SAMR, the EdTech Quintet and 21C Learning

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

One-to-One Technologies
Substitution
Tech acts as a direct tool substitute, with no functional change

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

Enhancement

Transformation
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Pedagogy
PK

Content
PCK
CK

Technology
TPK
TPCK
TCK
TK
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[Image of prehistoric tools and artifacts]
Learning Environments

- Contextual Search
- Augmented Reality
- Cloud Resources
- Mobile Tools
- Sensors
- Recorders
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![Image of human skull and artifacts](image1.png)

![Image of stone tools](image2.png)

![Image of Venus of Willendorf](image3.png)

![Image of cave drawings](image4.png)

![Image of gaming device](image5.png)
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Formal Definition of **Game** (Salen & Zimmerman)

“A game is a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome.”
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Resources


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

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


Hippasus

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