AN EVALUATION OF ENTREPRENEURIAL TRAINING BY THE OKLAHOMA FOOD AND AGRICULTURAL PRODUCTS RESEARCH AND TECHNOLOGY CENTER

By

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As a little girl I had always dreamed about what life would hold in-store for me beyond my farmyard gate in Powhattan, Kansas. Never would I have dreamed the path that life has taken me. There have been several people along this path that have made my journey much easier than if I would have had to make it by myself.

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CHAPTER I

INTRODUCTION

Background and Setting

Historically, Oklahoma has been a major producer of cattle, wheat, cotton, peanuts, and other raw agricultural commodities. For the most part, these products have been exported beyond the state border to be processed into finished goods such as bread or clothing that the consumer could purchase at retail. In the mid-1980's, a great deal of investigation was conducted to determine how agriculture might position itself in moving Oklahoma forward into the 21st century. In the late 1980's, state leaders realized that to enhance Oklahoma agriculture, raw commodities needed to be converted to finished consumer goods within state lines. The addition of value to commodities within state boundaries allows producers to move Oklahoma agriculture forward boosting the state's economy (Hunt, 1998).

State agricultural leaders, policy makers, and faculty from Oklahoma State University developed the idea of a center that would create value-added products from raw commodities produced in Oklahoma. In 1996, the Oklahoma Food and Agricultural Products Research and Technology Center, which is more commonly known as the Oklahoma Food and Agricultural Products Center or FAPC, was dedicated with

the following mission: "To generate and disseminate, through educational programs and technical and business assistance, information that will stimulate and support value-added food and agricultural products processing in Oklahoma," (Hunt, 1998). Today, the institute serves as a means to reduce the gap between academia and the private sector, creating a process in which business people from across the state can gain valuable business and technical experience from FAPC staff. The Oklahoma Food and Agricultural Products Center currently employees 19 specialists whose specialty areas range from food microbiology to agribusiness development. In addition, the FAPC works closely with 24 members of the OSU Division of Agricultural Science and Natural Resources value-added faculty and staff (Hunt, 1998).

The initial goal of the FAPC was to determine the needs of the audience whom the faculty and staff would be serving. In order to correctly address these needs, the audience first needed to be clearly defined. The client base included processors, entrepreneurs, commodity groups, communities, equipment manufacturers, food service companies, grant agencies and growers/producers (Strategic, 1999). The FAPC's commitment lies in helping members of the agricultural industry position themselves for advancement in the agricultural industry through the following activities: business and marketing assistance, microbiology testing services and consulting, sensory testing, access to state-of-the-art pilot plant facilities, and continuing education for industry (Hunt, 1998).

As previously mentioned, one of the primary objectives of the Oklahoma Food and Products Center was the continuing education of industry members. It is through continuing education activities that FAPC is able to work more closely with the private

sector, therefore creating opportunities for the state's food and agricultural products processing industry to expand and grow. The staff attempts to develop and deliver programs aimed at meeting the needs and wants of the private sector. The obstacle of providing convenient and meaningful education has been met by the FAPC's ability to not only host educational programs in-house, but also to hold programs at various sites around the state. Another unique aspect of the FAPC is the ability of program instructors to allow participants to apply what has been learned in seminars at the FAPC's pilot processing facility (Hunt,1998).

A long-term goal (3-5 years) of the FAPC is to establish a culture that embraces the philosophy of continuous improvement in all areas of conduct, performance, and achievement throughout the FAPC. A strategic element in this particular goal is the continuous assessment of FAPC personnel, programs, and facilities. Through this continuous assessment, the FAPC and its staff can be assured of the quality of programs offered by the Oklahoma Food and Agricultural Products Center and their value to the Oklahoma economy (Anonymous, 1999).

A part of the long-term goal of continuous improvement of FAPC programs is the establishment of entrepreneurial training. Training, in the most basic sense, is education put to practical use. The main goal in training is to help individuals perform their jobs better. In order for an individual to accomplish the goal of performing better they must first acquire the skills for effective work, knowledge for intelligent action, and the attitude that brings willingness for cooperation with peers and management (Denova, 1971).

The method chosen by the FAPC to educate Oklahoma residents has been through short-term training workshops. Shute and Moore (1982) have shown a workshop setting allows individuals to become active participants in the topic, working with the facilitator to design a program that meets the needs of the audience. Typically, the workshops have been one to two days in length. In particular, the small business-training workshops held by the FAPC have lasted on average four hours. Featured at each workshops are a variety of speakers ranging from university faculty to industry personnel from around the state. The focus of the small business workshops have not been on developing the business for the individuals, but providing individuals with the correct tools for developing their own business.

The Oklahoma Food and Agricultural Products Center early on made the realization that in order to provide effective training programs to individuals some type of evaluation needed to occur. Ayers (1989) noted evaluation could help change the format of the workshop by helping presenters decide whether a certain portion of the workshop needed to be changed or eliminated from the program therefore, allowing the workshop to reflect the needs of the audience and not the program developer's. McKenney and Terry, Jr. (1995) conducted research aimed at the goal of measuring the effectiveness of workshops in changing audience perception, attitude, and knowledge of xeriscaping as a result of participating in a workshop activity. The evaluation of the effectiveness of the workshop was determined using pre- and post-workshop surveys. McKenney and Terry, Jr. (1995) reported the audiences' perception of xeriscaping appeared to improve in every area. In addition, McKenney and Terry, Jr. (1995) reported for almost every concept the

participants' knowledge increased. Prior to this research the FAPC had not conducted similar research on their short-term workshops.

Statement of the Problem

The FAPC has been delivering educational programs for the last two years with little feedback from the participants as to the effectiveness of these workshops in increasing individuals' knowledge and/or attitude regarding workshop topics.

Statement of Purpose

The purpose of this study was to assess the impact of a series of short-term small business workshops delivered at the FAPC by investigating the knowledge and attitudes of workshop participants.

Objectives

The following objectives were developed to accomplish the stated purpose:

1. Identify selected personal and professional characteristics of workshop participants.
2. Assess change in knowledge as a result of participation in the workshop.
3. Assess change in attitude as a result of participation in the workshop.
4. Determine what relationships, if any exist between the characteristics of workshop participants and their change in knowledge and/or attitude related to topics presented in the workshop.

Definition of Terms

For the purposes of this study, the following terms were to be defined as follows:

1. Short-term training session: Intense training session that lasts four hours in length. The training session comes about as a result of individual(s) requests or problems. Other terms used to describe these sessions include class, course, orientation, program, seminar, school, or workshop.

2. Entrepreneur: Used interchangeably with small business owner in this study. A majority of the time small business owners are risk takers, who are looking to consolidate their resources but still maintain some control over these resources.

3. Adult: Means everyone past high school age. Therefore, people over the age of 18 are considered an adult in this study.

Assumptions

The participants that attended the training sessions were taking an active part in the learning process. An additional assumption of the study was that participants of the workshops answered the questions honestly and to the best of their ability.

CHAPTER II

REVIEW OF LITERATURE

Introduction

The review of related literature was developed to provide the foundation upon which to build the theoretical base for this study. A basic understanding of the use of short-term training workshops as an educational tool is fundamental in determining the effectiveness of small business workshops. It was also necessary to explore the overall components of evaluation, in particular, the evaluation of training programs. In addition, literature related to the education of entrepreneurs was gathered in order to reveal recent trends of educating small business owners. Literature reviewed included dissertations, theses, and papers from conference presentations, articles from professional magazines and journals, articles from popular magazines, books, and other sources.

Workshops as an Educational Tool

Principles of Teaching and Learning with Adults

"Learning is the change in ability, skill, information or motivation which takes place in the learner; it is what is left after a specific educational event or experience is concluded," (Shute & Moore, 1982, p.17). According to Bickman and Peterson (1990),

workshops are presented so that some type of acquisition of knowledge or learning will occur, resulting in a change in the participant. Program developers hope this change occurs as the result of some type of high-quality, high impact intervention such as a training workshop (Bickman & Peterson, 1990). Furthermore, Shute and Moore (1982) suggested in the case of adults, learning should not be given value for the simple sake of learning some new, enlightening information, but because the new information will help to solve a problem or deal with some item of concern in their everyday life. An example provided by Shute and Moore (1982) was the fact that a cattle rancher may be concerned with raising higher quality beef at a lower production cost. Alternatively, a wheat farmer may be concerned with ridding his crop of disease so as to increase yields and in turn increase farm profits.

The learning activities of adults should address the needs and interests of the audience the workshop is attempting to serve. Program developers need to continually remember each adult learner is concerned with something-different (Shute & Moore, 1982). Westmeyer (1988) discovered school teachers many times make the false assumption that children are just little adults, following along the same lines of thinking program educators can make the mistake that adults are just bigger children. He also pointed out that program developers must be aware that strategies used to educate children may not necessarily prove effective with adults. For example Westmeyer (1988) recommended that when teaching children you should speak to them in simple, easy to understand terms so as to make a complex idea easily understood by the child. If a presenter were to try this same teaching method with adults, he may be accused of talking down to the learners (Westmeyer, 1988).

There are several instances noted by Shute and Moore (1982) where an educator has taught and the learner did not learn. In addition, adult learners demand respect from the educator. That is, the educator needs to understand where the learner is coming from and attempt to reduce barriers to learning that may be present (Shute & Moore, 1982). Cooper and Heenan (1980) noted many program developers forget that a vast majority of the time learners bring many of their own resources to the learning site. Likewise, in the past educators made the assumption that students came to courses with their minds completely empty. Magill (1990) further backed this point up by quoting the work of Locke. According to Magill (1990) Locke said that the mind was initially a blank tablet (a *tabula rasa*). Locke put forth the idea that a person obtained their ideas from experience (Magill, 1990). Cooper and Heenan (1980) were not aware of a time where workshop participants had no previous knowledge of some type prior to the workshop. Therefore, as noted by Shute and Moore (1982), program developers must be very attuned to what the participant may or may not know about the subject material being discussed. If the information presented in the workshop is too intense the learner will more than likely take little, if any, useful information from the program (Shute & Moore, 1982). Also, if the program developer anticipates that the learner may experience anxiety toward a particular subject matter then the program developer should incorporate tools to help alleviate tension prior to the workshop (Van Kavelaar, 1998).

Shute and Moore (1980) stated adult learners likewise have the primary responsibility for their own learning: An educator will have more success if what is to be taught truly addresses the needs of the learner. Granted, it is the ultimate decision of the program developer to determine the type and manner in which the material will be taught,

but learners also have the responsibility to make their needs known to the educator (Cooper & Heenan, 1980). In addition, Shute and Moore (1982) asserted that those events that the learner feels are relevant to their own situation will be the ones that he/she incorporates into his/her everyday life. Furthermore, the learner is a whole person whose emotional needs and feelings are a crucial part of the learning process. Shute and Moore (1982) suggested that the teacher also becomes a learner in this process. The teacher must realize that they may not have all the answers and that they too can learn from the participants' experiences (Shute & Moore, 1982). Participants who are aware of the interactive nature of the teacher are more likely to express their own ideas more freely as opposed to the educator dictating their knowledge to the audience (Cooper & Heenan, 1980).

Principles of Learning

Typically, when people learn something new, according to Shute and Moore (1982), they obtain a new ability they were previously unable to perform. The resulting action is they have changed. In most instances, this change is for the better. Change may be observed in a person's attitude, values, or a new sense of self-confidence. Learning is an "active" process that requires an individual to continually process information (Shute & Moore, 1982).

According to McCormick, Jr (1994), the most basic element of learning is the concept of motivation. Newcomb, McCracken, and Warmbrod (1993) defined motivation as, "that which gives direction and intensity to behavior," (p.30). Depending on the learning situation, different types of motivation may be observed. For instance, Dickinson

(1973) provided the example that a person needs to initially be motivated to attend an educational experience. Once the decision has been made to attend, the learner must have the motivation to learn something from the experience. The driving force behind this example is that a person may be motivated either internally or externally. Dickinson (1973) more specifically defined these occurrences as *intrinsic* or *extrinsic* motivation. Intrinsic motivation involved the satisfaction for the sake of an activity itself, whereas extrinsic motivation might be achieved when some value is associated with an activity (Kidd, 1959). Therefore, a program developer must first determine motivation in the workshop audience. A suggestion offered by Cranton (1989) for increased motivation of the audience is to employ instruction that is closely related to the audience.

Shute and Moore (1982) reported the closer a learning task was to an individual's own interest, the more likely and willing the individual would be able to see the value, or meaning, of the task. Thus increasing their chance of gaining new information from completion of the task. Dickinson (1973) noted that there were two ways to establish *meaningfulness:* 1) by presenting material that is already known or, 2) by organizing new material in a form or pattern that is familiar to the learner. Material that the learner perceives as meaningful would be more easily learned and remembered for a longer period of time (Dickinson, 1973).

Learning is an activity that requires practice (Shute & Moore, 1982). Necomb et al. (1993) mentioned that many times educators only associated practice with tasks that required psychomotor skills. They suggested the concept of practice was also applicable to cognitive and attitudinal skills. It has been said that it is easy to simply acquire knowledge. The true learning experience comes when an individual has the opportunity

to apply the newly acquired knowledge. McCormick, Jr. (1994) reported that the concept of practice was not new in relationship with the concept of learning. Educators have used the technique of practicing since the beginning of time. By using practice in a learning situation an instructor was applying the psychological laws and principles of learning. Specifically, the instructor was utilizing the Law of Exercise and the principle of learning. That is, the more often a task was performed, the more quickly and likely a task would be learned. Also, an individual was more apt to learn a new piece of information if they were active participants in the learning process (McCormick Jr, 1994).

Finally, in order for an individual to learn, the individual requires some type of feedback as to the nature of their performance of a specific learning task (Shute & Moore, 1982). How is a learner supposed to demonstrate a task just learned without the opportunity of someone observing them, demonstrating the task and providing feedback (Westmeyer, 1988)? Westmeyer further argued that if a learner is expected to have acquired certain pieces of knowledge the learner could not be certain he had learned the correct information unless someone was there to observe them and provide feedback. Tying close into the issue of assuring a skill has been acquired is the concept of reinforcement. It is only natural a skill is "learned" more quickly when there is positive reinforcement that is occurring (Westmeyer, 1988).

Workshop Learning

In the preparation of any adult education program there are several classical planning models set forth by both theorists and practitioners of education that come into effect (Sork, 1997). According to Sork (1997), over the years there has been a great amount of discussion about the role some of these models play, but the models that follow are still relevant in today's planning and implementation of adult education programs.

Honoring the Learner's Experience, Perspective, and Expectations: Shute and Moore (1982) stated that the average adult learner comes into a workshop learning situation with several pre-conceived ideas. They further suggested that each adult learner comes into a learning situation with varying degrees of individual experiences, responsibilities for solving problems, and conducting their work. The learner remembers how school was organized in the past and knows the majority of their knowledge did not come from this formal type of education (Shute & Moore, 1982). Many adult learners would agree a vast majority of their acquired knowledge was gained through experiencing life first-hand. Adult learners become confused when they view themselves as self-directing and independent people, yet for the majority of their life, deliverance of knowledge was not done in this manner (Shute & Moore, 1982). It is for this reason that early in the organization of the workshop participants must be reassured that they *do* have an influence over their own learning. Workshops are designed to break the rigidity seen in traditional school atmospheres. A workshop allows for a seminar to be scheduled for a specialized topic and to have a participatory approach to learning (Shute & Moore, 1982).

Recognizing the Importance of Diversity: Sork (1997) noted that it has only been within the last 15 years that program planners have had to show a greater amount of concern for the issue of diversity in their programs. Traditional forms of diversity in the past included race, gender, ethnicity, and social ranking; but other forms such as sexual orientation, religious orientation; abilities or disabilities have come to the forefront with respect to program planning (Sork, 1997).

Involving Stakeholders in Planning: As noted previously, adults should be involved directly in the planning of programs they plan to be a participant in. However, Sork (1997) noted few adult educators involved participants or other stakeholders extensively in the development of their programs. In recent case studies written by Cervero and Wilson (1996), they confirmed the lack of stakeholder participation in the planning of programs. In some instances there was the deliberate exclusion of stakeholders for the intent of giving a voice to those individuals in lower status positions within the society (Cervero & Wilson, 1996).

Sork (1997) also noted the following as principles requiring program developers' attention: basing programs on the needs of learners, clarifying the aims or goals of the workshop, incorporating workshop processes that actively involve learners, and assessing program outcomes in addition to learner satisfaction.

Effectiveness of Workshops

In June of 1976, the U.S. Military Academy (USMA) conducted and evaluated a one-week, in-residence, summer academic workshop for students who had just completed their junior year in high school. Butler (1979) noted as part of the workshop class

samplings from USMA's curriculum in mathematics, physical sciences, engineering, humanities, and social sciences were included. Also, those students in attendance at the summer workshop had the opportunity to work directly with the Military Academy's computer and laboratory facilities, and had actual classroom instruction by faculty of USMA. Two specific goals of the project reported by Butler (1979) at the on-set were to:

- Increase the attendees' understanding of college-level academic offerings.
- Provide the attendees with an insight into the transitions from high school to college (Butler, 1979).

Butler (1979) noted organizers hoped as a result of attending the workshop participants' knowledge of USMA's academic offerings would increase, as would their interest in seeking an appointment at the Academy. He also wrote that each individual attending the workshop was given a preworkshop questionnaire at registration and a postworkshop questionnaire at the conclusion of the workshop. Results of the t-tests for changes in responses to Questions 1 and 2 were designed to measure the *explicit* goals of the workshop (Butler, 1979). According to the USMA study, students indicated they had a much better understanding of college-level academics and had a greater amount of insight into the academic transition from high school to college after participating in the workshop. The survey reported that there was no change in pre- and post- workshop responses concerning interest in seeking an appointment to USMA or that of a military career (Butler, 1979). The postworkshop questionnaire contained three additional essay-type questions that attempted to discover how the attendees' perceptions of Army officers, cadets, and USMA had changed as a result of the workshop. Of the 243

respondents to this question, 71% (172) stated that after the workshops they perceived the Army officer in a more positive manner (Butler, 1979).

Like most workshops or seminars, the study presented by Butler (1979) provided some mixed results. Granted, the two explicit goals of the workshop were accomplished. Butler (1979) presented the fact that the evaluation conducted had even provided data useful in examining several implicit goals of the workshop. However, the attendees failed to report that they had an increased interest in seeking appointment at the academy or even a military career (Butler, 1979).

Another example of a workshop able to effectively reach its prescribed audience was that of a grazing management information workshop held for livestock producers and educators in Missouri. The Management-Intensive Grazing Workshop program was first initiated at the University of Missouri's Forage Systems Research Center back in 1990 in order to provide livestock producers and other agricultural service entities with the proper training in sustainable pasture management concepts (Gerrish, J., Morrow, R., Roberts, C., Martz, F., Garrett, J., Moore, K., Peterson, P., Dailey, D., Davis, M., McDonald, D., Schafer, D., & Alice, D, 1995). Authors Gerrish and Morrow originally thought of the 3-day workshop when dealing with their frustrations of trying to develop continuing adult education programs within the traditional adult education framework. Traditionally, two hours of instruction in a classroom were devoted to a particular topic. Gerrish et. al. (1995) determined the traditional manner of instruction did not easily accommodate the teaching of in-depth ecological principles associated with sustainable resource management. What program developers needed, Gerrish et. al. (1995) felt, was a non-conventional approach to show how grassland communities and animal nutrition were

related to one another. Therefore, the authors initiated a grazing workshop. The grazing workshop allowed for the involvement of a multi-faceted teaching team, thus allowed presenters to disseminate a broad array of information to participants. According to Gerrish et al. (1995), 62% of producer participants would be interested in attending another 3-day workshop the following year. In addition, 99% of the participants indicated that they would be willing to attend a 1-day follow-up workshop during the next year.

Overall View of Evaluation

The concept of evaluation dates as far back as 2000 BC when Chinese officials first administered civil service examinations (Rose & Nyre, 1977). In recent years, the term "evaluation" has been used rather loosely by the general pubic, as well as by educators. Popham (1973) attempted to put evaluation into the proper context by pointing out several misconceptions about the use of the word evaluation. Popham (1973) suggested one of the largest misconceptions seen was the interchangeable use of measurement and evaluation. Gronlund and Linn (1990) defined measurement as the process of obtaining a numerical description of the degree to which an individual possesses a particular characteristic. Alternatively, measurement was the tool used by researchers to answer the question "how much?" Authors Gronlund and Linn (1990) defined evaluation as the systematic process of collecting, analyzing, and interpreting information to determine the extent to which participants were achieving predetermined objectives. In essence, evaluation attempts to get at the question of "how good?" Another misconception of lesser prevalence noted by Popham (1973) was equating evaluation with educational research. According to Popham (1973), educational research was

primarily an activity designed to detect the presence or absence of a significant difference between phenomena; unlike evaluation, it does not attempt to determine whether the difference is good or bad. Popham (1973) asserted many times evaluation will include educational research as a part of gathering data, but the research process is being used as a means to an end.

Stufflebeam (1968) provided the following clearly written definition for evaluation, "evaluation is the science of providing information for decision making." A more in-depth explanation was provided by The Center for the Study of Evaluation: "Evaluation is the process of ascertaining the decision areas of concern, selecting appropriate information, and collecting and analyzing information in order to report summary data useful to decision-makers in selecting among alternatives (Alkin, 1972)."

Keeping these definitions in mind, evaluation in relation to education refers to the evaluation of an educational enterprise, such as an instructional sequence, not simply evaluating the pupils within that enterprise (Popham, 1973). Furthermore, Popham (1973) claimed the underlying goal of educational evaluation was to provide decision-makers information about the program. Almost all evaluators can agree on this, but program developers and sponsors each will be seeking out different kinds of information about programs and for different purposes (Popham, 1973).

Why Evaluate?

In the past, program developers thought that as long as workshop objectives were being met the program could be deemed a success (Bush, Mullis, & Mullis, 1995). For years, Bush et al. (1995) felt it had become a custom to perform an evaluation at the

completion of a workshop. They believed the main purpose of evaluation then became to determine if the objectives of the workshops set at the development of the workshop were indeed met. Little, if any, thought was invested in program improvement. Questions left unanswered by merely evaluating the objectives were: What factors led to the success of the workshop? Why was the workshop a failure? (Bush, Mullis, & Mullis, 1995). Rossi, Freeman, and Lipsey (1999) suggested evaluation might be useful in providing information for program improvement. Scriven (1991) described this type of evaluation as *formative evaluation*. The intent of formative evaluation is to help form or shape a program such that the program is improved (Scriven, 1991).

Authors Loughary and Hopson (1979), in addition to answering the question of why, believed an additional reason for evaluation was the fact people wanted to learn or get their money out of something they have to pay for. Rossi et al. (1999) provided the example of the use of social resources such as tax dollars by human service programs may be justified on the merit that these programs are adding to the significant well being of the community. Scriven (1991) described this type of evaluation as *summative evaluation*. Scriven (1991) defined summative evaluation's purpose as to render a summary judgement on certain critical aspects of the program's performance.

Loughary and Hopson (1979) noted it might also be necessary to evaluate in order to make the determination of an individual's ability to take on new responsibilities. The more related a short-term training program is to a desired behavior, the more critical is program evaluation (Loughary & Hopson, 1979). They also provided the example that it would be nice if participants of a couple's group were more pleasant to one another upon completion of a program, but it would be very disappointing if they discovered they

had not learned any necessary relationship skills. In contrast, at the end of a lifesaving course for lifeguards, it is essential that instructors know whether or not participants can perform mouth-to-mouth resuscitation. Another reason to look at evaluation indicated by the authors was program developers continually want to improve their service as trainers (Loughary & Hopson, 1979).

A final reason for performing evaluation provided by Loughary and Hopson (1979) was to add to the climate of the workshop. Participants come to realize that program developers are truly concerned with the manner in which the delivering of the workshop was done. However, by asking for participants' reactions presenters may also be opening themselves up to the opportunity for criticism (Loughary & Hopson, 1979). In most cases though, participants are more likely to respect the presenters' decision for conducting the evaluation (Loughary & Hopson, 1979).

Ayers (1989) felt that if done properly, evaluation should provide program developers with answers to the following questions:

- What was the real worth of the workshop to participants?
- In what areas can program developers improve the workshop in the future?
- How can expenditures for the workshop be accounted for?
- Can program developers provide sponsors of the workshop a sound foundation for the future need of workshops?

Loughary and Hopson (1979) stated that clear and specific program goals equal effective feedback and evaluation. Presenters can conduct all the evaluation they want, but unless prior to the workshop a clear set of goals was set, evaluation would do little

good (Loughary & Hopson, 1979). Furthermore, they said that it was not possible to evaluate something that the presenter was not sure they wanted to achieve (Loughary & Hopson, 1979).

In addition to a poor-set of goals, Weiss (1998) noted there were four instances in which evaluation of a program was not worthwhile. These included:

1. When the program had few routines and little stability.

2. When people involved with the development of the program could not come to a consensus as to the purpose for conducting the workshop.

3. When the individual sponsoring the evaluation or program manager had set very strict limits as to what the evaluation could examine, setting certain important areas off limit.

4. When there was not enough money or qualified staff to conduct the evaluation (Weiss, 1998, p.25).

Also, Hyder (1971), in a review of literature related to training through workshops and institutes, noted the following relative to when evaluation was not recommended:

1. Funds available are generally inadequate to effectively evaluate workshop activities.

2. Objectives, in many instances, were written in such a manner as to make a specific evaluation very difficult.

3. It is difficult to follow-up participants in training activities to determine if substantial benefits occurred as result of training.

4. The tools for measuring training benefits were often inadequate or unavailable.

Ayers (1989) specified evaluation may assist program developers through data collected. Evaluation could help determine the overall content of the workshop and develop specific goals and objectives. Ayers (1989) suggested that programming may also be aided through the evaluation process, in other words, exactly how is the workshop going to be ran? For example, what is the budget, where are you going to have the workshop, what kind of materials do you need to effectively present the workshop? Ayers (1989) also mentioned evaluation might help program presenters in determining what activities they are going to have participants perform. Finally, evaluation aides in the changing of the workshop by helping presenters decide whether a certain portion of the workshop needs to be changed or eliminated (Ayers, 1989). Ayers (1989) indicated evaluation might also help in deciding if there is a need to continue the workshop.

Evaluation Criteria

Three types of evaluation are commonly used for short-term training programs: immediate, process, and outcome criteria (Loughary & Hopson, 1979). Loughary and Hopson (1979) defined an immediate criterion as one involving the review of staff and facilities prior to the beginning of the workshop. Loughary and Hopson (1979) mentioned that several researchers did not feel that immediate criteria were a true type of evaluation. Loughary and Hopson (1979) felt this was indeed a type of evaluation simply due to the fact that one was measuring the extent to which their staff was prepared to present the workshop and then deciding if program developers were satisfied with the findings. Loughary and Hopson (1979) compared immediate criteria to a pilot's checklist prior to takeoff. The pilot must first evaluate the aircraft and ensure that the aircraft is ready to

fly. Staff presenting the workshop must, as the pilot did, evaluate the workshop and ensure that it is ready to be presented (Loughary & Hopson, 1979).

Loughary and Hopson (1979) described process criteria as one that dealt with participants' reactions to the manner in which material was presented and the environment that it was presented in. Alternatively, Worthen, Sanders, and Fitzpatrick (1997) defined the objective of process evaluation as to identify or predict in process *defects* in the procedural design or its implementation. Loughary and Hopson (1979) point out that just because material was presented in a manner and environment the participants found appeasing does not guarantee that participants will learn. Issac and Michael (1982) noted process evaluation aids in the implementation and refinement of program design and procedures. According to Loughary and Hopson (1979), an evaluator obtains data through sampling participants' reactions to the workshop. However, it should be noted that neither immediate nor process criteria will reveal to the researcher HOW MUCH the participant has learned from attending a workshop (Loughary & Hopson, 1979).

An outcome criterion as defined by Loughary and Hopson (1979) allows us to measure how much the participant has learned as a result of attending the workshop. Issac and Michael (1982) alternatively defined outcome criterion or product evaluation as the ability to relate outcome information to objectives and to context, input, and process information. It is this type of evaluation that can become complex, depending upon the nature of the outcomes and the kinds of items presenters want to evaluate (Loughary & Hopson, 1979). Issac and Michael (1982) felt this type of evaluation aided in the decision-making process for deciding to continue, terminate, modify, or refocus a change

activity. Issac and Michael (1992) also mentioned that product evaluation helps researchers to link a particular activity to other major phases of the change process. Typical measures of outcome criteria noted by Loughary and Hopson (1979) were: paper/pencil tests at the end, completion projects, or develop a situation where an evaluator can observe behaviors.

A common manner in which to see if objectives have been met is through testing the learners. Van Kavelaar (1998) noted testing might not always have to be in the traditional paper and pen mode as many researchers have become accustomed to. For example, Van Kavelaar (1998) suggested performance tests might require participants perform or demonstrate a certain objective.

Van Kavelaar (1998) reported verbal feedback was probably one type of feedback that required quite a bit of courage in order to acquire information about the training that learners received. Many evaluators, when they solicit this type of feedback, are opening themselves to criticism and few researchers feel comfortable with having themselves criticized in the open and in front of their peers (Van Kavelaar, 1998). Another type of feedback was written feedback. Van Kavelaar (1998) suggested that when soliciting written feedback there needed to be an attempt to keep the evaluation of the training program to no more than one page. Few learners enjoy filling out lengthy evaluation forms. Cranton (1989) indicated feedback of any type should occur informally throughout the planning and development of instructional programming. Cranton (1989) listed discussions, questions, responses to questions, comments, and non-verbal communication (smiling, nodding, body posture) as modes of providing individuals with feedback in

addition to or rather than the traditional grading or testing used in the past for providing feedback.

The Affective Domain

The emphasis on student attitudes has been brought to light for several reasons with respect to educational evaluation. For example, there has shown to be a significant relationship between student attitudes and under-achievement in school, failure, conduct problems, and dropouts (Brodie, 1964). Kelly (1951) stated that attitudes are very crucial in that they provide the energy needed to translate knowledge into power. It is attitude that exposes the "unique purpose" for any individual (Kelly, 1951). Kelly (1951) suggested the old cliché, "knowledge *is* power" should be modified to read, "Knowledge is power hitched to action." Kelly (1951) felt knowledge was only knowledge unless it could be used to create some type of action, citing several examples of individuals "hoarding" their knowledge.

Gray (1983) mentioned that an individual's attitudes are closely aligned to their values. Therefore, like values, attitudes involve both the emotional and intellectual faculties (Gray, 1983). Gray (1983) claimed that a person's attitude could help them organize things in their lives or give direction. In the past the rate at which attitudes changed was fairly slow, but with the expansion of the media, the broadening of research, and new forums for discussion the rate at which attitudes were changed was shortening or becoming easier to accomplish (Gray, 1983).

Triandis (1971) suggested that the means of bringing about changes in attitudes included direct contact with the object of concern. For example, suppose a woman has a

Triandis (1971) suggested that the means of bringing about changes in attitudes included direct contact with the object of concern. For example, suppose a woman has a good experience with another woman in a management position. Triandis (1971) felt this positive experience created a positive attitude in that individual with respect to women in management. Jarrett (1973) went on to describe several key knowledge, skills, and commitments which aided in the altering or changing of a person's attitude. First, Jarrett (1973) identified the individual must understand the purpose and function of their organization. Secondly, the individual must be able to develop and act out the action with positive interpersonal skills (Jarrett, 1973). Finally, Jarrett (1973) listed a committed facilitator must lead the individual.

Jackson and Getzels (1959) contrasted students' opinion about school to certain other variables. The population in Jackson and Getzels' (1959) study consisted of 500 students from a private mid-western high school located in an above average socio-economic and intellectual community. Jackson and Getzels (1959) gathered students' opinions through a school satisfaction questionnaire. As a result of the study, Jackson and Getzels (1959) identified two distinct categories; those who were "satisfied" with school and those who were "dissatisfied." Jackson and Getzels' (1959) findings pointed to the relevance of psychological health data rather than scholastic achievement data in understanding dissatisfaction with school. Therefore, a negative attitude toward school would more than likely have a negative effect on a student learning information (Jackson & Getzels, 1959). Jackson and Getzels (1959) noted the negative attitude would be emphasized in school and less important for those issues not directly identified with school and formal education. A weakness of the study conducted by Jackson and Getzels

(1959) were questions could be raised as to the relevance of carrying these findings over to other populations.

General Considerations in Developing Measures of Affective Learning. Payne (1974) reported affective characteristics such as attitudes, values, or interests were all items that were learned in the classroom. Attitudes were the most prevalent of the affective variables (Payne, 1974). The following is a list of characteristics of attitudes described by Payne (1974):

- Lie in a range of degrees of "favorableness"
- Range in intensity
- Has the ability to be learned
- Places an emphasis on a variety of social objects
- Relative high degree of stability
- Variability in the ease with which they can be aroused

Payne (1974) noted there were several manners in which to measure affective variables. He stated that one could look at the amount of time, money, and/or energy spent on a particular activity. Formal verbal responses to such scales as the semantic differential, Likert, and Thurstone scales are also used in measuring affective variables (Payne, 1974). "Affective and cognitive phenomena are not separable. They develop together and influence one another," (Gordon, 1970).

The Need to Assess Affective Outcomes. Payne (1974) indicated that there were four primary reasons for needing to assess affective outcomes. First, Payne (1974) noted

affective variables influence an individual's ability to participate effectively in a democratic society. Scriven (1966) and Smith (1966) noted, individuals will form a favorable or an unfavorable attitude toward institutions, practices, or social groups. If the sole reason for measuring attitudes was to ensure that institutions continued to meet the favorable needs of their public, attitudes should be carefully examined (Scriven, 1966; Smith,1966).

In addition Payne (1974) mentioned, the development of skills and abilities related to the acquisition and growth of attitudes and values was necessary for a healthy and effective life. In essence Payne (1974) contended attitudes are necessary for the overall functioning of an individual.

Payne (1974) also stated affective outcomes interact with occupational and vocational satisfaction. According to Payne (1974) for a person to live within their finances the following pertaining to the individual must be met: relate effectively with associates, enjoy their work, believe it is possible to make maximal use of his abilities, and feel that they are making a contribution to society. Kahl (1965) presented the reason the values of mastery, activism, trust of others, and independence of family should be included as educational objectives, since in the past for a person to move up the social ranks of society these objectives must have been met.

Lastly, affective variables influence learning (Payne, 1974). Ripple (1965) said there were five issues that helped an educator or student attain certain classroom goals:

1. There was a feeling of a warm learning environment.
2. The students were tolerant of others in concern to expressing and feeling different emotions.

3. Activities were conducted using the democratic process.

4. The instructor used discipline that was firm but was not to the point of degrading the individual student.

5. Both instructor/student attempted to reduce frustration when doing learning activities.

Entrepreneurial Education

Entrepreneurship Defined

The word entrepreneurship has no single definition to date but there are certain elements that appear to come forth in several published definitions. Shapero and Sokol (1982) used the following elements to describe their definition of entrepreneurship:

- Initiative-taking: One or more individuals take the initial responsibility of founding the business.
- Consolidation of resources: Founders combine resources and develop a business structure to accomplish some planned objective.
- Management: Original founders of the business are actively involved in the management of the business.
- Relative autonomy: The founders are able to a certain extent exercise a great amount of freedom with concern to the allocation of expenses.
- Risk-taking: The success or failure of the business is the direct responsibility of the owners.

Still others involved with economic theory described the role and nature of an entrepreneur as the following, credit is attributed to the specific economists in parentheses (Kent, 1990):

1. An innovator (Bandeau, Bentham, Thunen, Schmoller, Sombart, Weber, Schumpeter)
2. A decision maker (Cantillon, Menger, Marshall, Wiser, Walker, Deynes, Mises, Shackle, Cole, Kerzner, Schultz)
3. An arbitrageur (Cantillon, Kirzner)
4. A contractor (Bentham)

Kent (1990) provided his readers with a more detailed definition of entrepreneurship:

> Entrepreneurship is drawing from a wide range of skills capable of enhancement to add value to a targeted niche of human activity. Income and independence as well as pride in creation reward the effort expended in finding and implementing such opportunities (p.47).

Kent (1990) went on to examine several of the key terms in his definition of entrepreneurship. His definition begins with "a wide range of skills." Kent (1990) claimed entrepreneurs have been classified in today's society as the "doers" rather than the thinkers. Kent (1990) felt this segment of the population was the one that initiated activities where in comparison a majority of the general population was content to sit back and "let" others do the work. In addition Kent (1990) made reference to entrepreneurs being the initiators, entrepreneurs must have the ability to think out the logic of their own endeavors.

There appeared to be a great amount of resemblance between Shapero and Sokol (1982) and Kent's (1990) definition of an entrepreneur and that of a small business owner. For the most part according to Greenwood, Bice, LaForge, and Wimberley (1984) small business owners were risk takers, who were looking to consolidate their resources but still maintain some control over these resources. Greenwood et al. (1984) noted it might also be said that not all small business owners are entrepreneurs, but for the purpose of this study, they have been used interchangeably.

Why is Entrepreneurship Important?

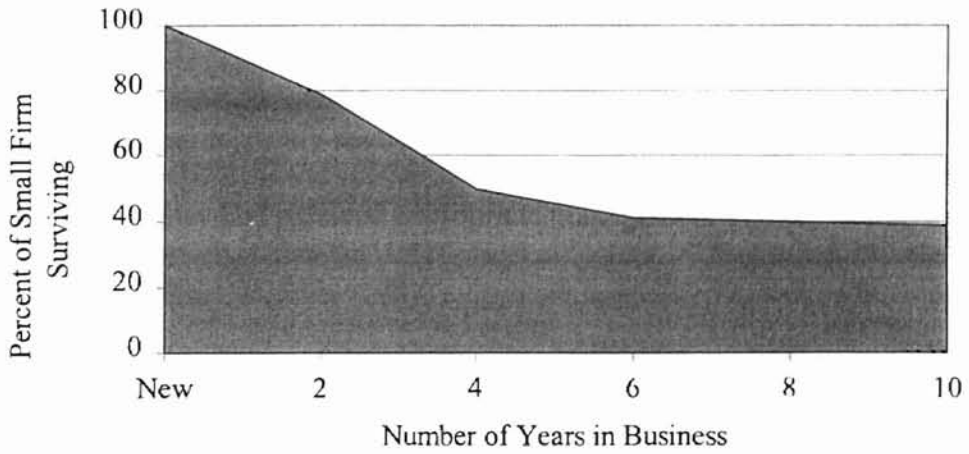
What is the contribution of small business to the economy and society? Why is entrepreneurship important to the economic well being of our society? In 1984, Greenwood et al. noted in a review of literature the following quote which was found in the preface to the Encyclopedia of Entrepreneurship written by Kent, Sexton, and Vesper:

> Humanity's progress from caves to campuses has been explained in numerous ways. But central to virtually all of these theories has been the role of the "agent of change," the force that initiates and implements material progress. Today we recognize that the agent of change in human history has been and most likely will be the entrepreneur (p. 6).

Statistical data provides the back up needed to support the fact small businesses are becoming an important part of an effective economy, "five million small businesses generate 38% of the Gross National Product and employ 91 million workers-47.9% of the nation's work force," (Herbert, 1989, p.103). Additionally, approximately 668,904 business firms are started every year in the United States. Of these roughly 75% are small

businesses (Price, 1987). Price (1987) also noted, as the economy of the U.S. continues toward a service providing economy, the importance of the small business would become ever more important. Price (1987) felt this was a logical statement given the fact a majority of small businesses at that point were focused on providing customers with some type of service.

Contributions made to the economy by small businesses were not easily made Price noted (1987). The U.S. Small Business Administration in 1986 reported that within the first five years of existence nearly 48% of all small businesses fail and this number increased to 90% that would fail within 10 years (Price, 1987). Zimmerer (1998) included the following figure to illustrate the low survival rate of small businesses.



Source: Adapted from NFIB Foundation/VISA Business Card Primer, Washington, D.C.

Figure 1. Small Business Survival Rate

Dandridge and Sewal (1978) stated the downfall of a business could be grouped into two categories: internal and external. Dandridge and Sewal (1978) found in a study they conducted that the major determinants of business failure were financing, government legislation, and credit collections. The U.S. Department of Education (1983) noted 93% of business failures were a direct result of poor management. Reece and O'Grady (1987) in another article noted the following as possible reasons for business failure: poor business concept, insufficient reserves to withstand slow sales, poor management and vulnerability to competition from larger companies. All too often Jellsion (1983) felt businesses were started based on the simple desire of an individual to create their own business. There was no thorough exploration of the market in which the entrepreneur was about to enter (Jellison, 1983). Belcher (1987) further emphasized an entrepreneur may have all the desirable psychological and personality qualities but unless they also had a second key ingredient, "know how," their business would be unlikely to succeed. Belcher (1987) noted that according to government entities who have dealings with the national economy about half of those businesses that fail each year could have been saved if they had received appropriate management training before the situation became too critical. Belcher (1987) suggested in addition to saving businesses from failing, others that were struggling could have been strengthened and stabilized through management training.

The Buildup to Entrepreneurship Education:

A Brief Look at History

Ross (1984) in his writing brought forth the question of what forces led to the great interest in incorporating small business education into all levels of vocational and adult education training? This question may be answered by looking at the national economic scene in the 1980's. It was here that many forces could be found that helped to develop the common goal of educating the small business owner. According to Ross (1984), the chronology of events in the early 1980's found: (1) small business owners being called to Washington for a national conference to discuss critical issues of concern to them, (2) a Federal Interagency Committee organized to help women business owners, (3) a presidential mandate to support the expansion of minority small business, (4) the U.S. Department of Education organizing a Task Force for Entrepreneurship Education.

In 1980, Ross (1984) noted, the White House Commission on Small Business provided a platform for small business owners to voice their concern over the current plight of the small business sector. On January 13, 1980, approximately 1,682 delegates and 3,600 other participants convened in Washington, D.C. at the request of Jimmy Carter (Ross, 1984). According to Ross (1984) small business owners from across the country were given the opportunity over a four-day period to voice their concerns about a variety of national affairs. The chance to speak was not taken lightly by those in attendance, because the small business owners knew that unless immediate action was taken their livelihood would be in grave danger (Ross, 1984). Ross (1984) further stated that the topic of great discussion was education. Ross (1984) noted that one of the major

themes to come out of the education discussion was the need for a systematic, national program of education that would encourage the development of small businesses. This systematic training should also be ongoing allowing individuals the means to update, on a continuous basis, management assistance skills (Ross, 1984).

What is the Role of Education in Entrepreneurship

A question posed several times throughout the review of literature was why is instruction in the development of small business needed? Oldham (1988) hinted that the characteristics of an entrepreneur might help to answer this question. Oldham (1988) defined an entrepreneur as one who is typically action-orientated, who is willing to work hard and smart in order to succeed. Furthermore, Oldham (1988) noted that this person usually comes from a family where one or both parents own a small business themselves. Fifty percent of entrepreneurs learned by observing and working with family members. In addition, the typical entrepreneur lacks a college degree (Oldham, 1988).

Meyer (1992) defined entrepreneurship education as consisting of a specialized body of knowledge. Meyer's (1992) definition of entrepreneurship education included but was not limited to knowledge, skills, and attitudes unique to entrepreneurship and elements of other similiar disciplines, in particular that of marketing. Meyer (1992) felt the combination of several applications resulted in a body of knowledge different than any of the disciplines from which individual information was taken from. Entrepreneurship education offerings, as defined by Meyer (1992), were focused on preparing an individual to develop a business as opposed to exposing an individual to entrepreneurship skills. Meyer (1992) contended the process of developing a business

was a complex and in-depth approach that required extensive preparation by the instructor in order to deliver instruction in an effective manner.

Belcher (1987) noted that most people, unfortunately, do not acquire the needed entrepreneurship skills to effectively manage a small business. Unless they grow up in a family-owned business, they would not be able to draw from their past experiences when they must deal with issues that arise in their own business (Belcher, 1987). Belcher (1987) in his report quoted from an earlier study that of almost 5,000 business developers only 34 percent of them had any type of college degree and only 39 percent had more than two business courses at some point in their education. Belcher (1987) questioned where individuals who have the technical experience would gain knowledge on how to start a business.

Successful Programs

Jellison (1983) reported on a small business management-training program located at Lane College in Eugene, Oregon that was a successful venture in a college based program. The area being served by the program were the communities of Eugene and Springfield, which had a combined population of approximately 200,000 (Jellison, 1983). According to Jellison (1983), the rest of the population served was comprised of small towns and rural area, which accounted for another 74,000 residents. Furthermore, he reported that because the area covered contained varying demographics, the college had developed a variety of program offerings. The intent of the Rural Small Business Resource Center according to Jellison (1983), was to help those persons located in outlying areas. The Small Business Center was originally designed to help small

businesses which employed 15 or fewer employees and were outside the major metropolis areas of Eugene and Springfield (Jellison, 1983). Programs described by Jellison (1983) that the Small Business Center conducted included short seminars on such various topics as recordkeeping, financial management, marketing and advertising, taxes, and stress management. Jellison (1983) stated seminars were usually conducted throughout the area in various small towns. The Small Business Center also served as a means where entrepreneurs could locate information pertaining to the start-up or maintenance of their business (Jellison, 1983).

Another successful program could be seen at the Pueblo (Colorado) Community College which established the Myers Center for Small Business in May of 1983. The Myers Center was to assist entrepreneurs in the development and maintenance of existing small businesses (Zeiss, 1987). Zeiss (1987) after a critical review of the Myers Center's historical activities, made the realization that researchers and the Myers Center had a strong commitment for providing a system that promoted cooperation between the institution and the small business community of southern Colorado. According to Zeiss (1987), the Myers Center had been able to develop a rigorous system of training services, primarily through seminars, that was meeting the needs of existing and new small businesses in the area.

Zeiss (1987) reported pertaining to educational services, the Myers Center had conducted twenty-two professional development seminars in the city of Pueblo and sixteen seminars in Canon City over a four-year span of time. Seminar topics noted by Zeiss (1987) included: building your own advertising, attitudes and the bottom line, writing the business plan, and how to get help from a bank. In addition to these seminars,

the Myers Center had demonstrated the ability to provide a significant contribution, via individual counseling, to the success of several small businesses. By March 10, 1987, five hundred fifty-five people had contacted the Myers Center about developing a small business, expanding an existing one, or about a specific business problem (Zeiss, 1987).

Zeiss reported in May of 1987 that a study was conducted to determine if the goals developed at the onset of the Myers Center were being met. The goals being measured included: the number of new businesses started by Myers Center clients; the number of full-time and part-time jobs created or directly affected by the Myers Center assistance; and the long-term survival rate of all businesses which had received some assistance (Zeiss, 1987). The study described by Zeiss (1987) involved telephone surveys of 268 Myers Center clients and included a thorough analysis of records obtained from the Myers Center. Zeiss (1987) noted the findings concluded that the Myers Center for Small Business had been notably successful in meeting its 1983 goals and that the assistance it provided to new and existing small business owners was exemplary. Zeiss (1987) observed that the survival rate of Myers Center's clients were 360% higher than that of the national rate for those individuals owning small businesses. Furthermore, Zeiss (1987) reported after close examination of data collected the realization was made that the Myers Center for Small Business had directly contributed to the start-up of 57 new small businesses and had contributed to the survival of 71 existing small businesses. By combining these two workforces there were a total of 294 full-time and 87 part-time employees (Zeiss, 1987).

In addition to the college-based programs in Eugene, Oregon and Pueblo, Colorado, the University of Nebraska can lay claim to establishing the first food-

processing center of its kind back in 1983. The Food Processing Center at the University of Nebraska offered both technical and marketing/business development assistance to individuals wanting to develop their own small business or expand their current food processing facility (University of Nebraska, 2000). The University of Nebraska (2000) noted that their technical capabilities included pilot plants and laboratories that were ready to assist manufacturers dealing with a wide array of products. The University of Nebraska Center also had the capabilities to help small business owners with market research, product costing, ingredient sourcing, market testing, and business venture development. Specifically, one of the services offered by the food processing center in Nebraska was to offer assistance to entrepreneurs dealing with food commodities through frequent workshop offerings relating to the development of small entrepreneurial businesses (University of Nebraska, 2000). The entrepreneurial program offered by the University of Nebraska (2000) was divided into three phases which included the From Recipe to Reality Seminar, From Product to Profit, and Existing Business Development workshops. Billie Lefler, owner of Sandhills Ranch Products L.L.C. and past participant in the food entrepreneur assistance program, said:

> The value of the Food Entrepreneur Assistance Programs is that it helps entrepreneurs from making costly mistakes. I didn't know anything about the technical and marketing issues and the order in which they should come when developing a product. I know I would have gotten the horse before the cart many, many times and I probably still wouldn't be in the marketplace without the help of the Food Processing Center (University of Nebraska, 2000).

Summary of Review of Literature

In this review of literature the use of workshops as an educational tool with regard to adult learning was reported. Topics such as principles of teaching and learning with adults, and workshop learning were explored. The effectiveness of workshops as a means of educating adults was also examined.

Evaluation in past was used to determine if workshop objectives had been effectively met. Only recently have program developers come to the realization that to get at the "why" of workshop effectiveness requires a formal evaluation of workshops needs to be conducted. Researchers hoped that data collected through evaluation would be used to determine what activities needed to be changed or eliminated. In addition, evaluation should aid program developers in determining if the need for a specific workshop exists.

The emphasis on attitudes has become very critical in understanding how an individual learns. Literature showed that attitudes are the component that provided the energy needed to translate knowledge into power. A person's attitude was the one thing that helped them to organize things in their lives, giving them direction. In essence, attitudes are necessary for the overall functioning of an individual.

Research has shown that small businesses in the past have contributed significantly to the economy of the United States. It has also been shown that this contribution has not been made without its sacrifices. References have shown that, although hundreds of new businesses are started each year, many will fail due to poor management. Small business owners across the country have put out the cry for the need of entrepreneurial education programs. Entrepreneurial programs attempt to equip small

business owners with the necessary management skills to effectively own and operate a small business.

CHAPTER III

METHODOLOGY

Introduction

This chapter describes the methodology used to achieve the purposes of the study, including the design of the research, procedure of determining the selected population, and Institutional Review Board. In addition this chapter looks at the context of the research, instrumentation, establishment of validity and reliability, collection of data, and analysis of the data obtained.

The purpose of this study was to determine the impact of an educational program for entrepreneurs delivered by the Oklahoma Food and Agricultural Products Research and Technology Center. The following objectives were developed to accomplish this purpose:

1. Identify selected personal and professional characteristics of workshop participants.
2. Assess change in knowledge as a result of participation in the workshop.
3. Assess change in attitude as a result of participation in the workshop.
4. Determine what relationships, if any exist between the characteristics of workshop participants and their change in knowledge and/or attitude related to topics presented in the workshop.

Research Design

The research design utilized in this study was the survey research method. The survey research method provided the tools to effectively measure change in cognitive understanding and affective behavior. The greatest disadvantage in employing survey research methodology is that it does not provide information concerning cause and effect relationships.

Employed, as a part of the survey method was a pre/posttest design. Gronlund (1973), in his book entitled Preparing Criterion-Referenced Tests for Classroom Instruction, noted that the use of a pretest and posttest was most effective when the objective was to provide a base for measuring learning gained during instruction. Gronlund (1973) also mentioned where the desire to measure learning gain, the pretest should include those items from both the developmental and mastery levels. Following the same line of thinking, if the objective of the posttest was to measure all learning outcomes, then the pretest should contain the same comprehensive structure. Workshop participants were asked to complete a pretest prior to instruction. In addition, upon completion of the four-hour workshop, participants completed a posttest. Both the pretest and posttest were designed based upon the objectives of the workshop. Thus, this design was used appropriately.

Population

The researcher utilized a census approach, therefore, the population consisted of all of the 35 individuals who attended the Basic Training workshops offered by the Oklahoma Food and Agricultural Products Center during the months of August, September, October, and November of 1999.

Institutional Review Board (IRB)

According to federal regulations and Oklahoma State University, policy requires a proper review and approval of all research studies that involve human subjects in order for the researcher to conduct his study. This review was required by Oklahoma State University so as to protect the rights of those participating in the experiment. In compliance with the above-mentioned policy, this study received the proper review and was granted permission to continue and was assigned the following research number: AG-00-043 (Appendix A).

Context of the Research

The small business workshops lasted approximately four hours beginning at noon with a sack lunch and adjourning by 4:30 p.m. Four "Basic Training" workshops were held, each the third week of every month from August through November. The agenda for the workshops included presentations on sample business plan and plan components, product evaluation and marketing, patents and trademarks, health regulations, processing and co-packing, labeling requirements, legalities and liabilities, and assistance available

to entrepreneurs. A copy of the workshop program is displayed in Appendix B. Slight modifications in the order of the agenda were made from one workshop to another due to presentation conflicts however, all topics listed were covered at each workshop to help maintain continuity.

Dr. Rodney Holcomb, coordinator of the workshop, opened the small business training sessions. The Director of the Oklahoma Food and Agricultural Products Technology Center (FAPC), Dr. Lowell Satterlee, set a positive tone for the workshop in delivering the welcome address. Dr. Satterlee stressed the main goal for the FAPC was to assist the people of Oklahoma in adding value to their agricultural products. Upon completion of the introduction of guests and presenters, the first presentation began. After completion of the fourth presentation, a break with refreshments was provided. Workshop participants returned after the break to attend the remaining presentations.

Instrumentation

The instrument used in the study was a researcher designed questionnaire constructed to meet the purpose of the study and provide answers to the objectives of this study. Initially, the researcher attended a small business workshop in an attempt to develop possible questions for the test instrument. At the July session, workshop participants were provided with a notebook containing subject material related to the presentations that would be delivered. The researcher was able to obtain a copy of the notebook and follow along with the presenters as they addressed their individual topics. This allowed the researcher to identify several possible questions pertaining to each presenter's presentation. A videotape was also made of the initial workshop providing a

means for reviewing information for survey questions. After attending the July session, the researcher with the help of committee members developed a draft instrument. Questions for the knowledge portion of the test instrument were developed from notes taken while attending the workshop, review of the tape, and input/feedback from presenters. The researcher attempted to select questions in proportion to the degree of complexity of the material covered by presenters.

The booklet style instrument (Appendix C) used to collect the data for this study consisted of three sections. Section one consisted of 19 multiple-choice questions with "I don't know" being one of the possible responses. Necomb et al. (1993) listed advantages for the multiple-choice format: adaptability, less ambiguity than completion or true-false questions, less susceptibility to guessing than true-false questions, and more easily understood by participants. The second section contained a 14 item semantic-differential scale. According to Oppenheim (1966) Charles E. Osgood developed the semantic-differential with the help of his colleagues while working with the quantitative study of meaning. It consists of several bipolar adjectives and a seven-point rating scale. Each scale is weighted and defined by two extreme adjectives. Examples used in this study included: fast/slow, happy/sad, pleasant/unpleasant, and clear/hazy. Respondents were responsible for rating each of the word pairs on the scale. The semantic-differential scale used in this study attempted to measure changes in participant attitudes toward starting their own business. The third section included six demographic items that were included only on the pre-test questionnaire.

Validity and Reliability

In the development and use of criterion-referenced tests, the issue of *content* validity is of primary importance. Gronlund (1973) defined content validity as "the extent to which our test items have adequately sampled the objectives and the subject-matter content of the instructional unit," (p. 47). Test items were developed as described in instrumentation in accordance with test specifications, therefore, responses of participants would provide valid estimates.

In order to establish reliability, pre- and post-questionnaires were pilot tested at the August workshop to determine if refinements were needed. Cronbach's alpha was used to determine internal consistency. The calculated Cronbach alpha for the instrument used in this study was .70 therefore, no structural modifications were made to the survey upon completion of the pilot test. Since no changes were made in the instrument, individuals participating in the pilot test were also included in the researcher's data analysis.

Collection of Data

Participants were asked by the researcher to complete the pretest questionnaire prior to the first presentation of the workshop. The posttest was administered by Dr. Rodney Holcomb, workshop coordinator, at the completion of the final presentation. There was a 100 percent response to both surveys.

Analysis of Data

To report the data, descriptive statistics, measures of variability, and inferential statistics were used. Included in the study as a measure of variability/dispersion were standard deviation of mean scores. In addition, analysis of variance was performed on mean scores of both the pretest and posttest. According to Sax and Newton (1997), by using measures of central tendency one can describe points of distribution, which represent the average or typical values. Steel, Torrie, and Dickey (1997) stated, "the most common measure of central tendency, and the one that in several cases is the best, is the arithmetic mean, or arithmetic average," (p. 16). Furthermore, these researchers noted measures of central tendency provide only a partial summary of the information in a data set. Therefore, a need to determine variation among the data was evident. Sax and Newton (1997) defined variability as the extent to which scores are varied, spread out, or dispersed. They further noted the most common measure of variability was the standard deviation. Sax and Newton (1997) also defined standard deviation as a measure of the extent to which scores cluster around the mean. For example, the more closely scores are to the calculated mean, the smaller the standard deviation will be. Mendenhall and Sinich (1996) described analysis of variance or ANOVA as the most common method used to compare treatment means. The analysis of variance procedure as noted by Mendenhall and Sincich (1996) uses a set of formulas that enable researchers to compute test statistics and confidence intervals, which are required to make inferences.

The researcher assigned numerical values to multiple-choice descriptors/variables used in the test instrument. For example, a response of "a" would be coded as a one (1)

and a response of "b" would have a value of two (2). The researcher then created several if-then statements as to how/why a correct response would receive a score of one (1) and an incorrect response on an individual question would receive a score of zero (0). For example, suppose a participant answered "c" on the first question, and the correct response for that question was "d". The individual would therefore receive a score of zero on that individual question. Responses from the semantic differential were also assigned numerical values for the purpose of calculating a mean response. A response recorded on the positive side of the bipolar adjective scale received a value of seven (7), while responses found on the negative side received a one (1) with values six (6) through two (2) completing the other possible responses. Mean scores were then calculated for each pair of adjectives. An overall mean score was also calculated for the groups.

Data were also analyzed to determine if there existed any correlation among test scores and demographic characteristics. Sax and Newton (1997) stressed the fact that measures of central tendency and variability are used to help describe distributions and the position certain individuals fall within a population. They went on further to say that sometimes it is useful to explain the magnitude to which scores on one distribution approximate scores obtained from the same individuals located on another distribution (Sac & Newton, 1997). Davis (1971) reported that .70 and above indicated a strong correlation, .50 - .69 substantial, .30 - .49 moderate, .10 - .29 low, and anything less than .10 as negligible correlation.

Data were analyzed using SAS for Windows Release 6.12.

CHAPTER IV

FINDINGS AND DISCUSSION

Introduction

The purpose of this chapter was to describe the findings from the data collected in this study.

To facilitate analysis and interpretation of the information, the data were grouped and arranged in progression based on the objectives of the study.

Data collected in this study were from 35 individuals attending the Basic Training workshop over a four-month period. Each of the nineteen "knowledge" questions asked of the participants were statistically analyzed using an ANOVA to determine whether significant differences existed between pretest and posttest scores. In addition, workshop participants were asked to rate a semantic differential scale to determine their attitudes toward development of a small business.

Findings Related to Objective 1

Objective 1 was to identify the personal and professional profile of participants.

The average age of workshop participants was 49.64 years of age with a range of 29 to 74 years of age. Data relating to the average age of participants are summarized in Table 1.

Table 1. Distribution of Workshop Participants by Age

Age	Frequency (N=33)	Percentage (%)
20 years of age or less	-	-
21-30	1	3.0
31-40	8	24.2
41-50	8	24.2
51-60	11	33.3
61-70	3	9.0
71 years or more	2	6.0
Total	33	100.0

*Mean age = 49.64 years

As shown in Table 2, the respondents were classified according to their gender. Of the participants responding, 45.5 percent were female and 54.5 percent male.

Table 2. Distribution of Workshop Participants by Gender

Gender	Frequency (N=33)	Percentage (%)
Female	15	45.5
Male	18	54.5
Total	33	100.0

Thirty-two participants responded to the question pertaining to ethnicity. Twenty-two (68.8%) of the workshop attendees were Caucasian/White, while four (12.5%) were Hispanic. Data indicating the breakdown of ethnicity among workshop participants are presented in Table 3.

Table 3. Distribution of Workshop Participants by Ethnicity

Ethnicity	Frequency (N=32)	Percentage (%)
African-American/Black	1	3.1
Caucasian/White	25	78.1
Native-American	4	12.5
Asian-American/Pacific Islander	1	3.1
Hispanic	-	-
Other	1	3.1
Total	32	100.0

Participants were asked to indicate the highest level of formal education they had completed. Eleven (35.5%) individuals that attended the workshop had received a bachelor's degree, while eight (25.8%) individuals had only completed one or more college classes yet had not received a degree. Data analysis revealed among this group seventeen (54.8%) workshop participants held a baccalaureate degree or higher. Data addressing the participants' level of formal education are summarized in Table 4.

Table 4. Highest Level of Formal Education Completed by Workshop Participants

Highest Level of Education	Frequency (N=31)	Percentage (%)
Did not complete high school	-	-
High school diploma	5	16.1
Technical school (beyond high school)	1	3.2
Technical school graduate	-	-
Completed one or more college classes	8	25.8
Associates degree	1	3.2
Bachelors degree	11	35.5
Masters degree	3	9.7
Doctoral degree	2	6.5
Total	31	100.0

Individuals attending the workshop were asked to identify the type of products with which their business primarily dealt. Of those individuals reporting data the majority (60.7%) dealt with other food/agricultural products such as salsa, health drinks, and baked goods. Following closely were small businesses dealing with meat products (32.1%). These data are summarized in Table 5.

Table 5. Distribution of Workshop Participants by Products Manufactured

Products Manufactured	Frequency (N=28)	Percentage (%)
Meat	9	32.1
BBQ Sauce	-	-
Non-food agricultural products	2	7.1
Jelly/Jam	-	-
Other food /agricultural products	17	60.7
Total	28	100.0

Finally, individuals were asked to respond to how many small business workshops in which they had previously participated. The overwhelming majority (93.3%) of respondents attending the workshop had not taken part in training involving the development of a small business. A summary of workshop participation is addressed in Table 6.

Table 6. Distribution of Workshop Respondents by Participation in Previous Workshops

Previous Workshop Participation	Frequency (N=30)	Percentage (%)
None	28	93.3
1	1	3.3
2	-	-
3 or more	1	3.3
Total	30	100.0

Findings Related to Objective 2

Objective two was to assess change in knowledge as a result of participation in the workshop.

The data were first analyzed to determine if differences existed among the four workshop sessions. Analysis of pretest scores did not reveal a statistical significant difference (P-value .6379). In addition, after analyzing the posttest no significant difference in those scores was found (P-value .1337). Therefore, the researcher combined scores from the four workshops and analyzed the data.

The ANOVA procedure produced a combined F-value of 61.20 and a P-value of .0001. Therefore, the gain in score for the combined group indicated that the workshop was successful in educating participants concerning the entrepreneurial skills needed to develop a small business (Table 7). The mean scores and standard deviations for individual and combined pretest and posttest scores are shown in Table 7.

Table 7. Analysis of Variance Comparison of Mean Test Scores

Group	f	Pre	Post	F value	P value < F
1	7	8.14 (3.63)[a]	12.00 (3.16)	4.50	0.0554
2	8	9.25 (2.12)	14.50 (1.93)	26.84	0.0001*
3	13	9.38 (2.36)	15.46 (2.30)	44.21	0.0001*
4	7	10.57 (3.31)	15.00 (2.52)	7.94	0.0155*
Combined	35	9.34 (2.79)	14.46 (2.68)	61.20	0.0001*

[a] Number in parentheses represents the standard deviation.
* Represents a test statistic that is significant at the alpha .05 level.

Findings Related to Objective 3

Objective three was to assess change in attitude as a result of participation in the workshop.

Change in attitude was measured using a 14 item semantic-differential instrument. A response recorded on the positive side of the bipolar adjective scale received a value of seven (7), while responses found on the negative side received a one (1) with values six (6) through two (2) completing the other possible responses.

Analysis of data relative to change in attitude of participants was first done by each group. Upon individual analysis attitude scores from each group were combined and an ANOVA was performed on this combination of scores in order to determine if there was a statistical significant change in attitudes of participants after completion of

workshop training. Data reported in Table 8 revealed a combined F-value of .32 and P-value of .5922, indicating there was not a statistical significant change in workshop participants' attitude as a result of attending the workshop.

Table 8. Comparisons of Mean Attitude Scores of Workshop Participants

	Pre	Post	F value	P value < F
1	4.59	4.34	-	-
2	3.84	4.50	-	-
3	4.51	4.84	-	-
4	4.54	4.29	-	-
Combined	4.37	4.49	0.32	0.5922

Findings Relative to Objective 4

Objective four was to determine what relationships, if any existed between the characteristics of workshop participants and their change in knowledge and/or attitude related to topics presented in the workshop.

Upon completing analysis of the data, it was determined there was a moderate relationship among posttest score and age (-.33440). Data analysis did not reveal any additional correlation among demographics and test scores above the low to negligible levels.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

The purpose of this chapter was to provide a summary of the research problem and its environment, the design and conduct of the study, and the major findings. Also presented in this chapter were conclusions and recommendations which were based upon analysis and brief summation of data collected and upon observations of the researcher as a result of the conducted study.

Purpose of the Study

The purpose of this study was to determine the impact of educational programs for entrepreneurs through an evaluation of entrepreneurial skills training sessions delivered by the Oklahoma Food and Agricultural Products Center.

Objectives

The following objectives were developed to accomplish this purpose:

1. Identify selected personal and professional characteristics of workshop participants.
2. Assess change in knowledge as a result of participation in the workshop.
3. Assess change in attitude as a result of participation in the workshop.
4. Determine what relationships, if any exist between the characteristics of workshop participants and their change in knowledge and/or attitude related to the workshop topics.

Significance of the Study

Results, conclusions and recommendations of this study will be useful to the Oklahoma Food and Agricultural Products Center when stakeholders such as academic department chairs, division administration, OSU representatives, and state legislature and the people of Oklahoma pose questions about the value of educational workshops conducted by the FAPC.

Study Population

In the study a census approach was utilized, therefore, the population consisted of all 35 individuals who attended the Basic Training workshop offered by the Oklahoma Food and Agricultural Products Center during the months of August, September, October, and November of 1999.

Instrumentation

The instrument used in the study was a researcher designed questionnaire constructed to meet the purposes of the study and designed to provide answers to the

researcher's objectives. Initially, the researcher attended a small business workshop in an attempt to help provide information to develop possible knowledge questions for the test instrument. A videotape recording was made of the initial workshop, providing a means for reviewing information for survey questions. After attending the July session, the researcher, with the help of her committee members, developed a draft survey instrument. Questions were developed for the knowledge portion of the instrument based upon presenter subject areas. Upon approval of committee members, program presenters also provided input on the knowledge questions in section one of the survey instrument to ensure their accuracy and appropriateness.

Data Collection

The instrument (See Appendix C) used to collect the data for this study consisted of three main sections. Section one had nineteen multiple-choice questions with "I don't know" being one of the possible responses. The second section contained a 14 item semantic-differential scale. The respondent was responsible for rating each of the word pairs on each scale. The semantic-differential scale used in the study attempted to measure changes in attitudes of participants toward starting their own small business. The third section, which was only on the pre-test questionnaire, included six demographic questions.

Participants were asked by the researcher to complete the pretest questionnaire prior to the first presentation beginning. At the completion of the final presentation Dr. Rodney Holcomb, workshop coordinator, asked participants to complete the posttest

questionnaire. There was a 100 percent response to both of these questionnaires; however, not all participants responded to every question on the survey instrument.

Analysis of Data

Descriptive statistics and the ANOVA test were utilized to analyze the data in order to accomplish the objectives of the study. Statistics utilized included frequencies, means, standard deviations, F-values, and P-values.

Limitations of Study

A major limitation of this study was the fact that this study was limited to small business entrepreneurs in the state of Oklahoma - -in particular those within driving distance of Stillwater, Oklahoma. The study had two major assumptions. First, participants who attended the training sessions were taking an active part in the learning process. An additional assumption of the study was that participants of the workshops answered the questions honestly and to the best of their ability.

Major Findings of the Study

Characteristics of Workshop Participants

Respondents to the study included all 35 participants who attended the Basic Training workshop held over the four-month period. The range of age was 29 to 74 years of age with 49.64 being the mean age of workshop participants. Of the 35 respondents responding 18 (54.5%) were male, with 15 (45.5%) being female. An overwhelming

percentage (78.1%) of individuals attending the workshop was Caucasian/White. A rather important factor relating to the highest level of education completed by workshop participants was the fact that 17 (54.8%) held a baccalaureate degree or higher. Individuals attending the Basic Training workshops dealt primarily with other food/agricultural products such as salsa, health drinks, and baked goods. Finally, the vast majority (93.3%) of workshop participants had not attended a small business workshop prior to their attending the small business training workshops conducted by the FAPC.

Knowledge Change of Workshop Participants

It was determined, as a result of the workshop, that participants had an increase in score on the knowledge portion of the survey instrument. The combined score for all workshop sessions on the pretest was 9.34 with a posttest score of 14.46. The resulting P-value for the combined group was 0.0001. Therefore, there was a statistical difference in pretest and posttest scores of workshop participants.

Attitude Change of Workshop Participants

Analysis of data relative to change in attitude of individuals attending the workshop indicated that the workshop was not effective in altering the individual's attitude toward starting a small business. The calculated mean for the pretest group was 4.37 and the posttest score was 4.49. The resulting P-value for the combined group was .5922, which indicated that this difference was not significant at the alpha .05 level.

Relationship Among Demographics and Change in Knowledge and/or Attitude

Data collected revealed only a moderate relationship among posttest scores and age (-.33440). The data did not reveal any additional correlation among test scores and demographics.

Conclusions

Conclusions were determined based on major findings from the data collected and analyzed during the research of this study.

1. The typical workshop participant was middle age, male, and well educated.
2. The short-term small business training workshops did significantly increase the knowledge of individuals participating.
3. The small business-training workshop did not alter the overall attitudes of participants toward starting a small business.
4. Personal and/or professional characteristics were of no consequence in the overall change of knowledge gained and/or attitudes among workshop participants.

Recommendations/Implications

The ensuing recommendations were based on the results, inferences, and insight of conducting the study.

1. Because the typical respondent falls within narrow limits in terms of diversity, educational programs presented by the Oklahoma Food and Agricultural Products Center should be targeted to underrepresented groups.

2. To aid in reaching a more diverse audience, alternative delivery modes should be explored. Possible delivery methods could include videotapes, Internet, videostreaming, satellite, and/or individualized instruction.

3. It was apparent as a result of the findings that the workshops were supportive of the Center's mission, which is to educate their clientele; therefore, the workshops should be continued.

4. To aide in the Oklahoma Food and Agricultural Products Center's mission of continually providing quality educational programming to meet the needs of their audience, every educational program delivered by FAPC staff should be evaluated to determine its impact upon participants' knowledge, attitudes and skill development.

5. The findings point to the fact that short-term workshops do not provide sufficient time to alter or change an individual's attitude toward establishing a small business. It should be considered that perhaps prior to workshop participation individuals have misconceptions about starting a small business and as a result of participating in the workshop come to realize the effort required in the development of a small business.

Recommendations for Further Research

It is in the opinion of the researcher that the following issues should be addressed in future research:

1. Research should be conducted to determine the effects of time regarding workshop sessions on individuals concerning attitude change. Due to the fact that a short-term educational workshop was not a sufficient period to change an individual's attitude, research comparing short-term workshops to extended workshops should be conducted.

2. In addition to the six demographic questions that were included in the original survey instrument, it would be worthwhile to examine the number of business-related courses participants had taken, from where participants were traveling to attend the workshop, and how many participants had family members who owned a small business.

3. A follow-up questionnaire should be mailed to workshop participants six months after the session to determine how individual attitudes changed overtime. In addition, how much knowledge did individuals retain from the short-term workshop?

4. It would be beneficial to conduct a similar study with other workshops presented by the Oklahoma Food and Agricultural Products Center where there was access to a larger, more diverse group of respondents.

5. As part of the small business training workshops, on-going evaluation of the seminar presenters should be included in addition to the knowledge, attitude and skill development assessments.

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APPENDIXES

APPENDIX A

INSTITUTIONAL REVIEW BOARD (IRB) FORM

OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD

Date:	October 11, 1999	IRB #:	AG-00-043
Proposal Title:	"EVALUATION OF EDUCATIONAL WORKSHOPS CONDUCTED BY THE FOOD AND AGRICULTURAL PRODUCTS CENTER AT OKLAHOMA STATE UNIVERSITY"		
Principal Investigator(s):	Rob Terry Meghan Mueseler		
Reviewed and Processed as:	Exempt		

Approval Status Recommended by Reviewer(s): Approved

Signature:

Carol Olson, Director of University Research Compliance

October 11, 1999
Date

Approvals are valid for one calendar year, after which time a request for continuation must be submitted. Any modification to the research project approved by the IRB must be submitted for approval. Approved projects are subject to monitoring by the IRB. Expedited and exempt projects may be reviewed by the full Institutional Review Board.

APPENDIX B

AGENDA FOR BASIC TRAINING WORKSHOPS

Schedule for FAPC Basic Training Workshop

Noon	Registration and lunch on the 2nd floor of FAPC
1:00pm	Sample Business Plan and Plan Components *Dr. Rodney Holcomb, FAPC*
1:30pm	Product Evaluation and Marketing *Jim Brooks, FAPC*
2:00pm	Patents and Trademarks *Dr. Julia Crawford, OSU Patent & Trademark Library*
2:30pm	Health Regulations *Mike Rockey, Oklahoma State Department of Health*
2:50-3:00pm	Break
3:00pm	Processing and Co-Packing *Chuck Willoughby, FAPC*
3:15pm	Labeling Requirements *Charles Carter, Oklahoma Department of Agriculture*
3:35pm	Legalities and Liabilities *Dr. Glenn Muske, Central Office for Home-Based Entrepreneurship*
4:05pm	Assistance Available to Entrepreneurs *Mike Clark, Oklahoma Department of Agriculture*
4:20pm	How FAPC Can Help *Chuck Willoughby, FAPC*

APPENDIX C

QUESTIONNAIRE

Food and Agricultural Products Center
Basic Training Workshop

Oklahoma State University
Stillwater, Oklahoma

November 18, 1999

Participant Survey

FAPC Basic Training Workshop

We appreciate your involvement in this activity. To help us better serve you and other groups in the future, we are collecting information from participants in this and other workshops we conduct. Your responses will be confidential; none of the information collected here will be associated with you as an individual. Thanks for your participation and assistance!

SECTION I: PRE-TEST

1. A business plan should be a...
   - A. I don't know.
   - B. Complicated document
   - C. Road map to business start-up and development.
   - D. Very brief and very general document.
   - E. Permanent document that is not revised nor strayed from.

2. Which of the following is **NOT** a reason to develop a business plan for your business?
   - A. I don't know.
   - B. In order to help obtain loans from lending agencies.
   - C. It can serve as a yardstick by which to measure progress and evaluate change.
   - D. It is a requirement by the Oklahoma Tax Commission.
   - E. It provides a detailed blueprint for the activities needed to create a new business.

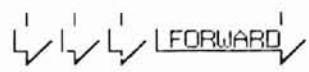
3. The business plan should be written by...
   - A. I don't know.
   - B. An attorney
   - C. The owner
   - D. Extension specialist
   - E. Loan officer

4. What should be the first section in a business plan?
   - o A. I don't know.
   - o B. Market description
   - o C. Manufacturing plans
   - o D. Executive summary
   - o E. Table of contents

5. A product that is in the mature market category fits which of the following descriptions?
   - o I don't know.
   - o B. A market that shows little or no growth for that product category.
   - o C. A market that is growing but at a slower rate for that product category.
   - o D. A market that is declining in terms of growth for a certain product category.
   - o E. A market that is just beginning to show growth in a product area.

6. Who probably needs the services of the OSU Patent and Trademark Library?
   - o A. I don't know.
   - o B. Researchers
   - o C. Inventors
   - o D. Entrepreneurs
   - o E. All of the above except "A".

7. Which of the following is **NOT** a description of a level of a trademark protection?
   - o A. I don't know.
   - o B. County
   - o C. Common law
   - o D. State
   - o E. Federally registered
   - o F. B and C
   - o G. D and E
   - o H. None of these.

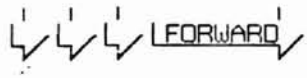


8. GMP is:
   - A. I don't know.
   - B. Good Managing Practices
   - C. Good Manufacturing Practices
   - D. Good Manufacturing Procedures
   - E. Good Managing Procedures

9. The following should **NOT** be on a label according to the FDA's Food Labeling Guide.
   - A. I don't know.
   - B. Ingredients
   - C. Name of Product
   - D. Net Weight
   - E. Manufacturer or the company manufactured for
   - F. None of the above.

10. A co-packer:
    - A. I don't know.
    - B. Manufactures products for non-processing entities.
    - C. Has excess capacity and is willing to contract with other companies to fill that capacity.
    - D. Is a food processor that processes meat products only.
    - E. B and C
    - F. C and D

11. A co-packer may ...
    - A. I don't know.
    - B. Reduce the number of employees an entrepreneur needs to hire.
    - C. Save the entrepreneur from having to build a processing facility.
    - D. Avoid health inspections whereas the entrepreneur cannot.
    - E. Reduce time spent on record keeping.
    - F. B, C. and E
    - G. None of these.



12. A co-packer could:
    - A. I don't know.
    - B. Manufacture a similar product or line of products.
    - C. Be a processor with excess capacity.
    - D. Manufacture a similar product, but for different seasonal or geographic markets.
    - E. C and D
    - F. All of the above except "A".

13. With respect to labeling which of the following statements is **NOT** true.
    - A. I don't know.
    - B. Net weight can be stated either in ounces or grams.
    - C. The manner in which a product is packaged determines the size of labeling.
    - D. The net weight should be displayed in the upper 30% of the label.
    - E. There are different labeling requirements for consumer and non-consumer commodities.

14. Which of the following words does **NOT** describe a type of liability for a sole proprietor?
    - A. I don't know.
    - B. Personal
    - C. Employment
    - D. Business
    - E. Product

15. A business organized as a sole proprietorship has the:
    - A. I don't know.
    - B. Most liability for the owner.
    - C. Least amount of control by the owner.
    - D. Most access to capital.
    - E. Most difficulty in establishing.

16. Two types of partnerships are...
    - A. I don't know.
    - B. General
    - C. Sole
    - D. Base level
    - E. Limited
    - F. B and D
    - G. C and D
    - H. B and E

17. A person structuring their small business should look at all of the following criteria except for:
    - A. I don't know.
    - B. Taxes
    - C. Ownership transfer
    - D. Liability
    - E. Control
    - F. All of the above except "A".

18. The "Made in Oklahoma" program is designed to:
    - A. I don't know.
    - B. Showcase only Oklahoma processed food products.
    - C. Showcase a variety of products offered by Oklahoma businesses.
    - D. Promote Oklahoma products only in Oklahoma and bordering states.
    - E. Promote Oklahoma products at state fair exhibits only.

19. To participate in the "Made in Oklahoma" program a small business must:
    - A. I don't know.
    - B. Pay a one-time fee.
    - C. File an application.
    - D. Have annual net sales exceeding $20,000.
    - E. Have been established for at least 2 years.

SECTION II: ATTITUDE ASSESSMENT

Please rate the concept "Setting up a small business is..." according to how you perceive it or feel towards it at the current time by placing an "X" somewhere along each of the seven-point scales anchored by the polar adjective pairs.

good	____	____	____	____	____	____	____	bad
long	____	____	____	____	____	____	____	short
sad	____	____	____	____	____	____	____	happy
rough	____	____	____	____	____	____	____	smooth
precise	____	____	____	____	____	____	____	vague
tense	____	____	____	____	____	____	____	relaxed
awful	____	____	____	____	____	____	____	nice
fast	____	____	____	____	____	____	____	slow
pleasant	____	____	____	____	____	____	____	unpleasant
perturbed	____	____	____	____	____	____	____	peaceful
valuable	____	____	____	____	____	____	____	worthless
chaotic	____	____	____	____	____	____	____	ordered
simple	____	____	____	____	____	____	____	complex
clear	____	____	____	____	____	____	____	hazy

SECTION III: DEMOGRAPHIC DATA

1. Age?_____
2. Gender? ❑ Female ❑ Male
3. Ethnicity:

❑ African-American/Black
❑ Asian-American/Pacific Islander
❑ Caucasian-American/White
❑ Hispanic
❑ Native-American
❑ Other_____

4. Highest level of education?

- ❑ Did not complete high school
- ❑ High school diploma
- ❑ Technical school (beyond high school)
- ❑ Technical school graduate
- ❑ Completed one or more college classes, but no degree
- ❑ Associates degree
- ❑ Bachelors degree
- ❑ Masters degree
- ❑ Doctoral degree
- ❑ Other _____

5. Products with which your business primarily deals:.

❑Meat products ❑Non-food agricultural products

❑BBQ sauce ❑Jelly/Jam

❑Other food agricultural products_____

6. Small business workshops previously attended:
   ❑ 1 ❑ 2 ❑ 3 or more ❑ none

VITA

Meghan Elizabeth Mueseler

Candidate for the Degree of

Master of Science

Thesis: AN EVALUATION OF ENTREPRENEURIAL TRAINING BY THE OKLAHOMA FOOD AND AGRICULTURAL PRODUCTS RESEARCH AND TECHNOLOGY CENTER

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Professional Organizations: Gamma Sigma Delta, Phi Kappa Phi, Kansas Farm Bureau, Alpha Zeta.