

EQUITY AND ACCESS

NATIONAL EDUCATION TECHNOLOGY PLAN

1. Learning

"ENGAGE AND EMPOWER"



PERSONALIZED *Multiple Intelligences* (Gardner, 1995)

- Multiple perspectives on concepts & subjects
- Embrace individual differences



ENGAGED & EFFECTIVE

Learning Sciences

- Growth mindset (Dweck, 2007)
- Protege effect (Chase, Chin, Oppezzo, Schwartz, 2009)
- Social belief (Okita, 2008)
- Exploration/Explanation (Schwartz, Chase, Oppezzo, Chin, 2011)



MULTIMEDIA

Will Media Influence Learning?

(Kozma, 1994)

- Find relationship between media and content
- Take advantage of unique capabilities of specific technologies

2. Assessment

"MEASURE WHAT MATTERS"



ASSESSMENT DESIGN

Backwards Design

(Wiggins & McTighe, 1998)

Learning outcomes



Assessments:

Evidence of learning



Learning experiences,
instruction



WHAT ARE WE TESTING?

Choice-Based Assessments (Schwartz & Arena, 2013)

- Assess choices, not content retention
- Embed assessment in learning process
- Student agency and decision-making

3. Teaching

"PREPARE AND CONNECT"



DATA & RESEARCH

Digital Promise

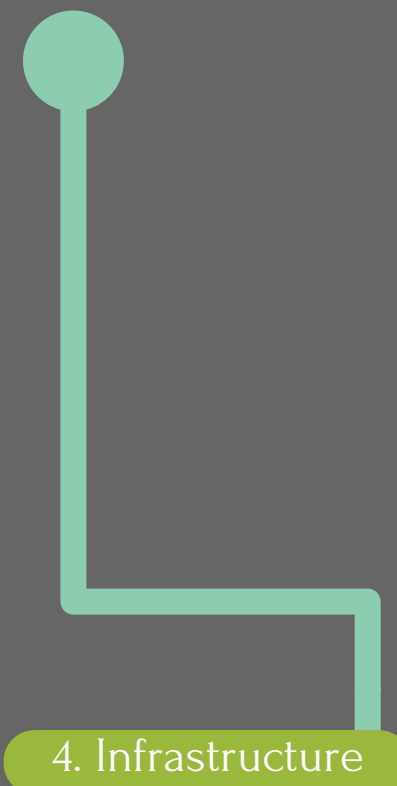
- Research-informed teaching & curriculum
- Access to data & analytics tools
- Educators collaborating with researchers



COLLABORATION

TPACK for Designers (Forssell, 2016)

- Tools must be useful & usable for teachers
- Combining content, tech & pedagogy
- Educators collaborating with designers



4. Infrastructure

"ACCESS AND ENABLE"



COMMON LANGUAGE & STANDARDS

Bloom's Taxonomy
(Krathwohl, 2002)

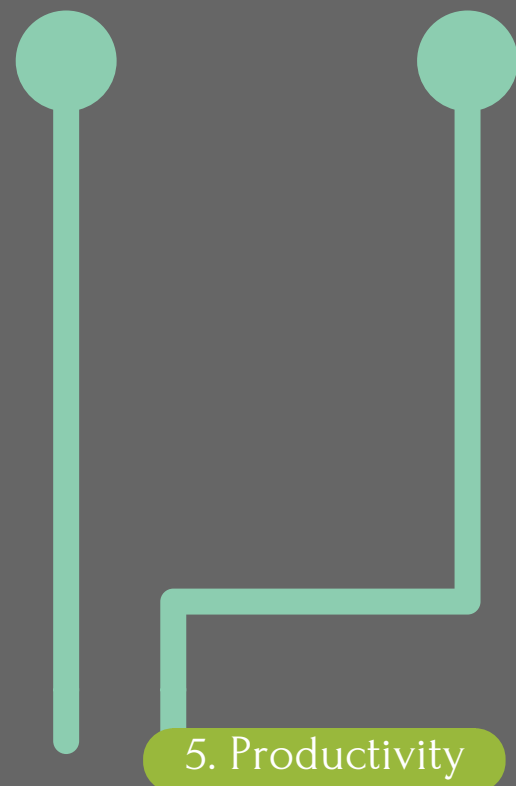
- Classify learning goals, objectives & standards
- Two common dimensions:
 - Cognitive Process
 - Knowledge



WIDESPREAD TRENDS

Horizon Reports

- Sharing best practices and innovations across sector
- Models for continuous growth and improvement



5. Productivity

"REDESIGN AND TRANSFORM"



TECH AS CATALYST

Technocentric Thinking
(Papert, 1990)

- Tech can enable large-scale change in education
- Understanding context of tech, how it is used



CREATIVE APPLICATIONS

Affordances of Technologies

- Mobile technology (Shuler, 2009)
- Video games (Gee, 2005)
- Teaching machines (Skinner, 1954)
- Tangible user interfaces (Ishii, 2008)
- Fab labs (Blikstein, 2016)