

Entrepreneurial Skills Assessment:
An Exploratory Study

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Key Words: Assessment, Entrepreneurial Skills, Exploratory Study

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Abstract

This paper examines literature related to seventeen skills suggested as being critical to individuals seeking to embark on entrepreneurial activities. It also reports the results of an exploratory study regarding the importance and usefulness of these skills to individuals pursuing entrepreneurial activities. The exploratory study disclosed that nine of the skills ranked highest in both importance and usefulness. All seventeen skills are discussed in the context of the literature review and the exploratory study. Implications for future research and for practice are also presented.

1 Introduction

Entrepreneurial activities require a broad array of skills. This paper examines a particular set of seventeen skills defined in four major categories: 1) technical skills, 2) managerial skills, 3) entrepreneurial skills, and 4) personal maturity skills (Lichtenstein and Lyons, 1996, 2001; Lyons and Lyons, 2002; Lyons, 2003). The seventeen skills, as presented here, were extracted and defined based on the writing of Lichtenstein and Lyons and the current literature related to each skill. Lichtenstein and Lyons (2001) have developed a system for managing regional enterprise development and a method of developing entrepreneurs called the Entrepreneurial Development System (EDS). Smith (2005) used this system as the basis for choosing an entrepreneurial development system

in a mid-American setting. This system is built on three major premises: 1) ultimate success in entrepreneurship requires the mastery of a set of skills; 2) these skills can be developed and 3) entrepreneurs do not all come to entrepreneurship at the same skill level (Lyons, 2003, p. 100).

Some of the skills are well known and well accepted in the literature and generally acknowledged by practitioners as essential entrepreneurial skills. Some of the skills are less well known in this context and initially may be expected to be of lesser interest to many practitioners, especially new and prospective entrepreneurs. The purpose of this study is to explore which skills are judged relevant by entrepreneurs in a Midwest region of the United States.

We begin with a brief discussion of all seventeen skills to provide a context for our more detailed examination. This is followed by a description of an exploratory study that was conducted with a group of entrepreneurs within two years of their first exposure to entrepreneurship technical assistance. The study measures their perception of both the importance of the skills and the usefulness of the skills along with their self-assessment of their ability level relative to each skill. Selected literature supporting the inclusion of each of the seventeen skills is reviewed along with the results of the exploratory study. We conclude with a general discussion and an examination of the implications of our review and exploratory study for both future research and for entrepreneurial practice.

2 The Seventeen Skills: An Overview

We begin our presentation with a brief overview of the seventeen skills in the four categories. Table 1 presents the four skills under the first category, Technical Skills.

Lyons (2002) described these technical skills as the “skills necessary to be successful in one’s line of business” (p. 4).

Table 1 Technical Skills

1. Operational – the skills necessary to produce the product or service
2. Supplies/Raw Materials – the skills to obtain them, as necessary
3. Office or Production Space – the skills to match needs and availability
4. Equipment/Plant/Technology – the skills to identify and obtain them

A business incubator study conducted by Lichtenstein and Lyons (1996) demonstrated that the more successful entrepreneurs had technical skills beyond just producing the product or service. This is consistent with the findings of writers like Smith and Miner (1983) who categorize entrepreneurs by basic entrepreneurial patterns. On one end of the continuum they identify artisan or craftsman entrepreneurs. These are persons who create a new venture in order to exploit their technical or job experience. They have strong technical expertise but often lack other essential skills like management experience and communication ability. On the other end of the continuum are opportunistic entrepreneurs. These are individuals who have supplemented their technical ability with additional skills such as communication, legal, economic or strategic knowledge.

Smith (1967) postulated that opportunistic entrepreneurs, by virtue of their breadth of education (relative to artisan entrepreneurs), exhibit higher social awareness and involvement and are oriented toward the future. These characteristics increase the

likelihood that the opportunistic entrepreneur will bring the entity through difficult developmental stages to ultimate success.

Table 2 presents the six skills under the second category, Managerial Skills. Lyons (2002) described managerial skills as “the skills needed to organize the work on a day-to-day basis” (p. 4).

Table 2 Managerial Skills

1. Management – planning, organizing, supervising, directing, networking
2. Marketing/Sales – identifying customers, distribution channels, supply chain
3. Financial – managing financial resources, accounting, budgeting
4. Legal – organization form, risk management, privacy and security
5. Administrative – people relations, advisory board relations
6. Higher-order – learning, problem-solving

The first four skills are well accepted and generally agreed to be critical managerial skills in the operation of any business entity. Support for these is strong in the literature (cf., Williams, 2003). The fifth skill in this set deals with using other people in the business. This raises interesting questions especially relative to groups such as advisory boards. While generally recommended as a sound practice, both the literature and our study illustrate that advisory boards are not widely used by practitioners. In this category, we consider the selection of persons to serve in an advisory board capacity (below, we examine how to best utilize these people in the entrepreneurial processes). The same appears to be true of higher-order learning and problem-solving skills. These skills appear to correlate with business success but are, nevertheless, under utilized.

Table 3 presents the three skills under the third category, Entrepreneurial Skills. Lyons (2002) described entrepreneurial skills as “the skills needed to develop innovative

products and services and to generate solutions to emerging needs in the marketplace” (p. 4).

Table 3 Entrepreneurial Skills

1. Business Concept – business plan, presentation skills
2. Environmental Scanning - recognize market gap, exploit market opportunity
3. Advisory Board and Networking – balance independence with seeking assistance

Using environmental scanning to identify opportunities for viable business concepts is nearly a definition of entrepreneurship for some. Recognizing market opportunities is a key, a defining skill for the entrepreneur. Being able to articulate orally and in verbal/visual presentation form is a useful skill for the entrepreneur. We believe the ability to balance activity as a sole proprietor with utilization of an advisory board and networking opportunities is another critical entrepreneurial skill. This is defined and discussed in more detail in the following sections.

Table 4 presents the four skills under the final category, Personal Maturity Skills. Lyons (2002) described personal maturity skills as “the skills needed to attain self-awareness, emotional maturity, ability and willingness to accept responsibility, and creativity” (p. 4).

Table 4 Personal Maturity Skills

1. Self-Awareness – ability to reflect and be introspective
2. Accountability – ability to take responsibility for resolving a problem
3. Emotional Coping – emotional ability to cope with a problem
4. Creativity – ability to produce a creative solution to a problem

We believe these critical skills for the entrepreneur have not received nearly enough attention but may include the “make-or-break” skills for individual entrepreneurial opportunities. These skills are only recently beginning to receive adequate attention in the entrepreneurial research, and are rarely included in entrepreneurial training programs. An argument for a change in this situation is presented in the discussion of results below.

In the next section, we briefly discuss the details of the exploratory study we conducted before moving into a detailed discussion of each of the seventeen identified entrepreneurial skills and the results of the exploratory study. This is followed by a general discussion and an examination of the implications for future research and practice.

3 The Exploratory Study

The exploratory study took the form of a mail survey of clients of the local Small Business Development Center (SBDC) over the previous two years (a total of 221 persons). Each of these persons had approached the SBDC seeking some kind of technical assistance. This assistance may have been help with a business plan, assistance in seeking financing, consultation in overcoming a problem in starting or operating their business, or just expressing serious interest in starting a new business.

Of the 221 surveys mailed, we had returns with no forwarding address on 9 of them. Therefore, there were a total of 212 good net mailings. 43 good responses were returned after two mailings - a 20.3 % response rate.

A copy of the survey form is in Appendix A, including the cover letter incorporating the instructions. The first three pages each listed the seventeen skills in order under the four categories (as contained here in Tables 1 through 4). Using the first two pages, the client was asked to “rate” the seventeen skills in two different ways. A certain amount of redundancy was intentional. For the first page (designated with an A), an “M” and an “L” were provided for each of the seventeen skills, with “M” meaning “most important” and “L” meaning least important. The clients were asked to circle five M’s for the five most important skills, from their point of view, and then to circle five L’s for the five least important skills. They were to leave the other seven skills blank. On the second page (designated with a B), each of the seventeen skills had a “1 2 3 4 5” in front of it. The clients were asked to rate each individual skill beginning with “1” – the lowest ranking – up to “5” – the highest ranking. The high/low ranking of page “A” was a redundancy check on the “1 2 3 4 5” ranking on page “B”.

The third page (designated with a C) provided an “H M L” for each of the seventeen individual skills, where the client was to rate their own self-evaluation of their ability level on each skill, with “H” representing a high level of skill, an “M” representing a medium level of skill, and an “L” representing a low level of skill.

4 Results: Overall Summary

Table 5 presents the Mean Skills Ranking, the overall ranking, based on the 1-5 scale from page B of the survey, ranging from 4.487 for Operational skill to 2.949 for Advisory Board and Networking skill.

Table 5 Mean Skills Ranking

Skill	Mean	Frequency				
		5	4	3	2	1
Operational	4.487	26	8	3	2	-
Management	4.263	21	9	6	1	1
Financial	4.237	20	11	3	4	-
Accountability	4.237	18	12	7	1	-
Marketing/Sales	4.231	19	12	6	2	-
Business Concept	4.154	17	13	7	2	-
Creativity	4.000	15	14	6	3	1
Environmental Scanning	3.846	12	16	5	5	1
Supplies/Raw Materials	3.757	10	13	10	3	1
Emotional Coping	3.605	8	14	9	7	-
Higher-order	3.553	10	11	8	8	1
Administrative	3.538	9	9	16	4	1
Equipment/Plant/Technology	3.368	4	13	14	7	-
Legal	3.333	9	9	9	10	2
Self-Awareness	3.308	6	12	10	10	1
Office or Production Space	3.135	5	6	15	11	-
Advisory Board and Networking	2.949	2	9	15	11	2

Rankings range from 5 (critically important) to 1 (not important).

Table 6 presents the Skills Rated Most Useful, based on a count of “Most Important” on page A of the survey, topped by Operational with 21 and Financial with 20.

Table 6 Skills Rated Most Useful

Skill	Count	Pct of Responses	Pct of Cases
Operational	21	13.5	67.7
Financial	20	12.9	64.5
Management	18	11.6	58.1
Marketing/Sales	16	10.3	51.6
Business Concept	15	9.7	48.4
Environmental Scanning	12	7.7	38.7
Accountability	12	7.7	38.7
Creativity	9	5.8	29.0
Supplies/Raw Materials	7	4.5	22.6
Higher-order	7	4.5	22.6
Legal	5	3.2	16.1
Equipment/Plant/Technology	4	2.6	12.9
Administrative	4	2.6	12.9
Emotional Coping	3	1.9	9.7
Self-Awareness	2	1.3	6.5

Total	155	100	500
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*Skills not indicated: Office or Production Space
Advisory Board and Networking*

Table 7 presents the Skills Rated Least Useful, based on count of “Least Important” on page A of the survey, topped by Office or Production Space with 21 an Advisory Board and Networking along with Self-Awareness, both with 17.

Table 7 Skills Rated Least Useful

Skill	Count	Pct of Responses	Pct of Cases
Office or Production Space	21	14.2	70.0
Advisory Board and Networking	17	11.5	56.7
Self-Awareness	17	11.5	56.7
Administrative	16	10.8	53.3
Emotional Coping	15	10.1	50.0
Higher-order	12	8.1	40.0
Equipment/Plant/Technology	10	6.8	33.3
Legal	10	6.8	33.3
Environmental Scanning	6	4.1	20.0
Creativity	6	4.1	20.0
Supplies/Raw Materials	5	3.4	16.7
Management	4	2.7	13.3
Business Concept	4	2.7	13.3
Operational	3	2.0	10.0
Accountability	2	1.4	6.7
Total	148	100	493.3

*Skills not indicated: Marketing/Sales
Financial*

Table 8 presents the Personal Skill Evaluation results, based on count, where the client rated themselves “High,” with the Accountability skill ranked first with 26 and the Creativity skill with 21.

**Table 8 Personal Skill Evaluation
Ranked at High Ability**

Skill	Count	Pct of Responses	Pct of Cases
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Accountability	26	13.7	72.2
Creativity	21	11.1	58.3
Operational	19	10.0	52.8
Emotional Coping	16	8.4	44.4
Supplies/Raw Materials	15	7.9	41.7
Marketing/Sales	14	7.4	38.9
Self-Awareness	14	7.4	38.9
Higher-order	13	6.8	36.1
Management	10	5.3	27.8
Financial	9	4.7	25.0
Business Concept	8	4.2	22.2
Environmental Scanning	7	3.7	19.4
Equipment/Plant/Technology	6	3.2	16.7
Office or Production Space	5	2.6	13.9
Administrative	4	2.1	11.1
Advisory Board and Networking	2	1.1	5.6
Legal	1	0.5	2.8
Total	190	100	527.8

Table 9 presents the Personal Skill Evaluation results, based on count, where the client rated themselves “Low,” with the Legal skill ranked first with 26 and the Advisory Board and Networking skill ranked second with 22.

Table 9 Personal Skill Evaluation
Ranked at Low Ability

Skill	Count	Pct of Responses	Pct of Cases
Legal	26	16.1	74.3
Advisory Board and Networking	22	13.7	62.9
Environmental Scanning	18	11.2	51.4
Financial	13	8.1	37.1
Administrative	13	8.1	37.1
Office or Production Space	11	6.8	31.4
Equipment/Plant/Technology	8	5.0	22.9
Management	7	4.3	20.0
Higher-order	7	4.3	20.0
Self-Awareness	7	4.3	20.0
Marketing/Sales	6	3.7	17.1
Business Concept	6	3.7	17.1
Creativity	6	3.7	17.1
Supplies/Raw Materials	4	2.5	11.4
Emotional Coping	4	2.5	11.4
Operational	2	1.2	5.7
Accountability	1	0.6	2.9
Total	161	100	460.0

The following section examines each of the skills in order by category, including the selected literature, the results of the exploratory study, and some discussion related to that skill.

5 Results: Technical Skills

We will look at each of the four technical skills, in order.

Operational – the skills necessary to produce the product or service

This is the point at which most aspiring entrepreneurs begin – they have acquired a skill at producing a product or service and believe they can do it better, or faster, or perform in some other way that is superior to the competition. It can be argued that for some entrepreneurs this skill is not even desirable since they, individually will not be producing the good or service. They want to assemble a team of people, included those with these skills, and manage the process. However, for the majority, this is the most basic of the skills we have listed.

Our study confirms the perception of the value of this skill among the aspiring entrepreneurs sampled. Operational skills rated highest in Mean Skills Ranking (Table 5) with 4.487 out of 5 and was ranked Most Useful (Table 6) with a count of 21(i.e., 21 of the 43 clients in our study ranked this skill among the top five skills most useful to the entrepreneur).

Supplies/raw materials – the skills to obtain them, as necessary

Resource constraints can be a barrier to successful business implementation if the entrepreneur does not have the skills and/or experience to locate the level of quality and quantity of supplies and materials, at reasonable prices, to carry out the mission of the business (Manolova, Brush Edelman, and Green, 2002). Availability of resources via the Internet, in recent years, has mitigated this constraint somewhat. However, it has replaced one needed skill set with another. Specifically, being able to locate appropriate supplies and materials using traditional methods has been replaced with the skill of using the Internet for procurement. Lessem (1983) speaks to this process of learning a new or modified skill set in his discussion of action learning with time for reflection, which involved learning by doing. The entrepreneur can use this approach in the preparation stage as well as during the implementation stage of their business development.

It is interesting to see that in our study, SBDC clients in their first two years of entrepreneurial activity, rated this skill at number 9 in both Mean Skills Ranking (Table 5) at 3.757 out of 5 and in Most Useful (Table 6) at a 7 (7 of 43 included this skill when they ranked the top five skills most useful to the entrepreneur).

Office or production space – the skills to match needs and availability

Lichtenstein and Lyons (1996) noted that some clients, particularly those engaged in manufacturing do require specialized facilities to carry out their production or distribution processes. Their study was based largely on business incubator clients where a large number of the clients were of this type. Others benefited from the availability of shared office space and related office services. In recent years, the ready availability of

the Internet at home, telecommunications options and related new processes and procedures reduce the needs for office space, in particular, for many entrepreneurs. Those in manufacturing, of course, still have these needs, in most cases.

Our exploratory study found the importance of this skill to rank next to last (16 of 17) in Mean Skill Ranking (Table 5) at 3.135 and was not rated at all (Table 6) in the top five by any of the clients as Most Useful.

Equipment/plant/technology – the skills to identify and obtain them

Dietrich (1995) discusses early use by entrepreneurs of online resources in identifying and comparing available equipment, plant and technology. Chau (1995) compared the selection behavior of business owners and business managers in choosing software to meet the IT needs of their respective firms. He found differences between the two sets of decision makers in that owners of the business were more focused on the technical capabilities being provided and were more reliant on vendor information.

Equipment, Plant, Technology, and the skill to identify and obtain them, were not high on the minds of the clients in our study. On Mean Skill Ranking (Table 5) this skill scored 3.368 (13th of 17) among the skills. On Table 6 (Most Useful) is ranked 12th with a count of only 4 out of 43 as being among the five most useful skills.

6 Results: Managerial Skills

The managerial skills are “the skills needed to organize the work on a day-to-day basis.” There are six such skills to examine:

Management – planning, organizing, supervising, directing, networking

These are the basic management functions that have been taught in “principles of management” courses in colleges and universities around the country for decades.

Williams (2003), for example, lists planning, organizing, leading and controlling as the traditional management functions. He goes on to discuss the ”modern” movement toward broader, more behavioral based functional descriptions, such as: 1) making things happen, 2) meeting the competition, 3) organizing people, projects, and process, and 4) leading. Kundu and Rani (2004) have begun to examine the entrepreneurial orientation of aspiring managers, which may play a role here.

Others suggest that managerial success requires more than knowing what to do. Buhler (2004), for example, discusses the top ten managerial mistakes, which provide additional insights into the managerial process:

Failure to Delegate	Failure to Keep Learning	Lack of Accountability
Failure to “Walk the Talk”	Lack of Knowledge of the Business	Underestimated the Power of Interpersonal Skills
Lack of Vision	Inability to Build Teams	Failure to Make Decisions
	Inability to Communicate	

Garcia-Morales, Moreno, and Llorens-Montes (2006) have examined the effects of entrepreneurial, learning, and innovator aspects of managers in small and medium sized business strategic capabilities and their performance.

The respondents to our exploratory study (See Table 5) ranked Management skills as second highest only to Operational on the Mean Skills Ranking, with a 4.263 out of a

possible 5. On the rating of Skills most useful (Table 6), Management ranked third, with a count of 18, just behind Operational and Financial and just ahead of Marketing/Sales and Business Concept.

Marketing/Sales – identifying customers, distribution channels, supply chain

Hisrich (1992) wrote of the need for marketing in entrepreneurship. He stresses that both marketing and entrepreneurship should be based on a customer orientation with the customer being the focal point. He adds that interfacing with potential customers from early on in the innovation process is important for success. Washer and Fredman (1992) remind us of the importance of educating the customer about the product being offered. They stress that the distribution and promotion strategy in the business plan should emphasize how these efforts will benefit the customer. In addition, they state that once the entrepreneur has defined the target market, he/she should stay focused on it.

Smeltzer (2001) describes supply chain analysis as the ability to “efficiently integrate suppliers, manufacturers, warehouses and stores so that merchandise is produced and distributed at the right quantities, to the right locations, and at the right time, in order to minimize system wide costs while satisfying service level requests (p. 3).” This is a goal toward which the entrepreneur should move in their overall marketing management efforts.

Our exploratory study ranked Marketing/Sales as fifth on the Mean Skills Ranking with a mean score of 4.231 out of 5. Marketing/Sales ranked fourth on the Skills Rated Most Useful with a count of 16, suggesting that the entrepreneurs surveyed regarded this skill as important.

Financial – managing financial resources, accounting, budgeting

Aspiring entrepreneurs should construct a business plan which includes the financial plans and projections of the new venture, including balance sheet, income statement and cash flow statement (Baron and Shane, 2005). Each of these statements must then be kept by the firm, coupled with appropriate accounting and budgeting processes and procedures.

Williams (2003) also discusses financial controls, from the point of view of controlling economic value added. He notes that use of financial ratios and budgets needs to be combined with a balanced scorecard approach to best understand the value added of the entire firm.

The respondents to our study ranked Financial third on the Mean Skills Ranking with a mean score of 4.237 out of 5 – a virtual tie with Accountability, behind only Operational and Management skills. Financial ranked second on the Skills Rated Most Useful ranking with a count of 20, just behind Operational and just ahead of Management.

Legal – organization form, risk management, privacy and security

Hawkins (2001) provides a good discussion of the legal organizational form decision each entrepreneur must make to adequately protect and properly operate their business. The sole proprietorship may serve some well, but most need to consider some form of incorporation and, in some cases, a partnership form of organization.

Risk management is examined by Walwyn, Taylor and Brinkhill (2002) as it adds value to the process of project evaluation. Lepofsky (2004) provides a critical view of the steps a firm must take to safeguard the personal information of employees to prevent identity theft (for example) and related security concerns. Vartanian and Fajfar (2004) go further in looking at information security by presenting the implications of the Sarbanes-Oxley legislation for small firms. Finally, Langnau (2004) considers the key legal issues (from pirating to privacy) that entrepreneurial firms face today.

Legal skills ranked lowest on the exploratory study rating of personal skill evaluation. In other words, most respondents perceived their ability in this category to be relatively weak. 26 of the 43 respondents ranked it low, 13 ranked it medium, and one person ranked their ability high. Legal ranked 15th (of 17) in mean skill ranking by the participants. It is reasonable to interpret this as recognition that the average entrepreneur does not consider himself/herself to be possessed of legal skills, and will therefore, most likely outsource any required work.

Administrative – people relations, advisory board relations

Barile (2004) looked at advisory boards used by retail agents, wholesalers and managing general agents running privately owned companies and found them to be generally very effective, especially where the board members were chosen based on expertise with respect to the problems and opportunities being faced by the business. When properly constituted and utilized, an advisory board can be a very useful tool for the entrepreneur individually and for the management team. In their study of advisory board effectiveness, Morkel and Posner (2002) stated:

A start-up venture can access expertise and credibility through its advisory board far greater than with a board of directors. A well wishing prominent person may be willing to serve on an advisory board of a start-up venture but not on the board of directors with its concomitant legal duties and responsibilities. The founder and investors can form a small board of directors for statutory and other board duties while tapping into the expertise and connections of a wider advisory board, and through them into their wider networks. Advisory boards are unencumbered by compliance and other business issues specific to boards of directors and can provide the CEO and management the benefits of experience, expert knowledge, contact and credibility. (pp. 4-5)

Our study found Administrative skill received a 12th ranking of 17 in terms of mean skill ranking. Administrative skill ranked in the “bottom 5” skills identified by our respondents. Specifically it ranked fourth highest of the bottom five skills possessed. It tied for fourth among the skills in which respondents identified themselves as having “low ability” indicating a high lack of confidence in this particular skill.

Higher-order – learning, problem-solving

Deakins and Freel (1998) in their study of entrepreneurial leaning concluded:

Entrepreneurs must learn from decisions, from mistakes, from experience and from their networks. We have seen from the evidence of the case studies, that the entrepreneurship and growth process is essentially non-linear and discontinuous. It is a process that is characterized by significant and critical learning events. The ability of entrepreneurs to maximize knowledge as a result of experiencing these learning events will determine how successful their firm eventually becomes (p. 154).

The study revealed that Higher-order skills ranked eleventh on Mean Skills Rating with a score of 3.553 out of 5. It ranked tenth on the most useful scale with a count of 7.

7 Results: Entrepreneurial Skills

Business Concept – business plan, presentation skills

The business plan is considered by many to be the most fundamental of entrepreneurial skills. Assistance here is available from multiple sources, including the local SBDC, books in the library or bookstore and self-help aids on multiple Internet sites. Seminars and workshops are also available. These range in price from free to very costly.

Chaney and Green (2004) focus on the presentation skills that are a critical adjunct to the preparation of the business plan. They stress the importance of verbal and

non verbal presentation skills, along with dress, body language, vocal characteristics and use of visuals.

Our study results ranked Business Concept sixth in overall Mean Skills Ranking with a 4.154 out of 5. It ranked fifth on the Skills Rated Most Useful with a count of 15, just behind Marketing/Sales and just ahead of Environmental Scanning.

Environmental Scanning - recognize market gap, exploit market opportunity

Albright (2004) identified environmental scanning as the process of identifying emerging issues, situations and potential pitfalls that may affect an organization's future. She noted that the relationship among markets, strategic planning, and the environment external to the organization is what defines an organization's success. McGee and Sawyer (2003) found that successful business expansion depended upon monitoring the external environment because of rapid advances in technology, accelerated globalization, and greater competitive intensity which have increased the general level of uncertainty they face. They also need to have knowledge of factors from the external environment, such as availability of human resources, financing, and the potential retaliation by competitors. A study by Beal (2000) provided a deeper understanding of the linkages between environmental scanning, environmental conditions, competitive strategy and firm performance.

Thompson (2004) studied the facets of the entrepreneur seeking to identify entrepreneurial potential. He considered the combination of talent, temperament and technique. Talent and temperament, he suggests, are innate qualities that can be revealed and nurtured, but not taught, as techniques can be. "Techniques can definitely help

improve our talents; but techniques cannot simply create passion and drive” (p. 3).

Environmental scanning is a technique – but to use it to recognize and exploit a market opportunity takes passion and drive.

Our study found Environmental Scanning ranked in the middle. Specifically, it ranked eighth of 17, with a score of 3.846 out of 5 (Table 5). It ranked a little higher on the Most Useful scale (Table 6) at sixth, with a count of 12 of the 43 clients.

Advisory Board and Networking – balance independence with seeking assistance

The individual entrepreneur is the key ingredient in determining the ultimate success or failure of the use of advisory boards and the network of contacts and expertise it represents. The entrepreneur must be able to provide leadership and direction, exhibit a willingness to be open about problems faced, earnestly seek advice and listen to the input provided. Advisory boards work best as think tanks that allow wise and experienced people to process serious business challenges. When the entrepreneur becomes too absorbed and too narrowly focused, an advisory board is more likely to see the larger picture and provide different perspectives which can be very valuable (Morkel and Posner, 2002). Entrepreneurial networks provide one of the best environments both for individual entrepreneur learning and for organization learning opportunities (Deakins and Freel, 1998).

The clients surveyed in our study ranked the use of an Advisory Board and Networking last (17 of 17) among the entrepreneurial skills suggested. They gave it a score of 2.949 out of 5. Not one person rated this skill among the five most useful (Table 6). Implications of this will be discussed in the discussion section, below.

8 Results: Personal Maturity Skills

Self-Awareness – ability to reflect and be introspective

For the purposes of this study we adopt Lessem's (1983) definition of self-awareness. It is the ability to become introspective and reflect on the actions one has taken and learn from them. While entrepreneurs may experience initial success without self-awareness, in the long run it is imperative to the growth of the enterprise. This is because it is not enough for an entrepreneur to develop a new and innovative business concept. Lessem states that they must be able to develop plans and put them into action. They must then observe the results, reflect upon them and decide whether his creation or even the entrepreneur himself needs to change in order to be successful.

As Ciampa (2005) points out, the ability to develop and sharpen ones self-awareness is especially important to CEO's (and owner managers) because typically they receive little performance feedback once they become "the boss". In addition, the ability to adapt ones behavior through introspective evaluation also assists in developing coalitions and winning support for ideas which can be critical to entrepreneurial success.

The importance of introspective reflection is reinforced by Johansson (2004) in his article describing the importance of storytelling as part of the entrepreneurial experience. He points out that the stories entrepreneurs tell illustrate "how opportunities are recognized and realized through a process of thinking, reflection, exchange and interaction" (p. 279). As a by-product of telling the story to others the entrepreneur is in a dialog with self as well as the audience and it is this dialog which allows 'windows of opportunity' to be recognized and exploited.

Our study found Self-Awareness ranked fifteenth among the 17 skills with a score of 3.308 out of 5 (Table 5). It also ranked fifteenth (last) of the 15 skills that at least one person rated among the five Most Useful.

Accountability – ability to take responsibility for resolving a problem

Since the entrepreneur will often make use of resources provided by others, entrepreneurial activity must take place within a framework of accountability (Spira, 2001). In this context accountability is described as systems which allow management freedom of action while at the same time encouraging them to take responsibility for decisions and actions so that the necessary standards are maintained and remedial action, when necessary, is taken in a timely fashion.

In an effort to mitigate the negative connotations associated with the term accountability, Connors and Smith (2004) have defined it as “a personal choice to rise above your circumstances and demonstrate the ownership necessary to achieve desired results“(p. 10). Both of these definitions (Spira as well as Connors and Smith) illustrate that a manager/entrepreneur must be accountable (i.e. be willing to accept responsibility).

While describing the steps necessary to create a culture of accountability within an organization, Connors and Smith stress that as a first step the manager/entrepreneur must know what specific results are necessary for success. At first glance such advice may seem obvious. However, as Rogoff, Lee and Suh (2004) point out, various psychological influences seem to affect the identification of the factors necessary for success. Regardless, the successful entrepreneur must overcome such obstacles as self serving attribution bias (the tendency to see success as the result of one’s own efforts

while viewing failure as the fault of others). He must then specify which results are necessary for success and hold himself and others accountable for their accomplishment.

In our survey Accountability ranked fourth on the Mean Skill Ranking with a score of 4.237 out of 5. It ranked seventh on the Most Useful (Table 6) list with a count of 12 out of 43. Accountability ranked number one, with a count of 43, on the Personal Skill Evaluation (High Ability) (Table 8), and, it ranked last, with a count of one, on the Personal Skill Evaluation (Low Ability) (Table 9).

Emotional Coping – emotional ability to cope with a problem

As mentioned earlier, Lichtenstein and Lyons (2001) identify emotional coping as a skill which (if not innate) can be developed by the successful entrepreneur. They further maintain that mastery of this skill (as well as the other named skills) is required for successful entrepreneurship (Lyons, 2003). They define emotional coping as the ability to cope with problems as they arise and cite difficulties which can develop as the result of an inability to cope (e.g. inability to admit weakness or inability to accept advice).

While not specifically dealing with entrepreneurs Raskind, Goldberg, Higgins, and Herman (2003) have developed a useful definition of emotional coping along with strategies to promote successful coping. They describe emotional coping as the ability to deal successfully with the stress caused by work, home and social life. Successful individuals are those who have developed strategies for reducing this stress. Such strategies include asking others for help with difficult or unmanageable tasks on the job, changing work activities occasionally so that stress does not build to intolerable levels,

learning to express feelings more freely, self assertion, forming and using peer support groups, avoiding negative or overly critical persons and finally, seeking medical help if necessary.

Using the description provided by Lichtenstein and Lyons, respondents to our survey ranked Emotional Coping as one of the five least important of the 17 skills. However, we believe that the survey should be repeated using a more detailed and proactive definition of the term. In future studies it might prove instructive to identify some of the specific coping strategies identified above and ask entrepreneurs if they regularly use such coping skills and how important they believe them to be.

Creativity – ability to produce a creative solution to a problem

Our review of the literature relative to entrepreneurial activity suggests basic agreement as to the definition of creativity. Most authors appear to agree with Baron and Shane (2005) when they describe creativity as the generation of ideas that are both new and potentially useful. In addition many authors, like Timmons (1989), maintain that entrepreneurs are more creative than the general population. Some argue that entrepreneurs are not so much creative as they are opportunistic—that they don't generate new ideas so much as they identify and exploit opportunities (Kirby, 2004). Even if one accepts this argument, if the opportunity is one that has never been identified before and is potentially useful then it would seem to fit Baron and Shane's general definition. Other authors focus on problem solving. They maintain that entrepreneurs tend to think unconventionally. They contend that entrepreneurs challenge existing assumptions and possess adaptable problem solving styles (Kirton, 1976; Solomon and Winslow, 1988).

Simply put, entrepreneurs solve problems in new and innovative ways. Again, this is not inconsistent with Baron and Shane's definition of creativity. Entrepreneurs generate ideas (solutions to problems) that are both new and potentially useful.

Research by Utsch and Rauch (2000) suggests that there is a positive correlation between innovativeness and future performance of the entrepreneur's venture. As a result it would seem that creativity/innovativeness should be an important factor to any entrepreneur.

The respondents to our study identified Creativity as seventh overall in the Means Skills Ranking, at 4.000 of 5, just behind Business Concept and just ahead of Environmental Scanning. They ranked Creativity eighth with a count of 9 as being Most Useful.

9 Discussion

We have shown that the suggested seventeen skills in the four categories are supported by the literature as skills that would be useful to entrepreneurs as they start and grow their businesses. In addition, our exploratory study did raise several interesting questions about the seventeen skills both in terms of perceived overall importance and in perceived usefulness. We recognize, of course, that the subjects of this exploratory study may not be the best persons to judge which skills are the most relevant. This critical issue will be examined more fully in future research activities.

First, of course, we must remember that our sample used in the exploratory study included only persons within their first two years of having sought technical assistance from a local SBDC office. There is bias built into this sample. Other studies will be required to achieve additional perspectives. The participants in our exploratory study did,

however, agree on the top nine skills; first, by rating them all above 3.750 out of 5 on the Mean Skills Ranking, and second, by rating them the top nine by count on the Skills Rated Most Useful (Operational, Management, Financial, Accountability, Marketing/Sales, Business Concept, Creativity, Environmental Scanning, and Supplies/Raw Materials, per Tables 5 and 6). The orders were slightly different. A first reaction to this result might be that these are to be expected from the sample used in the exploratory study because these are all skills that are regularly talked about in the early stages of new venture development, which was the primary reason these persons came to the SBDC. Additional studies involving a larger geographic area, more experienced entrepreneurs, as well as regional resource providers might prove valuable. These might provide useful additional insights as to whether these initial results are biased as suggested, or if they are representative of a broader view.

Second, in Table 8 we reported the rankings of the participants on their own abilities relative to the seventeen skills. It is especially interesting to note that these rankings and orderings are quite different than the results in Tables 5 and 6. To begin, three of the top nine are different: Emotional Coping, Self-Awareness, and Higher-Order appear here as High Ability skills, displacing Financial, Business Concept and Environmental Scanning in the top nine. This seems to indicate two things. First, these entrepreneurs have latent skills that they are undervaluing. Second, there is a specific need to bolster their skills in Financial, Business Concept, and Environmental Scanning, through training and related processes. This is further confirmed by the results reported in Table 9, those skills ranked at Low Ability by the participants: Environmental Scanning

ranked third, Financial ranked fourth and Management ranked eighth most often ranked as Low Ability Skills by our exploratory study participants.

Finally, it appears that an additional awareness program related to Emotional Coping, Self-Awareness, and Higher-Order is in order along with the other five in the lower eight ranked skills: Administrative, Equipment/Plant/Technology, Legal, Office or Production Space, and Advisory Board and Networking. The first three (Emotional Coping, Self-Awareness, and Higher-Order) were missing from the Table 5 and Table 6 listing. However, they ranked high on Table 8 as High Ability. This is encouraging, and does set an awareness agenda for future consideration. For both Office or Production Space and Equipment/Plant/Technology, these were important issues in earlier business incubator studies and are still important in industries where production space is an issue. For many knowledge and service based businesses, however, entrepreneurs work out of their homes and/or vehicles. The required technology is often mobile, and production space is seldom an issue. Administrative and Advisory Board and Networking appear to have two problems (at least). First, the descriptors are a bit confusing (“advisory board” appears in both). Additionally, the phrase “Advisory Board and Networking” is not yet well developed or understood by many people. This may constitute an awareness and educational training challenge. Also, in some people’s minds, the terms Administrative and Management may be indistinguishable, based on our experience.

10 Implications for Future Research and Future Practice

The results of this research seem to suggest that all seventeen skills have relevance to entrepreneurs in starting and growing their new ventures. The top nine

(Operational, Management, Financial, Accountability, Marketing/Sales, Business Concept, Creativity, Environmental Scanning, and Supplies/Raw Materials) received support from our exploratory study on two dimensions, perceived overall importance and perceived individual usefulness. These findings are limited based on the sample used in the exploratory study, of course. Additional confirmation through future research will help further delineate the relative importance of the various skills suggested, using other stakeholder groups such as academic experts, SBDC Directors, and more experienced entrepreneurs, to name just a few possibilities.

Even this exploratory study has confirmed that entrepreneurs, even in an early stage of development, do demonstrate a wide range of priorities and of perceived skill set development. This should suggest for managerial implications that these entrepreneurs should seek to identify their weaknesses and seek out training opportunities for themselves to strengthen these areas, hire someone to add these skills, or to out-source some activities to achieve maximum benefit to the organization.

These results also suggest that practitioners and those providing technical assistance and training to entrepreneurs may want to look more closely at several of the skills that fell outside the top nine, especially Emotional Coping, Self-Awareness, and Higher-Order, along with the use of Advisory Boards and Networking. These four sets of skills may very well need better definitions and descriptions along with additional emphasis in early stage training programs.

This exploratory study did not consider the international aspects of these issues. Are there any relevant cultural implications on the desired skill set? These international aspects are only just beginning to be examined in the literature (Diochon, Menzies and

Gasse, 2005; Kumar and Liu, 2005; Yu and Stough, 2006; and Yusuf, A., 2005). These important issues should be addressed as this research program moves forward.

Assessment of these various skill sets in the individual entrepreneur appears to offer a promising arena for future research. In addition, it may represent an opportunity for skill development training by educators and service providers for the ultimate benefit of the practitioner and the economy in general. Generic entrepreneurial training programs are unlikely to meet all the needs of entrepreneurs at the various stages of their development. This is an on-going process that should be based on periodic assessment of individual skills coupled with training for those individuals based on the specific skills needs identified.

References

- Albright, K. S. (2004). Environmental Scanning: Radar for Success. *Information Management Journal*, Vol. 38, No. 3, pp. 38-45.
- Barile, A. (2004). A Strategic Move. *Best's Review*, Vol. 105, No. 4, p.111.
- Baron, R. A., & Shane, S. A. (2005). Entrepreneurship: A Process Perspective. Thomson-Southwestern: Mason, Ohio.
- Beal, R. M. (2000). Competing Effectively: Environmental Scanning, Competitive Strategy, and Organizational Performance in Small Manufacturing Firms. *Journal of Small Business Management*, Vol. 38, No. 1, pp. 27-47.
- Buhler, P. M. (2004). Managing in the New Millennium: The Top Ten Managerial Mistakes. *SuperVision*, Vol. 65, No. 8, pp.15-17.
- Ciampa, D. (2005). Almost Ready: How Leaders Move Up. *Harvard Business Review*, Vol. 83, no. 1, pp. 46-53.
- Chaney, L. H., and Green, C. G. (2004). Key Business Skills. *SuperVision*, Vol. 65, No. 9, pp. 17-19.
- Chau, P. Y. K. (1995). Factors Used in the Selection of Packaged Software in Small Businesses: Views of Owners and Mangers. *Information & Management*, Vol. 29, pp.71-78.
- Connors, R., and Smith, T. (2004). Create a Culture of Accountability. *Executive Excellence*, Vol. 21, no. 6 p. 10.
- Deakins, D., and Freel, M. (1998). Entrepreneurial Learning and the Growth Process in SMEs. *The Learning Organization: An International Journal*, Vol. 5, No. 3, pp. 144-155.

- Dietrich, T. (1995). Small Business Learn About: Getting the Edge by Using Online Services. *Link-Up*, Vol. 12, No. 1, pp. 12-13.
- Diochon, M., Menzies, T. V., and Gasse, Y. (2005). Exploring the relationship between start-up activities and new venture emergence: a longitudinal study of Canadian nascent entrepreneurs. *International Journal of Management and Enterprise Development*, Vol. 2, No.3/4, pp. 408-426.
- Garcia-Morales, V. J., Moreno, A. R., and Llorens-Montes, F. J. (2006). Strategic capabilities and their effects on performance: entrepreneurial, learning, innovator and problematic SMEs. : *International Journal of Management and Enterprise Development*, Vol. 3, No.3, pp. 191–211.
- Hawkins, C. (2001). Beyond the Sole Proprietor. *Home Office Computing*, Vol. 19, No. 3, pp. 68-69.
- Henricks, M. (1993). Software That Ups Your Cash Flow. *Black Enterprise*, Vol. 24, No. 4, pp. 36-40.
- Hisrich, R. D. (1992). The Need for Marketing in Entrepreneurship. *Journal of Business and Industrial Marketing*, Vol. 7, No. 3, pp. 53-58.
- Johansson, A. W. (2004). Narrating the Entrepreneur. *International Small Business Journal*, Vol. 22, No. 3, pp. 273-293.
- Kirby, D.A. (2004). Entrepreneurship Education: Can Business Schools Meet the Challenge? *Education & Training*, Vol. 46, p. 510-519.
- Kirton, M. (1976). Adaptors and Innovators: a Description and Measure. *Journal of Applied Psychology*, October, pp. 622-629.

- Kumar, S., and Liu, D. (2005). Impact of globalization on entrepreneurial enterprises in the world markets. *International Journal of Management and Enterprise Development*, Vol. 2, No.1, pp. 46-64.
- Kundu, S. C., and Rani, S. (2004). Entrepreneurial orientation of aspiring managers: a study. *International Journal of Management and Enterprise Development*, Vol. 1, No.3, pp. 233-250.
- Langnau, L. (2004). From Pirating to Privacy. *Material Handling Management*, Vol. 59, No. 10, pp. 58-59.
- Lichtenstein, G. A., and Lyons, T.S. (1996). Incubating New Enterprises: A Guide to Successful Practice. Washington, DC: The Aspen Institute.
- Lichtenstein, G. A., and Lyons, T. S. (2001). The Entrepreneurial Development System: Transforming Business Talent and Community Economics. *Economic Development Quarterly*, Vol. 15, No. 1, February, pp. 3-20.
- Lepofsky, R. (2004). Preventing Identity Theft. *Risk Management*, Vol. 51, No. 10, pp. 34-40.
- Lessem, R. (1983). The Art of Entrepreneurship. *Journal of General Management*, Vol. 8, No. 3, pp. 39-49.
- Lyons, T. S. (2002). The Entrepreneurial League System: Transforming Your Community's Economy Through Enterprise Development. Washington, DC: The Appalachian Regional Commission.
- Lyons, T. S. (2003). Policies for Creating an Entrepreneurial Region. In Main Streets of Tomorrow: Growing and Financing Rural Entrepreneurs. Center for the Study of Rural America: Federal Reserve Bank of Kansas City, pp. 97-105.

- Lyons, T. S., and Lyons, J. S. (2002). Assessing Entrepreneurship Skills: The Key to Effective Enterprise Development Planning? 44th Annual Conference of the Association of Collegiate Schools of Planning. Baltimore, Maryland; November 21-24.
- Manolova, T. S., Brush, C.G., Edelman, L. F., and Green, P. G. (2002). Internationalization of Small Firms: Personal Factors Revisited. *International Small Business Journal*, Vol. 20, No. 1, pp. 9-31.
- McGee, J. E., and Sawyer, O. O. (2003). Uncertainty and Information Search Activities: A Study of Owner-Managers of Small High-Technology Manufacturing Firms. *Journal of Small Business Management*, Vol. 41, No. 4, pp. 385-401.
- Morkel, A., and Posner, B. (2002). Investigating the Effectiveness of Corporate Advisory Boards. *Corporate Governance*, Vol. 2, No. 3, pp. 4-12.
- Raskind, M.H., Goldberg, R.J., Higgens, E.L. and Herman, K.L. (2003). *Life Success for Children With Learning Disabilities: A Parent Guide*. CA: Frostig Center.
- Rogoff, E. G., Lee, M, and Suh, D. (2004). “Who done it?” Attributions by Entrepreneurs and Experts of the Factors That Cause and Impede Small Business Success. *Journal of Small Business Management*, Vol. 42, No. 4, pp. 364-76.
- Schupbach, A. (1997). Survival for the Little Guy: Utilizing Database Marketing to Solidify Your Business Niche. *Direct Marketing*, Vol. 60, No. 8, pp. 28-29.
- Smeltzer, L.R. (2001). The Five Immutable Laws of Universal Supply Chain Connectivity. Arizona State University Executive White Paper.
<http://www.motherlode.biz/pdfs/ASU-Larry-0201.pdf> (Extracted from the Internet, March 2005).

- Smith, N. R. (1967). The Entrepreneur and His Firm: The Relationship Between Type of Man and Type of Company. Bureau of Business and Economic Research, Michigan State University.
- Smith, N.R., and Miner, J.B., (1983). Type of Entrepreneur, Type of Firm, and Managerial Motivation: Implications for Organizational Live Cycle Theory. *Strategic Management Journal*, Vol. 4, No. 4, pp.325-340.
- Smith, W. L. (2005). Choosing an entrepreneurial development system: the concept and the challenges. *International Journal of Management and Enterprise Development*, Vol. 2, No.3/4, pp. 349-359.
- Solomon, GT. and Winslow, E. (1988). Towards a Descriptive Profile of the Entrepreneur. *Journal of Creative Behaviour*, Vol. L, No. 22, pp. 162-171.
- Spira, L.F. (2001). Enterprise and Accountability: Striking a Balance. *Management Decision*, Vol. 39, no. 9 p. 739-784
- Thompson, J.L. (2004). The Facets of the Entrepreneur: Identifying Entrepreneurial Potential. *Management Decision*. Vol. 42, No. 2, pp. 243-258.
- Timmons, J.A. (1989). The Entrepreneurial Mind. Brick House Publishing, Andover, MA.
- Utsch, A. and Rauch, A. (2000). Innovativeness and Initiative as Mediators Between Achievement Orientation and Venture Performance. *European Journal of Work and Organisational Psychology*. Vol. 9 No. 1, pp. 45-62.
- Vartanian, T. P., and Fajfar, M. (2004). Sarbanes-Oxley Act Underscores Importance of Information Security. *Community Banker*, Vol. 13, No. 6, pp. 50-51.

- Walwyn, D. R., Taylor, D., and Brickhill, G. (2002). How to Manage Risk Better.
Research Technology Management, Vol. 45, No. 5, pp. 37-42.
- Washer, L., and Fredman, C. (1992). Marketing 101: Finding Your First Customer.
Working Woman, Vol. 17, No. 10, pp. 53-54+.
- Williams, C. (2003). Management. Second Edition, Thomson-Southwestern: Mason,
Ohio.
- Yu, J., and Stough, R.R. (2006). The determinants of entrepreneurship development in
China. *International Journal of Management and Enterprise Development*, Vol.
3, No.1/2, pp. 30-52.
- Yusuf, A. (2005). Workforce diversity in small enterprises: implications on firm
performance. *International Journal of Management and Enterprise Development*,
Vol. 2, No.2, pp. 240-256.

Appendix
Survey Form

Exhibit A1: Survey Page 1

A		
Technical Skills:		
M	L	Operational – the skills necessary to produce the product or service
M	L	Supplies/Raw Materials – the skills to obtain them, as necessary
M	L	Office or Production Space – the skills to match needs and availability
M	L	Equipment/Plant/Technology – the skills to identify and obtain
Managerial Skills:		
M	L	Management – planning, organizing, supervising, directing, networking
M	L	Marketing/Sales – identifying customers, distribution channels, supply chain
M	L	Financial – managing financial resources, accounting, budgeting
M	L	Legal – organization form, risk management, privacy and security
M	L	Administrative – people relations, advisory board relations
M	L	Higher-order – learning, problem-solving
Entrepreneurial Skills:		
M	L	Business Concept – business plan, presentation skills
M	L	Environmental Scanning - recognize market gap, exploit market opportunity
M	L	Advisory Board and Networking – balance independence with seeking assistance
Personal Maturity Skills:		
M	L	Self-Awareness – ability to reflect and be introspective
M	L	Accountability – ability to take responsibility for resolving a problem
M	L	Emotional Coping – emotional ability to cope with a problem
M	L	Creativity – ability to produce a creative solution to a problem

Exhibit A2: Survey Page 2

B

Technical Skills:

- 1 2 3 4 5 Operational – the skills necessary to produce the product or service
- 1 2 3 4 5 Supplies/Raw Materials – the skills to obtain them, as necessary
- 1 2 3 4 5 Office or Production Space – the skills to match needs and availability
- 1 2 3 4 5 Equipment/Plant/Technology – the skills to identify and obtain
-

Managerial Skills:

- 1 2 3 4 5 Management – planning, organizing, supervising, directing, networking
- 1 2 3 4 5 Marketing/Sales – identifying customers, distribution channels, supply chain
- 1 2 3 4 5 Financial – managing financial resources, accounting, budgeting
- 1 2 3 4 5 Legal – organization form, risk management, privacy and security
- 1 2 3 4 5 Administrative – people relations, advisory board relations
- 1 2 3 4 5 Higher-order – learning, problem-solving
-

Entrepreneurial Skills:

- 1 2 3 4 5 Business Concept – business plan, presentation skills
- 1 2 3 4 5 Environmental Scanning - recognize market gap, exploit market opportunity
- 1 2 3 4 5 Advisory Board and Networking – balance independence with seeking assistance
-

Personal Maturity Skills:

- 1 2 3 4 5 Self-Awareness – ability to reflect and be introspective
- 1 2 3 4 5 Accountability – ability to take responsibility for resolving a problem
- 1 2 3 4 5 Emotional Coping – emotional ability to cope with a problem
- 1 2 3 4 5 Creativity – ability to produce a creative solution to a problem
-

Exhibit A3: Survey Page 3

C

Technical Skills:

- H M L Operational – the skills necessary to produce the product or service
 - H M L Supplies/Raw Materials – the skills to obtain them, as necessary
 - H M L Office or Production Space – the skills to match needs and availability
 - H M L Equipment/Plant/Technology – the skills to identify and obtain
-

Managerial Skills:

- H M L Management – planning, organizing, supervising, directing, networking
 - H M L Marketing/Sales – identifying customers, distribution channels, supply chain
 - H M L Financial – managing financial resources, accounting, budgeting
 - H M L Legal – organization form, risk management, privacy and security
 - H M L Administrative – people relations, advisory board relations
 - H M L Higher-order – learning, problem-solving
-

Entrepreneurial Skills:

- H M L Business Concept – business plan, presentation skills
 - H M L Environmental Scanning - recognize market gap, exploit market opportunity
 - H M L Advisory Board and Networking – balance independence with seeking assistance
-

Personal Maturity Skills:

- H M L Self-Awareness – ability to reflect and be introspective
 - H M L Accountability – ability to take responsibility for resolving a problem
 - H M L Emotional Coping – emotional ability to cope with a problem
 - H M L Creativity – ability to produce a creative solution to a problem
-

Exhibit A4: Survey Page 4

This information applies to the person completing the attached form:

Gender: Female___ Male___

Age Category:

Under 25___ 25-34___ 35-44___ 45-54___ 55-64___ 65 and older___

I have operated my own business: No___ Yes___; if so, how many years?___

I am preparing myself to operate my own business: No___ Yes___

My location: Rural___ **Population:** 0-500___ 501-1,000___ 1,001-2,000___
2,001-5000___ 5,001-15,000___ over 15,001___

Proximity to Emporia: In town___; near town___; # of miles away___

Primary business interest: Agri___; Retail___; Distribution___; Other Service___;
Manufacturing___; Other___ - what?_____

.....

With respect to attending workshops or meetings about operating/starting my own business:

	Agree		Disagree		
I prefer workshops/meetings to be in and around Emporia	5	4	3	2	1
I can easily attend workshops/meetings in Topeka	5	4	3	2	1
I can easily attend workshops/meetings in Manhattan	5	4	3	2	1
I can easily attend workshops/meetings in Lawrence	5	4	3	2	1
I can easily attend workshops/meetings in Kansas City	5	4	3	2	1
I can easily attend workshops/meetings in Wichita	5	4	3	2	1
I can easily attend workshops/meetings in Pittsburg	5	4	3	2	1
