

SAMR: A Pragmatic Approach

Ruben R. Puentedura, Ph.D.

Transformation

Redefinition

*Tech allows for the creation of new tasks,
previously inconceivable*

Modification

Tech allows for significant task redesign

Augmentation

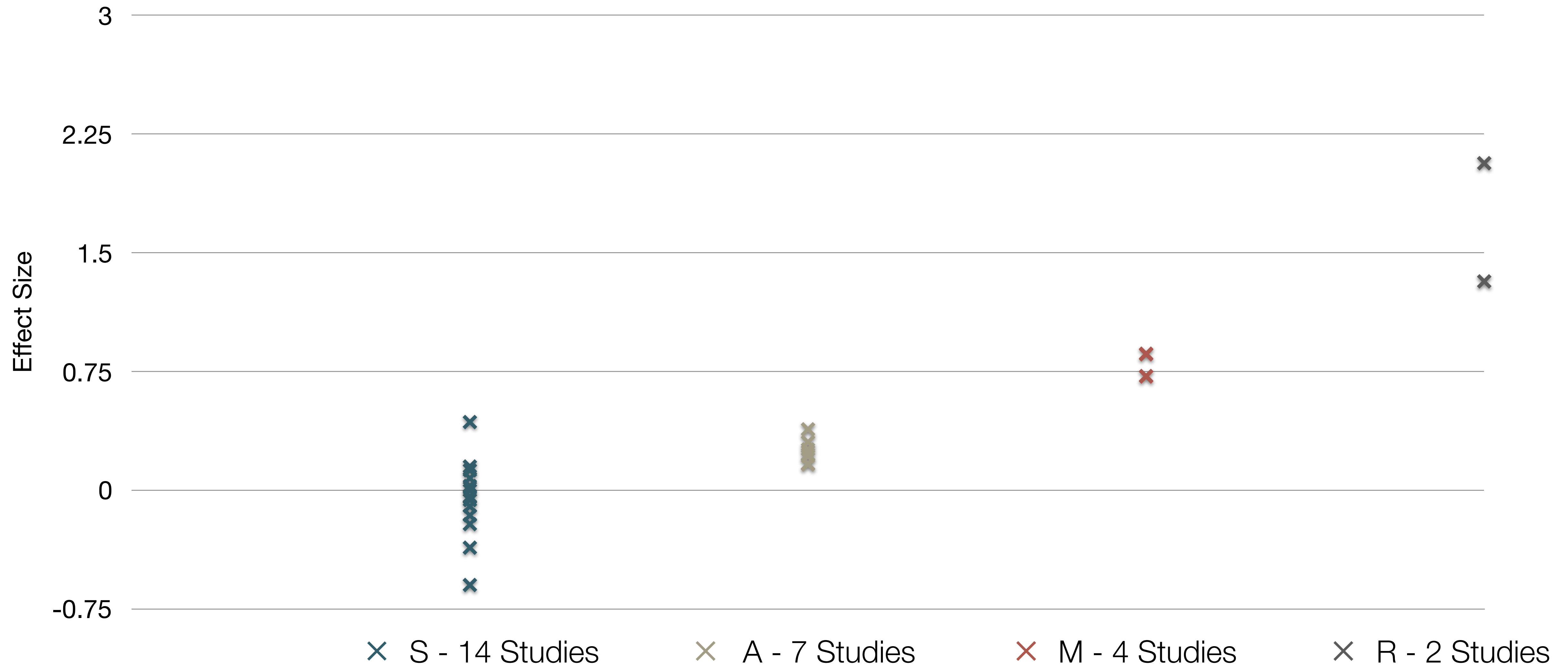
*Tech acts as a direct tool substitute, with
functional improvement*

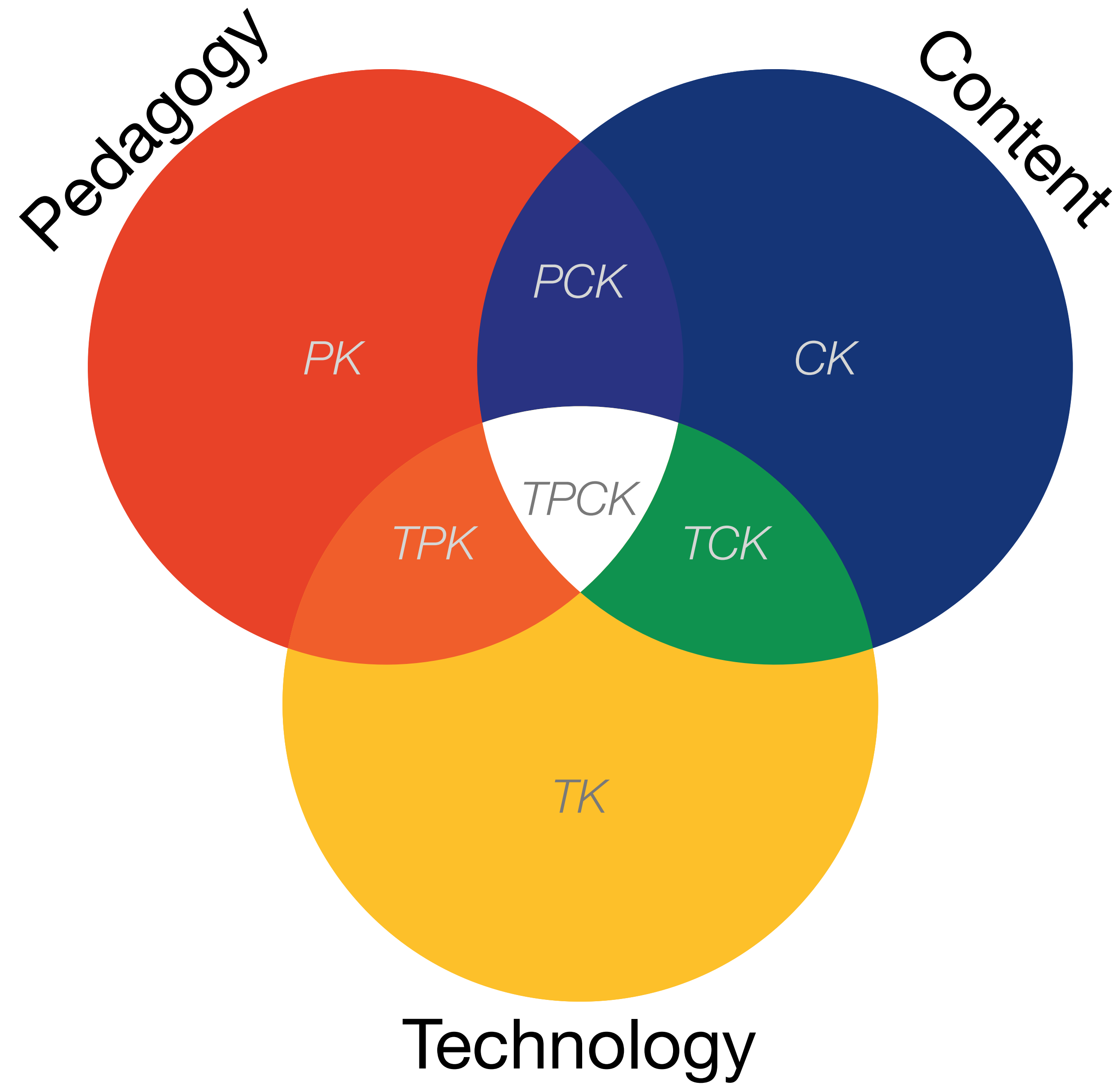
Substitution

*Tech acts as a direct tool substitute, with no
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Enhancement

SAMR and the Use of Tablets in Education





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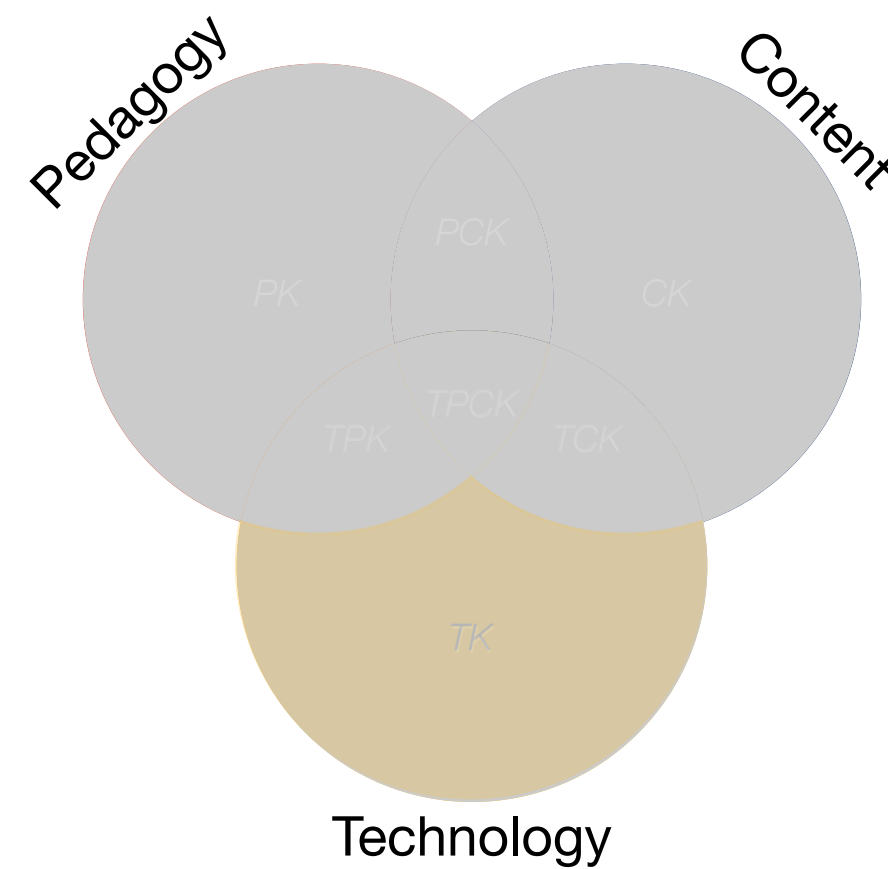
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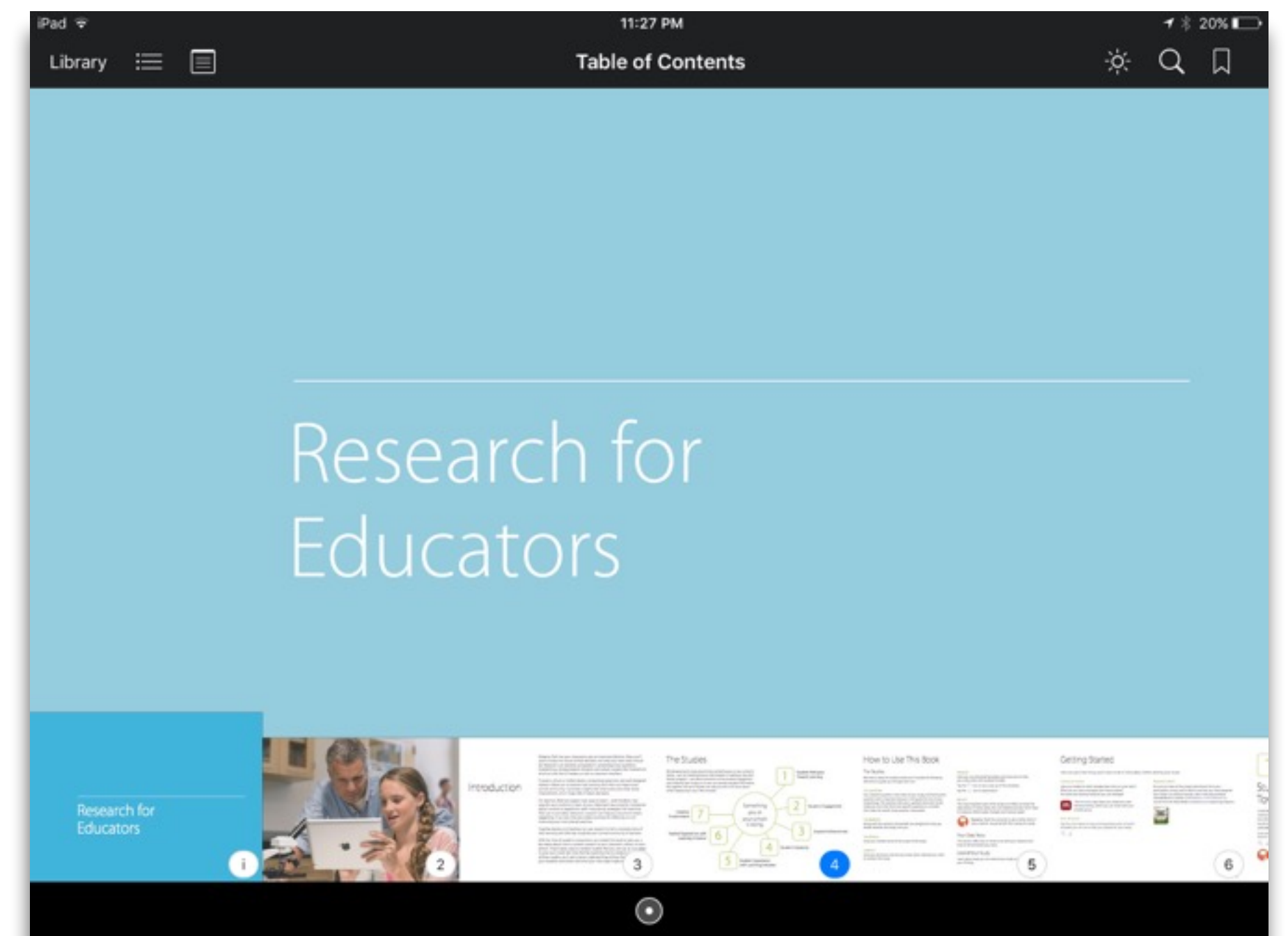
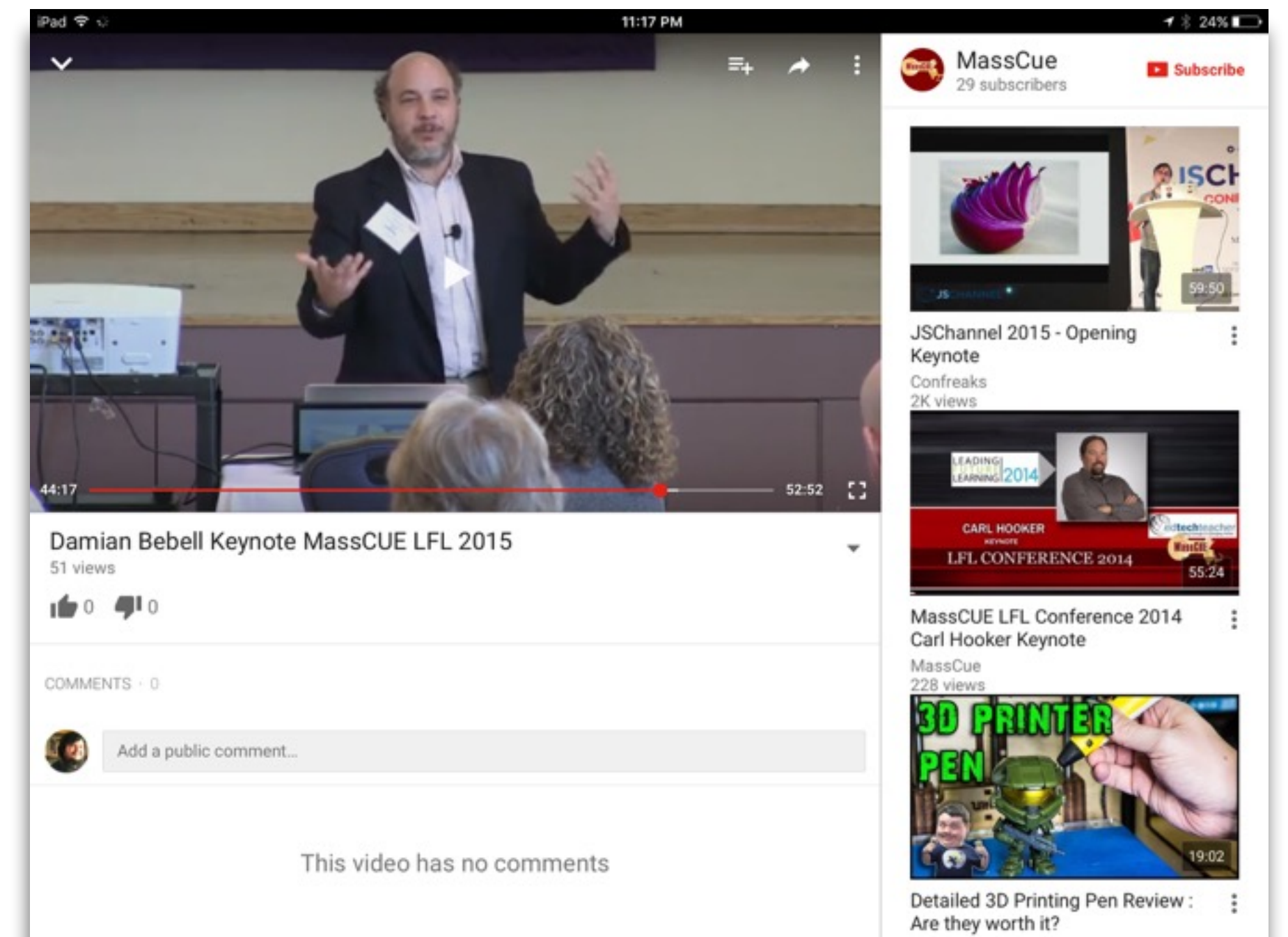
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Extending Traditional PD



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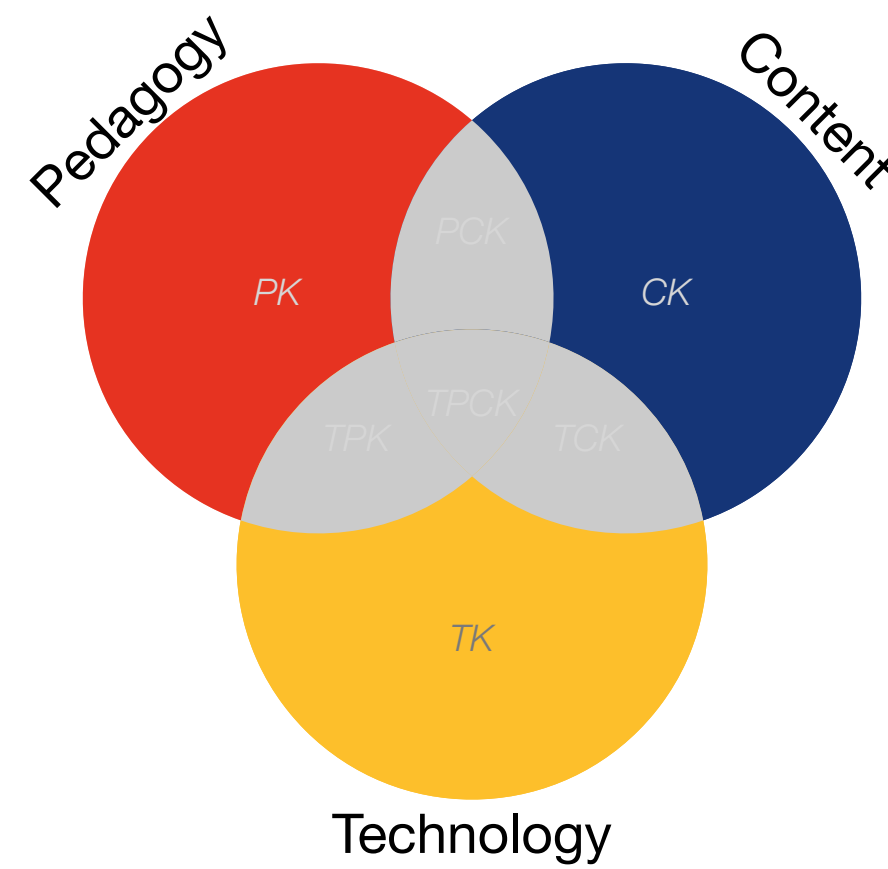
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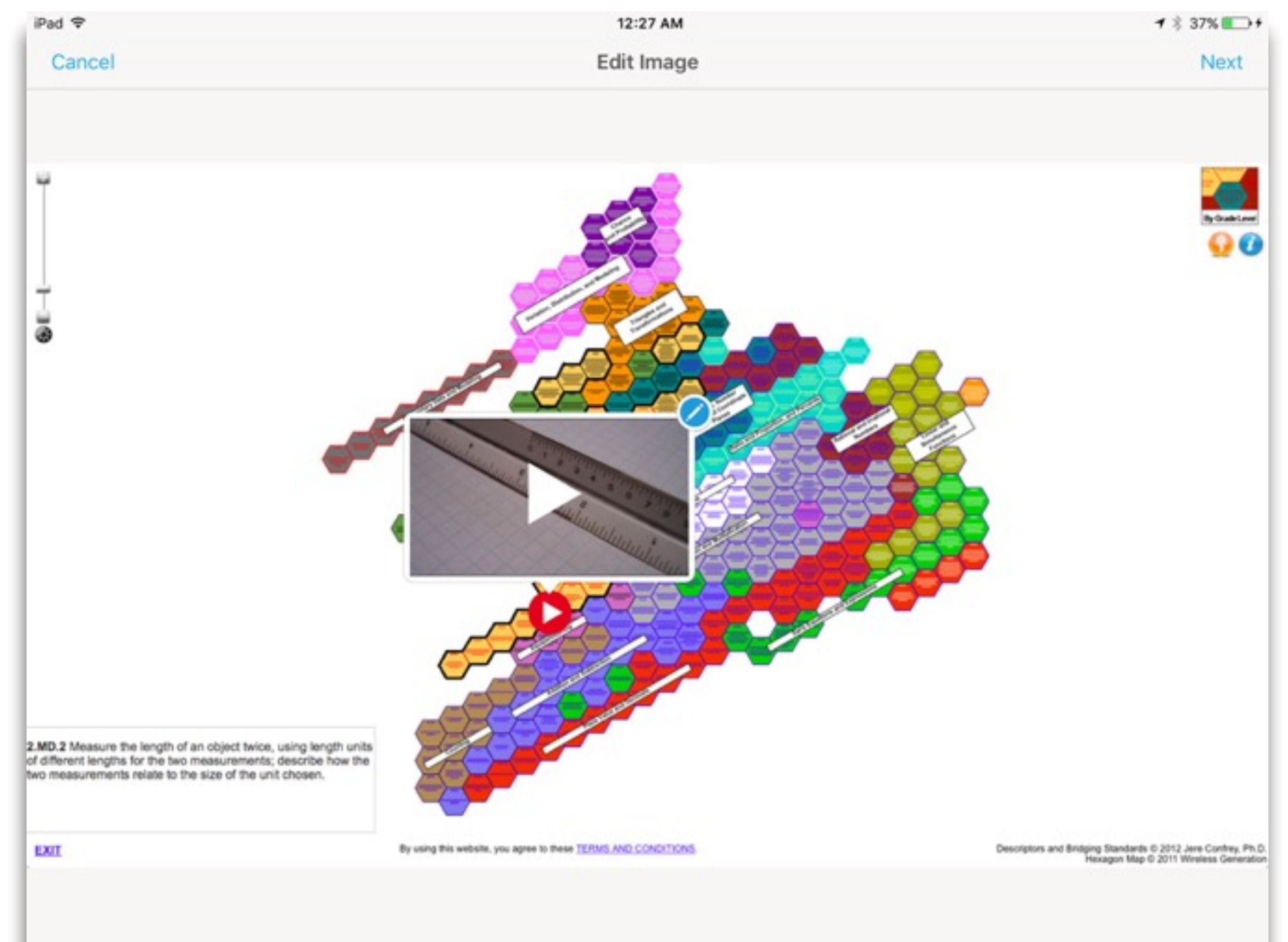
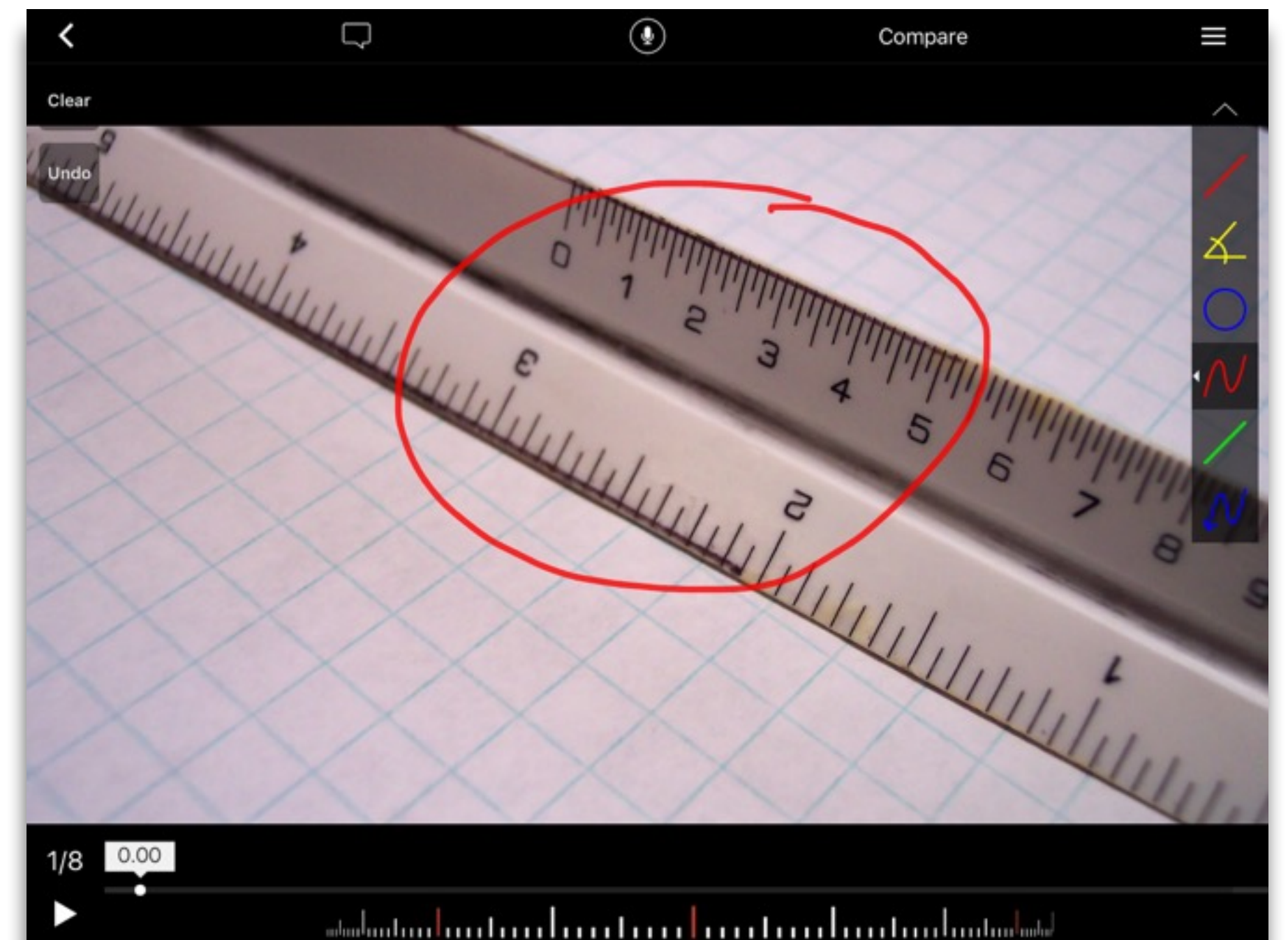
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Peer Coaching as PD



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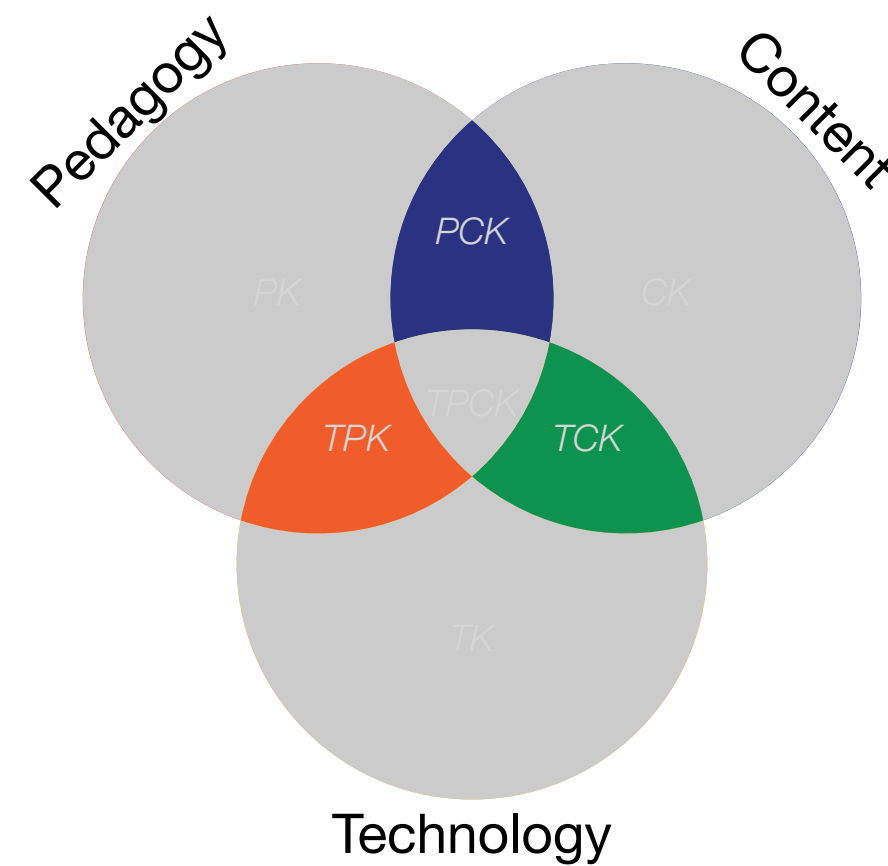
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Action Research as PD



Spreadsheet interface showing an **Effect Size Calculator** with input data and calculated results.

Control group scores	Treatment group scores
61	67
62	68
65	68
68	70
70	72
75	73
75	78
77	79
80	82
85	88
88	91
90	92
90	94
92	95
95	98
98	99
99	100

Control group mean:	80.59
Control group SD:	12.62
Control group Count:	17
Treatment group mean:	83.18
Treatment group SD:	12.10
Treatment group count:	17
Cohen Effect Size <i>d</i> :	0.21
Expected percentile gain:	8%

Tip: You can convert other measures to be quantifiable. For example, grades can be 3, 2, 1 instead of A, B, C. Or you can total up ratings on a rubric to get a total score for an assignment.

Audio analysis interface for a **Math Journal Project** entry titled **M. - Units Journal Entry**. The interface shows a video player with a ruler and a graphing grid, a transcript, and an audio waveform.

Transcript: **Confusio...**

00:03.49 - 00:04.60

Delete Quotation

Student is vague, uncertain in stating how their difficulties relate to the topic.

Link Codes 1 Code

Topic_Units 1 Quotations

00:00:00 00:00:10 00:00:20 00:00:30 00:00:40 00:00:50 00:01:00

1x Normal 00:03.27 00:16.63 Add Quotation

Rereading

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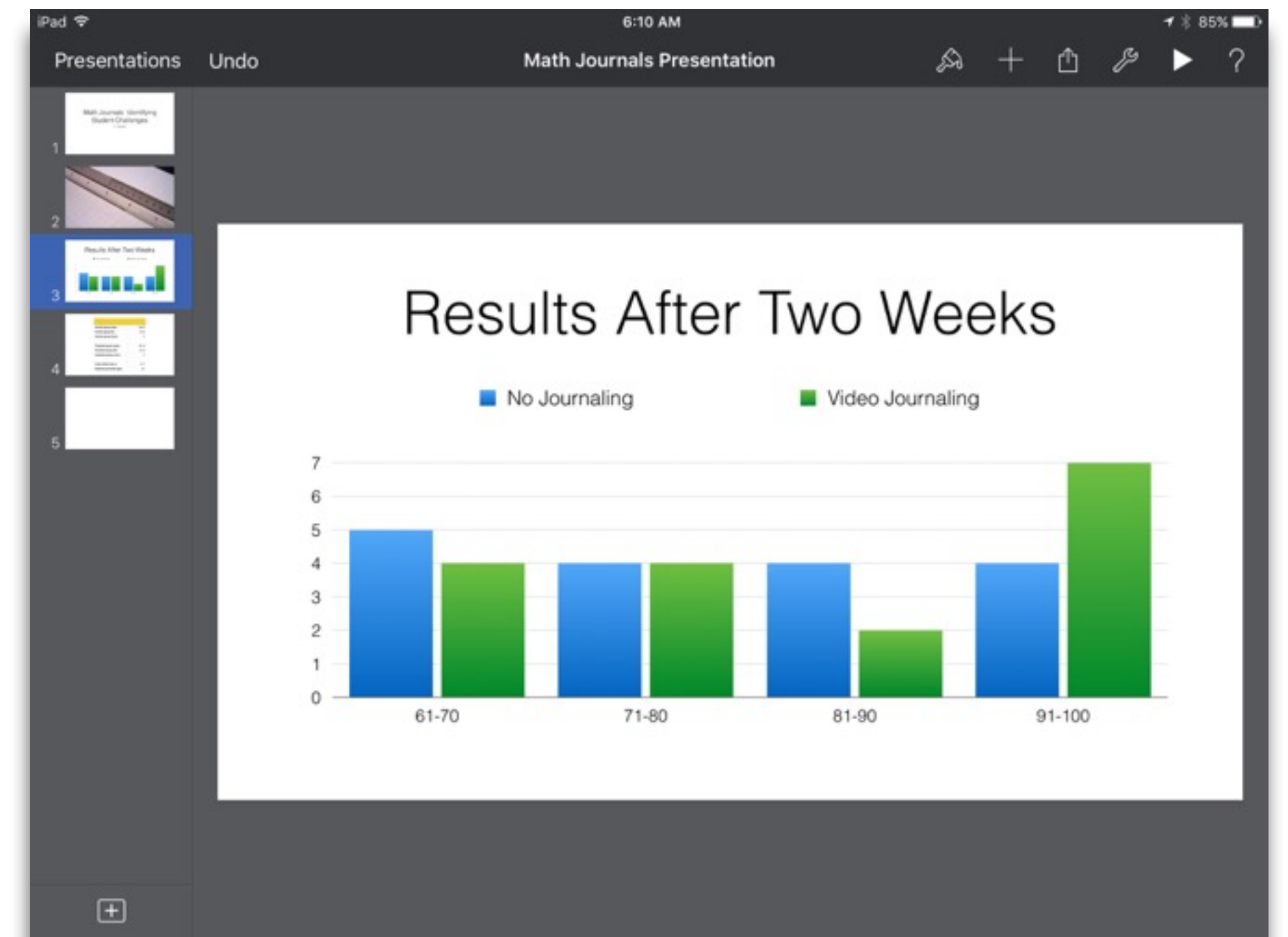
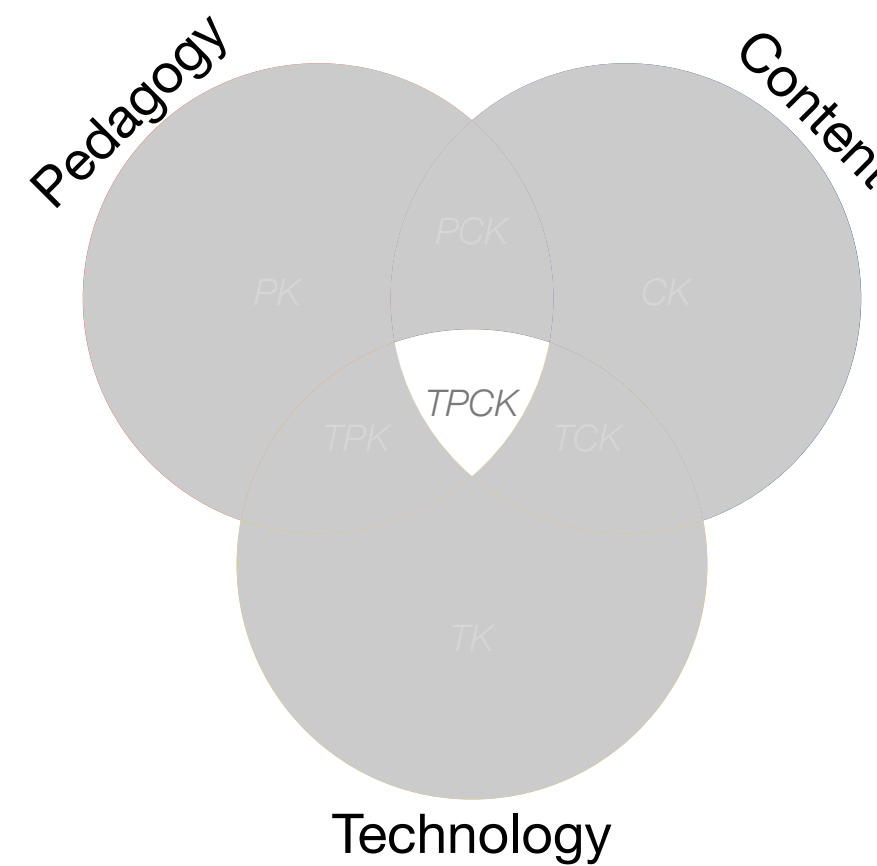
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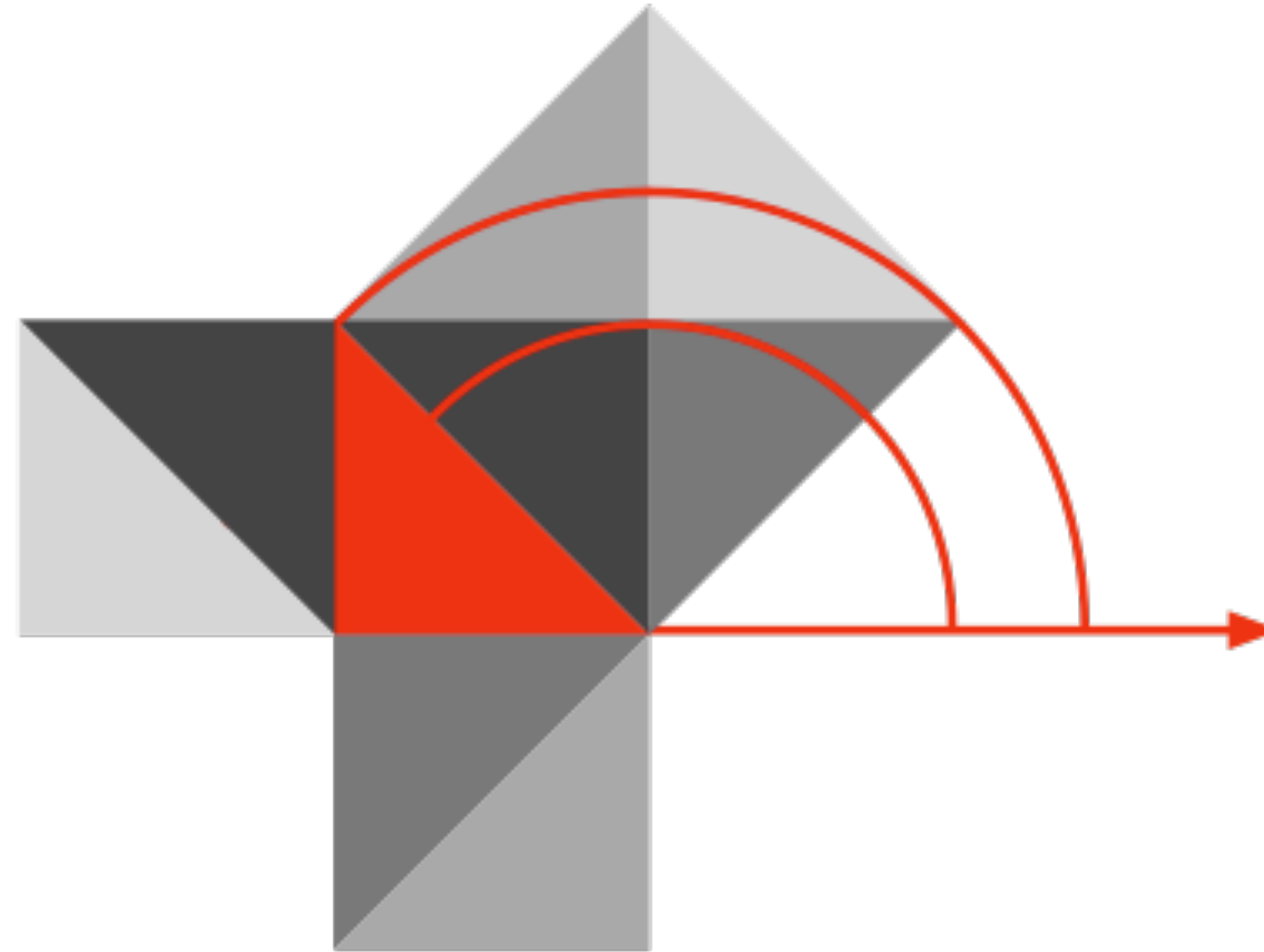
Digital Storytelling as PD



Some Resources Referenced

- Damian Bebell, *Keynote MassCUE LFL 2015*
<https://www.youtube.com/watch?v=f5e6fniwJUo>
- Apple Education, *Research for Educators*
<https://itunes.apple.com/us/book/research-for-educators/id1088992950?mt=11>
- Jere Confrey *et al.*, *TurnOnCCMath.net*
<https://www.turnonccmath.net>
- Arlene Borthwick and Melissa Pierson (Eds.), *Transforming Classroom Practice: Professional Development Strategies in Educational Technology*. ISTE (2008)

Hippasus



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