

SAMR and the EdTech Quintet: Elements of Practice

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Choosing the First SAMR Ladder Project: Three Options

- **Your Passion:**

- If you had to pick one topic from your class that best exemplifies why you became fascinated with the subject you teach, what would it be?

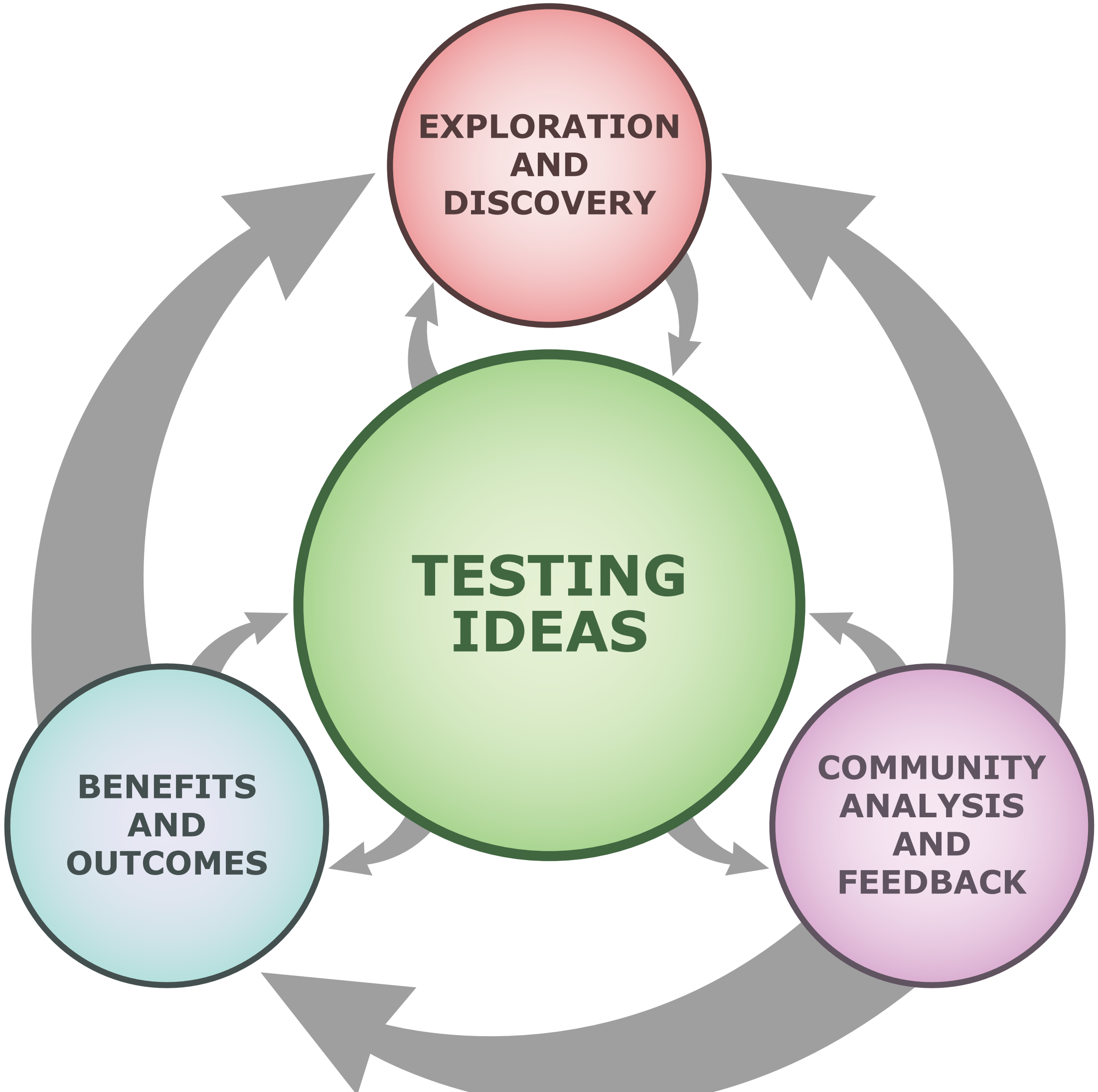
- **Barriers to Your Students' Progress:**

- Is there a topic in your class that a significant number of students get stuck on, and fail to progress beyond?

- **What Students Will Do In the Future:**

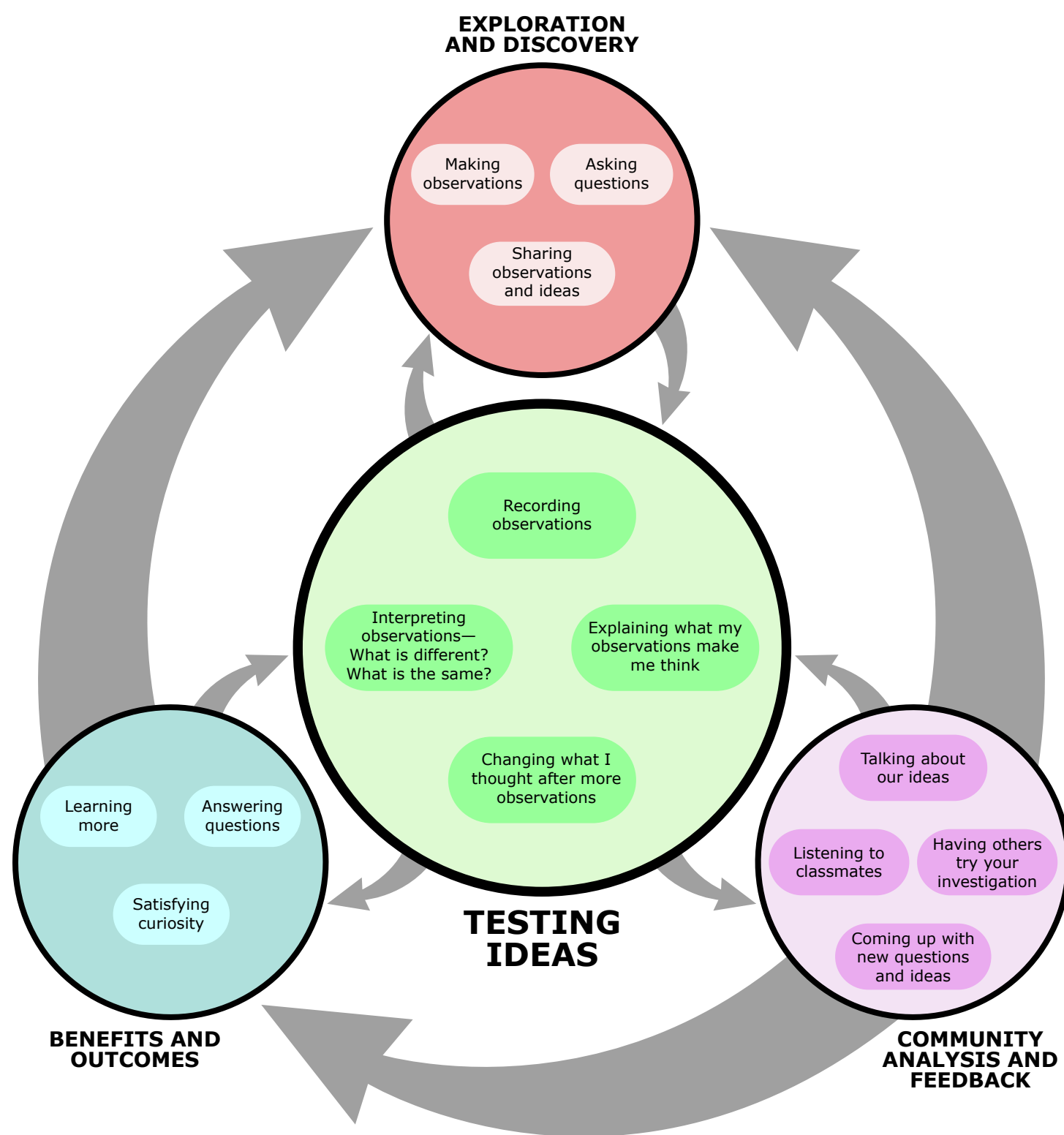
- Which topic from your class would, if deeply understood, best serve the interests of your students in future studies or in their lives outside school?

Understanding Science: How Science Works

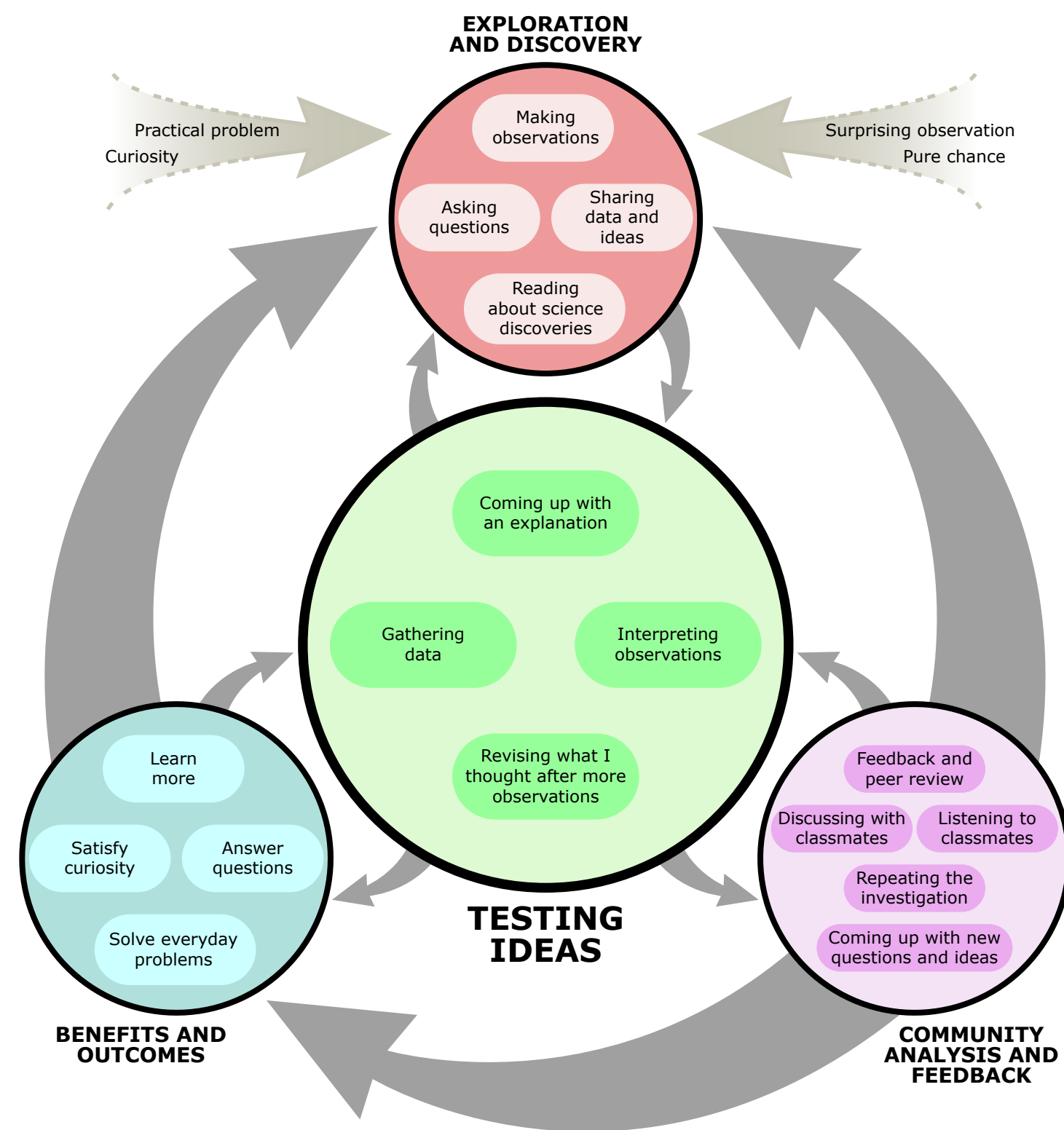


"Understanding Science." Understanding Science. N.p., n.d. Web. 5 Jan. 2014. <<http://undsci.berkeley.edu>>

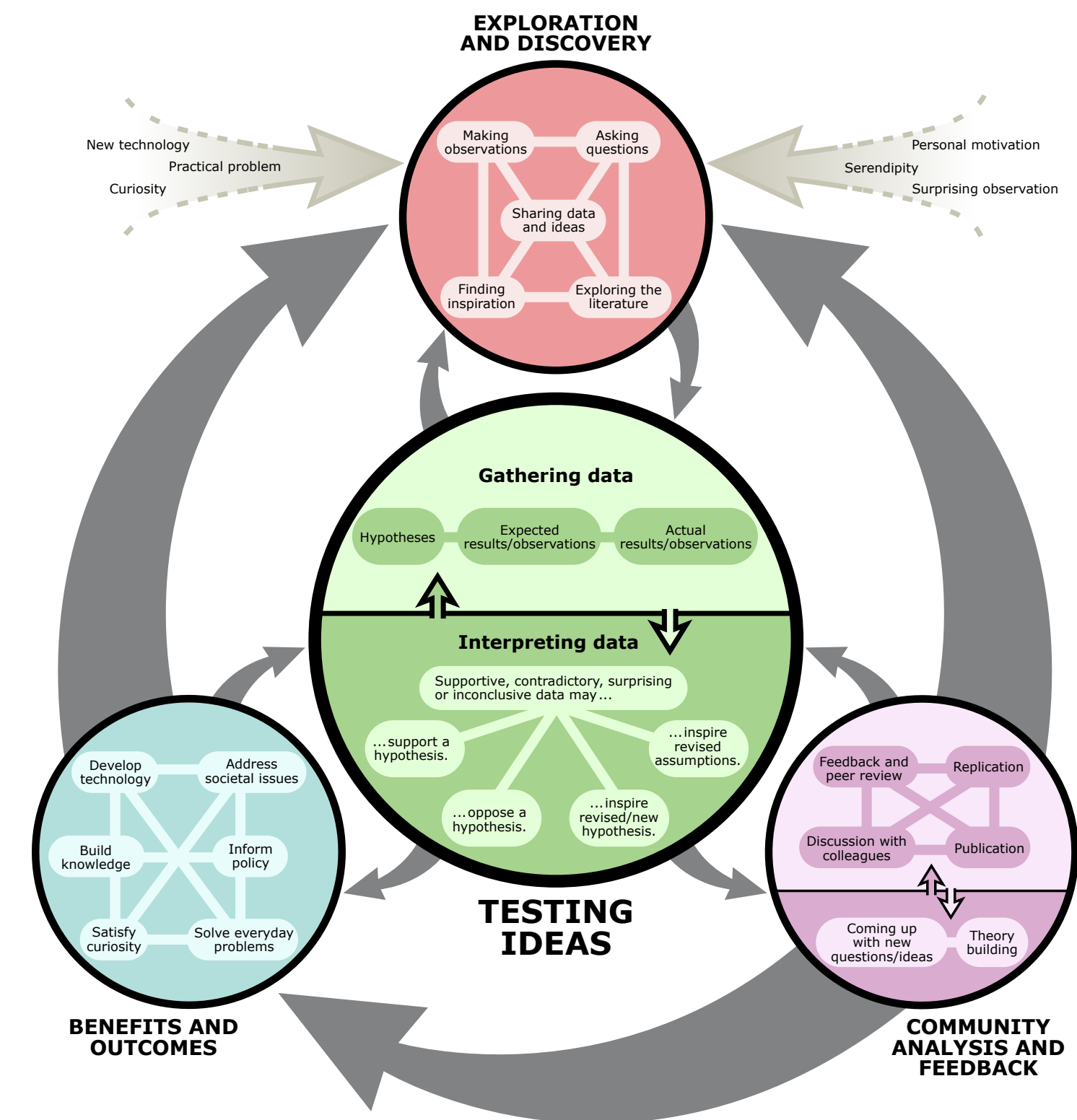
Understanding Science: How Science Works



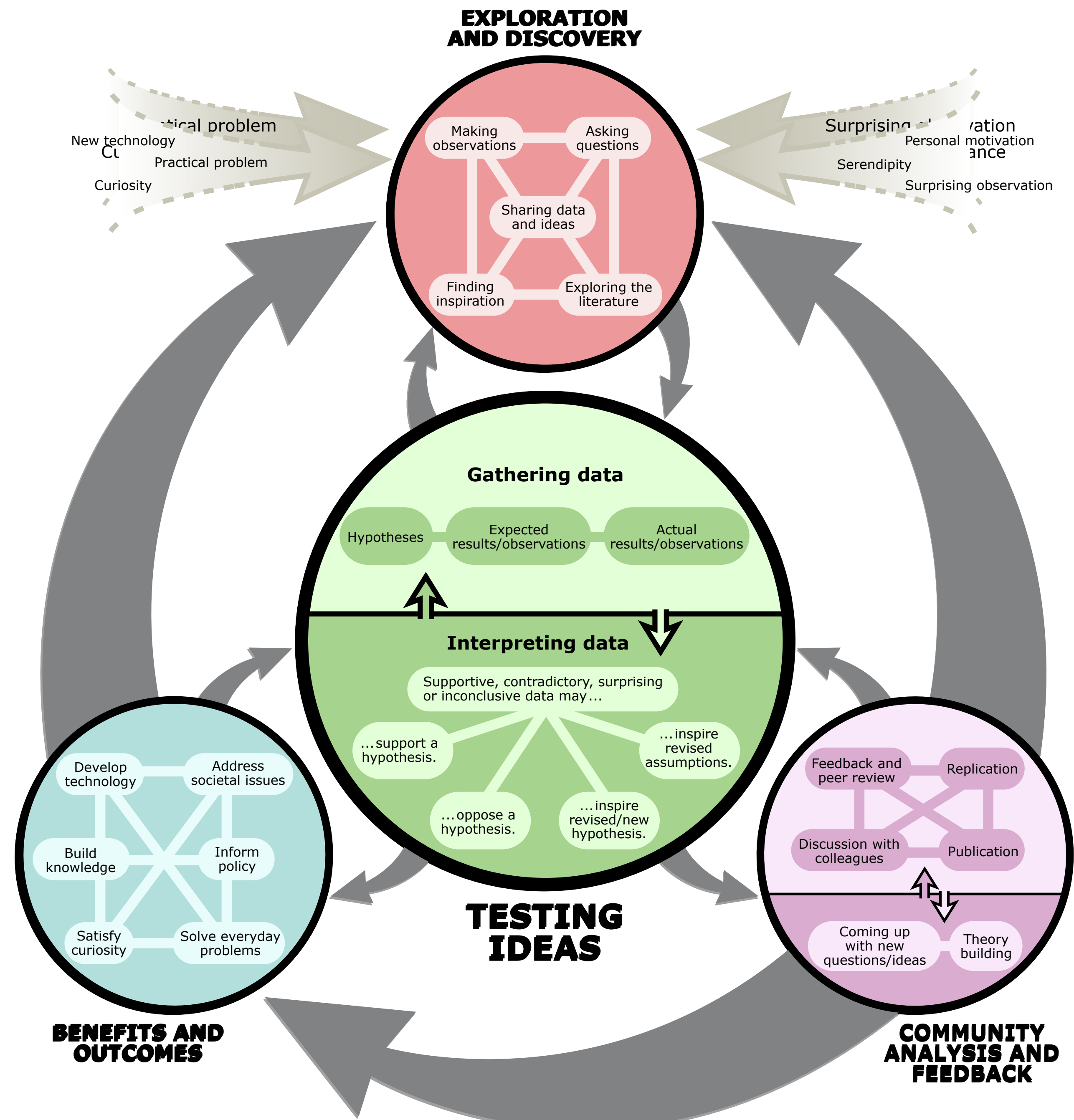
K-2



3-5



6-16



Bloom's Taxonomy: Cognitive Processes

Anderson & Krathwohl (2001)	Characteristic Processes	
Remember	<ul style="list-style-type: none"> • Recalling memorized knowledge • Recognizing correspondences between memorized knowledge and new material 	
Understand	<ul style="list-style-type: none"> • Paraphrasing materials • Exemplifying concepts, principles • Classifying items • Summarizing materials 	<ul style="list-style-type: none"> • Extrapolating principles • Comparing items
Apply	<ul style="list-style-type: none"> • Applying a procedure to a familiar task • Using a procedure to solve an unfamiliar, but typed task 	
Analyze	<ul style="list-style-type: none"> • Distinguishing relevant/irrelevant or important/unimportant portions of material • Integrating heterogeneous elements into a structure • Attributing intent in materials 	
Evaluate	<ul style="list-style-type: none"> • Testing for consistency, appropriateness, and effectiveness in principles and procedures • Critiquing the consistency, appropriateness, and effectiveness of principles and procedures, basing the critique upon appropriate tests 	
Create	<ul style="list-style-type: none"> • Generating multiple hypotheses based on given criteria • Designing a procedure to accomplish an untyped task • Inventing a product to accomplish an untyped task 	

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,
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Understand

Remember

The screenshot shows a mobile browser interface. At the top, the time is 1:15 PM and the battery is at 85%. The main article is titled "Aquatic Biomes" and contains text about their global coverage and comparison to terrestrial biomes. A definition pop-up for "bi·ome" is overlaid on the left, showing its pronunciation, part of speech, and etymology. Below the pop-up are "Search Web" and "Search Wikipedia" buttons. To the right, a world map titled "Worldwide Photosynthetic Activity" shows seasonal variations in photosynthesis. A caption below the map states: "Interactive The latitudes of peak photosynthesis change with the seasons." At the bottom of the page, the number "31" is visible.

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Understand

The image shows a digital field guide for pigeons. On the left, there are three entries:

- EURASIAN COLLARED-DOVE**
Streptopelia decaocto
Locally common, exotic
12½–13 in. (32–33 cm)
Recent colonizer of N. America from Caribbean but native to Eurasia; rapidly increasing and spreading. Slightly chunkier than Mourning Dove, paler beige, and with square-cut tail. Note narrow black ring on hindneck. Grayish undertail coverts. Three-toned wing pattern in flight.
- SPOTTED DOVE**
Streptopelia chinensis
Uncommon, local, exotic
12 in. (30–31 cm)
Note broad collar of black and white spots on hindneck. A bit larger than Mourning Dove; tail rounded with much white in corners. Juvenile: Lacks collar, but can be told by shape of spread tail.
- ROCK PIGEON (ROCK DOVE, DOMESTIC PIGEON)**
Columba livia
Common, exotic
12½ in. (32 cm)
Typical birds are gray with whitish rump, two black wing bars, and broad, dark tail band. Domestic stock or feral birds may have many color variants.

On the right, there is a 'Bird Sighting' overlay form with the following fields:

- Count: 1 Bird
- Date: Jun 9, 2012 4:35 PM
- Place: (empty)
- Weather: Not Recorded

The background of the app shows illustrations of various pigeons: Red-billed Pigeon, African Collared-Dove, Eurasian Collared-Dove, Spotted Dove, and Rock Pigeon (Rock Dove, Domestic Pigeon) in its typical form. A vertical label on the left side of the illustration area reads 'Rock Pigeon (Rock Dove, Domestic Pigeon)'.

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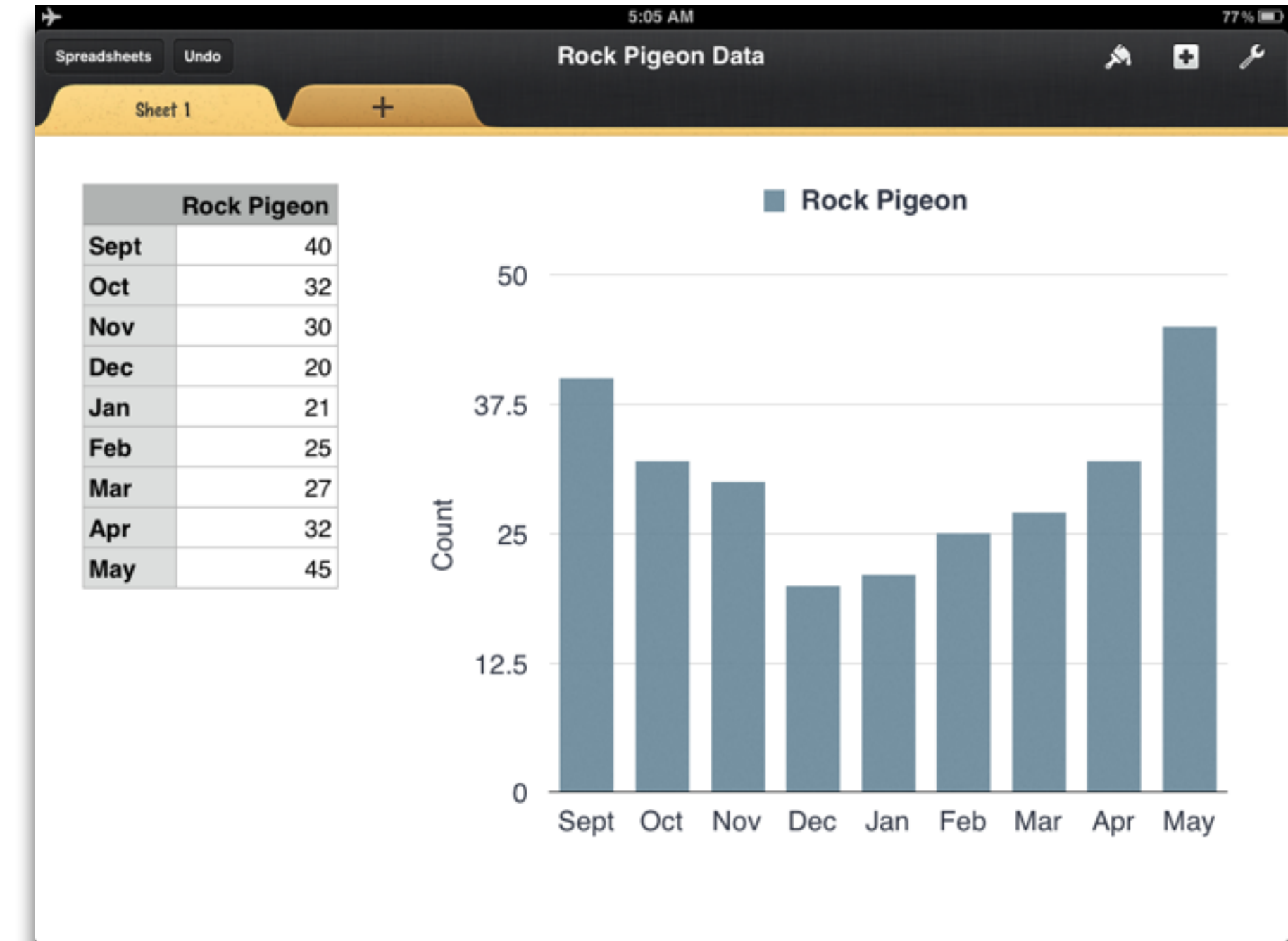
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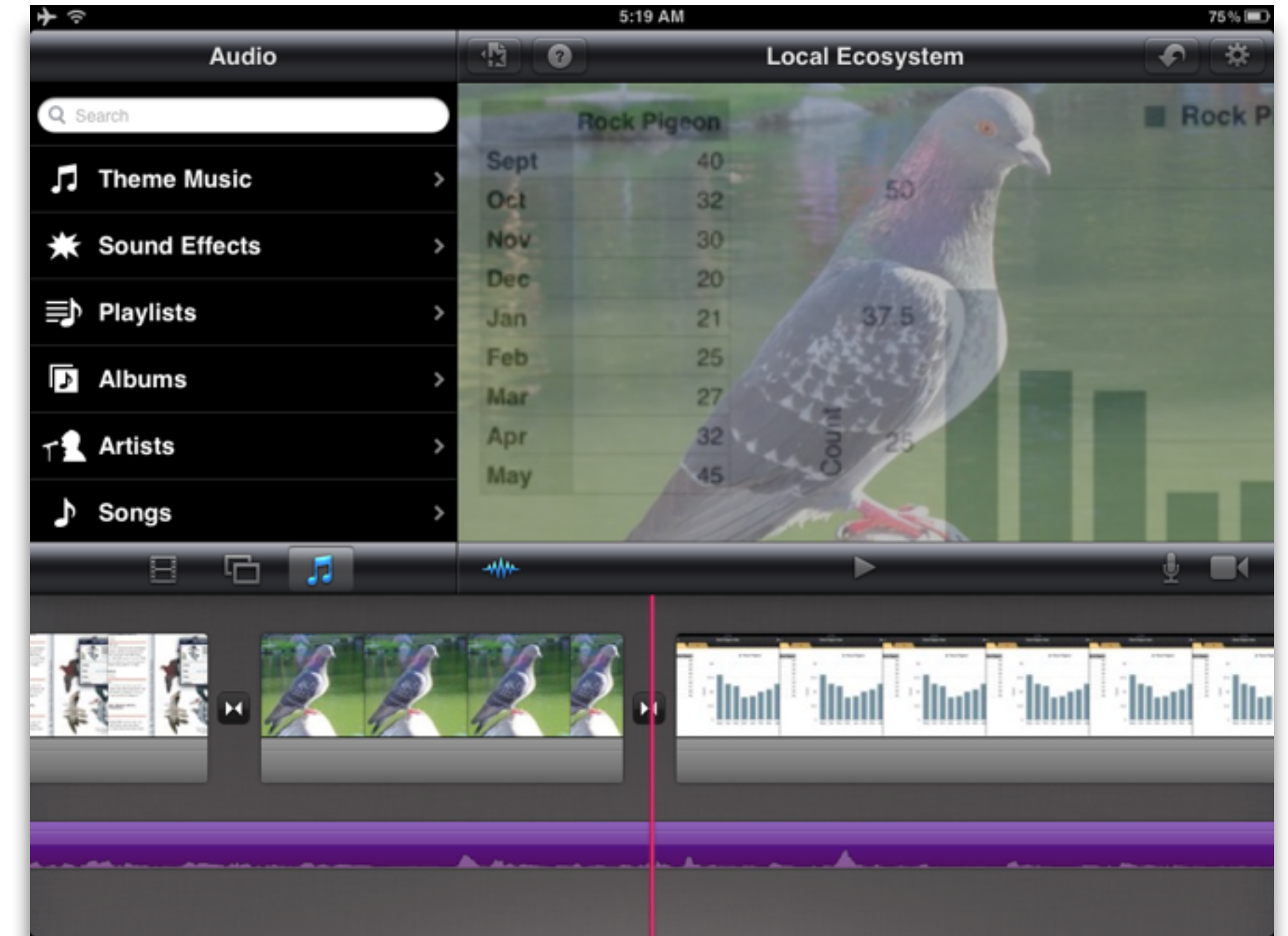
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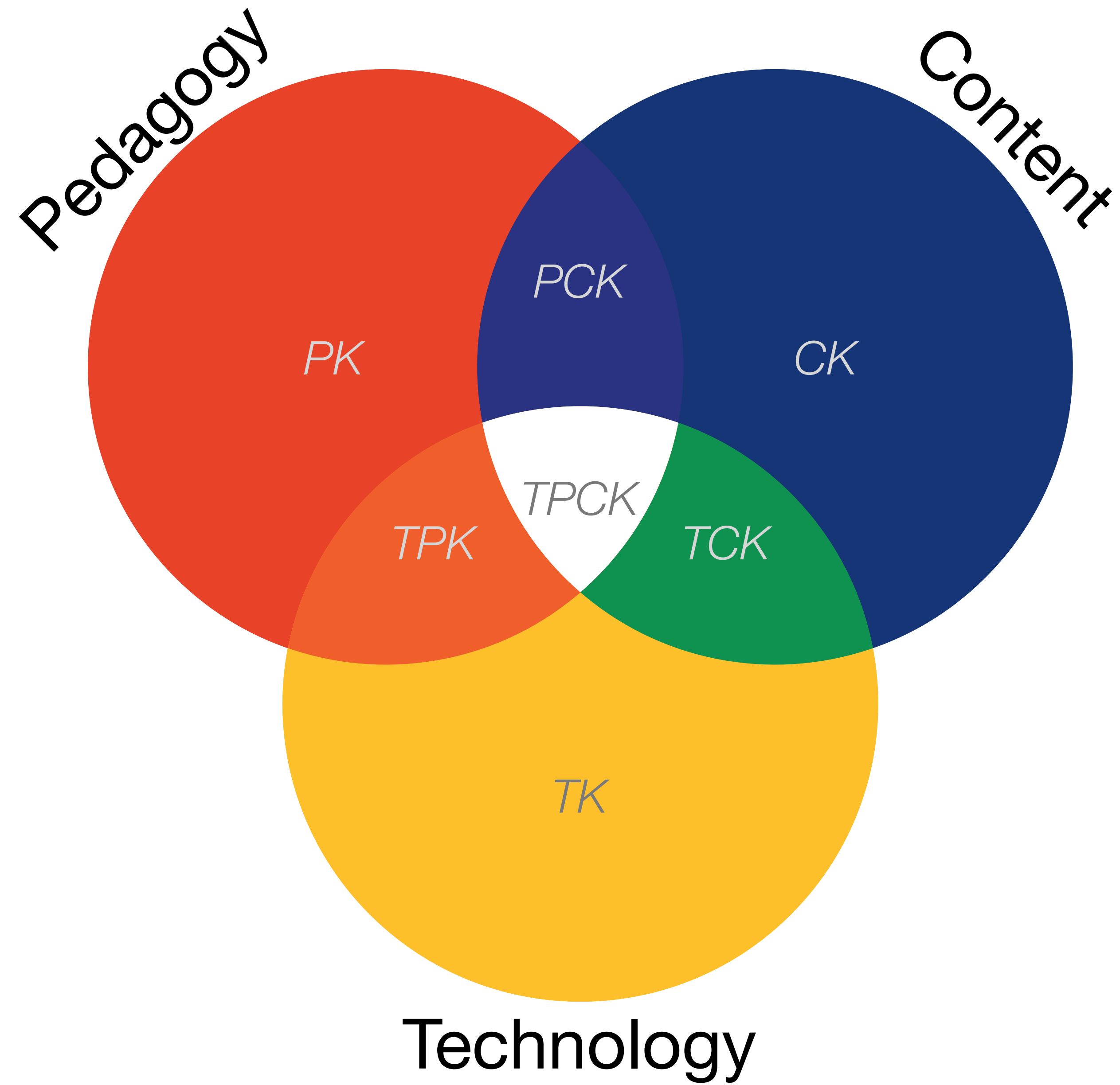
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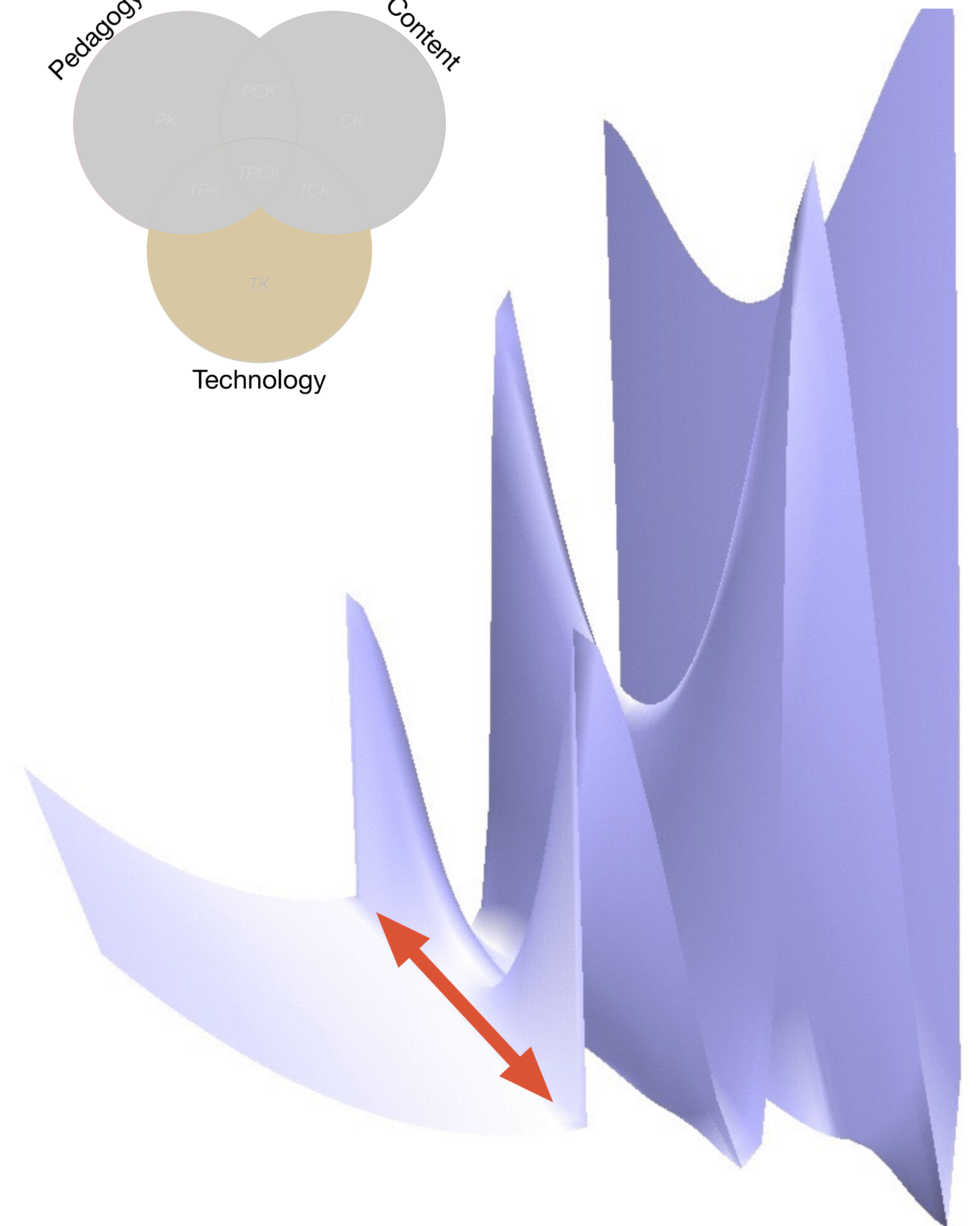
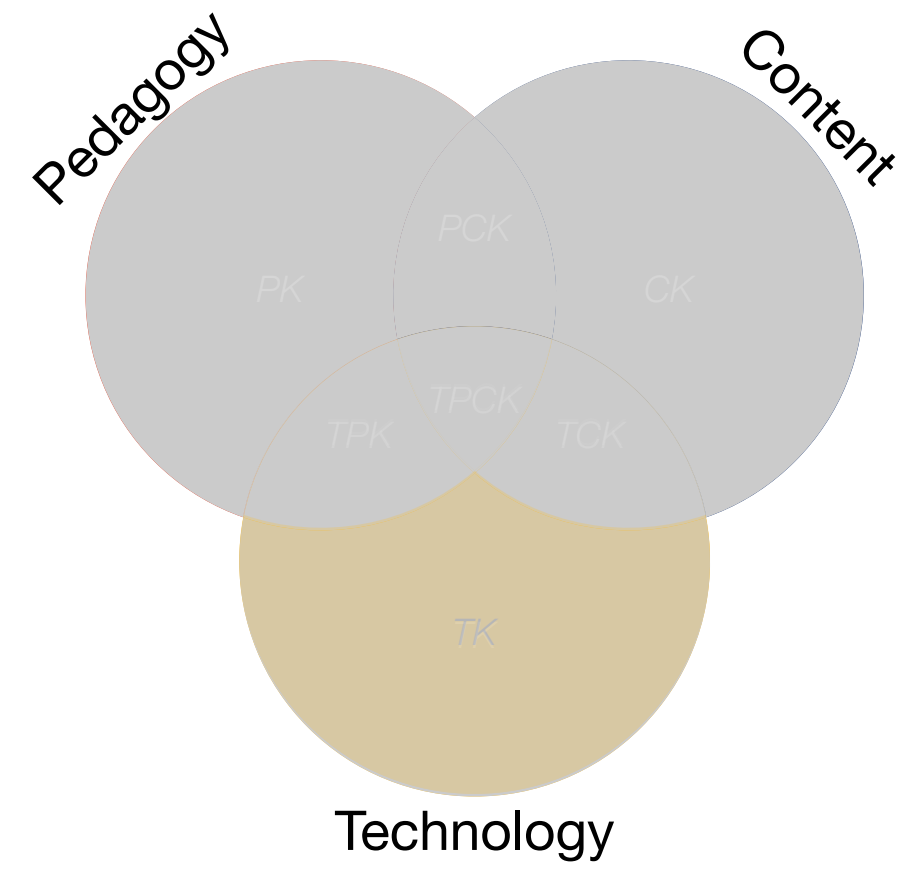
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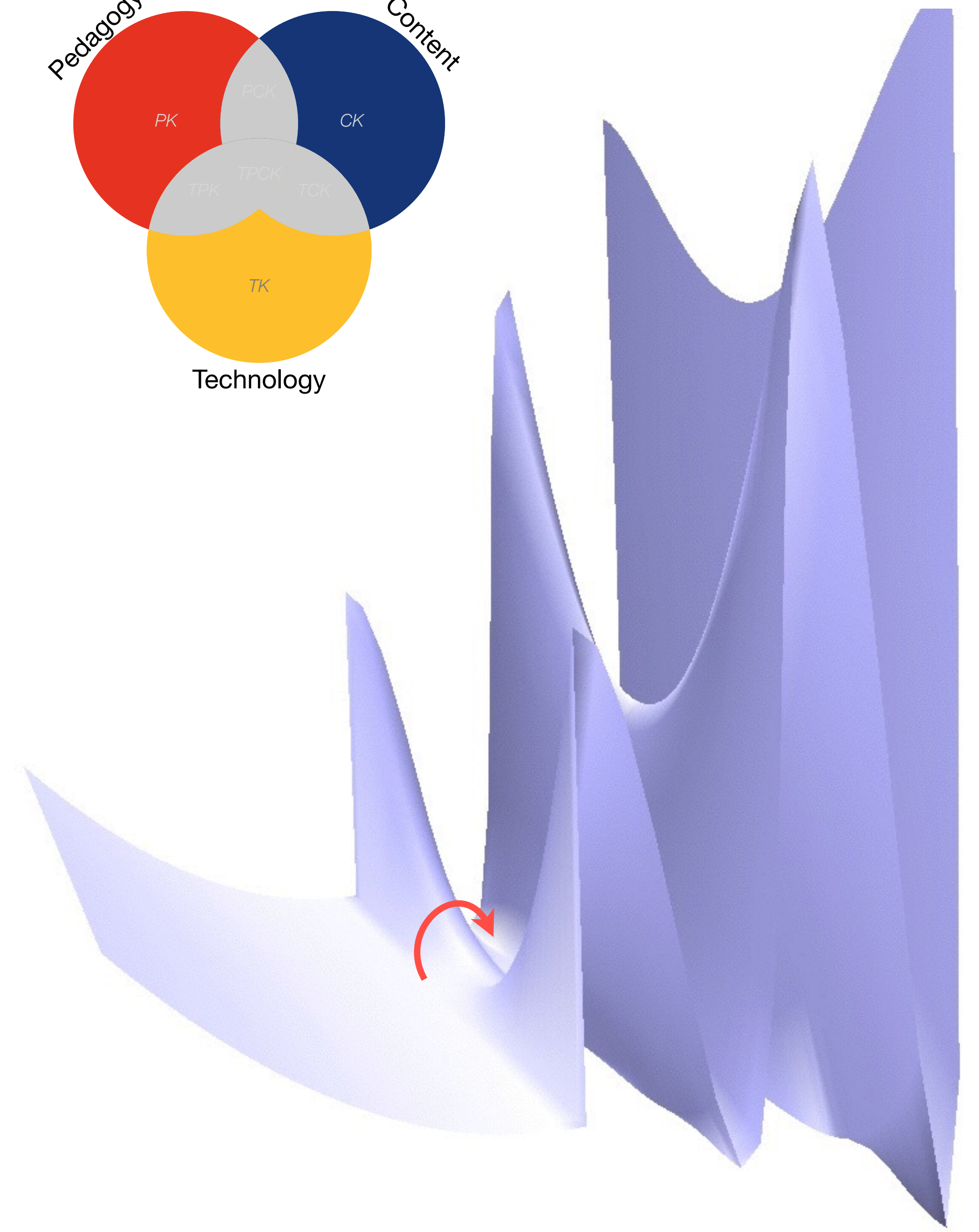
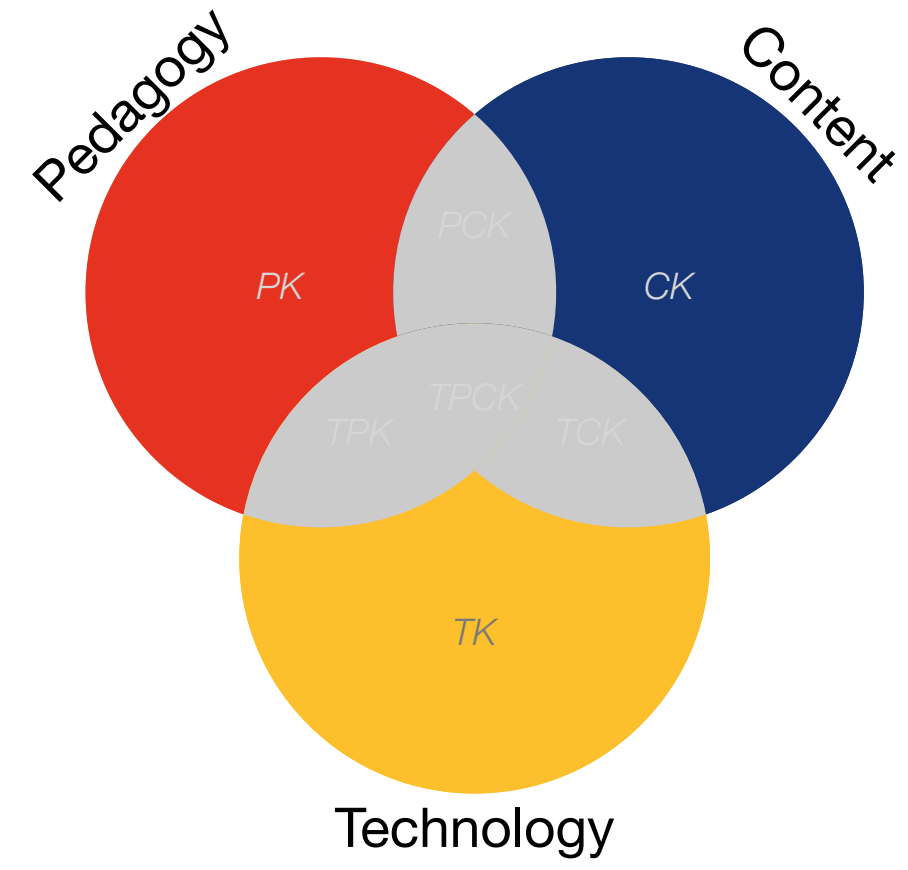
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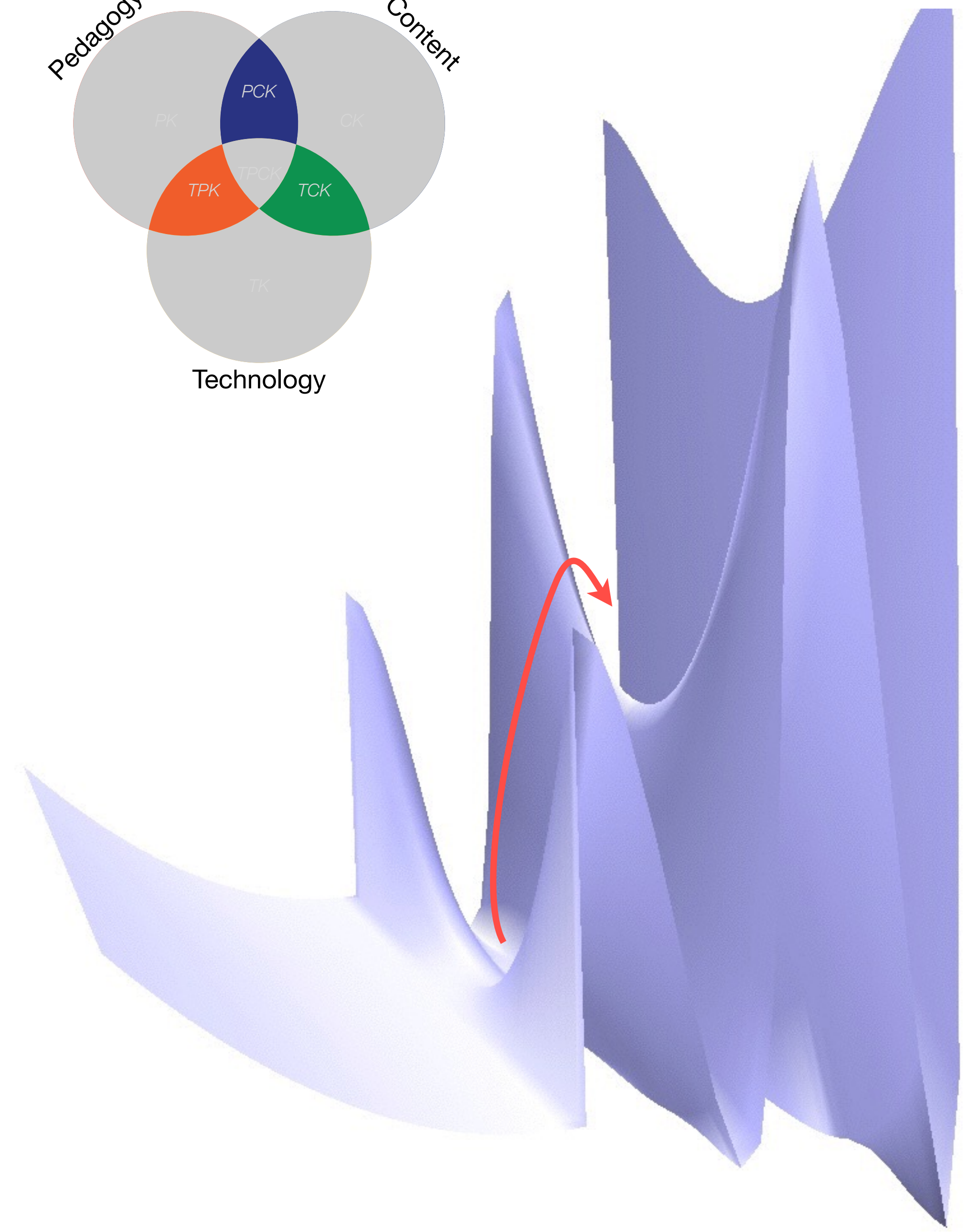
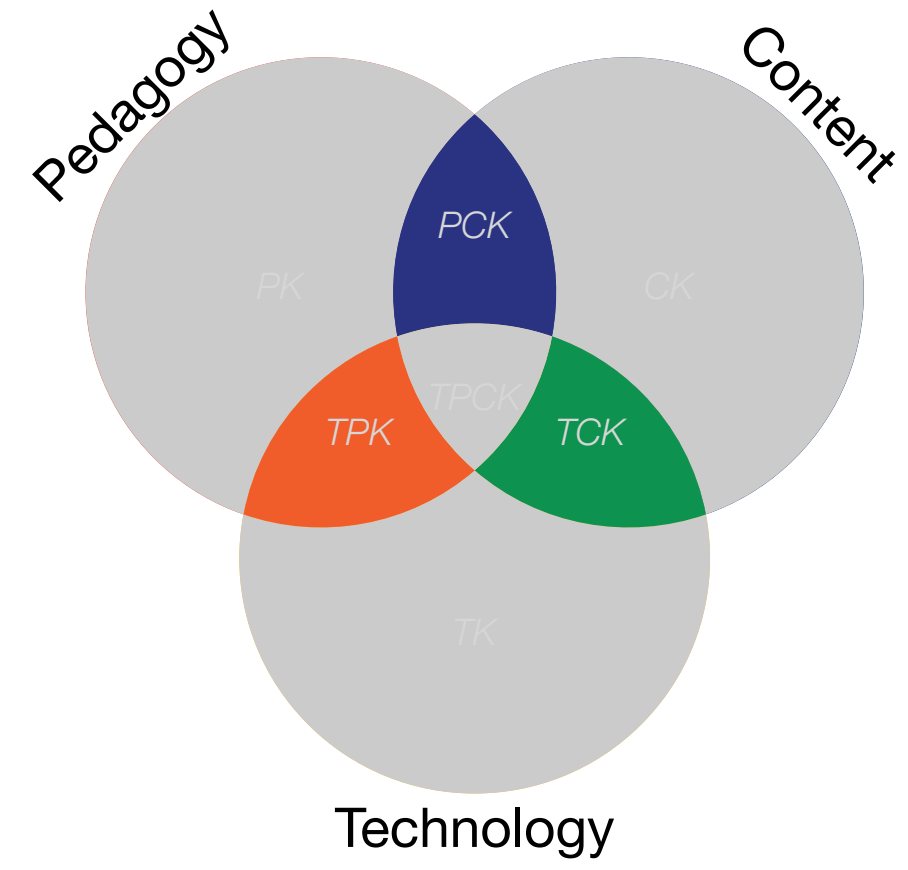
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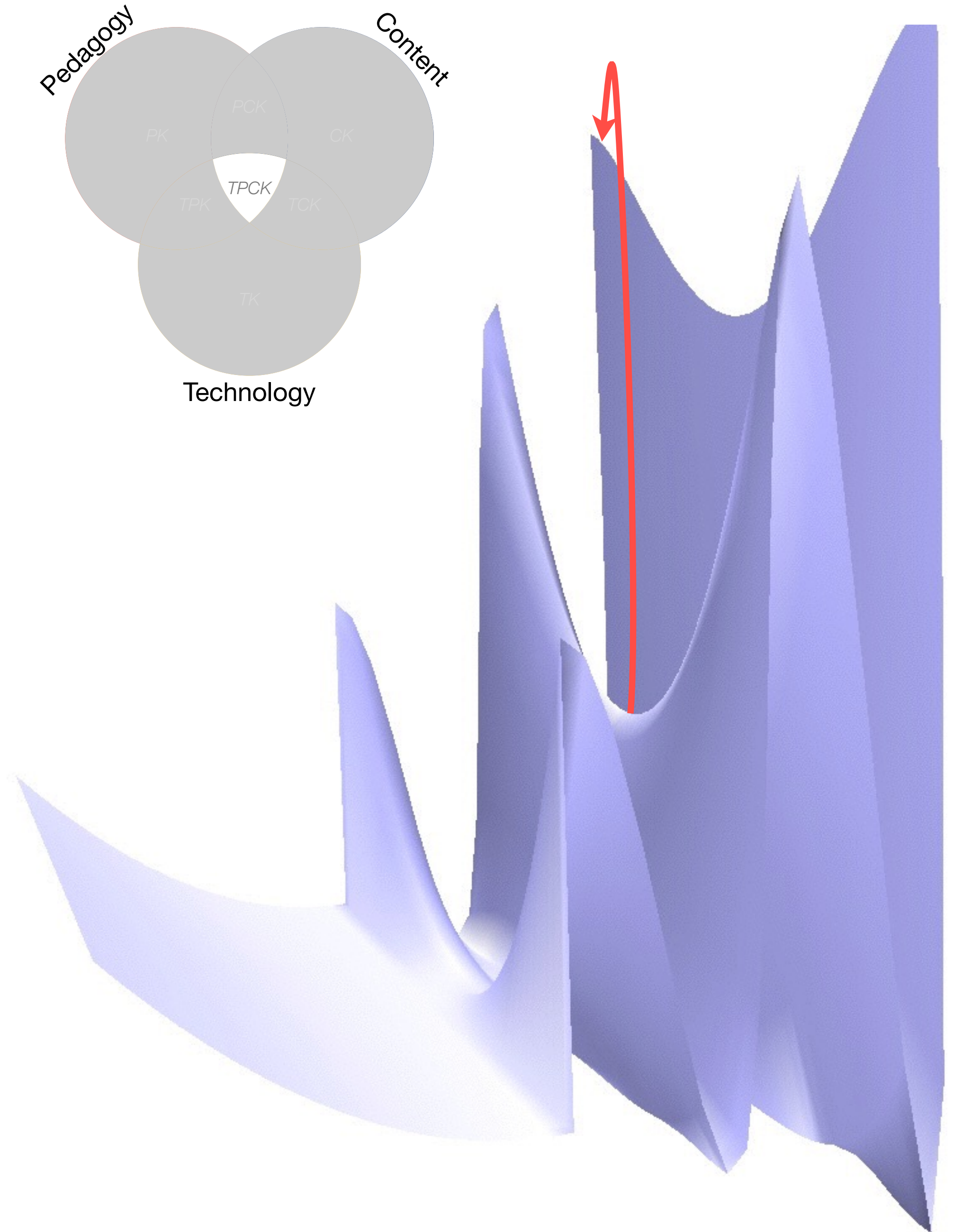


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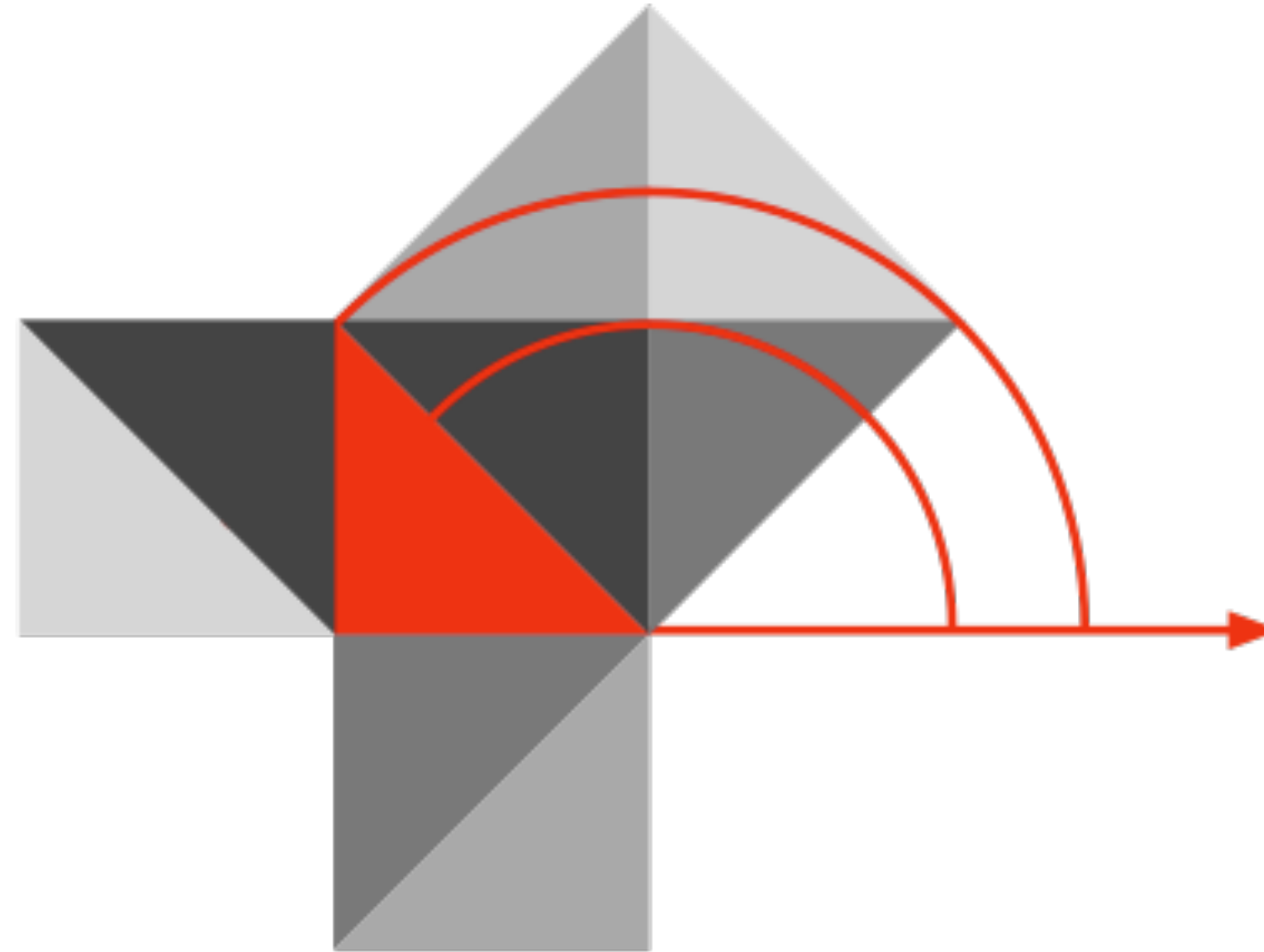
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