Title of Presentation: An Analysis of the Creation of a Community College Technology Park in the Context of Rogers’ Innovation-Decision Framework

Research purpose/main questions: The study investigated an innovative community college partnership that improved the college’s technology-based facilities and analyzed this using Rogers’ (1995) Innovation-Decision Model. The project addresses the problem that few community colleges are benefiting from partnerships that address technology-based buildings. As an enterprise we do not know why this deficit exists, or how to capitalize on lessons of successful partnerships. The research question was: What lessons can be learned about technology-based, facilities-improving partnerships from the story of Technical Community College (TCC) (a pseudonym) and its Technology Park partnership?

Summary of methods, population and sampling: This project used a case study methodology, which is an appropriate research method for a complex phenomenon involving patterns and processes (Merriam, 1990) calling for in-depth analysis using applied theory (Creswell, 1998). Case studies require researchers to choose a case depending on the critical phenomena (Patton, 1990; Vaughan, 1992; Yin, 1989). Among all community colleges, only those that had undertaken technology-based, facility-improving partnerships qualified for the sample. Of these half dozen such institutions, TCC was purposefully selected for investigation because it has created a relevant partnership and thus provided a “best practice” kind of sample. Data were collected through interviews, focus groups, and document analysis. A purposeful sampling strategy (Miles & Huberman, 1994) sought anyone having direct knowledge of or having participated in planning and execution of the Technology Park. This yielded 17 possible study participants of which nine agreed to participate and were interviewed, eight participated in the two focus groups, and nine provided documents. The study used phenomenological inquiry to interpret transcriptions and documents. The transcripts and documents were coded for chronology, and for key terms relating to the stages and attributes relating to Rogers’ (1995) Innovation-Decision Model. The coded transcripts and documents were then analyzed for two purposes: to create a chronological story of how the Technology Park was created and evolved, and to test to see if the innovation process exhibited the stages and attributes of the Rogers’ Innovation-Decision Model.

Theoretical Framework: The creation of the Technology Park and the underlying partnership that funded and shaped it is the result of a planned change process. Planned change results “from conscious, deliberate efforts to improve the operations of a system” (Gross, Giacquinta, & Bernstein, 1971, p. 19). Change models are either about process or strategy (Becker, 1999). Of the many process models, perhaps the best known is the Rogers’ Innovation-Decision framework (1995) that is grounded by over 3,000 studies, and over 100 research projects pertaining to education since 1995. The Rogers’ model (1995) presents a series of stages through which individuals pass and attributes evaluated as they embrace and institutionalize innovation. Rogers’ stages and attributes provide a useful research template through which to examine what happened as a college and its community proceeded through a change process – such as the adoption of a partnership in support of an innovation (a technology park).

Findings and Implications: The results indicated that the college’s mission, commitment to economic development, and responsiveness to community needs were paramount in creating a partnership that would ultimately yield a 500,000 square foot, technology-based facility – a first of its kind. Furthermore, Rogers’ (1995) Innovation-Decision Model, manifested itself prominently, but not in its entirety. Specifically, the linear process of the theory breaks when implementation and confirmation occur simultaneously.

Implications: The results suggest a pathway for a successful technology-based, facility-improving community college partnership. It suggests “best practices” for the design and implementation of such partnerships. Further research is needed on methods to facilitate such endeavors.