Creativity's Purpose, Place and Application in Proposal Development

Florida Research Administration Conference

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GOALS AND OBJECTIVES

Describe creativity's purpose and place in proposal development

- Identify forms of creative activity applicable to proposal development

- Delineate the potentials and limits of a number of creative approaches

- Discuss application of creativity based approaches

  for working with groups in grant proposal development

BACKGROUND OF PRESENTATION

Personal: Eight years of proposal development experience for dozens of institutions

Literature read:

- 37 research articles

- Five dissertations

- Four books

STUDY OF CREATIVITY

"The study of creativity is characterized by a variety of key questions, such as the nature of the creative process, whether there are multiple types of creativity, the relationship between high levels of creativity (Big C) and everyday creativity (little c), and the neural basis of creativity."

Source: Andreasen, N.C. & Ramchandra, K. (2012). Creativity in the art and sciences: Are there two cultures? *Dialogues in Clinical Neuroscience, 14*(1), 49-54.

CREATIVITY: CURRENT SCHOOLS OF THOUGHT

- Historic elitist

- Pragmatic

- Psychoanalytic

- Psychometric

- Social-personality

- Neuroscientific

Sources: Beine, J. (2007). *Evaluating Sterbnberg's investment theory of creativity: Are innovators widely distributed throughout the professions and what do they have in common?* (Kent State dissertation); Clark, C.W. (2008). *Estimates of association between cognitive complexity levels and creative complexity levels of field grade military officers: An exploration study of the relationship.* (Kansas State University dissertation).

DEFINITION OF CREATIVITY

"Creativity requires not only coming up with ideas but knowing when a problem exists to start with, how to define the problem, how to allocate resources to solve the problem, and how to evaluate the value of potential solutions – knowing which ideas are your good ones."

Source: Sternberg, R.J. & Lubart, T.I. (1995). *Defying the crowd: Cultivating creativity in a culture of* conformity. New York, NY: Free Press., p. 134.

PROPOSAL DEVELOPMENT AS CREATIVE THOUGHT

- Productive Creativity: related to the development of a machine, a product or a service.

- Inventive Creativity: related to new methods.

- Innovative Creativity: refers to the continuous development of ideas and resulting in new skills.

- Expressive Creativity: where originality and competence are important.

- Emergence Creativity: This type rarely happens since it produces new and novel assumptions.

Source: Al-Srour, N.H. & Al-Owiedi, A. (2013). The level of creativity among management employees, academic staff and artistes and its relationship with gender, practical experience and age. *Creative Education*, *14*(3), 185-188.

CREATIVE THOUGHT APPLICATION

Creative Pattern	Bological Sciences	Business/ Management	Music, Theater, Dance	Computer Science	Education	Architecture	Nursing/ Allied Health
Productive Creativity							
Inventive Creativity							
Innovative Creativity							
Expressive Creativity							
Aesthetic Organizing*							
Emergent Creativity							

*Source: Bartel, M. (2004). *Some types of creativity as described by Elliot Eisner.* Retrieved from:
https://people.goshen.edu/~marvinpb/11-13-01/types-of-creativity.html

PROPOSAL DEVELOPMENT AS CREATIVE THOUGHT: RHODES' FOUR Ps

- Person
- Process
- Product
- Press
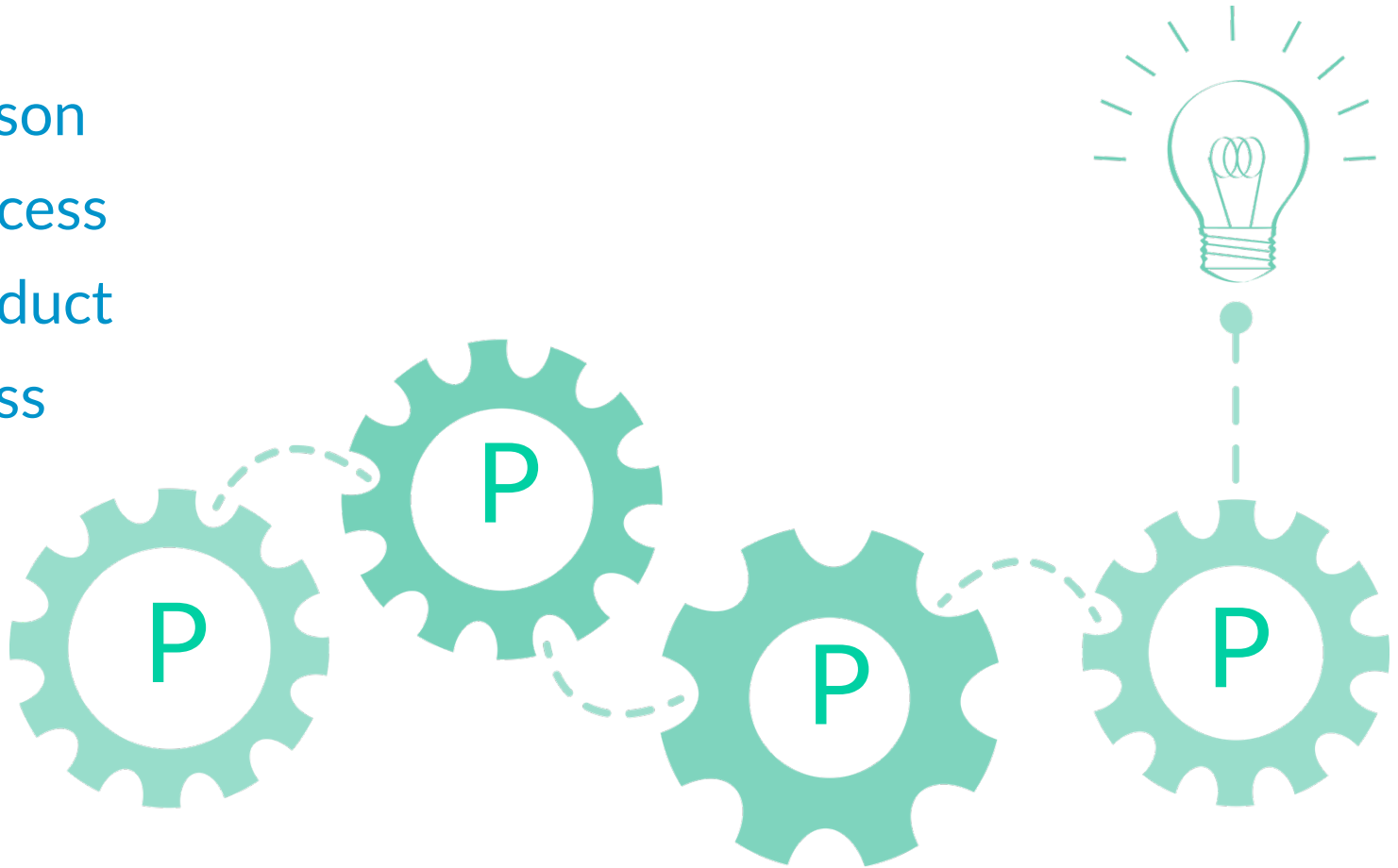
Source: Cropley, A. (2006). Creativity: A social approach. *Roeper Review, 28*(3), 125-130.

RHODES' PRESS EXPLAINED

- The "crucial (if controversial) point here is that <u>nothing is, or is not, creative in and of itself</u>…[it] is inherently a communal or cultural judgment."

- "The 'real' story is that social context is a key player in the game of creativity. Social conventions, attitudes, and behaviours have some control over reactions to the new, to its meaning, and to its possibilities."

Sources: Aaron, R.W. (2010). *The role of creativity in the development of identity and purpose in undergraduate seniors.* (Indiana University dissertation); Charharbaghi, K. & Cripps, S. (2007). Collective creativity: wisdom or oxymoron. *Journal of European Industrial Training, 31*(8), 626-638.

# PROPOSAL DEVELOPMENT AS CREATIVE THOUGHT: GUILFORD'S CHARACTERISTICS

- Fluency: producing many ideas within a relatively small amount of time

- Novelty

- Flexibility

- Synthesis

- Analysis

- Reorganization of existing ideas

- Complexity

- Evaluation

Source: Beine, J. (2007). *Evaluating Sterbnberg's investment theory of creativity: Are innovators widely distributed throughout the professions and what do they have in common?* (Kent State dissertation).

PROPOSAL DEVELOPMENT AS CREATIVE THOUGHT: CLARK'S SUMMARY

"Creative thinking seems to involve two components: generation of novelty via divergent thinking and evaluation of the novelty via convergent thinking. In the area of convergent thinking, knowledge is of particular importance: it is a source of ideas, suggests pathways to solutions, and provides criteria of effectiveness and novelty."
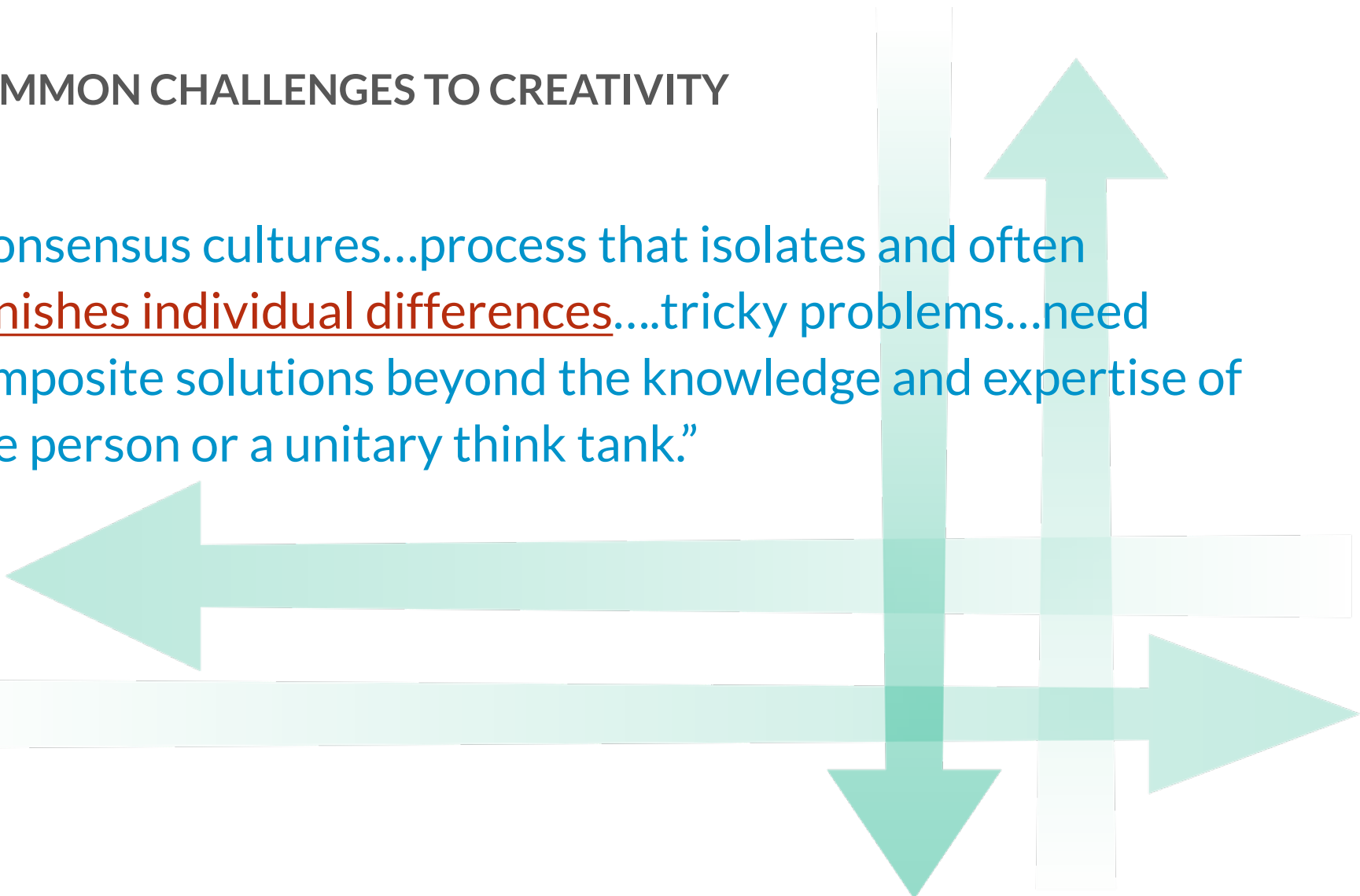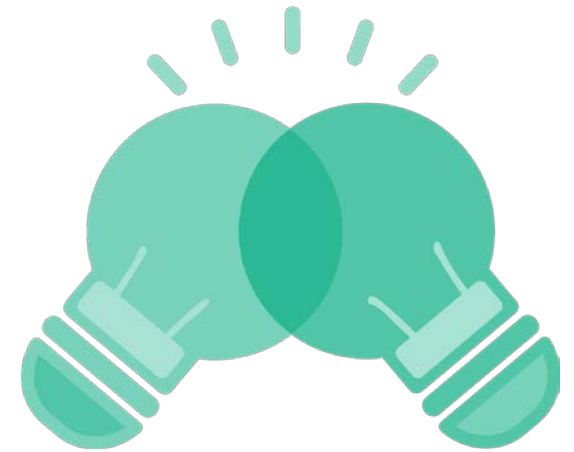
Source: Clark, C.W. (2008). *Estimates of association between cognitive complexity levels and creative complexity levels of field grade military officers: An exploration study of the relationship.* (Kansas State University dissertation).

COMMON CHALLENGES TO CREATIVITY

"Consensus cultures…process that isolates and often punishes individual differences….tricky problems…need composite solutions beyond the knowledge and expertise of one person or a unitary think tank."

Source: Charharbaghi, K. & Cripps, S. (2007). Collective creativity: wisdom or oxymoron. *Journal of European Industrial Training, 31*(8), 626-638.

COMMON CHALLENGES TO CREATIVITY (2)

Advanced learning: "Sometimes, when we are very knowledgeable about something, that very knowledge interferes with our seeing things in a new way….In general, previous experience and knowledge of standard ways for conceptualizing and solving a task **[functional fixedness]** can block creative solutions ….The point is not that some people become entrenched in their ways of thinking and acting, but that <u>everyone does</u>. The question isn't whether it will happen to you but <u>what you will do about it</u>."

Source: Sternberg, R.J. & Lubart, T.I. (1995). *Defying the crowd: Cultivating creativity in a culture of* conformity. New York, NY: Free Press., p. 134.

COMMON CHALLENGES TO CREATIVITY (3)

Aversion to risk

- "the two great personality characteristics of the highly creative: perseverance and risk-taking."

- "four main antecedents of team knowledge sourcing and creativity: learning orientation, intellectual demands, risk aversion, and relational capital."

- A clear majority of the subjects provided qualitative evidence that their willingness to think outside the box and then engage in professional risk-taking was directly fueled by their insistence upon helping others."

- "key themes included real-world teaching and learning, cross-curricular connections, and taking intellectual risks."

Sources: Beine, J. (2007). *Evaluating Sternberg's investment theory of creativity: Are innovators widely distributed throughout the professions and what do they have in common?* (Kent State dissertation); Henriksen, D. (2011). We teach who we are: creativity and trans-disciplinary thinking in the practices of accomplished teachers. (Michigan State dissertation); Khedaouria, A. & Ribiere, V. (2013). The influence of team knowledge sourcing on team creativity: evidences from information systems development. *The Learning Organization, 20*(4/5), 308-321.

COMMON CHALLENGES TO CREATIVITY (4)

"Moral compass…[when] solving problems…one of the best ways to start is by putting away your moral compass….<u>consumed with rightness or wrongness</u>…it's easy to lose track of what the issue is."

Source: Levitt, S.D. & Dubner, S.J. (2014). *Think like a freak*. New York, NY: HarperCollins Publishers, p. 31.

COMMON CHALLENGES TO CREATIVITY (5)

Environmental factors

- "Essentially, Sternberg rejects the concept that environments can be benign to one's creative development. Whether overtly or subliminally, <u>one's work and learning settings emit potent influences</u>, and so...the creative need to seek out innovation-affirming environments ....Creative ability must be <u>cultivated</u>; it can be <u>harmed or greatly diminished</u>" (p. 46).

- Clark's study of 66 military officers – creative performance varied based upon setting.

Source: Beine, J. (2007). *Evaluating Sterbnberg's investment theory of creativity: Are innovators widely distributed throughout the professions and what do they have in common?* (Kent State dissertation); Clark, C.W. (2008). *Estimates of association between cognitive complexity levels and creative complexity levels of field grade military officers: An exploration study of the relationship.* (Kansas State University dissertation).

COMMON CHALLENGES TO CREATIVITY (6)

Cultural bias

- "The language, legacies, needs, and beliefs of a society combine to form a <u>culturally appropriate conception</u> ….In the case of a non-Westem society, this may be equivalent to the Western concept in some regards but not in others."

- "<u>Significant differences</u> were found between individualistic and collectivistic cultures in regard to fluency, flexibility, and comfort level, but not in perceived creativity."

Sources: Schmidt, J.J., Facca, T. & Soper, J.C. (2013). International variations in divergent creativity and the impact on teaching entrepreneurship.; Sternberg, R.J. (1996). *Successful intelligence: How practical and creative intelligence determine success in life.* New York: Simon & Schuster.

WORKING WITH GROUPS: KEY OBSERVATIONS

- "Over-reliance on traditional rational management methods is held partly to blame for poor creative achievements within organisations"

- "One management style and organisational process will not be sufficient to meet all the different types of creativity."

- Need to recognize require "composite solutions beyond the knowledge and expertise of one person"

- "The creative individual and the creative collective supporting each other's existence"

Source: Charharbaghi, K. & Cripps, S. (2007). Collective creativity: wisdom or oxymoron. *Journal of European Industrial Training, 31*(8), 626-638.

WORKING WITH GROUPS: KEY APPLICATIONS

The goal of education is to produce artists… "individuals who have developed the ideas, the sensibilities, the skills, and the imagination to create work that is well proportioned, skillfully executed, and imaginative, regardless of the domain in which an individual works."

Source: Eisner, E. (2002). What can education learn from the arts about the practice of education?

1. Relationships that satisfy a purpose
2. Flexible purposing
3. Form-content relationship
4. Not everything is propositional
5. Constraints and affordances of the medium
6. Motives for engagement

WORKING WITH GROUPS: KEY APPLICATIONS (2)

Contextualized Multiple Thinking – theorizes six types of thinking within organizations which become evident in beliefs, learning patterns, and actions taken.

1. Technological thought
2. Economic thought
3. Social thought
4. Political thought
5. Cultural thought
6. Conception or practice of learning

Source: Cheng, Y.C. (2005). Development of multiple thinking and creativity in organizational learning. *The International Journal of Educational Management, 19*(6/7), 605-622.

QUESTIONS AND COMMENTS

THANK YOU FOR PARTICIPATING IN THIS SESSION

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SOURCES CITED

Aaron, R.W. (2010). *The role of creativity in the development of identity and purpose in undergraduate seniors.* (Indiana University dissertation).

Al-Srour, N.H. & Al-Owiedi, A. (2013). The level of creativity among management employees, academic staff and artistes and its relationship with gender, practical experience and age. *Creative Education, 14*(3), 185-188.

Andreasen, N.C. & Ramchandra, K. (2012). Creativity in the art and sciences: Are there two cultures? *Dialogues in Clinical Neuroscience, 14*(1), 49-54.

Bartel, M. (2004). *Some types of creativity as described by Elliot Eisner.* Retrieved from: https://people.goshen.edu/~marvinpb/11-13-01/types-of-creativity.html

Beine, J. (2007). *Evaluating Sterbnberg's investment theory of creativity: Are innovators widely distributed throughout the professions and what do they have in common?* (Kent State dissertation).

Clark, C.W. (2008). *Estimates of association between cognitive complexity levels and creative complexity levels of field grade military officers: An exploration study of the   relationship.* (Kansas State University dissertation).

Charharbaghi, K. & Cripps, S. (2007). Collective creativity: wisdom or oxymoron. *Journal of European Industrial Training, 31*(8), 626-638.

Cheng, Y.C. (2005). Development of multiple thinking and creativity in organizational learning. *The International Journal of Educational Management, 19*(6/7), 605-622.

SOURCES CITED (2)

Cropley, A. (2006). Creativity: A social approach. *Roeper Review, 28*(3), 125-130.

Eisner, E. (2002). What can education learn from the arts about the practice of education? *Journal of Curriculum and Supervision, 18*(1), 4-16.

Henriksen, D. (2011). We teach who we are: creativity and trans-disciplinary thinking in the practices of accomplished teachers. (Michigan State dissertation).

Khedaouria, A. & Ribiere, V. (2013). The influence of team knowledge sourcing on team creativity: evidences from information systems development. *The Learning Organization, 20*(4/5), 308-321.

Levitt, S.D. & Dubner, S.J. (2014). *Think like a freak*. New York, NY: HarperCollins Publishers.

Schmidt, J.J., Facca, T. & Soper, J.C. (2013). International variations in divergent creativity and the impact on teaching entrepreneurship. *Journal of Higher Education Theory and Practice, 13*(2), 101-109.

Sternberg, R.J. (1996). *Successful intelligence: How practical and creative intelligence determine success in life*. New York: Simon & Schuster.

Sternberg, R.J. & Lubart, T.I. (1995). *Defying the crowd: Cultivating creativity in a culture of conformity*. New York, NY: Free Press.