ABSTRACT

A little known provision of the North America Trade Agreement (NAFTA) legislation of 1993 is a mechanism that assists displaced workers with an interest in becoming entrepreneurs and small business owners. A program named the Self Employment Assistance Program (SEAP) was created and implemented in a number of states in the 1990s to do just that. SEAP facilitates entrepreneurial and small business management training and assistance to displaced workers. This article summarizes the experience and findings from Indiana University of Pennsylvania’s SEAP program, which has provided assistance to over two hundred displaced workers in a tri-county area of western Pennsylvania between 1998 and 2003. The results support the contention that entrepreneurs can be “made” (or at least “assisted”) even when they are confronted with less than optimal circumstances. Moreover, the findings suggest that the most reliable predictor of “success” was participation in the program itself, not entrepreneurial predisposition, education, aptitudes, or other factors that would be expected to positively influence success. Based on the success criteria established by the state of Pennsylvania, this program produced a “success rate” of 83%. Using an “up and running” criterion to define a successful entrepreneur, a 70% success rate was achieved. The framework for this entrepreneurial training program is also presented.

INTRODUCTION

The period between 1998 and 2003 has been characterized by both a vibrant and growing economy as well as one that of late, has been less than robust. During this period, even when the economy was humming along, not all benefited equally. Sharp differences have been
evident based on regional economies (e.g., Western Pennsylvania) and industry sectors (e.g., some manufacturing). Regardless of the year, the region or the industry sector, unemployed workers share the same concerns about paychecks, health care and their futures.

The economy in Pennsylvania is dominated by businesses that belong to the “old economy” industries, which have experienced insignificant growth or have decline in the recent past. The 1999 State New Economy Index (published by The Progressive Policy Institute, Washington, D.C. – www.ppionline.org) ranked Pennsylvania 24th among all the states on the progress “as the states adapt to the new economic order.” The ranking is based on a set of seventeen economic indicators under five major categories. Further, the report placed Pennsylvania at number 31 on a major category – economic dynamism. The 2002 rankings placed Pennsylvania at number 17 overall and number 22 on economic dynamism.

There are a number of segments of society that may not be normally associated with entrepreneurship and/or are perceived to be disadvantaged in terms of becoming successful entrepreneurs and small business owners. Several studies have investigated these groups with respect to their entrepreneurial potential, prospects, training, experiences, roadblocks and successes. Some examples include:

- African Americans – Beech (1997); Gallop (1999)
- Africans – Parker (1994), Nafukho (1998); Owualah (1999); Nieman (2001)
- Aboriginal Canada – Guly (1999)
- Youth from Disadvantaged Areas - OECD Observer (1996)
- Disabled – Crains (1998)

This article examines a group that is also burdened -- the unemployed (e.g., Sonfield & Barbato, 1990). This is a group who, notwithstanding the booming economy of the 1990s, unfortunately continues to represent a significant element of society.

In those instances where the unemployed are “displaced” – those who have been laid-off, downsized, etc., and who are not likely to return to their previous position or even an equivalent position – options are very limited. Relocation and/or retraining have been traditional approaches of dealing with these types of individuals. However, not all individuals are willing and/or able to relocate or retrain, especially in those instances where they have strong geographic attractions, or where there is little opportunity for re-employment. An alternative approach to this problem is to create self-employing businesses, which start with the displaced worker.

The Self Employment Assistance Program (SEAP) was instituted in Pennsylvania in 1998 at eight locations and continued through 2003 for the purpose of providing training and assistance to recently unemployed workers who were characterized as unlikely to return to their former jobs and having potential to start their own business. The Management Services Group (MSG) of Indiana University of Pennsylvania (IUP) provided the delivery for this program in a tri-county region in Western part of the state. This program is markedly different from the traditional offerings both in terms of its participants (unemployed) as well as the content of the program and its delivery. The program differs from conventional academic programs, continuing education programs, Small Business Development Center
(SBDC) services, Small Business Institute (SBI) programs, Service Core of Retired Executives (SCORE), etc. The program is a hybrid of many of these and integrates effective aspects of each in a manner that is appropriate for virtually any individual interested in pursuing an entrepreneurial/small business endeavor.

There are numerous programs and resources that are focused on developing entrepreneurs and assisting small business owners. Some examples of such initiatives are: Small Business Development Centers (SBDCs), Service Corp of Retired Executives (SCORE), Small Business Institute (SBI), small business & entrepreneurship programs, small business incubators, university non-credit programs, a host of services offered by for-profit entities, and many others.

The literature is extensive with respect to assessments of initiatives focused on training and assisting entrepreneurs. A few examples include the following:

- Subjective measures of effectiveness in entrepreneurship assistance programs – McMullan, Chrisman & Vesper (2001)
- Small business incubator assistance services – Brown (1998); Logue (2000)
- Entrepreneurial training for the disadvantaged - Ketcham, Taylor, & Hoffman (1990)
- University programs effectiveness – Schuler (1997); Farrell (1997); Watson (1997); Budman (1997); Callan & Warshaw (1995)
- Teaching corporate managers to be entrepreneurs – Thornberry (2003)

Garvan and Cinneide (1994) identified four types of entrepreneurship education and training programs. SEAP is a combination of the first three types with an emphasis on the first two in particular:

- **Education and Training for Small Business Ownership** – Small business education providing practical assistance to support the transition from regular employment to self-employment.
- **Entrepreneurial Education** – Education for the purpose of creating new entities to develop a “novel product/service.”
- **Continuing Small Business Education** – Adult continuing education intended to sharpen and update small business owner/manager’s skills.
- **Small Business Awareness** – Exposes people to small business, creates awareness, and perhaps influences the student to consider a small business career.

This research is a summary of the SEAP program and its outcomes based on a group of 207 unemployed persons who participated during the period of March 1998 through June 2003.

**THE SELF EMPLOYMENT ASSISTANCE PROGRAM (SEAP)**

In 1993, federal enabling legislation was passed that allowed states to establish programs to train unemployed workers to start their own business. The legislation was Section 507 of the NAFTA Implementation Act. Eleven states received approval to conduct such a program, including California, Connecticut, Delaware, Maine, Maryland, Minnesota, New Jersey, New York, Oregon, Pennsylvania, and Rhode Island. In Pennsylvania, a program named the Self Employment Assistance Program (SEAP) was established in 1998. The state solicited bids and awarded grants for pilot programs in eight locations across the state.
The logic of this legislation (as well as a “compromise” to garner support) was that there would be a (large) number of displaced workers as the result of this legislation. Recall the “loud sucking sound” of jobs going south of the border that Ross Perot referred to in his presidential campaign speeches! Although there are many views on the impacts of NAFTA, both positive and negative, “Public Citizen” is one group that has asserted that there have been negative consequences. “More than 525,094 U.S. workers have been certified as of December 31, 2002 under one special NAFTA unemployment program, NAFTA Transitional Adjustment Assistance (NAFTA TAA). These workers represent only a fraction of the total U.S. jobs lost due to NAFTA. The NAFTA TAA program provides job training and income support to workers who meet very narrow criteria.” (http://www.citizen.org/trade/forms/search_taa.cfm).

The essence of the NAFTA legislation was that unemployed persons involved in particular programs would not be disqualified from receiving unemployment benefits:

- Unemployed persons may continue collecting unemployment compensation while participating in such a program
- Unemployed persons are not required to take an available job while in training
- Unemployed persons may actually start their new business, earn revenues, and continue receiving unemployment benefits during the program period

THE INDIANA UNIVERSITY OF PENNSYLVANIA (IUP) SEAP

The State of Pennsylvania specified fifteen “outcomes” out of which each participant was expected to meet at least six to be considered a “success.” These are presented in Table I. Those that are highlighted were expected outcomes for each participant in the IUP SEAP. In addition, at least one other outcome was required.

Table I - Specific Outcomes Required for SEAP

| Successful completion of entrepreneurial training |
| Developed business plan |
| Established legal entity |
| Opened business checking account |
| The establishment of a home office |
| Signed a lease |
| Secured equipment/purchasing supplies |
| Developed marketing package |
| Solicited customers/advertised product or service |
| Purchased business insurance |
| Obtained needed licenses/registrations |
| Employees hired |
| Filed schedule C for income tax |
| Other - specific to a given business (e.g., buying franchise, franchise training, etc.) |
| Amount of time being devoted (minimum of 32 hours/week) |

The Management Services Group (MSG) of Indiana University of Pennsylvania (IUP) developed a training program in cooperation with the Tri-County Private Industry Council (later TEAM PA Career Track). Career Track provided the initial communication with individuals identified at the state level as potential candidates. Career Track then conducted further screening and an assessment of candidates pertaining to their aptitude, skills, attitudes,
entrepreneurial potential, etc. A number of instruments were utilized including one developed by Wonderlic titled “Entrepreneurial Quotient” or EQ™. This instrument is marketed as a “profiling system” and assesses a number of dimensions related to entrepreneurism.

During the course of this research that spans six years, a number of assessments have been conducted including the participants Demographics, EQ™, Aptitudes, and various Outcomes. There were 207 individuals originally enrolled in the program of which 187 actually participated and were evaluated in terms of their personal characteristics and outcomes of the program. Table II is a summary of the individuals who initially enrolled in the program and were assessed and/or surveyed at various periods during the period between 1998 and 2003. The respective results presented in this research are based on these individuals.

Table II - SEAP Participants (Assessments & Follow-up Surveys)  
(Program Entrants Accepted = 207, Participants = 187)

<table>
<thead>
<tr>
<th>Event</th>
<th>Number of Participants</th>
<th>Participation/Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Participants</td>
<td>187</td>
<td>100%</td>
</tr>
<tr>
<td>Aptitude Assessment</td>
<td>184</td>
<td>98%</td>
</tr>
<tr>
<td>EQ™ Survey</td>
<td>180</td>
<td>96%</td>
</tr>
<tr>
<td>Immediate Post-Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outcome Assessment</td>
<td>121</td>
<td>65%</td>
</tr>
<tr>
<td>Follow-up Business Concept</td>
<td>115</td>
<td>61%</td>
</tr>
<tr>
<td>Surveys</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003 Telephone Survey</td>
<td>54</td>
<td>29%</td>
</tr>
</tbody>
</table>

Table III presents the summary scales that are assessed by the instrument as well as the average scores of the participants of the IUP program (at the bottom of the table). Table IV is a summary of other characteristics and assessments of the participants.

Table III - Entrepreneurial Quotient (EQ™) Ideals & Test Results

<table>
<thead>
<tr>
<th>Summary Scales</th>
<th>Ideal Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptability</td>
<td>100-66</td>
</tr>
<tr>
<td>Managerial Traits</td>
<td>100-71</td>
</tr>
<tr>
<td>Risk Tolerance</td>
<td>85</td>
</tr>
<tr>
<td>Time Management</td>
<td>68</td>
</tr>
<tr>
<td>Creativity</td>
<td>86</td>
</tr>
<tr>
<td>Strategic Planning</td>
<td>85</td>
</tr>
<tr>
<td>Planning</td>
<td>55</td>
</tr>
<tr>
<td>Goal Orientation</td>
<td>47</td>
</tr>
<tr>
<td>Personality Traits</td>
<td>100-71</td>
</tr>
<tr>
<td>Extroversion</td>
<td>71</td>
</tr>
<tr>
<td>Intuition</td>
<td>67</td>
</tr>
<tr>
<td>Thinking</td>
<td>57</td>
</tr>
<tr>
<td>Perceiving</td>
<td>17</td>
</tr>
<tr>
<td>EQ™ Index (Ideal)</td>
<td>100-71</td>
</tr>
</tbody>
</table>

SEAP Participants N = 180 (7 persons did not take the test)  
Average = 39.9  
Std. Dev. = 28.0  
Range = 1 - 98
Table IV - Profile/Assessment of SEAP Participants

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>41.9</td>
<td>9.4</td>
<td>20-60 years</td>
</tr>
<tr>
<td>Education Level (years)</td>
<td>13.6</td>
<td>1.8</td>
<td>9th grade-MBA</td>
</tr>
<tr>
<td>Reading Level (Education Equivalent)</td>
<td>11.7</td>
<td>2.1</td>
<td>3rd Grade - College</td>
</tr>
<tr>
<td>Math Level (Education Equivalent)</td>
<td>10.3</td>
<td>2.2</td>
<td>4th Grade - College</td>
</tr>
<tr>
<td>Reasoning Level (Education Equiv.)</td>
<td>13.2</td>
<td>2.7</td>
<td>5th Grade - College</td>
</tr>
<tr>
<td>Language Level (Education Equiv.)</td>
<td>13.2</td>
<td>2.9</td>
<td>5th Grade - College</td>
</tr>
<tr>
<td>Entrepreneurial Quotient (EQ™)</td>
<td>39.9</td>
<td>28.0</td>
<td>1 - 98</td>
</tr>
</tbody>
</table>

119 males and 68 females entered the program

Based on this assessment process, 207 individuals were accepted into the program and were enrolled in one of twenty-one different cohorts from March 1998 through June 2003. Each cohort’s program lasted from 6-11 weeks and included at least one formal classroom session per week. Classes averaged approximately three hours each. Intensive one-on-one sessions were typically conducted with each of the participants from one to three times per week. Two books were used including *Smart Steps to Smart Choices*, (Bangs, 1996) and *The Business Planning Guide*, 8th Edition and 10th Edition (Bangs, 1998, 2002).

This diversity in participants (education, aptitudes) presented an immense challenge to design and deliver a program that would satisfy both the needs and abilities of all of the clients. Additional differences in participants (such as age, financial situation, types of business concepts, etc.) further exacerbated this challenge. A series of eleven “formal” sessions were developed with each session requiring several hours of preparation on the part of the participants. Consequently, these sessions were conducted once or twice a week in order to allow for preparation of financial projections, business plan drafts, brochures, marketing materials, etc. By conducting one-on-one sessions with each participant, the delivery of the program was customized to accommodate the diversity of the participants.

The formal sessions and the one-on-one sessions included a number of general topics: Introduction to SEAP; The Nature of Entrepreneurship; Business Concept to Business Plan; Marketing Basics and Market Research; Marketing Implementation; Advertising; Internet Marketing; Operations; Competitor Intelligence; Financial Analysis; Financing (Bank Loans & Other Sources); Bookkeeping/Accounting; Legal Structure & Issues; Insurance Issues; Family Business Issues; and Business Plan Development & Presentation (by participants).

In order to provide additional insight into these topics, a number of “guest lecturers” were used as topical instructors throughout the program. They included a SEAP Alumna; IUP Systems Technology Manager; Director, IUP Small Business Development Center (SBDC); Co-owner, MCM Communications (Advertising Agency); Professor of Marketing; Vice President/Loan Officer, First Commonwealth Bank; Financial Director, County Center for Economic Operations (CEO); Assistant Deputy Director, U.S. Small Business Administration.
(SBA); Accounting professor engaged in private accounting practice (CPA); Attorney, Tomb, Mack & Kauffman; Insurance Agent, Thompson & McClay Insurance Associates; President, Borough Council; President, Chamber of Commerce; Chief Executive Officer, County Center for Economic Operations (CEO); Director, IUP Government Contracting Assistance Program (GCAP); and Manager, IUP Small Business Incubator. A more detailed overview of the formal program is presented in the Appendix.

HYPOTHESES

The overarching assumption that has driven initiatives like SEAP as well as most entrepreneurship education is the assertion that entrepreneurs can in fact be developed. The following quote is particularly apropos:

"Let me tell you what we can't do," says Bill Bygrave, Director of Babson's Center for Entrepreneurial Studies. "We can't make people into entrepreneurs if they don't have the basic drive, energy, and a strong sense of what it takes to run a business. But give me someone who has those basic skills, and we'll make him into a much better entrepreneur" (Callan & Warshaw, 1995).

**H1** – The SEAP success rate will exceed the implicit state of Pennsylvania success rate of 75%.

For typical retraining programs, the state of Pennsylvania expects a 75% “success rate.” Since this was a pilot program, no such target was established, however. “Success” is based on meeting or exceeding 6 outcomes per participant (according to the state.)

A number of related hypotheses were developed. Aptitudes relating to reading, mathematics, language, etc. were expected to be beneficial to success in a business endeavor. In particular, the Entrepreneurial Quotient (EQ) instrument was expected to be an indicator of entrepreneurial predisposition. There is support for this premise in the literature (e.g., Faiska & Faiska, 1987). In addition, the vendor claims this.

**H2** – Assessment scores will positively correlate with EQ results.

The Wells Fargo/National Federation of Independent Businesses (Dennis, 1999) data indicates that the education level of those individuals who started businesses tended to be fairly high – specifically 38% hold college degrees and 13% have professional degrees).

**H3** – Assessment scores will positively correlate with the number of outcomes achieved.

This is based on the simple notion that educated, skilled individuals are more likely to succeed in life (including entrepreneurial efforts). Dolinsky, Caputo & Pasumarty (1993) found that education is positively correlated with aspects of entrepreneurial activity. In addition, this is supported by empirical data such as the Wells Fargo/NFIB survey referenced in H2.

**H4** – Age will not correlate with either EQ results or number of outcomes achieved

This hypothesis stems from the premise that entrepreneurs are most likely to succeed at a point when they have accumulated sufficient capital, experience and confidence while still
young enough to be interested and predisposed to take some risk and/or to not be at a “too comfortable stage” in their lives. This relationship is often expressed as an “inverted U” function. Evidence from the Wells Fargo/NFIB supports this notion as well – about 80% of business start-ups were by individuals between the ages of 30 and 55.

**H5 – EQ Results will positively correlate with number of outcomes.**

This is based on the explicit purpose of the instrument and the claims of vendor. This type of instrument is similar to that developed by Fasiska and Fasiska (1987) in *The Fingerprint of the Entrepreneur*.

**OUTCOMES OF PROGRAM**

There was a great diversity of business concepts that were pursued by the participants of the program. Based on follow-up surveys we have implemented twice and will continue do at planned intervals, 115 respondents were conducting business (out of the 187 participants who completed most or all of the training in the program). Table V summarizes these findings relative to seven categories of enterprise.

**Table V - Types of Businesses**

<table>
<thead>
<tr>
<th>Type of Business</th>
<th>Percent of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contracting/Repair Services</td>
<td>20%</td>
</tr>
<tr>
<td>Human &amp; Health Services</td>
<td>8%</td>
</tr>
<tr>
<td>Food Services</td>
<td>7%</td>
</tr>
<tr>
<td>Wholesale/Retail Sales</td>
<td>15%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>11%</td>
</tr>
<tr>
<td>Other Services</td>
<td>29%</td>
</tr>
<tr>
<td>IT/Communications</td>
<td>9%</td>
</tr>
<tr>
<td>Others</td>
<td>2%</td>
</tr>
</tbody>
</table>

Another way to assess the performance of the SEAP program is by analyzing the stated outcomes of a training program. The participants were assessed at the end of training in terms of the State of Pennsylvania mandated outcomes achieved (see Table I for the 15 measures). Currently we have 121 respondents (from the 187 participants who completed most or all of the training) who have completed the official state documents that track the number of outcomes officially achieved. The analysis of the results of these participants indicates that 100 out of the 121 participants completed at least one outcome. Furthermore, the average number of bona fide outcomes accomplished by the participants is 7.8 outcomes with a median of 8 and a mode of 7. Overall, 100 out of 121 completed at least six of the outcomes, a “success rate” of 83%. Several of the participants continue to be in the IUP “system” as SBDC and/or SBI clients and continue to be worked with on a one-on-one basis. In addition, many of these businesses are expected to develop. Consequently, it is expected that the
number of outcomes will increase over time. This result supports H1 – The SEAP success rate will exceed the implicit state of Pennsylvania success rate of 75%.

In addition, a telephone survey was conducted later (see Table VIII) to determine the extent to which businesses were actually open and become fully operational (and to what extent the owners were satisfied with the business). Of the 187 participants in the program, 54 responded to the survey. The results indicate that 38 of 54 respondents were “Open for Business” (a 70% “success rate”). While slightly less than the 75% threshold, it is a very impressive start-up rate for individuals who were recently unemployed.

In order to assess what factors might explain the participants’ scores on the Entrepreneurial Quotient (EQ™) survey, a correlation analysis was performed on several relevant factors (H2). It was expected that education level as well as the assessments of math, reading, reasoning and language would all be positively related to the EQ™ scores (H2). Table VI is a presentation of this data suggesting that there are two significant relationships, those between Reading Level with the EQ™ score and Education Level with the EQ™ score. Because Education Level and Reading Level are very highly correlated (.397 at a significance level of .000), it is not surprising that these relationships parallel one another.

Table VI - Relationship of Education Level & Assessment Scores on EQ™ – H2

<table>
<thead>
<tr>
<th>Variable</th>
<th>Correlation</th>
<th>R-square</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education Level</td>
<td>.225</td>
<td>.051</td>
<td>.006</td>
</tr>
<tr>
<td>Math Level</td>
<td>.009</td>
<td>.00</td>
<td>.909</td>
</tr>
<tr>
<td>Reading Level</td>
<td>.236</td>
<td>.056</td>
<td>.001</td>
</tr>
<tr>
<td>Reasoning Level</td>
<td>.073</td>
<td>.005</td>
<td>.335</td>
</tr>
<tr>
<td>Language Level</td>
<td>.132</td>
<td>.015</td>
<td>.083</td>
</tr>
</tbody>
</table>

The relationship of various factors to the success measure (number of outcomes) is of particular interest since this is the proxy for entrepreneurial success (H3, H4, and H5). Of all of the factors that were correlated to this success measure, it was expected that all but age would be related positively to EQ score. The age variable was not expected to be related due to the conventional wisdom that entrepreneurs are not likely to attempt to start a business and/or be successful in entrepreneurial efforts toward the end of their working careers (due to risk aversion, responsibilities, entrenchment, etc.). Please see Table VII.

As expected, age was not related to “entrepreneurial success.” We were, however, surprised that none of the other variables were related to the number of achieved outcomes! These results suggest that not only does the Entrepreneurial Quotient (EQ™) not have significant predictive validity, none of the other expected relationships were found to be significant either.

In order to further examine the relationship between the independent variables and measures of “success,” some additional measures were employed. Specifically, a follow-up telephone survey was conducted which included a large number of questions including some which pertained to additional measures of success. Keep in mind that in some cases the respondents are 5 years out from the completion of the SEA Program whereas others would be only a few
months out of the program. A few of the questions pertained to measures of success that go beyond the measures employed by the state of Pennsylvania and are presented below:

- Open for Business? (Yes/No)
- Sales Level? (Level of Sales)
- Financial Satisfaction? (5 point Likert Scale from “Not Satisfied” to “Extremely Satisfied”)
- Overall Satisfaction? (5 point Likert Scale from “Not Satisfied” to “Extremely Satisfied”)

Table VII - Relationship of Age, Education Level & Assessment Scores to Number of Outcomes – H3, H4, & H5

<table>
<thead>
<tr>
<th>Variable</th>
<th>Correlation</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>.173</td>
<td>.092</td>
</tr>
<tr>
<td>Education Level</td>
<td>.021</td>
<td>.837</td>
</tr>
<tr>
<td>Math Level</td>
<td>.112</td>
<td>.223</td>
</tr>
<tr>
<td>Reading Level</td>
<td>.084</td>
<td>.360</td>
</tr>
<tr>
<td>Reasoning Level</td>
<td>.161</td>
<td>.079</td>
</tr>
<tr>
<td>Language Level</td>
<td>.150</td>
<td>.108</td>
</tr>
<tr>
<td>Entrepreneurial Quotient (EQ™)</td>
<td>-.041</td>
<td>.657</td>
</tr>
</tbody>
</table>

Of the 187 participants in the program, 54 responded to the telephone survey (which is ongoing at this time). This represents a response rate of 29%. Based on this survey, 38 of 54 respondents were “Open for Business” (a 70% “success rate”). The following very strong and significant relationships were found to exist:

Table VIII - Significant Relationships of Follow-up Telephone Survey (n=54, Response Rate = 29%)

<table>
<thead>
<tr>
<th>Variable 1</th>
<th>Variable 2</th>
<th>Correlation</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Quotient (EQ™)</td>
<td>Profit Satisfaction with Business</td>
<td>.456</td>
<td>.004</td>
</tr>
<tr>
<td>Entrepreneurial Quotient (EQ™)</td>
<td>Overall Satisfaction with Business</td>
<td>.447</td>
<td>.003</td>
</tr>
<tr>
<td>Outcomes Achieved in SEAP</td>
<td>Open for Business</td>
<td>.469</td>
<td>.002</td>
</tr>
</tbody>
</table>

These results are very interesting – the first two relationships suggest that there is a very strong relationship between having a strong entrepreneurial orientation and achieving satisfaction by being an entrepreneur. Perhaps simply pursuing the “entrepreneurial dream” is more satisfying for one who is more predisposed to do so.

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SOME ANECDOTAL RESULTS

Through the delivery of the program itself, follow-up surveys, and testimonials from participants in the program, there were a number of interesting anecdotes that are worth mentioning.

- There were some very interesting business concepts that were proposed, and in some cases very successfully implemented, by the participants of the program. Some examples include a solar engine; a chemical composition that keeps black powder (and other substances) dry, even in the rain; a women’s center based on a SEAP graduate’s experience as a nurse-midwife; pedorthic footwear focused on persons with diabetes; “eldercare” assistance (non-healthcare) targeted towards elderly in need of general assistance; equine photographer; portable saw mill (trailer mounted); customized turbocharger manufacturing; canoe livery service; English Bulldog breeding; mobile vehicle detailing service (trailer); exotic mushroom production and marketing; antique brass manufacturing and a host of IT entrepreneurs.

- The “most successful” participant has grown their business to nearly 200 employees and $10 million in sales.

- A two-person team of SEAP participants from an earlier module (home health care) commenced business, substantially grew, and subsequently laid off two nurses. These two unemployed nurses came back through SEAP and started up their own home health care agency locating in our incubator and later becoming a SBI client! They are now very successful.

- There have been a significant number of SEAP participants who have networked with each other and now trade, buy and sell products and services with one another. The cohort concept creates an atmosphere ripe for relationship development and supportive synergies among the participants.

- One of the valuable outcomes of this program was the “discovery” on the part of some the participants who, through the process of developing a business plan, were pursuing a dream that was not likely to be feasible. Although disappointing to the individuals, they are far better off than had they blindly moved forward risking capital, their homes and their time. The attrition process is as full of insightful stories and lessons as those from the successful implementation process.

- On the negative side, there were many unemployed participants who, due to their past and current financial situation, were unable to obtain even modest amounts of capital to start-up their businesses.

CONCLUSIONS

This project began as a program (SEAP) with the purpose to try to make it possible for “displaced” unemployed workers to become self-employed – to become entrepreneurs and small business owners. Potential candidates were assessed for the purpose of establishing whether they would likely be successful based on their skills and aptitudes.

- The primary hypothesis that entrepreneurs can be developed (H1) has been strongly supported by the level of success realized by those who have completed the program with more outcomes. It appears that providing systematic assistance to a disadvantaged individual (or group) who endeavors to launch a business is most effective when the participant is able to attain many specific outcomes. Thus, the greater number of outcomes they achieve during the training program, the higher the likelihood of opening a business and staying in business.
• Interestingly, educational attainment and reading skills correlate very highly with Entrepreneurial Quotient (EQ™).

• A priori assessments of participants in a program of this nature provide little in the way of a predictive tool with respect to “objective” measures of entrepreneurial success.

• However, the Entrepreneurial Quotient (EQ™) of participants is very highly correlated with “subjective” measures of entrepreneurial success. For example, EQ™ is highly correlated with Profit Satisfaction with Business AND Overall Satisfaction with Business.

• The real reason for success is the program itself – the success of the individuals is a function of their participation in the program and the learning and assistance provided therein. This was the entire purpose of the program and the basis for the primary hypothesis.

• Individual characteristics of entrepreneurial candidates may not be all that important for determining whether a person has the resolve, competency and intention to actually start a business. Self-selection and immersion in the program would seem to be more important.

**SUGGESTIONS FOR FURTHER RESEARCH**

Based on this SEAP experience, there are at least three clear areas that require further research:

• Screening instruments need to be further developed and tested.

• What is success? Better measures of both objective success and subjective success are needed.

• There is a need for longitudinal research and follow-up in assessing the success of such programs. This is presently underway with respect to this particular program.

**REFERENCES**


Entrepreneurial Quotient. Wonderlic Personal Test, Inc.: Libertyville, IL.


APPENDIX - OVERVIEW OF FORMAL SESSIONS

SESSIONS # 1 & # 2 - INTRODUCTION TO SEAP (DOUBLE SESSION)

Guest Speakers:
- SEAP Alumna
- Systems Technology Manager

Session Contents:
- Nature of Self Employee Assistance Program (SEAP)
- Discussion of business concepts
- Indiana University of Pennsylvania Management Services Group (MSG) - Small Business Incubator; Small Business Development Center (SBDC); Government Contracting Assistance Program (GCAP); Center for Family Business; Small Business Institute (SBI)
- Why businesses fail; Video (40 minutes) “E-MYTH”
- Assignment of participants to personal advisor/counselor
- Computer lab orientation/workshop

SESSION # 3 - NATURE OF ENTREPRENEURSHIP

- Explain your business concept in 1 sentence and in 1 paragraph
- Discussion of Wonderlic EQ™ Survey & other assessments
- Definitions/characteristics of the entrepreneur
- The concept of strategy
- What is your business concept?/initial assessment by participants & staff

SESSION # 4 - BUSINESS CONCEPT TO BUSINESS PLAN

Guest Speaker:
- Director, IUP Small Business Development Center (SBDC)

Session Contents:
- Video - “Business Planning”
- The purposes/content/key components of a business plan; What bankers look for
- Discuss costs and revenues associated with your business (estimates include start-up costs)

SESSION # 5 - MARKETING I - BASICS AND MARKET RESEARCH

Session Contents:
- The “4 Ps” of marketing
• Technology Vs. product Vs. market driven companies
• Defining markets/market research/consumer behavior; Marketing mix decisions
• Competitive strategies

SESSION # 6 - MARKETING II - IMPLEMENTATION; ADVERTISING; OPERATIONS

Guest Speaker:
• Co-owner, MCM Communications (Advertising Agency)

Session Contents:
• Advertising & promotion techniques
• Presentation & discussion of participants’ brochures
• Marketing section of business plan
• Overview of operations aspects of running a business (quality, TQM, inventory, etc.)

SESSIONS # 7 - COMPETITOR INTELLIGENCE; INTERNET MARKETING; FINANCIAL ANALYSIS

Guest Speakers:
• Professor of Marketing/IUP MBA Program Director
• Director, Small Business Development Center (SBDC)

Session Contents:
• Competitor intelligence
• Internet marketing
• Cash flow analysis; Proforma statements

SESSION # 8 - FINANCING (BANK LOANS & OTHER SOURCES)

Guest Speakers:
• Loan Officer - First Commonwealth Bank
• Financial Director – Indiana County Center for Economic Operations (CEO)
• Assistant Deputy Director, U.S. Small Business Administration (SBA) – Pittsburgh District

Session Contents:
• Personal “financial statement”
• Types of financing
• How to secure a bank loan
• U.S. Small Business Administration (SBA) loans & other programs
• State & local sources of financing

SESSION # 9 - BOOKKEEPING/ACCOUNTING

Guest Speaker:
• IUP Accounting Professor engaged in private accounting practice (CPA)

Session Contents:
SESSION # 10 - LEGAL STRUCTURE & ISSUES; INSURANCE ISSUES; FAMILY BUSINESS ISSUES

Guest Speakers:
- Attorney, Tomb, Mack & Kauffman
- Agent, Thompson & McClay Insurance Associates; President, Borough Council

Session Contents:
- What attorneys can do for you; Types of legal entities - advantages/disadvantages/costs
- Insurance needs; Types of insurance/costs
- Issues related to family businesses (succession, estate planning, compensation, etc.)

SESSION # 11 - BUSINESS PLAN PRESENTATIONS

Guest Speakers:
- President, Indiana County Chamber of Commerce
- Chief Executive Officer, Indiana County Center for Economic Operations (CEO)
- Director, IUP Government Contracting Assistance Program (GCAP)
- Manager, IUP/Indiana County Small Business Incubator (located on campus)

Session Contents:
- Regional support services
- Presentation/discussion of business plans (to panel and instructors)


Thomas Falcone is a professor of management who specializes in entrepreneurship. He has published dozens of articles in scholarly journals and taught and presented on diverse topics in America, Canada and Europe. In 2003, he was named a Small Business Administration Research Advocate. He was recently named by Pennsylvania Business Central as one of the 100 most influential business people in the region.

Stephen Osborne is Professor of Management at Indiana University of Pennsylvania (IUP). Since 1993, he has served as Director of the IUP Small Business Institute (SBI). In 2002, Dr. Osborne was elected as a Fellow of the Small Business Directors Association. In addition, Dr. Osborne served as Editor, Journal of Small Business Strategy 1998 - 2004. In 2003, Dr. Osborne was named U.S. Small Business Administration (SBA) Research Advocate of the Year for Western Pennsylvania and also named as a "Top 100 Local Business People of the Year" by Pennsylvania Business Central.