Expanding Entrepreneurial Strategies to Increase Revenues:

A Study of Three Distinctive Higher Education Institutions

with Practical Application at a Community College

by

Casandra Gwen Kakar

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Christopher Michael Clark, Chair Alfredo G. de los Santos Jr. Eugene Giovannini

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#### ABSTRACT

Higher education institutions in the state of Arizona have experienced a reduction in government funding due to the economic challenges the state is facing combined with an ongoing national recession. Three higher education institutions studied are located in Phoenix, Arizona. The three higher education institutions are Phoenix College, Arizona State University and The University of Phoenix. An analysis of documents made public by each institution was conducted and high level administrators at each institution were interviewed to learn about revenue streams currently active and planned. The results of this set of analyses were presented to the leadership team of Phoenix College in a three-hour strategic planning and priority setting meeting.

The action research study assisted Phoenix College administrators in gaining knowledge about and initiating action plans to increase revenue through entrepreneurial strategies. Increased funding is necessary to offset reductions in state aid and property tax revenues. Implementing entrepreneurial strategies to increase funding can promote self-reliance and flexibility and can mitigate the damage to institutional mission success that is threatened by reductions in traditional funding.

The strategic planning and priority setting exercise conducted at Phoenix College produced three immediate outcomes: it informed the community of practice about entrepreneurial strategies to increase funding that are in use by higher education institutions located in greater Phoenix, Arizona; it influenced the community of practice to examine entrepreneurial revenue streams and; it

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committed the leadership team to pursuing and enlarging three additional revenue streams.

#### DEDICATION

I dedicate this dissertation to Tony, my intelligent and talented husband and our two incredible sons Austin and Drake. These three supportive loved ones are caring and kind and never waiver in their confidence in me. It is impossible to fail when you have their strength and energy to keep you moving forward in reaching a goal.

My mother Marceline, a Texas gal in every way, joined us in Phoenix as my doctoral journey began. She was one of my biggest supporters in all aspects of life but no longer physically here to join in the celebration of completing this degree. Her fun loving spirit will always be with us.

I am also surrounded by many friends and family that encouraged me from the start of this degree to the finish line. They understood when I had to decline trips or fun adventures in order to complete coursework and the dissertation. I look forward to returning to guilt free tennis, golf and travel.

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#### Chapter 1

#### Leadership Context and Purpose of the Study

Higher education institutions in the state of Arizona have experienced a reduction in government funding due to the economic challenges the state is facing combined with an ongoing national recession. During the past four years of my seven year tenure as a Vice President at Phoenix College, funding has been a priority topic of discussion and analysis for leadership at the college. Phoenix College, established in 1920, is the first of ten colleges that make up the Maricopa County Community College District, one of the largest community colleges in the country.

The college has faced unique funding challenges due to the age of facilities and infrastructure and the desire for growing new programs and developing initiatives to serve the community and support student success. Full-time student enrollment of 6,908 in 2004 has fluctuated in the years since then. The college experienced a dip in enrollment during the next four years, which reduced the operating budget and state funding began to decline. The next three years a gradual rebound in full-time student enrollment for 2011 is 7,578 which is a 9.6 percent increase compared to the previous 2004 peak. The college is currently planning for a 10 percent increase in enrollment for Fall 2011. The estimated increase will be an all time high enrollment for Phoenix College. While public demand for education and job training--two consequences of a down

economy--are at an all-time high, community colleges, many of which face record enrollments, are forced to do more with less (Blose, 2010).

Dr. Rufus Glasper, the chancellor of the Maricopa County Community College District, predicted that the district will be a state-located but not a statefunded community college district in the next two to three years (Moltz, 2009). Actual budget cuts have been \$23.4 million: a 34.1% decline over two years. The 2011-12 Arizona state budget includes a cut of 85% in the funding of the Maricopa County Community Colleges. The cut reduced state funding from \$45.3 million to \$6.9 million.

The public universities in the state are also faced with drastic cutbacks and have had twenty-five percent of their state funding reduced, which equates to funding levels of the 1960's. State budget reductions have been imposed incrementally over the previous three fiscal years. For example, in 2010 the cumulative impact has been a reduction in Arizona State University's state appropriation by \$110 million. This represents a 22% reduction in absolute funding while enrollment increased 15.3% during the period since the budget reductions began in 2008.

On May 5, 2011, ASU President Michael Crow announced to the university that reductions of state funding will amount to an additional \$90 million during the 2012 fiscal year.

All told, our total cut since the end of 2008 from the state is approaching \$200 million. Those represent some of the most dramatic changes in investment – positive or negative – ever made in a public university and so

we've been faced with a significant challenge. We've been working through that challenge the last few years. We had furloughs in 2009. We had staff reductions in 2009. We've had reorganizations in 2009 and now, as we move into 2012, we are looking to make our adjustments with the following basic approach: \$90 million in additional reductions from the state, about \$30 million of which we make up through tuition adjustments upward; Maintaining our commitment to financial aid; The balance, \$60 million, we will address through two things performance and revenue enhancements and additional cuts. (Crow, 2011)

On November 3, 2010, The Apollo Group Inc., the parent company of the University of Phoenix, disclosed that the United States Department of Education planed to review financial aid practices of the institution. The review, which began on December 6, 2010, appears to have shaken some investors. After this announcement, Apollo shares fell 8 percent, down \$3.09, to \$35.38 (Berry, 2010). In January 2011 it was reported that new student enrollment at the University of Phoenix fell 45 percent to 48,200 from a year earlier. Analysts had expected the figure to decline by 42 percent. Apollo's new student enrollment may decline for the next several quarters as the company institutes a program that allows students to sample classes before enrolling. Apollo is changing its approach as the United States Education Department and Congress question the student-loan defaults, dropout rates and debt levels of those attending for-profit colleges (Hechinger, 2011). Alternative funding is necessary to maintain the quality and level of instruction that is provided to students.

There is a mixture of opinion about funding in the context of the community college environment. Many are beginning to understand the importance of increasing funding through entrepreneurial strategies. Others in the community of practice hold an entitlement mentality about state funding and property tax revenues rather than an entrepreneurial spirit of self-reliance (Zeiss, 2008). Many assume entrepreneurial strategies to increase funding will create a business, revenue-focused model and ultimately negatively impact the integrity of the scholarly image and mission of higher education (Clark, 2004). This traditionalist understanding of the phenomenon positions higher education institutions in a reactive posture in terms of funding year to year. Community colleges can bewail the budget cuts and criticize policymakers, or can take positive measures that will save the day by placing the destiny of our colleges in our own hands (Zeiss, 2010).

Increased funding is necessary to offset reductions in state aid and property tax revenues. Entrepreneurial strategies to increase funding can promote institutional self-reliance, flexibility and a reduction of constraints imposed by traditional funding. Higher education institutions must be more proactive in generating funding through entrepreneurial strategies that will reduce dependence on government funding. Community colleges and public and private universities are at different stages of advancement with regard to entrepreneurial strategies to increase funding (Zeiss, 2010). For example, community colleges are in the early stages of building their alumni divisions as compared to most universities. Nevertheless, different kinds of higher education institutions in Arizona have

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much to learn from one another as we attempt to address our daunting financial challenges.

#### Chapter 2

#### **Review of Supporting Scholarship**

The review of supporting scholarship consists of four topics: three distinctive higher education institutions; traditional funding sources; entrepreneurial strategies to increase funding; and action research methodology. The action design is informed by published scholarship from primary research sources and supports the potential usefulness of the action.

#### **Three Distinctive Higher Education Institutions**

The study is focused on learning about revenue sources at three distinctive higher education institutions: Phoenix College, a traditional community college located in Phoenix, Arizona; Arizona State University, a public research institution with multiple campuses located throughout the metropolitan area of Phoenix, Arizona; and The University of Phoenix, a private for-profit university headquartered in Phoenix, Arizona. These three higher education institutions share a home in the Phoenix area, but represent three different models of higher education with fundamental differences in their purposes and the population served.

**Community college.** Established in 1901, Joliet Junior College is the oldest continuously existing public two year college in the nation (Vaughan, 2006). Historically the major responsibility of the American community college has been to ensure access to higher education for those who would not otherwise be able to achieve it. Community colleges differentiate themselves from their four-year counterparts in the curriculum offered and the diverse student body

served. A community college is typically defined as any institution regionally accredited to award the associate in arts or the associate in science as its highest degree (Cohen & Brawer, 2008).

**Public research university.** According to the Carnegie Foundation for the Improvement of Teaching, public tier one universities are state institutions that offer a full range of baccalaureate programs, are committed to graduate education through the doctorate, give high priority to research, award 50 or more doctoral degrees each year, and receive \$40 million or more in federal support annually.

**Private for-profit university.** For-profit institutions are not at all new to the United States (U.S.) higher education system, with roots reaching as far back as 1617. This was the year The College at Henrico, the first college in the American colonies, was proposed as a revenue-generating scheme for the cash-strapped Virginia Company (Wright, 1988). In the 1990's, the for-profit sector garnered attention by developing a more established and visible presence (Kinser, 2006). For-profit institutions can be viewed as organizations executing an entrepreneurial strategy for solving the societal problem of providing access to higher learning to as many students as possible while capitalizing on this enrollment opportunity (Kinser, 2005).

#### **Traditional Funding Sources**

Traditional funding for the three distinct higher education institutions varies. Student tuition and fees are the only consistent, common source of traditional funding.

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**Community college.** Community colleges depend on four revenue sources: tuition and fees, local funding primarily from property taxes, state support, and federal funding (Cohen & Brawer, 2008; Phillippe & Sullivan, 2005).

**Public research university.** Public research universities rely on state funding. This source is a mainline support for the institution. A second source of traditional funding comes from research grants and contracts, primarily from the federal government, but also from private foundations. Tuition and fees are another traditional funding source for the institution (Ronca & Weerts, 2006).

**Private for-profit university.** Private for-profit universities are funded principally by tuition and fees. They are not publicly supported through tax revenue, but the majority of their income comes from government subsidies, grants and loans to students for tuition. This is derived from financial aid to students enrolled in private for profit universities (Kinser, 2006). Seventy to eighty percent of the revenue of for-profit universities comes directly from the U.S. federal government in the form of loans that must be repaid by the students to the government-backed loan underwriters. Ironically, private for-profit universities are much more dependent on government funding than are public universities (Blumenstyk, 2010).

#### **Entrepreneurial Strategies to Increase Funding**

In an academic setting, the term "entrepreneurial" has been defined as activities that combine risk, innovation, and opportunity, particularly in times of uncertain resources (Mars & Metcalf, 2009). In the academic context, entrepreneurship might involve individuals (students, faculty, and administrators), organizational units such as departments or colleges, or the entire institution. In this way, entrepreneurship leaves the door open for interpreting many diverse higher education activities as being entrepreneurial (Mars & Metcalf, 2009).

Many higher education leaders are embracing an entrepreneurial spirit rather than an entitlement mentality that is pervasive at many colleges and universities (Zeiss, 2008). Implementation of entrepreneurial strategies to increase funding, when successful, would benefit students, employees and taxpayers. The following are examples of revenue streams that have potential to increase funding through entrepreneurial strategies.

**Tuition and fees.** The manipulation of tuition and fees are found to be the most frequent method used by higher education to increase revenue. As the state retreats as full-cost patron, this particular source of substantial income is widely seen around the globe as the natural substitute for diminished state aid (Johnstone & Shroff-Metha, 2001). Entrepreneurial strategies using tuition and fees as a mechanism have emerged. Many higher education institutions incorporate the use of fees for specialized courses and programs. These fees give the institutions a funding base required to support specialized equipment and technology for training in high tech workforce programs (Cohen & Brawer, 2008). Universities and colleges have adjusted tuition as a mechanism to increase enrollment by offering a reduced out-of-state rate to attract students to their institutions (Glater, 2008). Simply put, this strategy involves increasing net tuition and increasing

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student enrollment, while holding down costs of delivering an education such as faculty and staff salaries and benefits (Clark, 2004).

**Other government sources.** Many government or public agencies want to connect with higher education institutions in order to receive useful services in return or to promote economic progress. As universities become more complex, and especially as they actively seek out additional supporters, more government departments become prominent in their portfolios. Such agencies may grant longterm standardized support for "their" part of the university. However, the modern trend is toward grant-making characterized by agency peer-review and competitive allocation (Clark, 2004; Birley, Mosey & Wright, 2004). An example of this type of funding are Student Support Services Grants, one of eight TRIO grants programs offered by the U.S. Department of Education.

**Private sector sources.** These sources include gifts, professional associations based on specialties, business firms involved in contract research, contract training and education and funding from philanthropic foundations (Birley, et al. 2004). For example, an accountancy professional association may want to promote continuing professional development and education.

**Contract research.** Contract research is a project funded by an external client or entity to examine a specific problem. The client or entity defines the research question, and the contractor does the actual research. Higher education and industry ties have grown since 1990 and can be measured by (1) growth of funds received from industry for research and development; (2) growth of jointly authored articles by industrial researchers and university researchers; (3) growth

in the number of licensing agreements generated by university research; and (4) growth in the amount of licensing income received (Brint & Turk-Bicakci, 2005).

**Contract training.** Community colleges began contract training and education for the private sector in the 1970's and continues to garner revenue in the form of continuing education and non-credit or custom training divisions at the college. Contract training divisions tend to be the most entrepreneurial and innovative in higher education (Downey, Pusser & Turner, 2006).

**Philanthropic foundations.** Philanthropic foundations are plentiful and are a strong provider of private funding of higher education. The trend is toward grant-making characterized by formal, written proposals that are reviewed and awarded through competitive allocation (Birley et al, 2004).

University or college generated income. University or college generated income is the most promising income provider because the institution can develop and directly control these enterprises (Clark, 2004). The rental of facilities such as university stadiums for rock concerts or football bowl games and the use of auditoriums and other venues for conferences, meetings and performances are examples that can generate this type of income.

**Endowment.** An endowment is a gift carrying a stipulation that the principal be invested in perpetuity, with the investment income generated by the gift being available for program support or other purposes (Goldstein, 2005). Designated as surplus income, return on endowment, when properly managed, offers compound income growth for years or decades to come. Endowment income can also offer the widest discretion in expenditure (Clark, 2004; Zeiss,

2010), although some categories of endowment are restricted as to their possible uses.

**Alumni fundraising.** This type of revenue is obtained from alumni fundraising. Often it is earmarked for long-term general support to be spent in the here-and-now, and can be a first-class source for annual funding (Clark, 1998; 2004).

**Spin-off companies and patent incomes.** The Bayh-Dole Act of 1980 was the first legislation that allowed universities to start spin-off business and to generate profits from patents (Campbell & Slaughter, 1999).

Income from spin-off companies comes from sales of products or services developed within the university and then marketed through commercial entities associated with the school. Here both the university and the scientist must agree that spin-off is the most viable option for technology commercialization and must negotiate a spin-off contract (Birley, et al., 2004).

Another potential supplementary income source is royalty income from patented inventions and licensing of intellectual property. Issues are many and keep shifting, but the point is to share the income from exploited research at least between the university and the inventing individuals, involved research groups, departments and faculties (Birley, et al., 2004; Clark, 2004).

**Stand-alone activities.** These activities are operated to provide services and to generate surpluses, e.g., conference centers, campus store, news agencies, restaurants, coffee shops, exercise facilities, bookstore complexes that attract non-

students, online learning, videos, and other products to be sold on the world market (Clark, 2004; Zeiss, 2003).

**Auxiliary enterprises.** Auxiliary enterprises include activities that provide services but are expected only to break even, and thereby not need subsidy. Examples may include parking fees, student residencies, food services, bookstores and photocopying services (Clark, 2004).

#### Action Research Methodology

This section of the literature review includes an overview of: (a) action research design, (b) data collection, and (c) issues of reliability and validity.

Action research design. Action research documents and evaluates an action or cycle of actions that organizational or community members have taken, are taking, or wish to take, to address a particular problematic situation (Anderson & Herr, 2005). The approach has been described as a highly reflective, experiential, and participatory mode of research in which all individuals involved in the study, researchers and subjects alike, are deliberate and contributing actors in the research enterprise (Berg, 2004).

Action research has been concisely explained as a form of self reflective problem solving, which enables practitioners to better understand and solve pressing problems in social settings (McKernan, 1988). It has also been described as systematic inquiry that is collective, collaborative, self-reflective, critical, and undertaken by the participants of the inquiry. The goals of action research projects are the understanding of practice and the articulation of a rationale or philosophy of practice in order to improve practice (Jung & McCutcheon, 1990). By collecting data around a problem and then feeding it back to the organization, researchers identify the need for change and the direction that the change might take (Watkins, 1991).

Action research consists of a team of practitioners, and possibly theorists, who cycle through a spiral of steps including planning, action, and evaluating the result of action, continually monitoring the activity of each step in order to adjust as needed (Kemmis & McTaggart, 1988). The cyclical nature of action research recognizes the need for action plans to be flexible and responsive to the environment and allows changes in plans for action as people learned from their own experience (Dickens & Watkins, 1999). The action research definitions and process have guided my research and will continue to serve me as plans of action are implemented at my community of practice, Phoenix College.

**Data collection used in the study.** Grounded theory is a qualitative strategy of inquiry in which the researcher derives a general, abstract theory of a process, action, or interaction grounded in the views of participants (Creswell, 1998). This process involves using multiple stages of data collection and the refinement and interrelationship of categories of information (Corbin & Strauss, 1998). Four research methods and data gathering techniques were used in the study: Document Analysis, Personal Interviews, Nine-Block Analysis, and Force-Field Analysis.

*Document analysis.* This research design is low cost, allows for quick and easy access to data, and is a collection of objective and subjective data (Suzuki, Ahluwalia, Arora, & Mattis, 2007). Document analysis of data is also referred to

as mute evidence or material culture (Creswell, 1998). Data is collected through a compare-and-contrast approach based on the idea that themes (Corbin & Strauss, 1998) represent the ways in which texts are either similar or different from each other will be utilized. The researcher compares texts by asking "How is this text different from the preceding text?" and "What topics are mentioned in both?" Triangulation of the different data sources of information is accomplished by examining evidence from the sources and using it to build a coherent justification for the themes (Creswell, 1998).

*Personal interviews.* The use of personal interview often strengthens a study. The process includes an interview guide and has the following benefits: measures attitude, allows for probing and posing of follow-up questions, provides in-depth information, and is useful for exploration as well as confirmation (Creswell, 1998).

*Nine-Block Diagram.* The Nine-Block Diagram is an interactive, facilitation technique used to encourage a group of participants to focus and prioritize when choosing among multiple actions (Adams & Means, 2005). Suppose the study identifies 15 entrepreneurial strategies for increasing income. It is unrealistic to try to implement all 15 strategies at an institution. Making the selection among 15 strategies is not easy or obvious. The Nine-Block Diagram is a way of seeing how alternatives compare in relation to two common factors that are important decision-making considerations. For example, suppose the team has determined that the two criteria used in priority setting will be "ease of implementation," and "impact on the organization." An example of the NineBlock Diagram using these criteria was created (see Appendix D). This technique will rarely get to a final decision but provides a rationale to support decision-making. In addition it assists in identifying the two or three alternatives that rise to the top in relation to the selected criteria. Also, the technique helps the team to overcome personal biases and preferences and focuses them on the contribution of a priority or strategy in a more objective manner (Adams & Means, 2005).

*Force-Field Analysis.* The Force-Field Analysis technique is used to identify opportunities for improvement by exploring what is at work within an organization or environment that supports a proposed initiative or change and what is in existence that might inhibit the initiative or change. This group activity helps organize thinking and encourages thoughtful exploration prior to making decisions (Adams & Means, 2005). Once elements within the two opposing forces are identified, the group can generate ideas for reinforcing the positive elements and eliminating (or reducing) the negative elements. A team will make more progress toward its goal by removing barriers than by pushing harder on what is already working well (Senge, 1990). An example of a Force-Field Analysis illustrating the steps involved in the group process was created (see Appendix E). Force-Field Analysis can help a group identify critical actions that must be taken to get us from where we are to where we want to be (Adams & Means, 2005).

**Issues of validity.** One of the major data collection components of the study was a document analyses. This type of data collection is an analysis of physical data through interpretation of written words, which are always subject to

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interpretation. Therefore validity or trustworthiness is a major concern (Morrow, 2005). Interpretation of physical data needs to be understood as just that, the researcher's making of meaning (Suzuki et al., 2007). Personal interviews are an effective method to confirm or challenge initial findings of document research (Creswell, 1998). Personal interviews were conducted following the document analyses at the three Phoenix area higher education institutions. Through triangulation of the different data sources themes were established based on converging sources of data and the perspectives from interview participants (Creswell, 1998).

#### Chapter 3

#### **Research Design**

The research design consists of six components: Action Research Setting, Purpose of the Action Research, Goals of the Study, Role of the Researcher, Documented Institutions, and Methods of Data Collection. The action research design is intended to facilitate the expansion of entrepreneurial strategies to increase revenues at Phoenix College, the community of practice.

#### **Action Research Setting**

The action research study was conducted to support the leadership team at Phoenix College. Phoenix College, established in 1920, is the first of ten colleges that make up the Maricopa County Community College District that now ranks as the nation's largest community college system and the single largest provider of higher education and career training in Arizona.

Located on the corner of 15th Avenue and Thomas Road, the beautiful tree-lined campus sports a blend of both modern and traditional historic buildings that includes state-of-the-art instructional classrooms, a modern library and computer lab, a performing arts theatre, culinary café, gymnasium, and a community dental clinic, as well as premium athletic fields and a fitness center. A second location, "PC Downtown," is housed in a charming historic building nestled in the heart of the city's business and cultural centers on 1<sup>st</sup> Avenue and Fillmore.

Phoenix College's students speak over 50 different languages, representing over 100 different countries, and they reflect the multicultural central city community it serves. Each year, more than 30,000 students prepare for university transfer, career training and advancement, or lifelong learning in one of the 200 degree and certificate programs. The college is also officially designated a Hispanic-Serving-Institution, gaining access to state and federal funding to further assist this growing segment.

#### **Purpose of the Action Research**

The study assists community college administrators at Phoenix College in gaining knowledge of and acting to realize increased funding possibilities through entrepreneurial strategies being utilized by higher education institutions in Phoenix, Arizona. Increased funding is necessary to offset reductions in state aid and property tax revenues. Entrepreneurial strategies to increase funding can promote self-reliance, flexibility, and a reduction of constraints imposed by traditional funding. Higher education institutions must be more proactive in generating funding through entrepreneurial strategies that will reduce dependence on government funding (Zeiss, 2010).

Specific to the practical application at Phoenix College, the study was designed to: (a) inform the community of practice consisting of the leadership team of the college about entrepreneurial strategies to increase funding for higher education institutions located in greater Phoenix, Arizona; (b) influence the community of practice to examine entrepreneurial revenue streams and; (c) commit to pursuing one or more additional revenue streams.

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#### **Goals of the Study**

The research goals of the study were established to create action at the college to expand entrepreneurial strategies to increase revenue. The goals of the study:

- Identify action at the community college to explore entrepreneurial strategies to increase funding;
- Provide insight into increased funding strategies initiated by public and private universities in metropolitan Phoenix;
- Compare funding practices currently being utilized in metropolitan Phoenix;
- Prioritize entrepreneurial strategies for implementation at the community college under study;
- Identify critical actions that must be taken by the community college to get from where we are to where we want to be;
- Evaluate the effectiveness of my efforts to promote change and expansion of funding sources and amounts.

#### **Role of the Researcher**

I am the Vice President of Academic Affairs, part of the

Phoenix College leadership team, and serve on the President's Executive Team. During the past four years of my seven-year tenure as a Vice President at Phoenix College, funding has been a priority topic of discussion and analysis of leadership at the college. My study included data collection through document analysis and personal interviews. I presented the findings of the document analysis and personal interviews through an interactive visual and oral presentation. In addition I facilitated the Nine-Block Diagram prioritization activity, Force-Field Analysis and development of a plan of action to be implemented beginning in Fall 2011.

#### **Methods of Data Collection**

Data was collected in three phases: (1) document analysis; (2) interviews of university or college presidents and/or vice president of development or administrative services; (3) interactive visual and oral presentation of document analysis and results of interviews to the Phoenix College President's Executive Team, Dean of Industry and Public Service, Director of Alumni and Development and Director of Institutional Advancement. Following the visual presentation, a Nine-Block Diagram prioritization of increased funding strategies for implementation at the college was conducted. A Force-Field Analysis was completed to identify critical actions that must be taken for the initiative to be successful.

**Document analysis.** Public documents published by Phoenix College, Arizona State University, and The University of Phoenix were analyzed. The fiscal year-end of the college and universities is June 30. Most information was available in the spring of 2011 for the fiscal year ending June 30, 2010. It was an ideal time for the researcher to collect the data and complete research on a timely basis. The documents included: (a) Organization Charts, (b) Higher Learning Commission Self-Study (n.d.), (c) annual report, (d) Integrated Postsecondary Education Data System (IPEDS) Reports. The most recent IPEDS reports available were 2009 (National Center for Education Statistics, n.d). A grid was created that outlines the questions that were asked of each document (see Appendix B).

**Interviews.** Personal interviews were conducted with the president or vice president of each institution in the study. Face-to-face interviews were conducted with the President and Vice President of Administration at Phoenix College on May 4, 2011 and the Associate Vice President of University Initiatives at Arizona State University on April 20, 2011. A personal phone interview was conducted with the Senior Vice President of Academic Research at the University of Phoenix on June 6, 2011. The purpose of the interview was to confirm the information collected in the document analysis and bring life to the silent data. Consistent interview questions were asked of each interviewee (see Appendix C).

Interactive visual and oral presentation. The final component of the study was held on June 7, 2011 from 2:00 p.m. – 5:00 p.m. in the Administration Conference Room, located in the Administration Building at Phoenix College. The Phoenix College President's Executive Team which consists of the President and three Vice Presidents were present. In addition, the Dean of Industry and Public Service, the Director of Alumni and Development, and the Director of Institutional Advancement participated in an interactive presentation by the researcher. This group was referred to as the leadership team for the purpose of the action research. Each member received a binder that contained a printed copy of the visual presentation (see Appendix F) and heard an oral presentation of the data that provided more detailed information about entrepreneurial departments

and revenue streams at each higher education institution. The interactive visual presentation, Nine-Block Diagram prioritization technique, Force-Field Analysis and development of a plan of action were completed. The development of a plan of action to be implemented in Fall 2011 concluded the interactive session.

The interactive visual and oral presentation consisted of the comprehensive and comparative data collected in the document analysis and interviews (See Appendix F). Participants were encouraged to ask questions and provide input during the presentation.

An interactive Nine-Block Diagram prioritization technique was conducted. The document analysis and interviews identified 12 entrepreneurial strategies for increasing revenue streams. It was unrealistic to try to implement all 12 strategies at Phoenix College. Making the selection among the 12 strategies was not obvious. The Nine-Block Diagram prioritization technique was used to compare alternatives in relation to two common factors that are important decision-making considerations. The facilitator and leadership team determined the two criteria used in the decision-making: "ease of implementation," and "greatest impact on the organization."

The Force-Field Analysis technique was used to identify opportunities for improvement by exploring the culture or elements of Phoenix College that will support the initiative to increase revenue streams and what is in existence that might inhibit the initiative. This group activity helped to organize the group's thinking and encouraged thoughtful exploration prior to making decisions about the plan of action. Once elements within the two opposing forces were identified, the group generated ideas for reinforcing the positive elements and eliminating (or reducing) the negative elements. An example of a Force-Field Analysis illustrating the steps involved in the group process was created (See Appendix E). The Force-Field Analysis helped the community of practice identify critical actions that must be taken to get the college from where it is to where it should be.

## **Measure and Evaluate**

The community of practice decided to proceed with development of three plans of action: contract training, grants, and private gifts and endowments. Structures were designed, timelines established, and elements of the plans determined. Implementation of newly specified priorities and plan of action for increased funding strategies will begin in Fall 2011. Revenue activity, such as increases in contract training, grants, endowments, and gifts will be tracked each semester to determine effectiveness of efforts to promote change and expansion of sources.

# **Data Collection**

Data was collected and documented through the use of charts, graphs, a visual presentation, recorded interviews, visible notes and results of the interactive presentation held on June 7, 2011.

#### Validity

Personal interviews were used to validate the document analysis. Participants of the interactive presentation on June 7, 2011 were asked to review the data collected during the session and to confirm that the interview recordings were transcribed accurately by the researcher.

### Chapter 4

## **Analysis and Results**

All of the six goals of the study were accomplished and the analysis and results are detailed in this chapter to support this claim. Through this action research study, I have become better informed about entrepreneurial strategies to increase funding for higher education institutions located in greater Phoenix, Arizona. I have presented this information to the leadership team at Phoenix College. I have explored and compared alternative funding strategies currently in use through document analysis and personal interviews with institutional leaders and have shared the findings with the college leadership team. In addition, I have influenced the leadership team of Phoenix College to examine funding alternatives and commit to pursuing one or more additional revenue streams through an interactive presentation to this community of practice, including a Nine Block Diagram prioritization technique and Force-Field Analysis for future implementation. Finally, I have evaluated the short-term effectiveness of my interactive presentation. The following is a detailed review of the accomplished goals which include: Identify Action, Provide Insight, Funding Comparison, Prioritize Entrepreneurial Strategies, Identify Critical Actions, and Evaluate Effectiveness.

### **Identify Action**

I identified action at the community college to explore entrepreneurial strategies to increase funding as we plan for the future. I secured support and approval from the President of Phoenix College to proceed with the study. The decision to proceed was influenced by the continuing decline in state funding for the community college district and dependence on the governing board's decisions regarding tuition and property tax increases. In addition, the college's Budget Review Committee has been active in making recommendations to the President's Executive Team and the Phoenix College Leadership Council regarding strategies to reduce expenditures and become a more efficient operating higher education institution. By conducting the action research study for expansion of entrepreneurial strategies to increase funding, a better understanding of potential opportunities resulted. In addition, the action research study has positioned the college to become more proactive in effectively planning for the future.

## **Provide Insight**

The goal of providing persuasive information about how to increase revenue by public and private universities in metropolitan Phoenix was accomplished. The first data collection exercise in this action research dissertation was to bring together and summarize the content of public documents that describe the revenue streams of the three institutions studied. I began this process in January 2011 and completed the study in April 2011. My reasoning was that it made sense to begin with publicly available information, but later to update and cross check this information in personal interviews of institutional leaders. The public records that I examined included: Organization Charts, Higher Learning Commission Self-Study (2003), Annual Report, and Integrated Postsecondary Education Data System (IPEDS) Reports. The most recent IPEDS reports available were for the year 2009 (National Center for Education Statistics, n.d). Each institution has an established culture of entrepreneurship that was evident in the document analysis and enriched during interviews of high level administrators. In addition, each institution has some combination of entrepreneurial departments, initiatives, positions and committees.

**Phoenix College.** Phoenix College has a culture of giving, creativity, and risk taking that has been developed through transparency and trust. These three attributes (giving, creativity and risk taking) are critical elements in developing an entrepreneurial environment. As shown in Figure 1 below, the PC Basics are the core values of the college and the foundation for building a strong future for the college: Engagement, Integrity, Excellence, Respect, Innovation, and Stewardship (Phoenix College, 2010).



Engagement

We connect with our campus and community through clear and frequent communications, collaborations, and the valuing of differences.



We support learning, discovery, informed risk taking, and an entrepreneurial spirit that creates new possibilities.

Innovation

We value deliberation, tolerance, and our obligation to treat each other with dignity, fairness, and civility.

Respect



We promote quality teaching and learning experiences that prepare individuals for life, work, and leadership.

#### Excellence



We are committed to the highest principles of academic, professional, and personal conduct.



We are committed to prudent management of our resources.

Stewardship

Figure 1. PC basics. From Phoenix College. (2010). Report to our community.

Planning for the future of the college is continuous and is based on collaboration among talented faculty and staff, students, community members and partners. Plans for the future are driven by data and sustainability considerations while maintaining compliance with policy and procedures that govern our district. Phoenix College is an open access institution and encourages discussion and implementation of new revenue sources through instructional department growth, committee recommendations, entrepreneurial departments, community partners, and active engagement of the college community at large.

Entrepreneurial departments, positions and committees at Phoenix College are as follows:

- Alumni Office;
- Alumni and Development Director;
- Custom Training and Education;
- Institutional Advancement Office;
- Grants Management Foundation Office;
- Budget Review Committee.

*Entrepreneurial initiatives.* During the interview, the President and Vice President of Phoenix College shared many examples of entrepreneurial initiatives at the college including: (a) Agreements made with multiple clinical and laboratory businesses across the valley; (b) The development of an innovative, one-of-a-kind partnership program with Arizona State University for students to earn a Bachelor of Applied Science in Medical Laboratory Science, the program enables students to complete 90 credits through the community college and 30 credits through ASU; (c) The Budget Review Committee's commitment to reducing costs, which has resulted in more efficiency; (d) The Legacy Fund; (e) Federal grants; (f) Philanthropic grants; and (g) *For the Love of Art Tennis Fundraiser* featuring celebrity alumni Eric Fischl and John McEnroe.

Arizona State University. ASU suffuses entrepreneurship into the fabric of the university and makes entrepreneurship resources widely accessible. Arizona State University is creating an innovation ecosystem infused with an entrepreneurial spirit. As a New American University, the vision is to create solutions for the global challenges before us: broader access to education, better quality of life, and sustainability. Because this requires radical innovation at the individual and the institutional level, ASU is committed to supporting entrepreneurs and being a university as entrepreneur. Entrepreneurial departments at ASU are as follows (Arizona State University, 2009-2010):

- Grants Division;
- Knowledge Enterprise Division (Research Unit);
- Office of University Initiatives;
- Business & Training (W.P. Carey School of Business-Executive & Professional Development, College of Nursing & Health Innovation-Academy of Continuing Education);
- ASU Foundation for a New American University (Arizona Technology Enterprises LLC (AzTE), SkySong, Brickyard);
- The Venture Catalyst.

*Entrepreneurial approach.* During the interview with the Associate Vice President of the Office of University Initiatives, she described the entrepreneurial approach the university has embraced. The focus is on interdisciplinary and cross-unit efforts that transform the university's ability to be entrepreneurial and connected with communities. These efforts involve academic units, business units, faculty, staff and students. She explained that entrepreneurship is not something that can be solely taught in a business course or business curriculum. It is more likely to evolve from an idea or concept taught in another subject. The university is positioning itself to facilitate the creation of entrepreneurship through funding and support mechanisms for the faculty, staff and students (Arizona State University, 2010).

University of Phoenix. The most comprehensive form of an entrepreneurial culture in higher education, University of Phoenix is a for-profit, publicly held institution that serves students through the virtual universe, face-toface offerings, and real world experience. Apollo Group Inc. is the parent company of the University of Phoenix. Customer centered, it specializes in offering well-packaged instruction to well-defined niche markets. University of Phoenix is one of the first of the for-profit schools that took the traditional model of higher education and subjected it to modern principles of operations management, financial management, and cost accounting. Profit minded stockholders appreciate the entrepreneurial culture that has been created and maintained. The goal of the University of Phoenix is to meet the needs of working and underserved students by giving these students the chance to earn a college degree. Flexible scheduling, faculty with real-world knowledge, and a consistent and effective curriculum design help make higher education accessible to everyone (University of Phoenix, 2010).

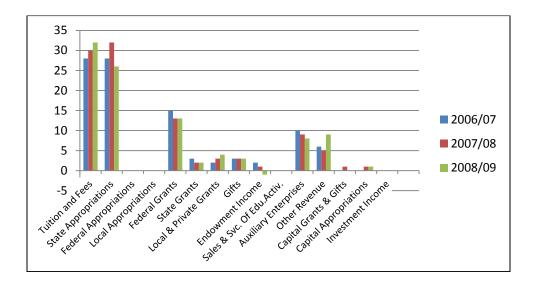
Entrepreneurial departments at University of Phoenix are as follows:

- University of Phoenix Foundation;
- University of Phoenix National Research Center;
- Workforce Solutions Team;
- Public Relations Division;
- Alumni Association.

*Innovations and spirit of entrepreneurship.* During the interview with the Senior Vice President of Academic Research at University of Phoenix, he proudly tracked the innovations and spirit of entrepreneurship that exist at Apollo, the parent company, and have become the culture of the University of Phoenix. Innovations include: Introduction of adult basic education in 1975, course offerings on-line in 1989, electronic libraries in the mid-nineties, electronic textbooks in 2002, learning research institute in 2008, and creation of a learning management system for online teaching and learning ten years before existing providers evolved.

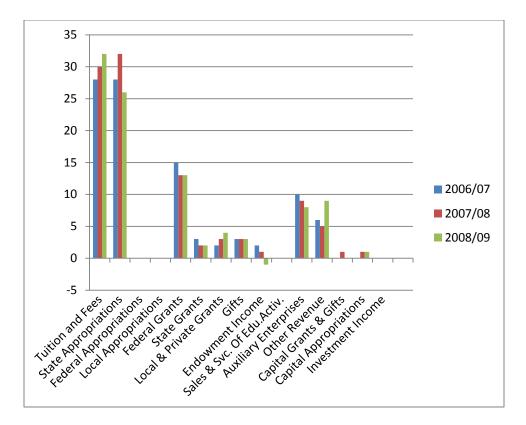
# **Funding Comparison**

A comparison of revenue sources currently being utilized in metropolitan Phoenix was collected through the document analysis and interviews. Data comparisons illustrate the traditional and nontraditional revenue streams utilized by the three documented institutions from 2007 through 2009. The following results are represented as a percentage of revenue and income for the institution by year according to IPEDS:



*Figure 2*. Phoenix College percentages of revenue by source and year from IPEDS data.

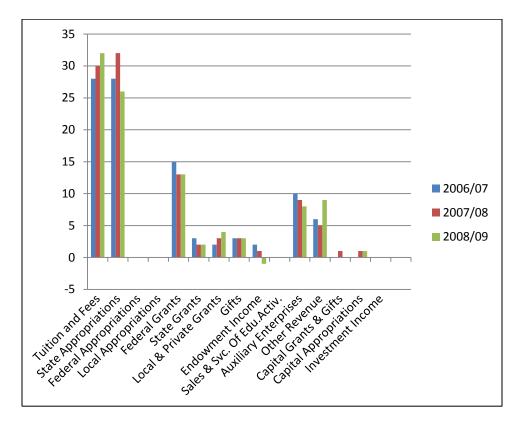
**Phoenix College.** Tuition and fees contributed a constant 18% at Phoenix College for the years 2006-2009. State appropriations declined annually from 9% in 2007, to 8% in 2008, and 7% in 2009. Federal appropriations were received for the first time in 2007 and made up 10% of the revenue for the college. Local appropriations fluctuated from 58% in 2007 to 60% in 2008 and 59% in 2009. Federal grants increased from 2% in 2007 to 11% in 2008 and 12% in 2009. Gifts remained constant at 2% and auxiliary enterprises remained constant at 1%. There was no activity in the following entrepreneurial revenue streams: local and private grants, endowment income, sales and service of educational activity, other revenue, and capital grants and gifts.



*Figure 3.* Arizona State University percentages of revenue by source and year from IPEDS data

Arizona State University. Tuition and fees increased each year from 28% in 2007, 30% in 2008, and 32% in 2009. State appropriations fluctuated from 28% in 2007 to 32% in 2008 and declined to 26% in 2009. Federal grants slightly declined from 15% in 2007 to 13% in 2008 and 2009. State grants slightly declined from 3% in 2007 to 2% in 2008 and 2009. Local and private grants increased each year from 2% in 2007 to 3% in 2008 and 4% in 2009. Gifts remained constant at 3% each year. Endowment income declined from 2% in

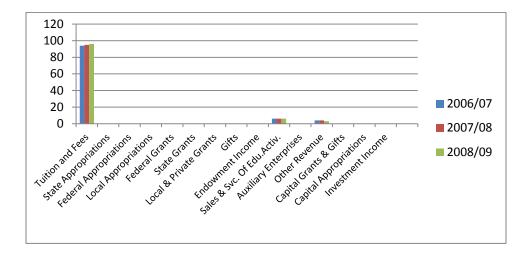
2007 to 1% in 2008 and fell to negative 1% in 2009. Auxiliary enterprises slightly declined from 10% in 2007 to 9% in 2008 and 8% in 2009. Other revenue fluctuated from 6% in 2007 to 5% in 2008 and 9% in 2009. Capital grants and gifts were 1% in 2008, and capital appropriations were 1% in 2008 and 2009. The only entrepreneurial revenue stream not active for Arizona State University is sales and services of educational activities.



*Figure 4*. University of Phoenix, Hohokam percentages of revenue by source and year from IPEDS data

## University of Phoenix. The University of Phoenix IPEDS Data is

organized for each entity or location throughout the country. It is not a composite of the entire organization. For the purpose of this component of the comparative study, the University of Phoenix, Hohokam Campus was used. The Hohokam Campus is located in Phoenix, Arizona. The proportion of revenue from tuition and fees fluctuated widely for the University of Phoenix, Hohokam from 52% in 2007 to 42% in 2008 and 92% in 2009. Sales and services of educational activity fluctuated from 4% in 2007 to 11% in 2008 to 5% in 2009. Other revenue fluctuated from 41% in 2007 to 29% in 2008 and 5% in 2009. Investment income was recorded at 12% for 2008. When asked about the dramatic changes in contribution percentage, the Vice President of Research indicated that IPEDS does not represent the true percentages for each of the campuses that are reported. University of Phoenix offers its educational programs worldwide through its online education delivery system and on the ground through its campuses and learning centers in 39 states and the District of Columbia, Puerto Rico, Alberta and British Columbia, Canada, Mexico, and the Netherlands. University of Phoenix's online programs are designed to be identical with University of Phoenix's on-campus operations. The Vice President of Research suggested it is best to look at Apollo Group Inc. for overall revenue streams. The annual report for Apollo combines several entities including University of Phoenix, Apollo Global, Western International University, Meritus, and Insight. University of Phoenix is considered the dominant entity. Data from the Apollo Annual Report provides a different breakdown of revenues based on percentage (Apollo Group, Inc., 2007; 2008; 2009).



*Figure 5.* Apollo Group Inc. percentages of revenue by source and year from Annual Report data

Tuition and fees contributed 89% of revenue in 2007, 90% in 2008 and 91% in 2009. Sales of online materials were consistent at 6% each year. The Institute for Professional Development contributed 2% in 2007, 3% in 2008 and 2% in 2009. Other revenues were 2% in 2007, 1% in 2008 and 1% in 2009.

Type of Revenue	PC	ASU	UOP
Tuition and Fees	$\checkmark$	$\checkmark$	$\checkmark$
Government Grants & Contracts	$\checkmark$	$\checkmark$	
Private Sector Sources	$\checkmark$	$\checkmark$	
Contract Research		$\checkmark$	$\checkmark$
Contract Training	$\checkmark$	$\checkmark$	$\checkmark$
Philanthropic Foundation Grants	$\checkmark$	$\checkmark$	
University of College Generated Income	$\checkmark$	$\checkmark$	$\checkmark$
Endowment Income	$\checkmark$	$\checkmark$	
Alumni Fundraising	$\checkmark$	$\checkmark$	$\checkmark$
Spin-off Companies & Patent Income		$\checkmark$	$\checkmark$
Stand-alone Activities		$\checkmark$	$\checkmark$
Auxiliary Enterprises	$\checkmark$	$\checkmark$	

**Entrepreneurial revenue streams.** Entrepreneurial revenue streams were identified and were documented by institution, as shown in Figure 6.

Figure 6. Entrepreneurial revenue streams implemented by institution

Student tuition and fees, contract training, university or college generated income and alumni fundraising are the common entrepreneurial revenue streams of the documented institutions. Each institution has entrepreneurial elements with regard to additional revenue streams. For-profit institutions are often seen as being more entrepreneurial than community colleges and public universities, but the University of Phoenix engages in fewer activities. Contract research, spin-off companies and patent and stand-alone activities are unique to Arizona State University and University of Phoenix. In addition, Arizona State University has a high level of endowment income and gifts as successful revenue streams.

**Contract research.** Arizona State University and University of Phoenix have established contract research as an entrepreneurial revenue stream.

*Arizona State University.* In the most recent Arizona State University Higher Learning Commission Self Study in 2003, President Crow's Design Imperative 3, ASU as Entrepreneur, specifically addresses the vision of the university with regards to contract research: ASU will aggressively seek new revenue streams, fully exploring the potential of university research to bring a higher return on resources invested by the state. A competitive research infrastructure will be developed that draws faculty of national prominence, who can be expected to attract the federal funding that is currently available for research in such areas as the life sciences. This strategy has paid off for the university with research grants and contracts and net investment increasing by \$30 million in 2009 and \$18 million in 2010 (Arizona State University, 2009-2010).

*University of Phoenix*. On May 5, 2008, the University of Phoenix announced the formation of a research unit, the University of Phoenix National Research Center (NRC), to drive continued significant and innovative research initiatives in teaching and learning among adult students in higher education.

**Spin-off companies & patent income.** Arizona State University and University of Phoenix have established spin-off companies. Arizona State University has established patent income as an entrepreneurial revenue stream.

Arizona State University. In 2003, President Crow's Design Imperative 3, ASU as Entrepreneur, explains the university's policy of encouraging the creation of spin-off companies and generating income from patents and royalties. Members of the ASU faculty engage in path-breaking research and creative activity, developing new learning tools and new products with potential for commercial application, all of which have the capacity to generate new revenues for the University. ASU will capitalize on its knowledge content and intellectual property, expediting the transfer of knowledge and technology developed in classrooms and laboratories to the commercial sector. This has been a successful strategy for Arizona State University. There were 197 ASU-related inventions developed in 2010 and 19 spin-off companies founded in 2009.

*University of Phoenix.* Apollo, parent company of University of Phoenix, has established a for-profit service subsidiary Institute for Professional Development (IPD) that provides program development, administration and management consulting services to private colleges and universities, which they refer to as "Client Institutions," to establish or expand their programs for working learners. These services typically include degree program design, curriculum development, market research, student recruitment, accounting, and administrative services.

**Stand-alone activities.** Arizona State University has component units that support the university. University of Phoenix sells a product that contributes to revenue streams of the entity.

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Arizona State University. Arizona State University has multiple component units whose activities are reported in the annual financial statement. These component units are nonprofit corporations controlled and governed by separate Boards of Directors whose goals are to support Arizona State University. The university does not appoint a voting majority to any of the Boards. Even though these organizations support the university, they are neither subsidiaries of the University, nor directly or indirectly controlled by the university. The assets of the component units are the property of the component units and do not belong to the university. The university does not have ownership of the financial and capital resources of the component units and does not have the authority to mortgage, pledge, or encumber the assets of these organizations. Four of these organizations--the ASU Foundation, ASU Alumni Association, Sun Angel Endowment, and Sun Angel Foundation--are comprised of two major component units, the ASU Foundation and the Arizona Capital Facilities Finance Corporation (ACFFC). Several smaller component units include the ASU Alumni Association; ASU Research Park, Inc., Collegiate Golf Foundation, Downtown Phoenix Student Housing, LLC, Mesa Student Housing, LLC, Sun Angel Endowment, Sun Angel Foundation, and University Public Schools, Inc.

*University of Phoenix.* University of Phoenix considers the sales of their electronic textbooks as a stand-alone revenue stream. It is an innovative product line first established in 2002.

## **Prioritize Entrepreneurial Strategies**

During March 2011, I met with the President of Phoenix College to determine which college administrators would benefit and be in a position to activate change in the organization with regard to expansion of entrepreneurial strategies to increase funding. We agreed that the appropriate administrators are the Phoenix College President's Executive Team, which consists of the President and three Vice Presidents, the Dean of Industry and Public Service, the Director of Alumni and Development, and the Director of Institutional Advancement. An invitation was extended and each administrator agreed to participate in the interactive oral and visual presentation facilitated by me. This group is referred to as the leadership team for the purpose of the action research.

The interactive presentation began with a welcome, brief introduction to action research, the goals of the study, and an agenda for the meeting. An oral presentation was given, enhanced by a visual presentation (See Appendix F). Each participant was provided with a binder containing a printed version of the visual presentation slides. The presentation consisted of the data collected from the document analysis and interviews conducted of the three higher education institutions that were studied. Participants were encouraged to ask questions throughout the presentation, and it resulted in a very rich and dynamic dialogue. Many examples of entrepreneurial revenue streams that have been utilized by Phoenix College, Arizona State University, and The University of Phoenix were described, compared, and analyzed. After the interactive presentation, the leadership team understood the 12 revenue streams that are identified as entrepreneurial in the study. They each expressed confidence that the team was ready to prioritize each revenue stream. The prioritization of entrepreneurial strategies for implementation at the community college under study was accomplished through the facilitation of a Nine-Block Diagram prioritization. Each of the 12 revenue streams were discussed, analyzed as it relates to Phoenix College, and individually placed on the Nine Block Diagram based on ease of implementation and greatest impact to the college. The results of the Nine-Block Diagram prioritization for the Nine-Block Diagram prioritization for the Nine-Block Diagram prioritization activity are summarized in Figure 7.

		< High	Medium	Low
Gretatest Impact	High	#5	#2, #6, #9	#3, #8
	Medium			
	Low		#7	#11, #12

Ease of Implem	ientation
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*Figure 7.* Phoenix College Nine Block Diagram prioritization of twelve revenue streams

Results of Prioritization Exercise with Leadership Group:

- 1. Tuition and Fees (unable to rank, due to Governing Board control);
- Other Government Sources (high impact, medium ease of implementation);
- 3. Private Sector Sources (high impact, low ease of implementation);
- 4. Contract Research (unable to rank because the institution does not have a research entity for this purpose);
- 5. Contract Training (high impact, high ease of implementation);
- Philanthropic Foundations (high impact, medium ease of implementation);
- University or College Generated Income (low impact, medium ease of implementation);
- 8. Endowments (high impact, low ease of implementation);
- 9. Alumni Fundraising (high impact, medium ease of implementation);
- 10. Spin-Off Companies & Patent Incomes (unable to rank because the institution does not have a research entity);
- 11. Stand-alone Activities (low impact, low ease of implementation);
- 12. Auxiliary Enterprises (low impact, low ease of implementation).

**Prioritization conclusions.** The leadership team concluded that areas for improvement for the college are those that are predicted to have a high impact on college net revenue. They include: Contract Training; Grants Government and Philanthropic Sources; and Alumni and Development through Alumni Giving, Private Gifts and Endowments. Although the college already has some activity in progress in these areas, the leadership team saw them as a major growth opportunity for the institution. For example, endowments at the college are earmarked for student scholarships rather than for operations, faculty positions, or program support. Phoenix College does not proactively seek out gifts for the institution, although there is activity in this category. Each priority varies as to ease of implementation, but the leadership team feels the potential for positive impact warrants implementation of strategies to increase these revenue streams.

The leadership team did not rank tuition and fees because they are approved and constrained by the governing board. Tuition was increased by the board in March 2011. The college recently went through an analysis of the impact and benefits of increasing fees for courses and programs and recommended increases were approved by the governing board. But increasing tuition and student fees is a delicate matter for an institution whose highest priorities include near universal access and affordability. The leadership team did not rank contract research because the institution does not have a research entity for this purpose and does not plan to develop one in the future.

#### **Indentify Critical Actions**

The next component of the interactive presentation flowed from the prioritization exercise. Our discussions throughout the meeting had been very open and honest. The leadership team consists of mature leaders with long tenures in upper level management positions in higher education institutions. Each has participated or provided leadership for change at Phoenix College or other higher education institutions. We agreed that we must be confident of the driving forces for the change and also understand the restraining forces we might face. In addition, we agreed that a plan of action should be created to assist in reducing barriers. A Force-Field Analysis was conducted to identify critical actions that must be taken by the Phoenix College leaders to get from where we are to where we want to be.

**Driving forces.** Driving forces or reasons for increasing revenue streams at the college include:

- The college anticipates continued reductions in state funding and seeks other revenue sources to compensate;
- The governing board controls increases in tuition, fees and property tax increases. It is important to develop revenue streams that are controlled by the college and that do not undermine our primary mission;
- Exploring revenue streams will assist the college in planning for the future;
- Expanding entrepreneurial strategies to increase revenues places the college in a proactive posture when reduction in traditional funding takes place in the future;
- Early implementation of the strategy to increase revenue streams will assist in securing early commitments. Other higher education institutions will be seeking the same types of revenue streams.

**Restraining forces.** Restraining forces or barriers that may exist at the Phoenix College include:

- College budgets are tight. Adding positions to help with revenue increasing activities may not be embraced by the college community;
- The economy is still weak and may not rebound for a few more years. It is a tough time to seek gifts and endowments;
- There is a tendency for institutions to ask the same group for support which results in donor fatigue;
- Implementing entrepreneurial strategies to increase revenues is a culture stretch for the college;
- This is new territory for the college and skill sets will need to be developed or hired in order to create a stronger capacity for revenue enhancement.

Actions to reduce barriers. The leadership team focused on the list of restraining forces and asked, "What can we do to remove or minimize each of the restraining forces?" The following documented actions were recommended by the leadership team as actions to reduce barriers:

- Involve faculty and staff in developing the action solutions;
- Be transparent to the college community;
- Share outcomes and inform how this strategy will benefit the college, their departments, and our students;
- Create high quality solutions, measure and document results. Use data to drive decisions;

- Create a strong communication network to assure we are not duplicating efforts;
- Explore the use of the MCCCD Creative Pathways program to increase numbers of employees in key departments without increasing payroll;
- Ask alumni to assist in the launch of new initiatives;
- Secure champions from faculty and staff that understand the need for increased revenue sources for the future of the college;
- Secure buy-in from the Phoenix College Budget Review Committee;
- Invite legislators, board members, and community leaders to tour the college or have an open house to demonstrate and display the college's creativity in teaching, learning, and support to students. Use the opening of new facilities such as the One Stop student services center to engage community and showcase the college;
- Provide training and professional development opportunities to faculty and staff to build skills and develop capacities for new revenue generating activities.

**Force-Field Analysis Conclusion.** The leadership team expressed confidence that the eleven action items developed will be successful tactics to minimize the restraining forces or barriers to implementing a strategy to increase revenue streams at Phoenix College.

# **Evaluate Effectiveness**

The effort to design and begin to implement a plan for expanding funding sources and increasing revenue streams has been successful to date. After completing the oral and visual presentation of the document analysis, interviews, Nine Block Diagram Prioritization technique, and Force-Field Analysis, the leadership group proceeded to develop a plan of action. I facilitated the planning session.

There was a high level of energy in the room, and the group was very productive. The leadership group agreed to focus action on the revenue streams that will have the highest impact at the college. Three areas of action were selected: Contract Training; Grants Government and Philanthropic Sources; Alumni and Development through Alumni Giving, Private Gifts and Endowments. The following are the actions endorsed by leadership for increasing revenue streams at Phoenix College and information relating to the documentation, follow up, input and measurement:

**Contract training.** Contract training has been profitable for the college for the past three years, and the leadership team feels it can grow and become a more substantial, positive revenue source in the future. The following are recommended actions to take place in the fall semester of 2011:

Develop a sustainability and growth plan for the next three to five years. Consider hiring a consultant to assist in creation of the plan. Elements of the plans will include the following:

- A benchmark of successful contract training divisions at other community colleges;
- Analysis to determine necessary levels of staffing required to reach plan goals and objectives;
- Redesign the division to move from a traditional operation to a more creative, entrepreneurial, out-of-the-box entity;
- Determine an appropriate return on investment formula for the college as net revenues continue to increase in the division.

**Grants.** Grants have steadily increased at the college but there is significant room for growth in this revenue stream. The leadership team feels substantial growth will occur if the following recommendations are implemented in the fall semester of 2011. By establishing a Grant Planning Task Force, we can make the institution proactive rather than reactive. Elements of the plan will include the following:

- The development of systematic planning in alignment with the college Strategic Planning Committee;
- Increase collaboration through blending and partnering with instructional departments and student affairs to strategically prepare for future grant opportunities;
- Recommend the hiring of a new position and establishment of a grant office.

**Private gifts and endowments.** Alumni giving and scholarship endowments have been productive at Phoenix College for a number of years.

Securing private gifts and endowments other than those for scholarships are revenue sources that have substantial growth opportunity at the college. The college leadership team has agreed to develop a plan to expand resource development beyond student scholarships in Fall 2011. The plan will include fundraising strategies for cash and non-cash gifts to support college programs.

A task force will be formed to explore the college priorities and to assist in the development of the plan. Elements of the plan will include the following:

- Benchmark best practices at other community colleges across the country;
- Alignment with the MCCCD Foundation and recent Foundation Feasibility Study conducted by the foundation;
- Develop a recommendation for hiring a position for Alumni and Development;
- Plan and champion employee Giving Campaign;
- Develop an employee education and training plan to improve knowledge about philanthropy at the college;
- Explore naming opportunities for buildings, meeting spaces or rooms at the college;
- Expand a formal list of community connections and develop a communication network;
- Create strategic newsletters, marketing plans, and collateral materials;
- Share resource concerns with the community Phoenix College serves.

#### Documentation, follow-up, feedback and measurement.

Documentation, follow-up, feedback and measurement of the effectiveness of the action research are summarized in this section.

*Documentation.* I documented the entire interactive sessions on flip charts. All participants could see the flip chart paper that documented our work during the session. It was displayed around the conference room after each group activity and action planning session.

*Follow-up.* Because I had the role of presenter, facilitator and recorder, it was very important for me to confirm that the information and data collected reflect the accurate recollections and expressed understandings of action for the entire leadership team. On June 19, 2011, I sent out an email to the leadership team seeking their additions, modifications, or suggestions regarding the summary documents shared.

*Feedback.* The input received from the leadership team was very valuable. The correction of specific functions of committees mentioned in the plan of action was helpful. A minor name change was provided and some rewording of specific action items was provided by the Director of Alumni and Development and the Director of Institutional Advancement.

Additional feedback was provided regarding the presentation and resulting plans of action. A participating leader expressed her opinion that the interactive presentation of expanding entrepreneurial strategies to increase revenues was a conversation that needed to be held at Phoenix College, but would not have taken place without the action research. The President commented that the oral and visual presentation and group activities were well organized and an extensive amount of information had been collected and shared with the leadership group. A Vice President felt the session with the leadership group was very valuable and a great learning experience for all participants. The Nine Block Diagram, Force Field Analysis, and plans of action were modified to incorporate all requested additions, modifications, and suggestions from the leadership team.

*Measurement.* Follow up measurement will consist of confirming that the plans of action as are indeed implemented by assigned leadership. Ultimately, revenue activity, such as increases in contract training, grants, endowments, and gifts will be tracked each semester to determine effectiveness of efforts to promote change and expansion of revenue by source.

#### Chapter 5

# Conclusion

Higher education institutions can no longer depend on traditional sources to increase funding. Governing boards, regents, the public, and students of higher education are sensitive to extensive and frequent increases in tuition and property taxes. State and federal governments are struggling with massive deficits that negatively impact funding of higher education.

Institutional budget cuts to hold down the costs of delivering higher education have been imposed on universities and colleges during the past three years. Programs, faculty and staff positions, salaries and benefits have been reduced or eliminated. Additional areas to target for further reductions are not abundant. In any case, the continuation of institutional budget reductions threatens to weaken the quality of instruction and compromise student success.

Entrepreneurial strategies offer innovative methods to increase funding and create a proactive funding posture for higher education institutions. Implementation of entrepreneurial strategies to increase funding will, if done well, benefit students, employees, and taxpayers. Options must be explored, and implementation should be thoughtful and customized to meet the needs of the communities and stakeholders being served.

# **Lessons Learned**

The three institutions studied are unique. Each has different organizational structures, policies, and philosophies that impact entrepreneurial funding strategies. Phoenix College is a traditional academic institution and in the early stages of developing an entrepreneurial culture. Arizona State University began their culture change in 2003 with new leadership and the development of supporting structures. The University of Phoenix founder based the institution on innovation, and since it is a for-profit, publicly held entity, entrepreneurial strategies were in place from the beginning.

Implementing change. Implementing change at Phoenix College is possible if there is strong rationale for the change. The rationale must be developed and understood by individuals (students, faculty, staff, and administrators), organizational units such as departments and, eventually, the entire institution. Mandating change in a top-down manner at Phoenix College will not be politically correct or successful. A proposed change must be driven by data and sustainability while maintaining compliance with policy and procedures that govern our district. Phoenix College is an open access institution and encourages discussion and shared governance. Communication of proposed change and broad participation in designing elements of the change are critical for a successful implementation.

**Measurement of change.** At Phoenix College the measurement of change is driven by data. Data must be collected and tracked in a consistent, timely manner to determine if the change made an improvement at the institution. A process for tracking the expanded revenue streams will be developed by the director of each responsible entity or initiative and the Vice President of Administrative Services. Leader of change. As a leader at Phoenix College, I have learned that using the college vision and mission statements along with the core values of the organization when initiating a discussion and analysis of a proposed change provides a meaningful framework to begin the process. A collaborative process, involving faculty, staff, students, and community members was followed at Phoenix College in the development of our mission, vision, and core values:

*Vision.* Phoenix College will be the premier provider of learning opportunities for our community to go far close to home.

*Mission.* Phoenix College delivers teaching and learning experiences that inspire the lifelong pursuit of educational, professional, and personal goals for our diverse urban community.

*Core values.* The PC Basics represent the core values of the institution (see Figure 1).

The interactive presentation that was held on June 7, 2011 with the Phoenix College leadership team was a very engaging experience. It was clear that we were discussing strategies to expand entrepreneurial revenue streams for the sake of supporting the vision and mission of the college. We were discussing innovative approaches to increase or expand revenue streams that will make a positive contribution to stewardship at the college. Participants were respectful of each other and the resulting plan of action reflects the integrity of the leadership team and the strength and potential of our institution.

*Ask questions of the data.* As the leader of change it is very important to understand the data being analyzed. For example, I discovered in an interview

that the University of Phoenix IPEDS information did not provide an accurate reflection of percentages of revenue derived from various revenue streams.

When charting the data of the five-year trends for Grants and Other Revenues of Phoenix College and IPEDS Comparison Group, two results were displayed. First, it appeared that Phoenix College was making significant progress in securing grants in 2008 and 2009 (see slide 34 of presentation indicated in Appendix F). Second, it appeared that Phoenix College was declining significantly in the Other Revenue category in 2008 and 2009 (see slide 35 of presentation indicated in Appendix F). A conversation with the individual responsible for providing data to IPEDS revealed that in 2008 the MCCCD reclassified government grants from operating to non-operating funds. This explained why "Grants" appeared to increase and our "Other Revenue" appeared to decline. Not understanding the data could have changed the leadership's team decision to move forward with increased emphasis on securing grants for the college.

**Benefits to leadership at the college.** The action research dissertation has benefited Phoenix College leadership in for the following ways:

- Provided an opportunity to explore entrepreneurial strategies to increase funding as we plan for the future;
- Provided an insight into increased funding strategies initiated by public and private universities in metropolitan Phoenix;

- Provided a comparison of funding practices currently being utilized in metropolitan Phoenix by Phoenix College, Arizona State University, and the University of Phoenix;
- Prioritized entrepreneurial strategies for implementation at Phoenix College;
- Assisted the leadership team in identifying critical actions that must be taken by the college to get from where we are to where we want to be.

**Benefits to the researcher.** The action research dissertation was of benefit to me as a member of the leadership team. The benefits to Phoenix College listed above apply to my role as the Vice President of Academic Affairs. In addition, the action research project provided me an opportunity to evaluate the effectiveness of my efforts to promote change and expansion of funding sources and amounts at Phoenix College. At this point, early in the cycle, the action research appears to have been a success for the following reasons:

- The community of practice decided to proceed with development of three plans of action;
- Structures were designed, timelines established, and elements of the plans determined;
- Implementation of newly specified priorities and plan of action for increased funding strategies will begin in Fall 2011;
- Increases in entrepreneurial revenues will be tracked each semester to determine effectiveness of efforts to promote change and expansion of sources;

 Feedback from participants has been positive and many, including the President, expressed gratitude for the vast amount of information that was presented and the resulting action that will be taking place at Phoenix College.

**Professional development.** Conducting the study has contributed to my professional development as a leader in higher education during challenging financial circumstances. It has increased my knowledge of traditional and entrepreneurial funding sources for higher education. I am more aware of the importance of fundraising and development particularly as it relates to higher-level leadership positions such as a presidency. In addition, I have improved my understanding of how cultural change takes place in higher education institutions and the benefits of introducing entrepreneurial strategies at the community college.

My President has asked me to serve on an exploration committee at the district level. During August 2011, the committee will be studying a new initiative to increase funding at the community colleges. The understanding of my interest in the subject matter prompted her recommendation for me to serve on the committee and garnered approval of the Vice Chancellor of Administrative Services at Maricopa County Community College District.

# Implications

The study has implications for Phoenix College and community college administrators.

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**Phoenix College.** Key leadership at Phoenix College gained knowledge of increased funding possibilities through examining entrepreneurial strategies being utilized by higher education institutions in Phoenix, Arizona. The leadership team of the college has more insight into increased funding strategies initiated by public and for profit universities in metropolitan Phoenix. The study's final phase of data collection provided an opportunity for leadership to prioritize strategies to increase funding as we plan for the future. The leadership team identified critical actions that must be taken by the college to get from where we are to where we want to be. Three plans of action were developed for implementation in Fall 2011.

Implementation of the three plans of action will benefit the college by promoting college self-reliance, flexibility, and a reduction of constraints imposed by traditional funding. Ultimately, Phoenix College will have a proactive posture and informed community with regards to expanding entrepreneurial strategies to increase funding.

**Community college administrators.** The study has the potential to assist community college administrators in gaining knowledge about increased funding possibilities through identification of the entrepreneurial strategies being utilized by higher education institutions in Phoenix, Arizona. Increased funding is necessary to offset reductions in state aid and property tax revenues. Higher education institutions must be more proactive in generating funding through entrepreneurial strategies that will reduce dependence on government funding.

### **New Questions**

Two new questions emerged from the action research study that I believe are worthy of a follow-up study:

- How are other colleges in the Maricopa County Community College District expanding entrepreneurial strategies to increase funding?
- How are other community colleges throughout the nation expanding entrepreneurial strategies to increase funding?

**Other MCCCD colleges.** Phoenix College has nine sister colleges within the district. Each is operating in the same environment as Phoenix College with regard to dependence on traditional funding. It would be interesting to benchmark the entrepreneurial strategies to increase funding throughout the district. For example, Rio Salado Community College has created an innovative business model to reduce expenses and maximize revenues. The ground breaking of GateWay College's new Emerging Technologies Incubator was held in October 2010. The \$6 million dollar incubator was funded through donations from Blue Cross Blue Shield, a competitive grant from the U.S. Economic Development Administration, city grants, and a previous community-college bond offering. GateWay College began accepting applications for rental space in the incubator in January 2011.

**Community colleges across the nation.** There are 1,173 community colleges across the nation and a bit over 1,600 if you count all the branch campuses for various community colleges (American Association of Community Colleges, 2011). Lessons can be learned from other community colleges' use of

entrepreneurial strategies to expand funding. For example, State Fair Community College in Sedalia, Missouri, has developed a public-private partnership, the Missouri Center for Waste to Energy. It is on a campus facility that converts agricultural waste, or biomass, into energy used on campus and throughout the local community. It also supports alternative-energy research, development and commercialization, and features a renewable energy plant, training center, and business incubator (Murray, 2011). When California's West Hill Community College District bandied about suggestions for a guest speaker to raise money toward construction of a new events center on the college's Lemoore campus, one bold, if controversial, name rose to the top: Sarah Palin. Twenty donors willing to pay a \$5,000.00 sponsorship for the event had the opportunity to hear her speak up close and personal. Tickets to the event sold out before administrators announced Palin's visit to the press (Murray, 2011).

Comparing Phoenix College to similar colleges across the country is a useful exercise. It would be interesting to learn what other ninety-year old, Hispanic-Serving-Institutions located in an urban setting are doing to expand entrepreneurial strategies to increase funding.

#### Conclusion

Generations of families have come to Phoenix College to pursue their goals and dreams since 1920. While remaining true to our rich history, the college continues to grow and evolve, implementing innovative methods to improve teaching and learning. The college is committed to providing students

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with opportunities to engage in enriching learning experiences, empowering them to achieve their dreams and create a successful future.

I am confident that Phoenix College will continue pursuing and expanding entrepreneurial revenue sources and be successful implementing the plans of action that evolved from this action research. The Phoenix College community is supportive of implementing initiatives, raising awareness, and inspiring action. The innovative spirit that began nine decades ago is alive and well at Phoenix College.

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## APPENDIX A

IRB/HUMAN SUBJECTS APPROVAL

	Poul Develo	edge Enterprise opment					
	Office of Research Integrity and Assurance						
Τc	): ):	Christopher Clark FAB					
Fr	om:	Mark Roosa, Chair SM Soc Beh IRB					
Da	ate:	02/09/2011					
Co	ommittee Action:	Exemption Granted					
IR	B Action Date:	02/09/2011					
IR	B Protocol #:	1101005965					
St	udy Title:	Increase Funding at Higher Education Institutions through Entrepreneurial Strategie	5				
	The above-referenced protocol is considered exempt after review by the Institutional Review Board pursuant to Federal regulations, 45 CFR Part 46.101(b)(2).						
sul	bjects cannot be ide tained not be such ti	regulations requires that the information be recorded by investigators in such a manner th nified, directly or through identifiers linked to the subjects. It is necessary that the informe tat if disclosed outside the research, it could reasonably place the subjects at risk of crimin aging to the subjects financial standing, employability, or reputation.	nion				
m:		marian.gibney@pcmail.maricopa.edu Thursday, December 16, 2010 10:48 AM					
nt:		casi@syspac.com					
oject:		IRB Protocol Approved: 2010-11-085, Kakar, Casandra					
has a	pproved the protoco	with the following details.					
tocol II	D: 2010-11-085 nvestigator: Kakar, (						

This is to follow up on your recent request to conduct research at the University of Phoenix. The Committee on Research met and reviewed your request. They understood that your research project was based upon an analysis of publically available data from three universities, among them the University of Phoenix. Your request was to confirm the information available publically through interview with a senior administrator. The Committee determined that your request was not within the scope of its oversight and that our public relations department might be an appropriate contact for you in terms of questions you may need recarding this. any clarifications you may need regarding this.

Please contact me if you have any further questions. Thank you for your interest in conducting research at the University of Phoenix.

Freda Z. Hartman, Ph.D., Dean University of Phoenix | Academic Affairs 4615 E. Elwood Street | AA-S401 | Phoenix, AZ 85040 phone: 480.557.3049 | fax: 602.333.1420 | email: <u>freda.hartman@phoenix.edu</u>

# APPENDIX B

# QUESTIONS FOR EACH DOCUMENT

DOCUMENT	QUESTIONS
Organizational Chart	1. Does the institution have a Development Officer or Division?
	2. Does the Institution have a Grant Manager or Division?
	3. Does the institution have an Alumni Office?
	4. Does the institution have a Research Division(s)?
	5. Does the institution have an Advancement Office?
	6. Does the institution have an Entrepreneurial Division?
	7. Does the institution have a Business & Industry Training Institute?
Higher Learning Commission Self Study	1. What funding sources for the institution were reported in the most recent HLC Self Study?
	<ol> <li>Were any unique partnerships described in the most recent HLC Self Study that indicates an increase in funding through entrepreneurial strategies?</li> </ol>
	3. What strategies were recommended in the Focus on the Future section of the HLC Self Study with regards to funding?
Annual Report to Community	1. What are the funding sources for the institution by category for the most current fiscal year?
	2. How does the most current year compare to the IPEDS Report from 2007-08?
	3. Are there examples of entrepreneurial funding sources described in the report to the community?
Integrated Postsecondary Education Data System	1. What are the funding percentages by institution when analyzing the twelve current fund revenue sources?
(IPEDS) Reports	2. How do the three institutions compare when analyzing the twelve current fund revenue sources?
	3. How do the three institutions compare to other in-state institutions of same category when analyzing the twelve current fund revenue sources?
	4. What is the trend analysis over the past three years?

# APPENDIX C

PERSONAL INTERVIEW QUESTIONS

In an academic setting, the term "entrepreneurial" has been defined as activities that combine risk, innovation, and opportunity, particularly in times of uncertain resources (Mars & Metcalf, 2009).

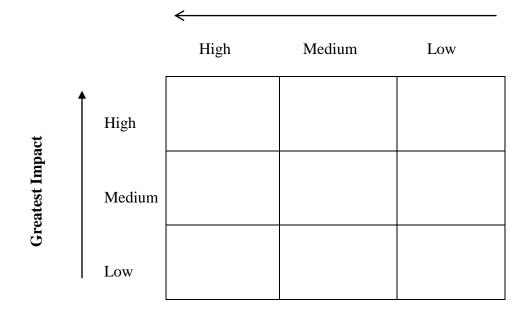
1. From a leader's point of view, what does it mean to you to

introduce and promote a spirit of entrepreneurship?

- 2. What is the philosophy of the institution regarding entrepreneurial funding practices?
- 3. What success stories can be shared regarding increased funding through entrepreneurial strategies?
- 4. What are the pros and cons of various entrepreneurial practices?
- 5. Are there restraining or driving forces for implementation at your institution?

# APPENDIX D

# NINE BLOCK DIAGRAM



Ease of Implementation

# APPENDIX E

## FORCE FIELD ANALYSIS

Part One: The team brainstorms the driving and restraining forces of the discussion topic or change.

Discussion Topic or Change:	
Driving Forces:	Restraining Forces:
•	•
_	_
-	-
•	•
•	•

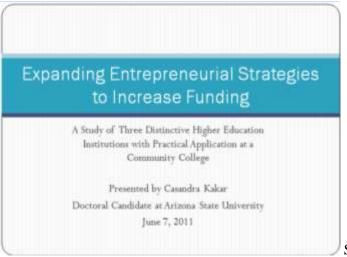
Part Two:

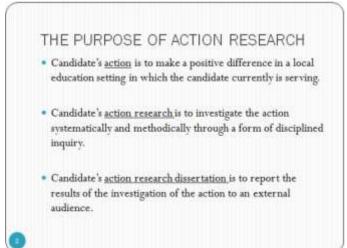
The team focuses on the list of restraining forces and ask, "What can remove or minimize each of the restraining forces?" Please document below.

# APPENDIX F

## POWERPOINT PRESENTATION TO

# PHOENIX COLLEGE LEADERSHIP ON JUNE 7, 2011



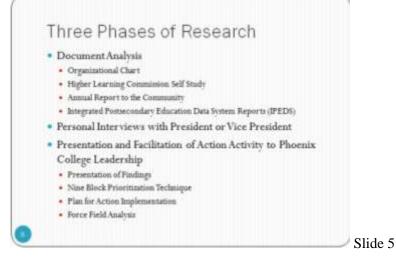


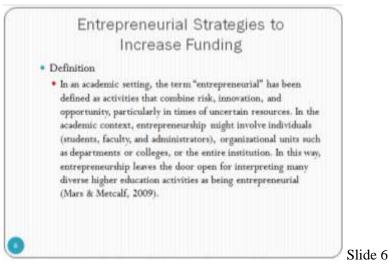


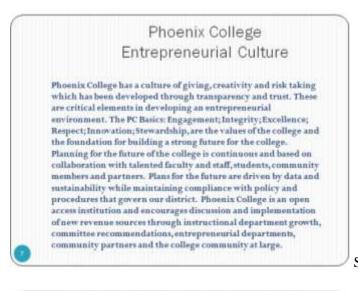






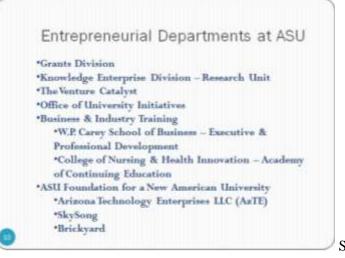












#### UOP Hohokam Entrepreneurial Culture The truest form of an entrepreneurial culture in higher education, University of Phoenix is a for-profit, publicly held institution that serves it's students through the virtual universe, face to face offerings and real world experience. Customer centered, it specializes in offering wellpackaged instruction to well-defined niche markets. In addition, the institution has a healthy advertising budget and annually spends \$20 million on marketing alone. It is one of the first of the for-profit schools which took the traditional model of higher education and subjected it to modern principles of operations management, financial management, and cost accounting. Their profit minded stockholders appreciate the entrepreneurial culture that has been created and maintained. The following is the philosophy statement of the college: \*Our care goal is to meet the needs of working and underserved students by giving you the chance to earn your college degree. Flexible scheduling, faculty with real-world knowledge and a consistent and effective curriculum design help make higher education accessible to everyone. Slide 11 Entrepreneurial Departments at **UOP Hohokam**

University of Phoenix Foundation

\*University of Phoenix National Research Center

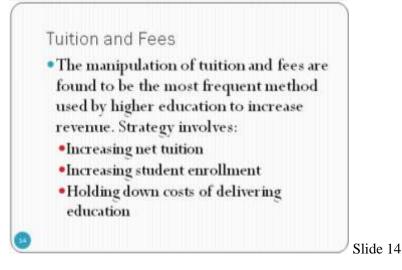
Workforce Solutions Team

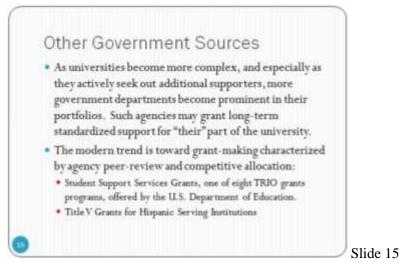
Public Relations Division

Alumni Association



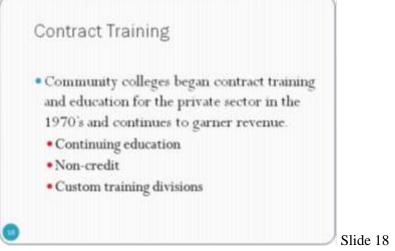








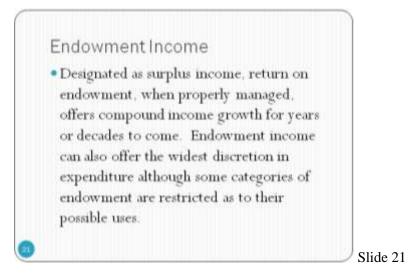


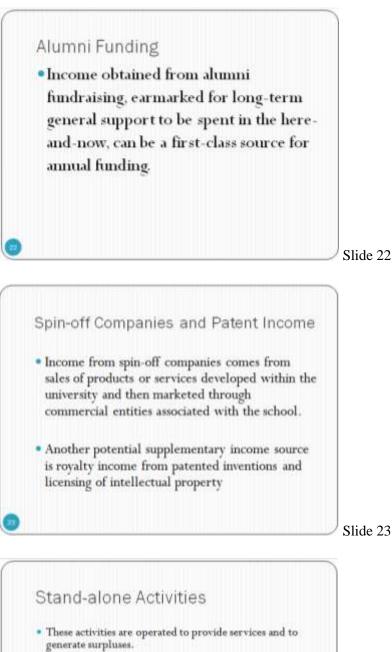




- the most promising income providers because the institution can develop and directly control these enterprises. Examples include rental of facilities:
- Football games
- Venues for conferences or meetings
- Performances













Implemented by Institution						
Type of Revenue	PC .	ASU	UOP			
Tatton and Feet	*	*	*			
Government Grants & Contracts	*	*				
Petrate Sector Sources	*	*				
Contract Research		*	*			
Contract Transg	*	*	*			
Philanthropic Foundation Grants	*	*				
University or College Generated Income	*	*	*			
Enderstantlacome		*				
Alumni Fundrating	*	*	*			
Spin-off Companies is Patient Income		*	*			
Stand-alone Arthities		*	*			
Auxiliary Europetion	+	+				

