What is creativity?

Innovation – Creativity - Tehnology

- **Innovation**: taking an existing idea or product and making it better by applying creative ideas

- **Creativity**: an indirect path to innovation by harnessing unique ideas to achieve key improvements in an idea or product

- **Technology**: the ability to apply scientific knowledge in order to achieve a practical purpose, such as audience reach in marketing

Source: marketingland.com

Creativity - can we define it?

- creativity is a coveted quality of thinking

- often an important aspect of innovation and change

- creativity is not a domain by itself but a way of thinking and approach to problem solving that cuts across disciplines

- as important in the sciences and mathematics as it is in the arts

- creativity is not a skill that is limited to few individuals

Creativity - can we define it?

- Creative work is novel in that it brings something into the world that did not exist before (at least in that particular/specific instantiation).

- But novelty alone does not define creativity—novelty must be joined to the value, quality, or usefulness of the work. A novel idea with no potential use cannot be taken as "creative" (Cropley, 2003); it must also have value, quality, or be effective toward a purpose (Zhou & George, 2001).

NEW definition

- Novel

- Effective

- Whole

definition of creativity for educational contexts

develop rubrics to measure creative student output

Henriksen, Mishra, & Mehta, 2015; Mishra, Henriksen & Mehta, 2015).
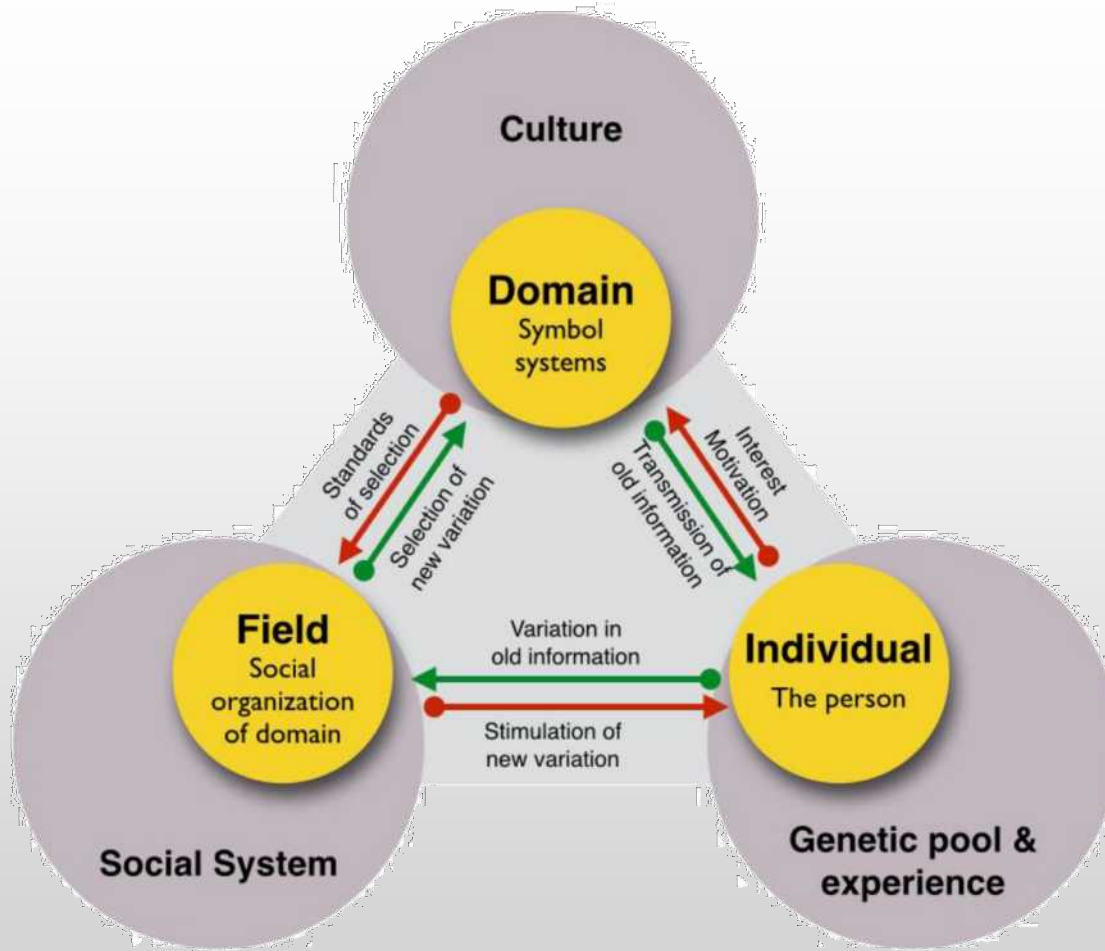
NEW definition

- Creative people are able to connect experiences they've had and synthesize new things.

- They can not explain how they did it, because they just „saw" something. It seemed obvious to them after a while.

"little c" or "Big C"

- Little c: or everyday, subtler, smaller acts of creativity.

- From Big C: or more grandiose, "sublime" creativity. Big C creativity may involve "extreme forms of originality" that dramatically shift thinking within a discipline.

- Little c (everyday) creativity may be just as crucial to improvement or innovation within a discipline.

- Combinatorial creativity involves a mindset that thinks across different disciplines and experiences, in order to connect ideas for new inspiration and construction.

From What to Where

- **"Where is creativity?"**

- Asking this helps us locate creativity in specific realms that impact practice, a key point for the field of education.

- The Individual, the Field and the Domain work together reciprocally to decide if something is creative (i.e., novel, effective & whole).

- Each component is a necessary factor in creativity (and even expertise) but not sufficient in itself to produce impact or valuable novelty. Creativity exists as a dynamic process emerging through a system of interactions.

Individual – Field – Domain and their interactions to determine Where is Creativity? (Henriksen et al., 2016 p. 30 Based on Csikszentmihalyi, 1997)

Creative thinking

- Essential for 21st century success, as societal problems become more interdependent, global and complex.

- The skills that were important in the past (the popularly termed "left-brain" skills) are still important but not enough.

- "The 'right brain' qualities of inventiveness, empathy, joyfulness, and meaning—increasingly will determine who flourishes and who flounders (Pink, 2015, p. 3)."

Role of teachers

- The role of the teachers and classroom settings is an important influence upon student beliefs and development of their own creativity.

Sources

- Danah Henriksen, Punya Mishra and Petra FisserInfusing: Creativity and Technology in 21st Century Education: A Systemic View for Change.

- Danah Henriksen, Punya Mishra: We Teach Who We Are: Creativity in the Lives and Practices of Accomplished Teachers