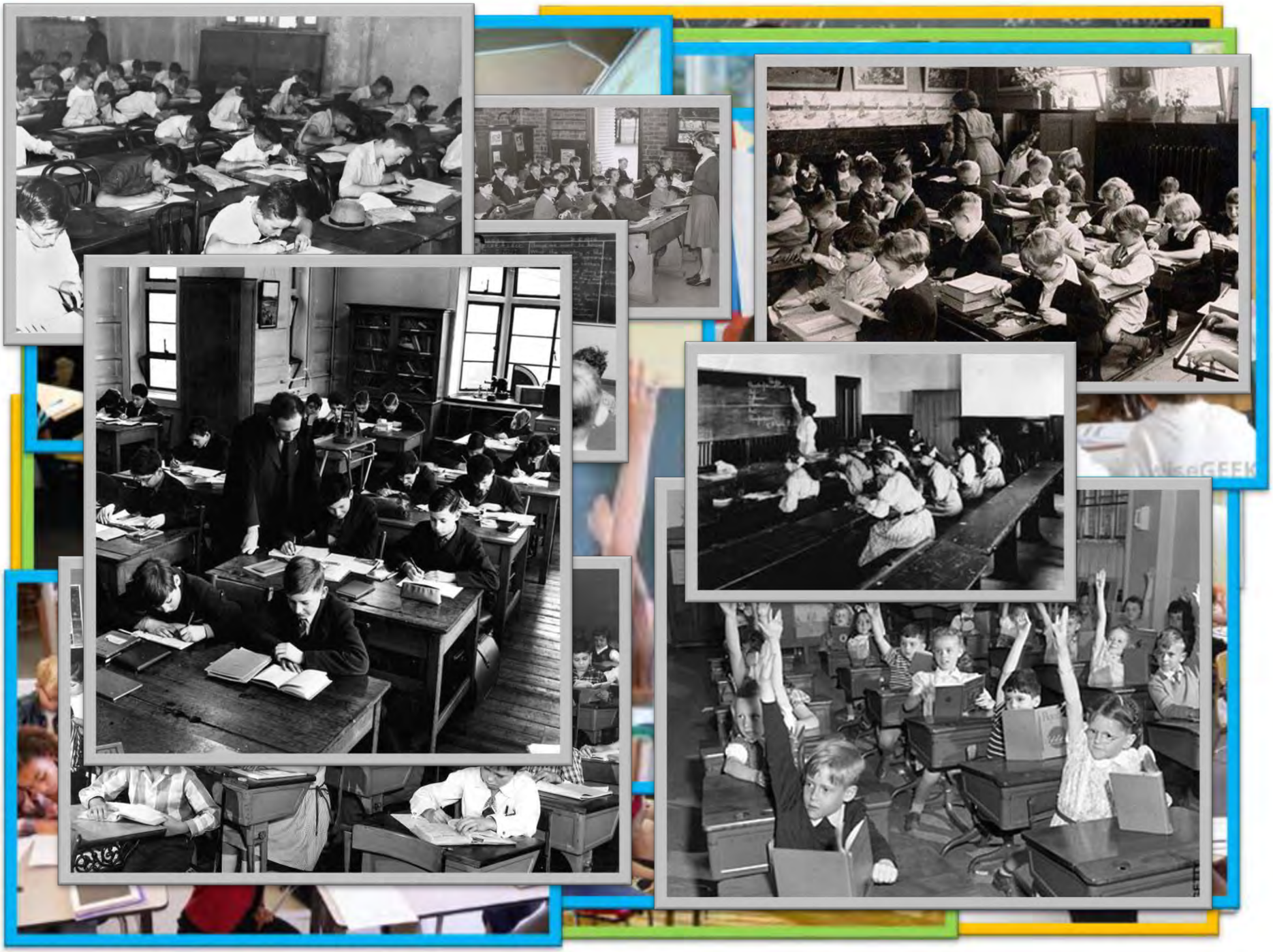
…back in 2003…


20% of students spent 20% of class time thinking
80% of students spent 0% of class time thinking


RESPECT
March

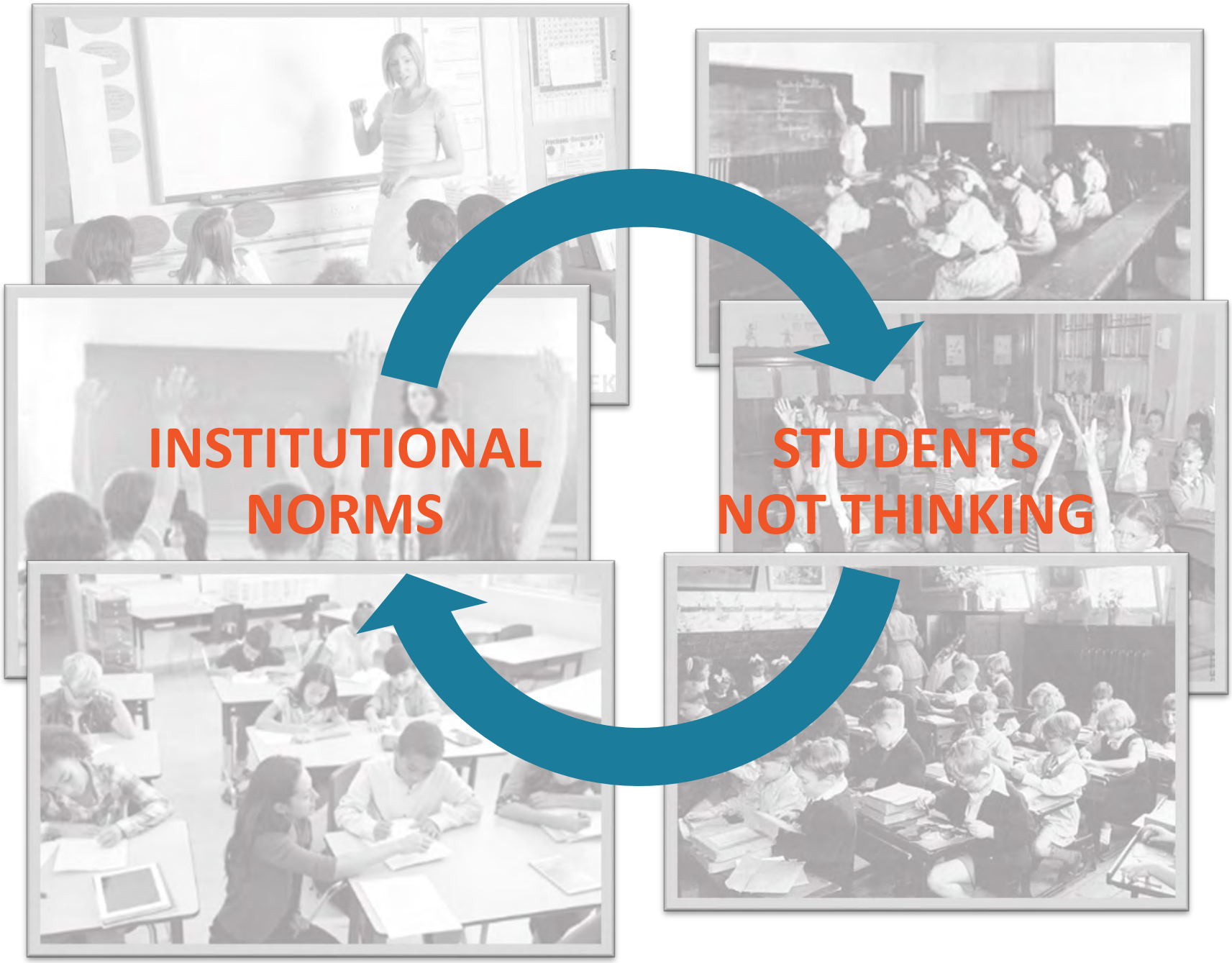

SPORTS


Fractions • Decimals
wiseGEEK




INSTITUTIONAL NORMS


NON-NEGOTIABLE NORMS


INSTITUTIONAL
NORMS
STUDENTS
NOT THINKING

400+ TEACHERS | 15 YEARS | 2 WEEK CYCLES

RENEGOTIATING THE NON-NEGOTIATED NORMS

400+ TEACHERS | 15 YEARS | 2 WEEK CYCLES

CLASSROOM PRACTICES

1	What are the types of tasks we use?	
2	How we form collaborative groups?	
3	Where students work?	
4	How we arrange the furniture in our classroom?	
5	How we answer questions?	
6	When, where, and how tasks are given?	
7	What homework looks like?	
8	How we foster student autonomy?	
9	How we use hints and extensions?	
10	How we consolidate a lesson?	
11	How we give notes?	
12	What we choose to evaluate?	
13	How we use formative assessment?	
14	How we grade?	

	CLASSROOM PRACTICES	*OPTIMAL* PRACTICES FOR THINKING
1	What are the types of tasks we use?	
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14	How we grade?	

	CLASSROOM PRACTICES	*OPTIMAL* PRACTICES FOR THINKING
1	What are the types of tasks we use?	Use thinking tasks
2	How we form collaborative groups?	Form frequent visibly random groupings
3	Where students work?	Use vertical non-permanent surfaces
4	How we arrange the furniture in our classroom?	*Defront* the classroom
5	How we answer questions?	Only answer keep thinking questions
6	When, where, and how tasks are given?	Give tasks early, standing, and verbally
7	What homework looks like?	Give check your understanding questions
8	How we foster student autonomy?	Be intentionally less helpful
9	How we use hints and extensions?	Create and manage *flow*
10	How we consolidate a lesson?	Consolidate from the bottom
11	How we give notes?	Use meaningful notes
12	What we choose to evaluate?	Evaluate what you value
13	How we use formative assessment?	Communicate to students where they are and where they are going
14	How we grade?	Report out based on data (not points)

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CLASSROOM PRACTICES

OPTIMAL PRACTICES FOR THINKING

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3	Where stu	
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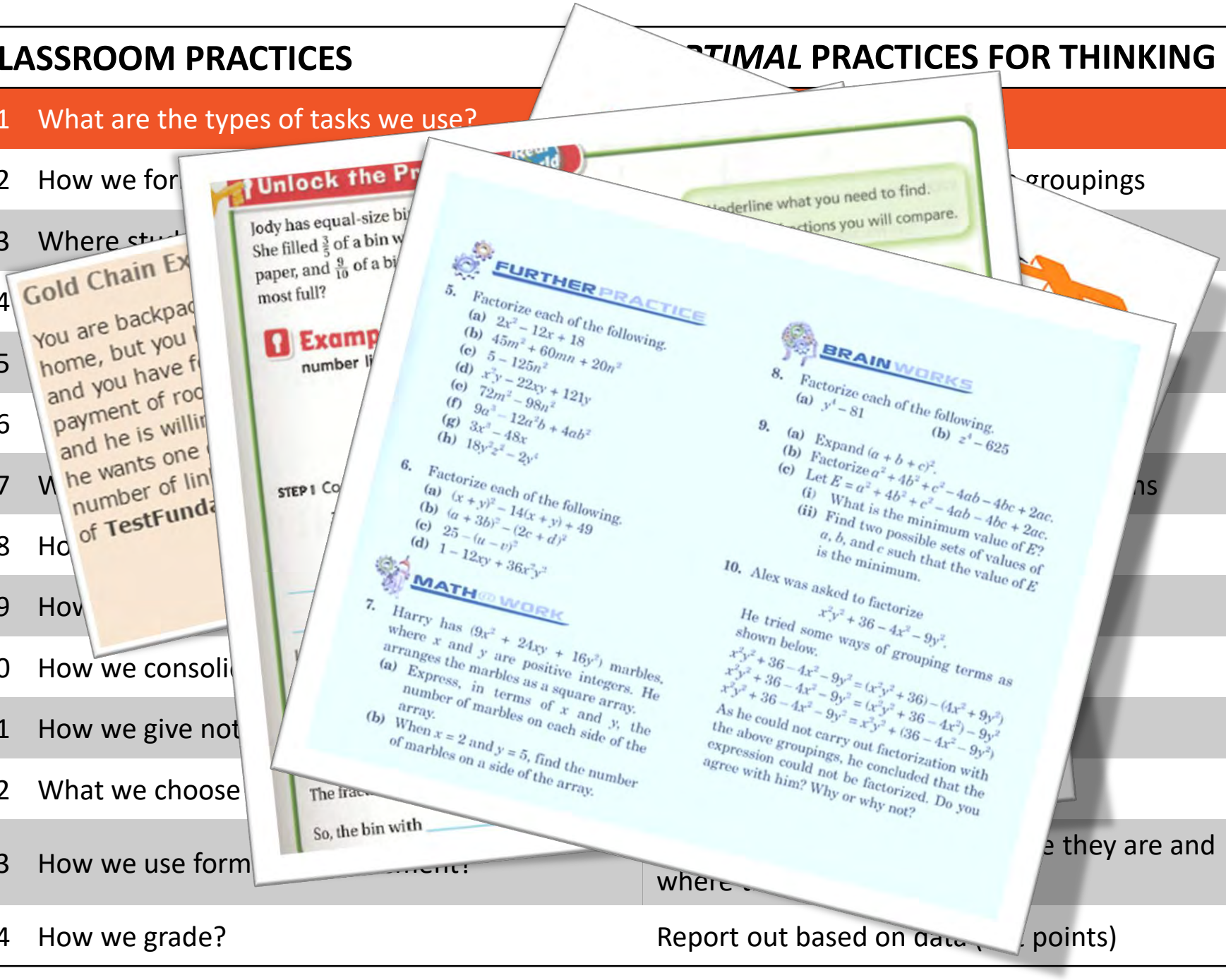
11	How we give not	
12	What we choose	
13	How we use form	e they are and where
14	How we grade?	Report out based on data (points)



	CLASSROOM PRACTICES	*OPTIMAL* PRACTICES FOR THINKING
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14	How we grade?	Report out based on data (not points)

	CLASSROOM PRACTICES	*OPTIMAL* PRACTICES FOR THINKING
1		Use thinking tasks
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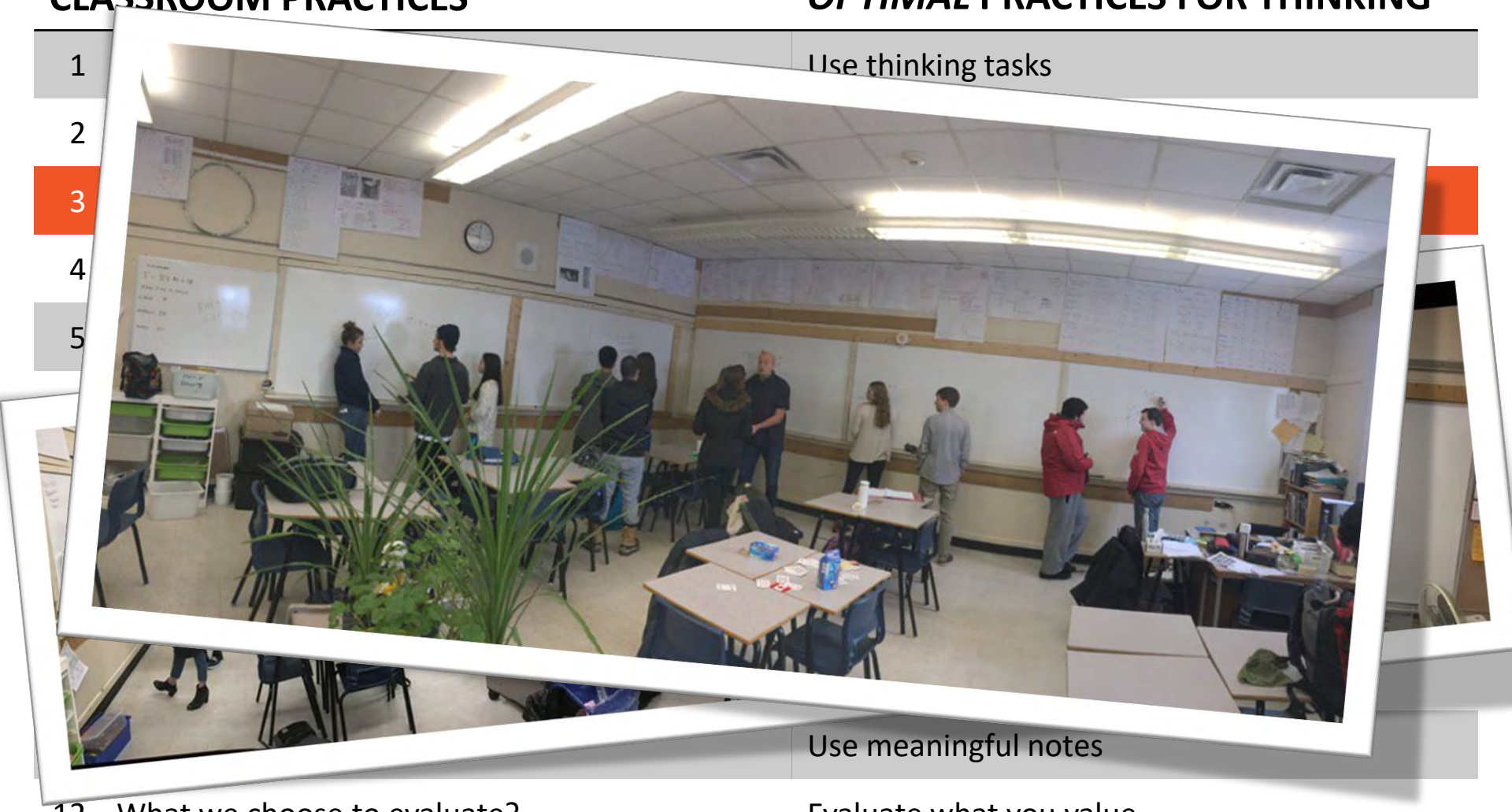
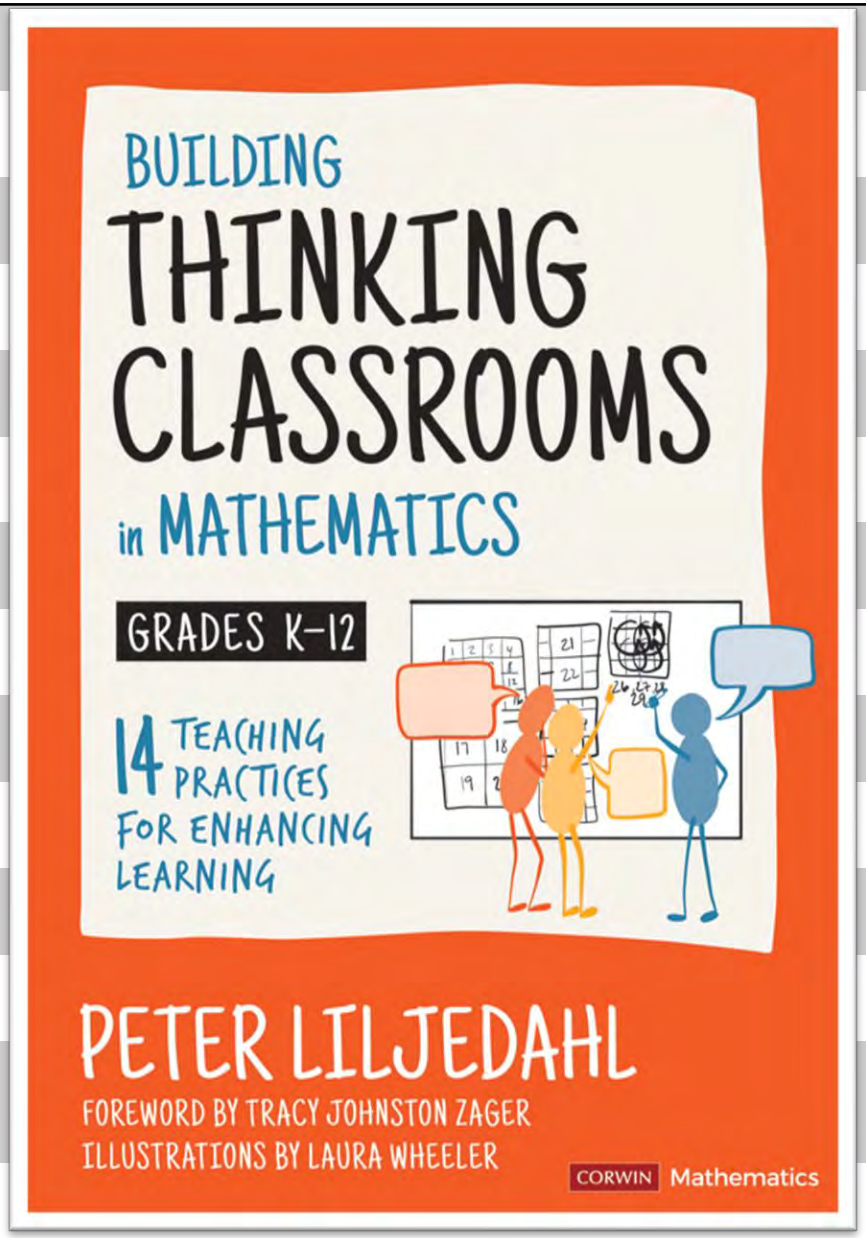
		Use meaningful notes
12	What we choose to evaluate?	Evaluate what you value
13	How we use formative assessment?	Communicate to students where they are and where they are going
14	How we grade?	Report out based on data (not points)



CLASSROOM PRACTICES		*OPTIMAL* PRACTICES FOR THINKING
1		Use thinking tasks
2		Form frequent visibly random groupings
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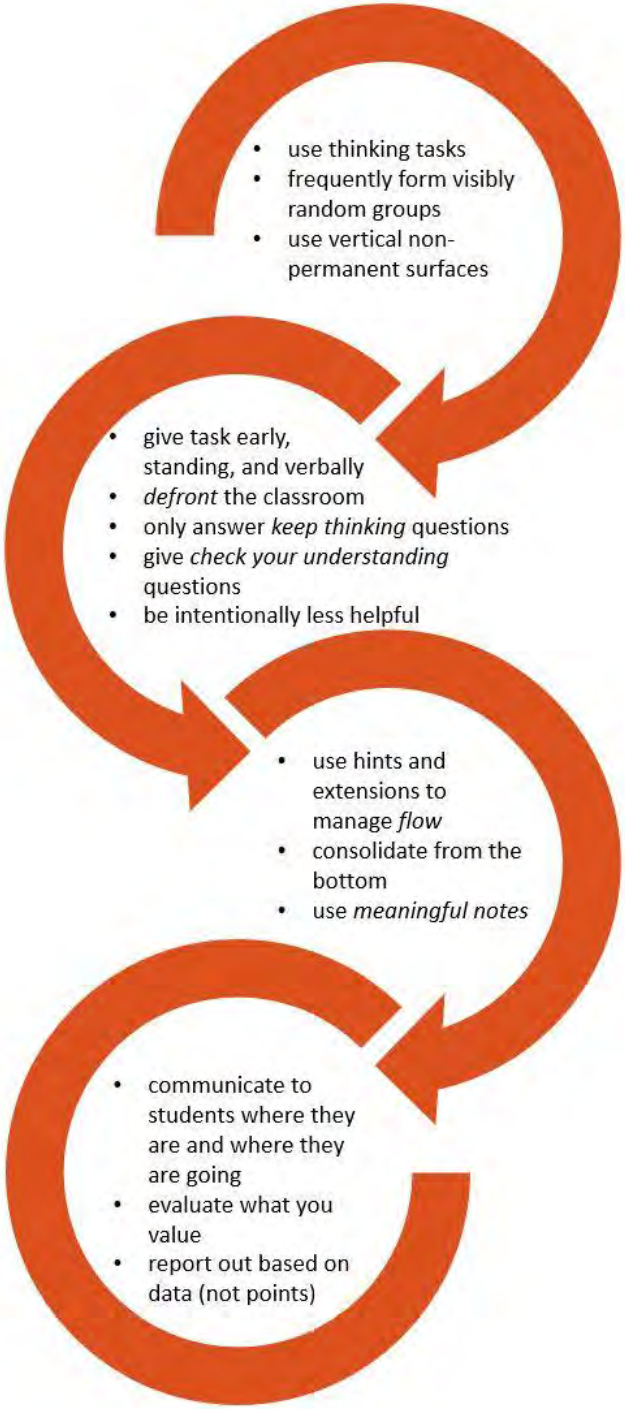
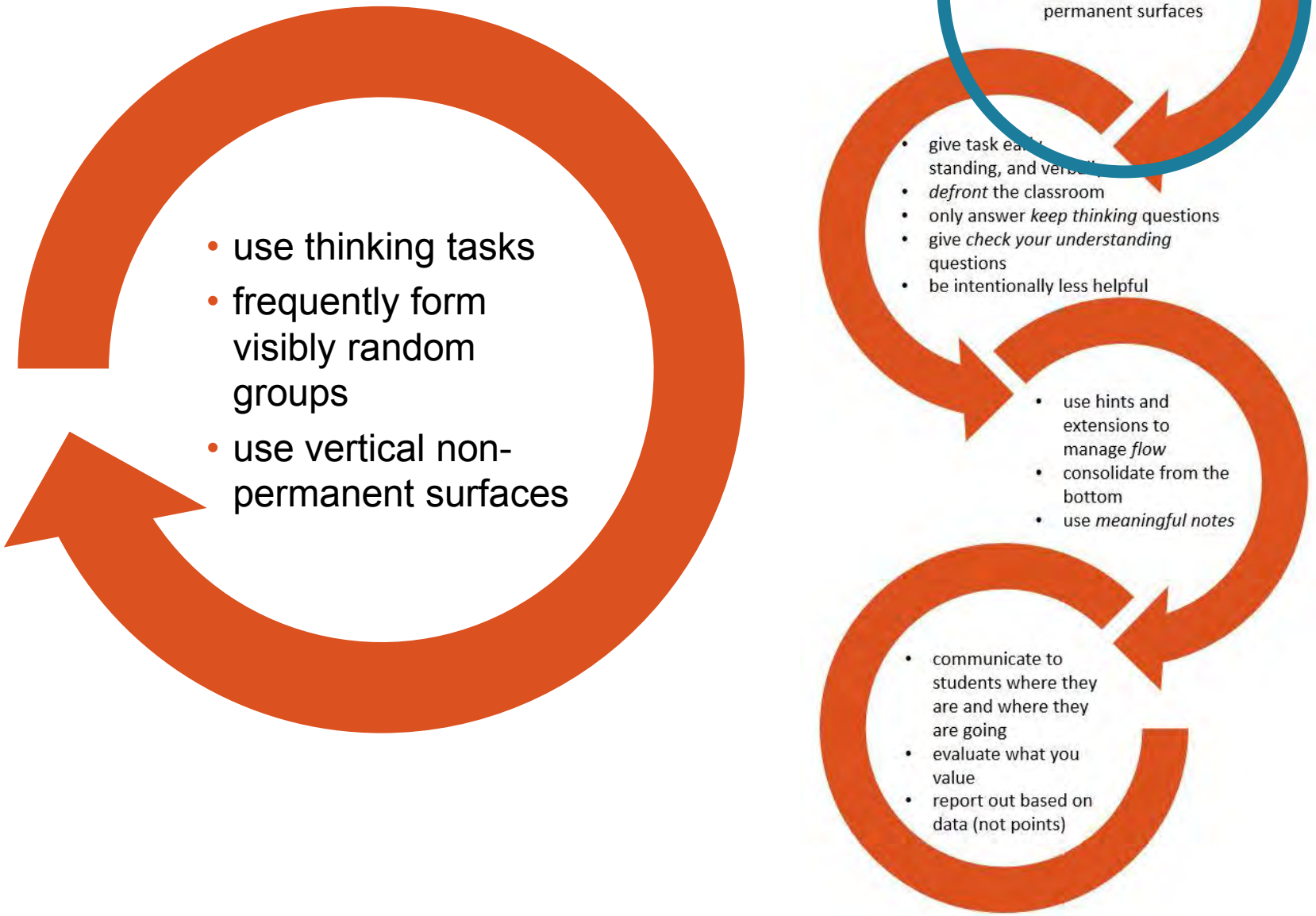
4		*Defront* the classroom
5		Only answer keep thinking questions
6		Give tasks early, standing, and verbally
7		Give check your understanding questions
8		Be intentionally less helpful
9		Create and manage *flow*
10		Consolidate from the bottom
11		Use meaningful notes
12		Evaluate what you value
13		Communicate to students where they are and where they are going
14		Report out based on data (not points)

WHERE TO START?

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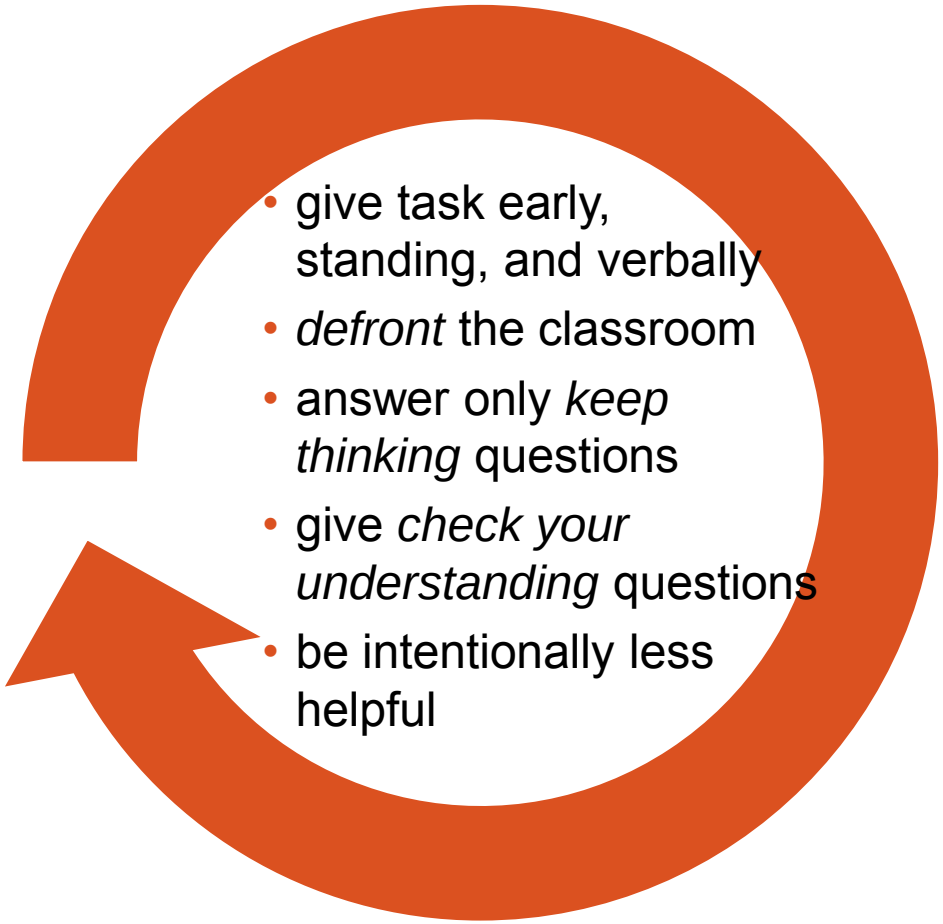
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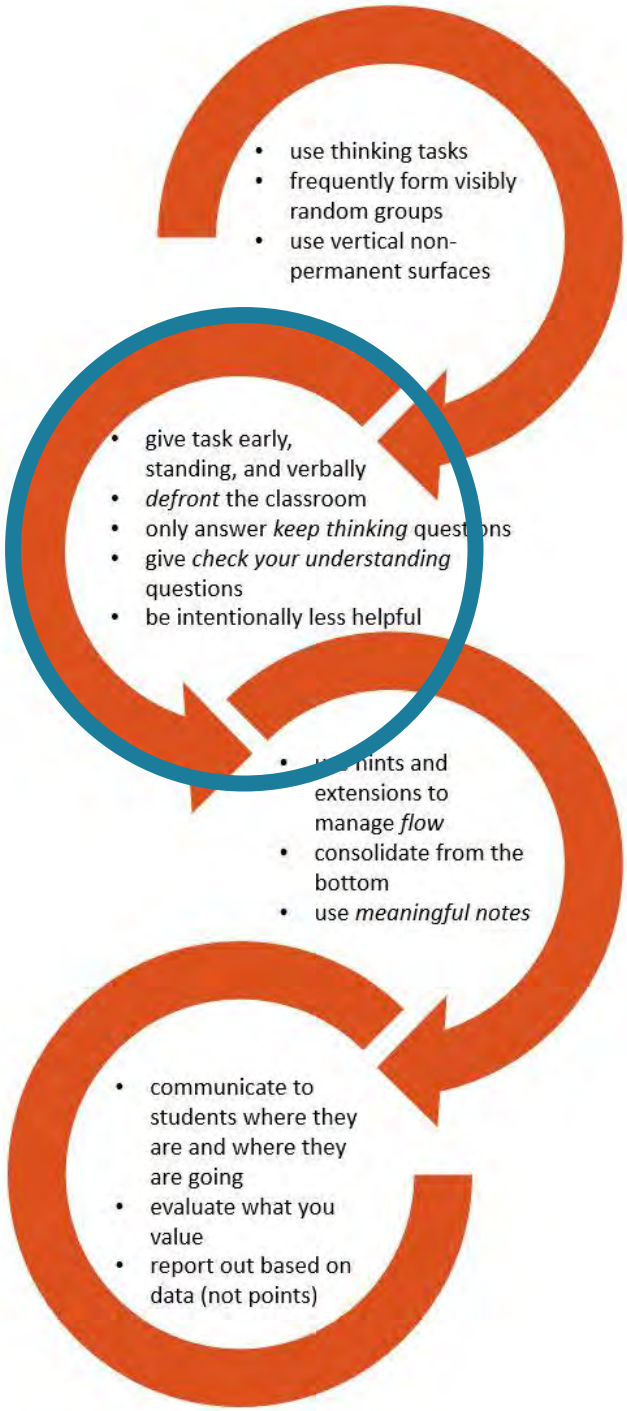
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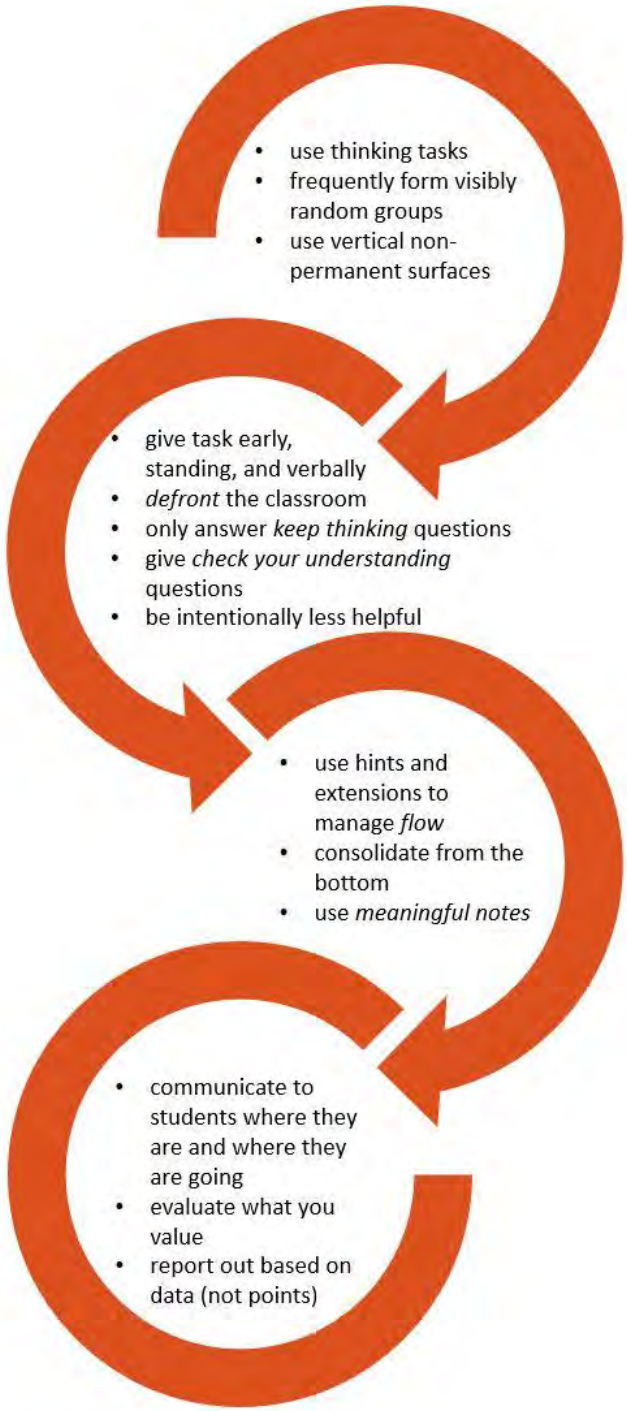
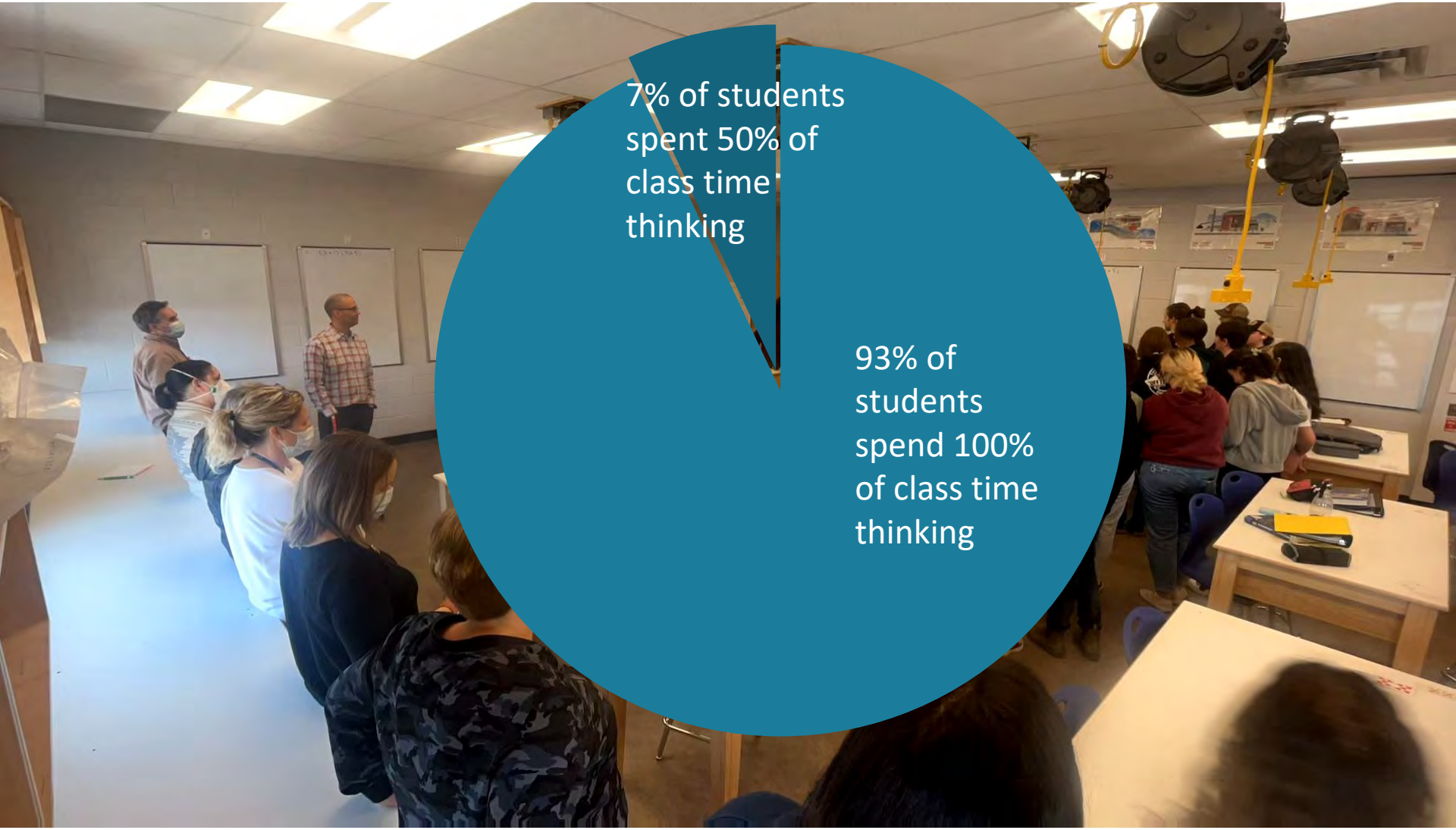
BUILDING THINKING CLASSROOMS




7% of students spent 50% of class time thinking
93% of students spend 100% of class time thinking

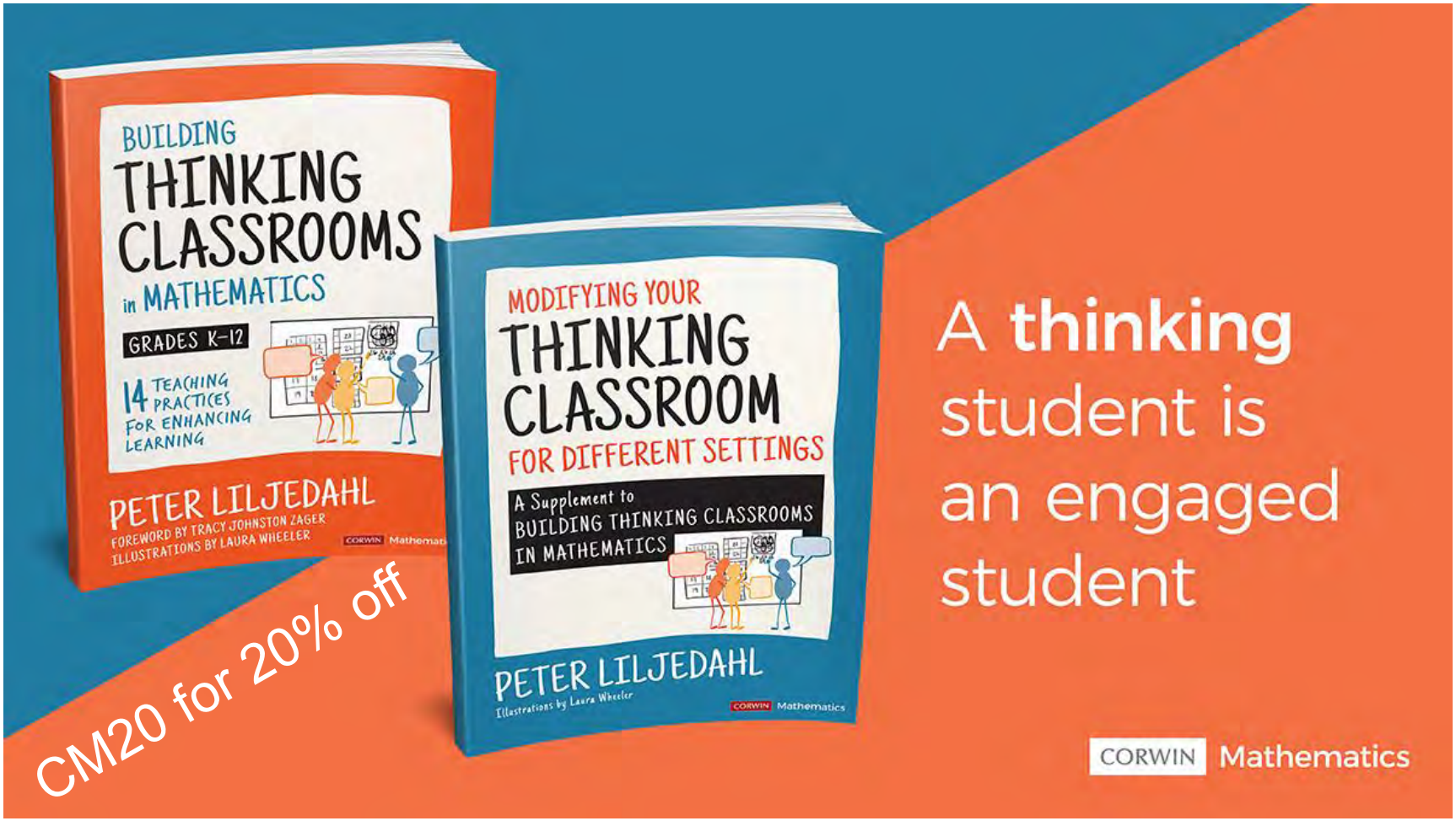
THANK YOU!

@pgliljedahl | #thinkingclassroom

Building Thinking Classrooms

www. buildingthinkingclassrooms.com

https://bit.ly/3qYGtDU


BUILDING
THINKING
CLASSROOMS
in MATHEMATICS
GRADES K–12
14 TEACHING PRACTICES FOR ENHANCING LEARNING
PETER LILJEDAHL
FOREWORD BY TRACY JOHNSTON ZAGER
ILLUSTRATIONS BY LAURA WHEELER
MODIFYING YOUR
THINKING
CLASSROOM
FOR DIFFERENT SETTINGS
A Supplement to BUILDING THINKING CLASSROOMS IN MATHEMATICS
PETER LILJEDAHL
Illustrations by Laura Wheeler
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