Paths to Technology Integration: SAMR & TPCK in Context

Ruben R. Puente-Dura, Ph.D.
Augmenting Human Intellect & Learning Capacity

One-to-One Technologies
TO POLY : ANGLE STEP i.
FORWARD : STEP 2.
RIGHT : ANGLE 3.
POLY : ANGLE ~ STEP
END

The figures show the action of this procedure with various inputs. It will be seen that in general the figure crosses itself.

On a more abstract mathematical level, the day comes when the child gets involved with figures that cross themselves and so need an extension of the theorem. For example, consider the following turtle procedure written recursively in LOGO:

A Personal Computer for Children of All Ages

ON MAKING A THEOREM FOR A CHILD

A research center for augmenting human intellect

As we may think
Substitution
Tech acts as a direct tool substitute, with no functional change

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

Modification
Tech allows for significant task redesign

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

Transformation
Enhancement
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Does the question represent an important issue to historical and contemporary times?

- Is the question debatable?
- Does the question represent a reasonable amount of content?
  - Will the question hold the interest of students?
  - Is the question appropriate given the materials available?
  - Is the question challenging for the students you are teaching?
- What organizing historical concepts will be emphasized?

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**History – Core Concepts**
- Causality
- Chronology
- Multiple Perspectives
- Contingency
- Empathy
- Change and Continuity Over Time
- Influence/Significance/Impact
- Contrasting Interpretations
- Intent/Motivation

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**History – Guiding Criteria**
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<table>
<thead>
<tr>
<th>Social</th>
<th>Mobility</th>
<th>Visualization</th>
<th>Storytelling</th>
<th>Gaming</th>
</tr>
</thead>
<tbody>
<tr>
<td>200,000 years</td>
<td>70,000 years</td>
<td>40,000 years</td>
<td>17,000 years</td>
<td>8,000 years</td>
</tr>
</tbody>
</table>

![Images related to social mobility, visualization, storytelling, and gaming over time.](image-url)
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21st Century Learning

- Foundational Knowledge
  - Cross-Disciplinary Knowledge/Synthesis
  - Information Literacy
- Core Content Knowledge
- Meta Knowledge
  - Creativity & Innovation
- Humanistic Knowledge
  - Cultural Competence
- Problem Solving & Critical Thinking
  - Communication & Collaboration
  - Life & Job Skills
  - Ethical & Emotional Awareness
Resources


- TPCK - Technological Pedagogical Content Knowledge. Online at: http://tpack.org

- AACTE (Eds.) The Handbook of Technological Pedagogical Content Knowledge for Educators. Routledge. (2008)


