



ASSEMBLING THE PUZZLE: FIVE TECH PIECES FOR EDUCATION RUBEN R. PUENTEDURA, PH.D.

To achieve transformative results in one-to-one technology initiatives, a basic office suite will not suffice. Based upon a decade of research from the Horizon Project, we can identify five software categories that must be available to students and teachers for top-tier outcomes to result. In this series of sessions, we will examine these five categories - social software, mobile resources, simulation and visualization tools, digital storytelling, and educational gaming - and learn how to use them productively across all subject areas. We will see how to integrate them into SAMR- and TPCK-informed instructional designs that instantiate key 21C literacies, and fold formative assessment into the design structure. Applications will be stressed throughout, with working demos and exemplars.



TUESDAY

Session 1 (1hr.): The Frameworks

- SAMR: a (re)introduction
- The Horizon Report: content and uses
- The EdTech Quintet: origins and implications

Session 2 (2hr. 30min.): Social Software

- Dividing up tasks: scholarly primitives and community types
- Building a seven-component social toolkit
- **Project #1:** Constructing multi-social SAMR ladders

WEDNESDAY

Session 3 (4hr.): Mobility and Digital Storytelling

Part I: Mobility

- Deriving information from the world: GPS and other sensors
- Embedding information into the world: augmented reality
- Spaces, mobility, and learning
- **Project #2:** SAMR and augmented reality

Part II: Digital Storytelling

- A visual lexicon for digital storytelling
- Text and image: connections and contrasts
- Digital stories and the social domain
- **Project #3:** SAMR ladders for social storytelling

Session 4 (1hr. 45min.): Educational Gaming

- The structure of games and the structure of learning
- Designing for learning/designing for gaming
- **Project #4:** Using game design principles in SAMR design

THURSDAY

Session 5 (4hr.): Visualization

- Five essential categories of visualization tools
- Maps and timelines: visualizing space and time
- Concept maps: information from connections
- Numbers and text: seeing patterns in math, science, and the humanities
- **Project #5:** Rich visualization and SAMR