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**Theme:**  
**Understanding Multifaceted Interactions among Person, Process, Product, and  
Press/Environment**

**Initiative:**  
**Developing new instrumentation for one or more of the four P's framework elements**

**Project/Thesis Title: Profiling Creativity with the use of the Appropriate Change Theory (ACT)**

**Rationale and Questions:** The purpose of this project is to use case analysis to further develop ACT. Currently, this theory is in the infancy phase and further development is needed to validate one of the Center's research initiatives. This theory is based upon the relationship between the idea generated (the invention) and the environment requirements. The creative aspect of this invention is deemed to be non-creative, adaptive, or innovative only when the environment accepts the idea. When the idea is not accepted, the result fits outside of adaptive or innovative creativity and thus lies in either one of the following: inappropriate nonrevolution or nonevolution, inappropriate revolution or evolution, or unnecessary revolution or evolution. To support this theory, several interviews will be conducted with inventors with the focus on the metacognition of the creative process and the environment requirements when their invention is introduced or proposed.

I hope to answer the following questions!

- Why did the inventor invent this product?
- What environment considerations did the inventor consider in the development of the invention?
- What creative process was used to come up with the idea?
- Why or why wasn't the invention successful?

**Statement of Significance:** This theory has evolved from Dr. Gerard J. Puccio's (1993) work on Person-Environment Fit. Gerard Puccio, Andrew Joniak, and Reginald Talbot initially developed this theory in 1998. However, very little research has been conducted on the environment and its interaction with the proposed idea. Besemer and O'Quinn (1982, 1993) have extensively researched and refined a measurement tool to examine the interaction between product and environment.

This research is important to the business and education community to help foster change that the environment accepts. Very few inventions make it to production so implications of this research may create some guidelines before the product is introduced. Two other implications to this research includes the understanding of the creative process used by the inventor, and identifying key questions during a task appraisal in a CPS session.

Upon completion of this project, a better understanding of ACT and the future implications of the theory will be met.

**Description of the Method or Process:** Case study analysis is used in this research to help validate this theory with the use of living inventors. The qualitative research discovered through

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developing and implementing interviews given to inventors will be the focus of the research. The ACT model will be used as a guide to the development of the interview questions. After the design and implementation of the interviews, an incubation time will occur followed by another interview if informational gaps are found. The sample size of this research will at least be two. Data from all interviews will be compiled and information will be processed looking at similarities, differences, and key learnings that will be compared with the ACT model. Implications of the research will be addressed along with what further research is needed.

**Learning Goals:**

- The ability to understand what types of environmental concerns that need to be considered when introducing a product
- To increase knowledge in the creative process of inventors
- The ability to design an interview that fulfills my objectives and to have an appropriate follow-up session

**Outcomes:** To test and develop ACT by understanding the parameters to developing a product and to enhance knowledge of the creative process used by the inventor. Another outcome will be ten annotations in reference to creative process, person, product, and environment.

**Timeline:** Dec. 1999 – Finish concept paper and increase product development knowledge

Jan. 2000 – Design interviews and start annotations

Feb. 2000 – Conduct initial and follow-up interviews

Mar. 2000 – Compile and analyze information

Apr. 2000 – Develop implications and further research of ACT

May 2000 – Submit project to the Center

**Principal Investigators:** Faculty Advisory: Dr. Gerard Puccio  
Student: Cameron Schilling

**Related Literature:**

Besemer, S.P., (1997). Creative Product Analysis: The search for a valid model for understanding creative products Bergen, Norway: University of Bergen.

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Kirton, M.J., (1989). Adapters and innovators: Styles of creativity and problem solving, London, New York: Routledge.

Puccio, G.J., Talbot, R.J. & Treffinger, D.J., (1995). Exploratory examination of relationship between creative styles and creative products. Creativity Research Journal, 8 (2), 1157-172.