ENHANCING STUDENT ENGAGEMENT IN ENTREPRENEURIAL ACTIVITIES: THE CASE OF IOWA STATE UNIVERSITY

by

CARLY CUMMINGS

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Major Professor Dr. Keith Harris

ABSTRACT

Iowa State University's Agricultural Entrepreneurship Initiative (AgEI) was founded in 2005 from a generous gift given by Roger and Connie Underwood of Ames, IA. The original mission for the initiative was to provide undergraduate students at Iowa State University, specifically in the College of Agriculture and Life Sciences (CALS), with practical business development and entrepreneurial experiences essential for their success in future careers and endeavors.

A non-conventional case study structure will walk readers through the history of how the AgEI program came to be and introduce them to the present day, while acknowledging tribulations the program has faced along the way. The purpose of this study is to determine wether the addition of soft skills programming will strengthen the value of the program to Iowa State University CALS students and generate actionable ideas on how to do so. Further analysis will ascertain whether enticing additional participation in the program, while maintaining its original entrepreneurial goals, will allow the AgEI program to grow in value and size. Quantitative, as well as qualitative, means of analysis are utilized to understand the students' needs for soft skills development and identify skills deemed necessary by entrepreneurs to find success in the marketplace.

Results indicate that it is advantageous to add a focus in soft skills development for undergraduate students who have an interest in entrepreneurship and small business development. These skills compliment their technical skills nicely when considering all aspects of creating a successful startup business. By implementing soft skills development

programming, the AgEI program will be able to produce more well-rounded individuals and enhance their likelihood to successfully start their own businesses.

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CHAPTER I: INTRODUCTION

Entrepreneurship. A word not easily defined, but one that continues to make great strides in the world. Often interpreted as a new invention, innovation, or simply an idea on a piece of paper, entrepreneurship is all around us. Whether it change the life of one or lives of millions, entrepreneurship is the key to moving our world forward. At Iowa State University, students have the opportunity to experience entrepreneurship, defined at the program level as the creation of value to solve issues presented in the agricultural marketplace, first-hand through a unique the Agricultural Entrepreneurship Initiative ("AgEI").

AgEI program was founded in 2005 and is located in the Iowa State University

College of Agriculture and Life Sciences ("ISU CALS"). It was the dream of one
entrepreneur who saw the importance of exposing students at a young age to the
opportunities entrepreneurship could provide to them early on in their careers. Roger

Underwood, founder of Becker Underwood, and his wife, Connie Underwood, approached

Wendy Wintersteen, Dean of ISU CALS with a \$1.6 million expendable gift – a gift
designated to be used for its value, not reliant on interest payments –designated to the
development of a program dedicated to growing and fostering the entrepreneurial spirit of
students on campus through undergraduate programming.

As AgEI celebrates its 10-year anniversary, success can clearly be defined by the eighteen student businesses that were created through resources offered by the AgEI program (see Appendix A). But, should success of the AgEI program also be defined as students gaining soft skills through real-world experiences, resulting in their commendable

contributors to the agriculture industry? This is a question that the AgEI Student Advisory Team posed to the staff members as they felt their AgEI achievements and involvement, professional in nature, should also be recognized and promoted, just like those of students who have used AgEI to create businesses.

1.1 Roger Underwood's Legacy

From a young age, Roger Underwood embodied a passion for entrepreneurship and business development. Following his graduation from ISU CALS in 1980, he went to work in the ag chemical distribution industry as a sales manager, but quickly realized his desire to do more and create products that would help farmers utilize the chemicals more efficiently and effectively. Shortly after he left his sales manager position, Mr. Underwood founded Becker Underwood, Inc., a leader in seed enhancements and biological products, in 1982 with childhood friend, Jeff Becker of Atlantic, IA. Becker Underwood's beginnings can be traced back to Roger Underwood's garage where his initial investments exhausted Mr. Underwood's savings account, but their drive for success continued. Their company redirected its resources and began to specialize in the development of nonpesticide specialty chemicals and biological treatment color products for the agriculture, landscape, and horticulture industries. Becker and Underwood's products reduced the costs for farmers, landscapers, and horticulturalists by identifying where chemicals had been applied with visible traces of non-toxic colorants. In Becker Underwood's first year, sales were estimated at \$45,000. Sales revenue reached over \$240 million before it was sold in September 2012 to BASF, the world's leading chemical company.

1.1.1 The Early Years

Roger Underwood understood the positive impact a rigorous academic curriculum in entrepreneurialism could have on undergraduate students. He believed this level of education would serve to inspire the next generation of agricultural entrepreneurialism. His generous gift sparked action by ISU CALS to enlist the assistance of Dr. Bob Jolly, professor in Economics, and Dr. Steve Nissen, professor in Animal Science and founder of MTI Bio-Tech and Prairie Moon Winery, to envision and create a model for what would later be named the Agricultural Entrepreneurship Initiative.

Keeping in mind Mr. Underwood's vision for growing and fostering the entrepreneurial spirit of undergraduates in ISU CALS, doctors Jolly and Nissen developed a mission to which would guide AgEI's current and future plans. AgEI would provide undergraduate students at Iowa State University, specifically in ISU CALS, with practical business development and entrepreneurial experiences essential for their success in future careers and endeavors. Development of the program soon followed with the mission in place. Dr. Jolly and Dr, Nissen both took an active role as the Interim Chairs for the program. In their position, they understood the importance of developing and sustaining the program. As such, a need for a program coordinator with particular expertise in business development and youth relations was identified. Soon Stacey Noe was hired and charged with advancing AgEI's plan.

The foundation for the original AgEI model was the implementation of an internship program that would allow for relationship building between the AgEI program, and entrepreneurs around the Midwest interested in developing undergraduate students.

This program allowed students to gain valuable entrepreneurial experience, while giving

entrepreneurs a valuable future labor source they could use to build their business. The interns' salaries were paid from Underwood's original gift, with the sole purpose of minimizing the financial burden for the entrepreneurs. Other expected benefits from the relationship included; a potential partnership with the entrepreneurs, the opportunity to expose interns to entrepreneurial opportunities and activities in the agricultural sector, and provide intern skills to launch new products designed to meet the needs of agriculture.

Over the next three years, the AgEI staff worked to grow and establish various student programs that would cater to the needs of entrepreneurial-minded students. The supervision of an Entrepreneurial Minor for ISU CALS students gave undergraduates an opportunity to expand their knowledge and build their repertoire of skills in entrepreneurship. Entrepreneur roundtables were planned and hosted. The program brought together bright entrepreneurial minds with ambitious students. Conversations surrounding the key issues faced by entrepreneurs were discussed during these events. Often times the interactions resulted in the mentorship of budding entrepreneurs. The programs were developed around a premise that innovations and business creation would be fundamental to long-term economic growth, and that helping ISU CALS students and faculty strengthen their entrepreneurial skills would contribute to Iowa's economy.

1.1.2 The Formative Years 2008-2012

Shortly after the entrepreneurial initiative began to show progress, Dr. Jolly considered retirement in 2008 and stepped down from his position as Co-Chairman. In the same year, Dr. Nissen suffered a stroke, which prevented him from continuing as a chair of the program. The program began to outgrow its original blueprint and staff, and the financial support needed to grow along with it. In 2009, the AgEI program received a

\$2.25 million endowed gift – with the stipulation that only the interest income earned on the gift would be available for program expenses – from Mr. Bruce Rastetter, founder of Heartland Pork, Hawkeye Renewables, and Summit Group. The gift established the AgEI's Rastetter Chair of Entrepreneurship, which included the building of a new 1,100 sq. ft.

AgEI Suite located in Curtiss Hall at Iowa State University, helping make the AgEI program highly sought after by current and prospective students.

With the financial gift in hand, a search, led by Dean Wendy Wintersteen, ensued to find the perfect fit for the newly endowed Chair position. After evaluating applications, ISU CALS appointed Kevin Kimle to carry on the legacy built by Jolly and Nissan. Mr. Kimle was selected as Chairman for his business savvy, persona, and willingness to dedicate his time to sharing his experience with undergraduate students. His success in entrepreneurship, which includes the development and sale of three agriculture startups, set him apart from the other candidates. Mr. Kimle was named the first Rastetter Chair of Entrepreneurship and Director of the Agricultural Entrepreneurship Initiative at Iowa State University in 2009.

Mr. Kimle worked closely with Ms. Noe, Program Coordinator, to develop a startup incubation program for students, whose product ideas were in the idea or development phase of a new business. He also created two courses taught in the Department of Economics, which aimed to educate undergraduates about small business development and business plan creation. Mr. Kimle's impact did not stop there. He brought a wealth of connections from the agriculture and entrepreneurship fields, creating a web of resources for the program and it's students. These resources helped create the AgEI's first Advisory Council (Table 1.1), comprised of 12 agri-business professionals. The advisory council

meets annually to review the program's progress and develop plans for the future of the program. With a collective 150 years of experience, the council's agribusiness expertise in owning and managing businesses involved in farm inputs, food processing, marketing and research has been an invaluable resource for AgEI.

Table 1.1: AgEI Advisory Council

Roger Underwood	Murray Wise	Harry Stine	Dave Rettig
Becker Underwood	Murray Wise & Assoc.	Stine Seed	Rembrandt Enterprises
Tray Thomas	Roxi Beck	Shannon Latham	Craig Hill
Context Network	CMA	Latham Hi-Tech Seeds	Iowa Farm Bureau
Eric Holtkamp	Ryan Pellett	Wayne Freese	Joe Kerns
ControlTech	J.D. Heiskell	Newport Labs	Kerns & Assoc.

1.1.3 AgEI Today

Through Mr. Kimle's professional network in the agri-business industry and Ms. Noe's ambition to move the program forward for the betterment of ISU CALS undergraduates, the program has remained a vital part of the college and university. The program grew to serve more than 750 students each year through internships, fellowships, classroom activities, and professional development programs. Carly Cummings, an active alumnus of ISU CALS, was hired as a Program Assistant in 2011 to increase capacity for student program development. Ms. Cummings' role afforded Ms. Noe the time to focus on outreach and industry relations for sponsorship and donor purposes. Ms. Noe stepped out of her role with the program in 2015 to pursue a position in industry and Ms. Cummings assumed the role as Program Coordinator. In 2016, the program required more expertise and focus on student resource management and hired Amanda Blair as an additional Program Coordinator.

Underwood's gift was expended through program expenses in eight years and the Rastetter gift could only be used for the Endowed Chair's salary. The program began to rely on smaller donations to sustain its operations. As a completely donor-funded program, AgEI relies on strong industry relations to secure donors and sustain funding for a growing undergraduate program. Private donors who give to the program are interested in the same thing that Mr. Underwood was; to grow and foster the entrepreneurial spirit of students on campus through undergraduate programming. The Iowa Farm Bureau Federation has been the largest contributor at a \$100,000 annual commitment. A combination of smaller donors provided funds for specific events and scholarships. These funds are essential in keeping the program financially viable, but an endowment is being sought to sustain the program for the long-term.

Over time, the AgEI program has come to be known by undergraduates, not only for its ability to produce student businesses, but also as an outlet for building soft skills; referred to as a set of competencies, behaviors, attitudes, and personal qualities that enable a person to effectively navigate an environment, work well with others, and achieve personal goals. (Kautz, et al. 2014) They have been able to gain these skills through the AgEI courses, international development projects, networking events, and internships offered. Table 1.2 lists the current programs created and managed by AgEI, and provides a description of each program's purpose. The programs are developed to link students' understanding of the importance of entrepreneurialism in agriculture and reinforce key entrepreneurial success factors, such as soft skills, and business development. Students interested in building their soft skills are using these programs and events to strengthen

their personal portfolio, enabling them to become more marketable in the professional sector.

Table 1.2: Description of Current Program Offerings

AgEI Program	Description
Fall & Spring Entrepreneur Roundtables	Through a series of roundtable rotations, students and entrepreneurs discuss what it takes to be a successful entrepreneur with some of the most successful business owners in the industry.
Student Business Incubator	Students with business ideas can take part in this unique program providing them with many necessary resources for a startup business.
National Agri-Marketing Association (NAMA) Team	Course introducing students to marketing new agriculture products. Students develop a comprehensive marketing plan for a product and compete at the National Competition each spring.
Ag Innovation & Value Creation Competition (AIVCC)	Competition allowing students to showcase their creative talent and entrepreneurial spirit by challenging them to add value to an existing product or service in the ag industry.
Domestic & International Study Course	Course immersing students in entrepreneurial practices around the world through business development projects.
Scholarships	Each year, over \$25,000 in scholarships are distributed to students involved in the AgEI program.
Summer Internships	20 students are selected each year to take part in a 12 week entrepreneurial focused internship. Selected students are paired with companies who have a unique entrepreneurial structure.
Semester, Inc. Internships	Offers students an opportunity to work with participating companies on a project in product, business, or market development. These internships are conducted during the school year to compliment a students' course work.
Student Advisory Team	Student team used for providing feedback and advice to staff members for the development and improvement of AgEI programs.
"Entrepreneurship Around Iowa" Industry Tour	With many successful entrepreneurs around Iowa, the AgEI program added a local industry tour to offer students an opportunity to meet successful entrepreneurs in the state.

Entrepreneurial Minor	Students interested in entrepreneurship have the ability to emphasize their studies at Iowa State with entrepreneurial based courses offered through this minor.
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AgEI's programs provide a solid foundation for entrepreneurial training. In keeping with the legacy of Roger Underwood, AgEI understands the importance of advancing the mission required to allow students to be successful in the professional world.

1.2 Problem Definition

Student business development has been the core purpose for ISU's AgEI program since its establishment in 2005. However, the recent influx of students interested in program offerings for soft skill development, coupled with an employment market signaling the importance of strong soft skills in candidates, has forced the AgEI program to take a closer look at the opportunities of this underlying causality. The problem faced by AgEI is trying to understand the following: should the program continue to engage those students interested in participating in business startup activities while also accommodating for those with an ambition to take advantage of program offerings for soft skill development purposes? This study investigated how undergraduate students value soft skills to their future success and how AgEI must develop a plan, which remains true to its mission of entrepreneurial development while encompassing the need to develop soft skills with students.

1.3 Objectives

The overall objective for this research was to establish the AgEI program's place in developing soft skills in undergraduates, while still focusing on its original mission to provide undergraduate students at Iowa State University, specifically in ISU CALS, with

practical business development and entrepreneurial experiences essential for their success in future careers and endeavors. The specific research objectives are to:

- Identify soft skills designated by successful entrepreneurs as important for undergraduates to possess when looking to build their own businesses or when seeking full-time employment with an entrepreneurial firm.
- 2) Establish a comprehensive index of the ten most important soft skills that students involved in the AgEI program have been able to develop through established programming.
- Determine how the AgEI program could position itself as an outlet for soft skill development.
- 4) Create a business model for the implementation of specific soft skill programming into the existing AgEI program.

1.4 Significance of Study

Meeting these objectives will be useful in determining whether the addition of soft skills programming will strengthen the value of the program to ISU CALS students and generate actionable ideas on how to do so. Enticing additional participation in the program, while maintaining its original entrepreneurial goals, will allow the AgEI program to grow in value and size.

1.5 Methods

A case study research method has been employed to create a better understanding of this complex issue specific to the AgEI program. This methodology allowed for the use of multiple sources and techniques for gathering data. For the purposes of this thesis and its objectives, data were gathered from student-focused surveys and AgEI alumni/entrepreneur

testimonials. Using the data collected from the student-focused surveys, the researcher will give a better understanding of the core competencies gained from the current programming, as well as quantify the students' desires for future skills development within the AgEI program. Interviews with entrepreneurs helped to identify the core competencies needed to become a successful entrepreneur. The entrepreneurs' insight helps to bear in mind new program ideas. The interviews and testimonies are rich sources of primary data and will support the research objectives of this thesis.

1.6 Thesis Outline

A review of literature will be provided in the following chapter. Chapter III provides details for how the methods and theories are used to analyze the research question and provide a framework to systematically address the fundamental issues involving this case. This case study can be utilized as a teaching or training mechanism for other entities looking to establish an entrepreneurial development program or expand upon a current one. In chapter 4, results from the student survey, entrepreneur testimonials, and employer questionnaire are presented and discussed. The final chapter summarizes the results and provides a business model for implementing new core competency development programming into the established AgEI program.

CHAPTER II: LITERATURE REVIEW

2.1 Soft Skills

What are soft skills? They are the knowledge, attitudes, behaviors, and abilities possessed by an individual that define personality characteristics and are often used to facilitate success in the workplace. Sociologists Bowles and Gintis, introduced the concept of soft skills in 1976 to bring light to personal factors other than those measured by academics. Soft skills are commonly contrasted, in the professional world, with cognitive 'hard skill' abilities in the areas of mathematics, literacy, or science tested by measurable academic assessments. In academia, hard skills are often the objective of an intuition's existence, but soft skills are becoming increasingly important, if not more important, than cognitive skills or intelligence, based on academic and employment deliverables (Gutman 2013). In, "The Importance of Soft Skills", Heckman and Rubistein state:

"Numerous instances can be cited of people with high IQs who fail to achieve success in life because they lacked self-discipline and of people with low IQs who succeeded by virtue of persistence, reliability and self-discipline." (1991, p.1)

Soft skills can be defined by a wide range of characteristics. Examples of these skills may include self-direction, motivation, communication, critical thinking, innovation, or initiative. The most widely accepted method of describing and testing these skills is through the OCEAN model. This test narrows down thousands of soft skills into 5 categories of personality traits and rates individuals on the following: Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism (John and Srivastava 1999). Although conclusive, personality traits are less malleable than modifiable characteristics, such as creativity, innovation, and perseverance. This concludes the need

for an open discussion on the soft skills students have been able to obtain through current AgEI programming and those they wish to enhance in the future.

Soft skills will reveal a complicated and non-conclusive discussion. Much research has been done, but conclusions on the definition of, or even the name for, these skills are still highly-contested between researchers based on the theoretical and methodological approaches that have been utilized. Soft is the most common term utilized to describe these skills, but terms such as competencies, personality traits, transferable skills, and life skills, are also widely used. For the purpose of differentiating those skills obtained in the classroom (hard) and those through experiences (soft), we will use 'soft skills' to maintain consistency throughout this research.

2.2 Agriculture Industry Demand for Soft Skills

Although the term 'soft' may be highly-contested as a descriptor, there is no question that these skills are gaining popularity amongst employers seeking to hire young professionals prepared to succeed in a growing knowledge and technology-driven economy. Employability has often been linked to an individual's level of education, as confirmed by a recent statistic stating that more than a quarter of employers (27.7 percent) project they will reduce the hiring of new entrants with only a high school diploma over the next five years (Casner-Lotto and Barrington 2006). For companies to remain competitive in a global market, they are looking for more than a college degree. Many firms have recognized the need to adapt behavioral-based assessment of potential employees to increase their ability to gain value from employees embodying desirable soft skills.

Companies in the agriculture industry are no exception. It is predicted that by the year 2050, there will be 9.6 billion people on this planet. The industry must meet the demand for food with less arable acres of farmland and mounting social pressures

(Primentel and Wilson n.d.). Farmers, ranchers, and producers are not going to be able to produce more food while conserving scarce natural resources. According to the American Association for Agricultural Education, "In order to further improve agricultural productivity efficiency and effectiveness in meeting our global food, fiber, and energy needs, a sufficient supply of well-prepared agricultural scientists and professionals is needed to drive sustainable growth, scientific discovery, and innovation in public, private, and academic settings." (2011, p.1)

Employers in the agriculture market are looking for undergraduate and graduate students who not only embody basic skills, such as mathematics, but those who have a vast applied soft skill portfolio, allowing them to prosper quickly within an organization as a key contributor. An employer's ability to train new employees in general company practices is relatively easy, according to AgCareers.com. Often, however, employers find it difficult to teach employees soft skills, such as motivation, because these skills must be learned through practical experiences; they cannot be easily taught (Doyle 2012). A 2010 American Management Association Critical Skills Survey of 2,115 managers and executives valued communication skills (80.4 percent), critical thinking (72.4 percent), collaboration (71.2 percent) and creativity (57.3 percent) – the 4 Cs – as the soft skills they desired the most in employees (Shrader and Finkle 2012).

More specific to the agriculture industry, a recent study designed to observe the agribusiness labor market's perceived value of college graduate attributes, 29 percent of respondents ranked creativity as the most important attribute, followed by communication skills at 23 percent. Critical thinking skills and teamwork skills came in at 22 percent and 16 percent respectively. When asked the importance of technical skills, such as knowledge

in finance, only 11 percent of the labor market valued them as more important than soft skills (Noel and Qenani 2013).

Market signals from the agribusiness labor market have clearly defined the need and importance for college graduates to possess strong soft skills, thus requiring the development of these skills throughout their time in higher education institutions. With these demands, colleges and universities are feeling the pressure from the industry to shift their extra focus from technical skills to the development of more profound soft skills in students. According to Noel and Qenani (2013), "An efficient coordination of efforts of agribusiness programs to labor market needs will strengthen and enhance the value of the program, while boosting agribusiness graduates' employability." (2013, p.30) This creates an opportunity for agricultural academic institutions.

2.3 Entrepreneurship & Soft Skills

Entrepreneurs, much like agribusiness professionals, exemplify certain soft skills affording them the ability to be successful in their profession. While developing a steadfast list of the soft skills an entrepreneur must possess to be successful would be irrelevant due to the vast array of skills bestowed in entrepreneurs, this research focused on five of the most prevalent as summarized by the Harvard Business Review: creativity, innovation, problem solving, perseverance, and persuasion. (Bonnstetter 2012)

Creativity is an important skill for identifying and generating technologies, products, and services to meet customer demands, but entrepreneurs must first be able to identify needs through problem solving to understand voids in the marketplace. (Allen, et al. 2012) Aspiring entrepreneurs must be able to recognize problems in the market and create valuable solutions. Persuasion comes into play when an entrepreneur must sell consumers or investors on the new idea that they created. This sale is based on knowing the

consumer's needs and persuading them that their new creation will effectively solve a void in the marketplace. Finally, perseverance will be the key to success for an entrepreneur. Failure is eminent when developing new ideas, but successful entrepreneurs must embody the will to keep on going or start over and try again.

Entrepreneurial activity is not only limited to startup firms, but is also found in established organizations. Employers seek out entrepreneurial-minded people because they know these individuals have the ability to generate value for their companies through new ideas, which are essential in today's fast-paced, commercially-based economy. This is also how established companies are keeping up and remaining competitive in an age of globalization. These market demands have caused a shift in the demand for colleges and universities to transition away from stagnant academia approaches for education and into creativity-generated curriculums (Amabile 1997). Market demands for these unique, soft skills gives great opportunity and validity to higher education programs, such as ISU's AgEI program.

CHAPTER III: METHODS

Chapter III provides an overview of the methods that were used to explore the opportunity for introducing soft skill development opportunities into the ISU AgEI student offerings portfolio. A case study research method isemployed to create a better understanding of this complex issue. Data were gathered through student-focused surveys, entrepreneur testimonials, and employer questionnaires.

3.1 Case Study Methodology

A single-case study methodology is utilized to provide an in-depth investigation into this holistic, sociological topic of education and professional development. Robert K. Yin, the highly acclaimed author of *Case Study Research: Design and Methods*, identified three specific types of case studies: Descriptive, Exploratory, and Explanatory. (Tellis 1997) For the purposes of this thesis, an explanatory case study is utilized and designed to explain the current relationship between the AgEI's original objective of providing business development learning opportunities for students and the demand from a certain demographic of students who seek out opportunities within the established programming to further develop their soft skills.

The Art of Case Study Research author, Robert Stake, groups case studies into three other groups: Intrinsic, Instrumental, and Collective (Tellis 1997). As a member of the staff and someone who has grown with the program over the past five years, I took special interest in this topic as I have seen the importance of our program's existence for those students interested in utilizing the program to build their soft skills. Therefore, this specific case study can be grouped into Stake's intrinsic category.

3.2 Data

Triangulation, the practice of collecting data and evidence from multiple sources, is an important component when utilizing a case study methodology in order to gain a well-rounded perspective and capture the full scope of the problem being addressed, while providing adequate information for the development of a solid base to test the case's hypothesis (Fisher and Ziviani 2004). For this case study, data were collected through an online student survey and entrepreneur interviews. Both of these components played an important role in developing a proper analysis that could be utilized by the AgEI staff to broaden the program's offerings for ISU CALS students in an area underserved by current programming.

An online student survey, comprised of nineteen questions (see Appendix B), was pilot tested by a group of fifteen students, revised, and sent to all ISU CALS undergraduates – totaling 3,000 students – through a list serve provided by the University, to gain a better understanding of the students' preliminary awareness of the AgEI program on campus, their background in soft skill awareness, and their desire to have more opportunities on campus designed to strengthen them professionally in this area. The survey was developed and dispersed to students through Qualtrics, an online survey software, and distributed through the university email system. Students had 2 weeks to complete the survey. To entice participation, students who completed the survey were entered into a drawing for a \$50 gift card to Target. A goal of a 20% survey response rate, equating to 600 surveys, was the initial feedback goal set forth for this study. Evaluation of the data was done by utilizing the Qualtrics software as it has the ability to aggregate all responses into easy-to-understand charts and graphs.

In-person interviews of AgEI alumni, both successful entrepreneurs and business professionals, were conducted to gain a better sense of the soft skills they were able to gain from their experiences with AgEI and those that have been important to their entrepreneurial and professional careers. These semi-structured interviews, gave the interviewer freedom to ask additional questions beyond the outlined questions, allowed for candid conversations, giving insight into the program's current relevancy to those entering the workforce and producing ideas for improvements. Interview questions focused on understanding the soft skills they were able to build during their involvement in the AgEI program, how they were able to use those when starting a business or working in a professional career, and those skills they wished they had developed while at ISU in order to strengthen their personal portfolios. The interviews were evaluated and analyzed on a case-to-case basis, generalizing similarities and highlighting specific ideas for further implementation of soft skills programming into the initiative.

CHAPTER IV: THEORY

Joseph A. Schumpeter's model of economic development assumes a perfectly competitive economy is in stationary equilibrium, thus lending to a perfectly competitive equilibrium. This results in an economy with no profits, no interest rates, no savings, no investments, and no involuntary unemployment. Theorized as the "circular flow" that continues to repeat itself year after year, this model states that the same products are produced every year in the same manner as well. However, as a very unlikely state to an ever-changing economy with profits, etc., Schumpeter stated that economic development can be achieved through the "spontaneous and discontinuous chance in the channels of the circular flow, disturbance of equilibrium, which forever alters and displaces the equilibrium state previously existing."

Furthermore, Schumpeter's theory states that innovations destroy the market, but in doing so, create new products, processes, and services unlike a market has seen before.

Influencing and promoting innovation within a cyclical market is what the AgEI program aims to accomplish through its programming to strengthen Iowa's and the world's economy. In the beginning of the research process, three hypothesis of study were identified:

- Students are not aware of the soft skills needed to be successful as an entrepreneur or business professional.
 - a. The concept of soft skills is not taught beyond isolated instances in the U.S. school system as an important component to future success, therefore these skills are often not a component of one's formal education, but all humans possess them. If students were explicitly taught soft skills development

strategies, they could be cognizant of those they possess and those they need to strengthen in order to find success in their professional and personal lives.

- 2. Increased funding and involvement from donors will increase the awareness of and the importance of building soft skills through the AgEI program.
 - a. The AgEI program is a completely donor-funded entity within CALS at ISU. Student programming relies on donations that range from \$500-\$100,000, but with an annual \$250,000 operating budget, it is difficult to add any new programs. An endowment of \$2.5 million would allow for the program to expand efforts in soft skills development.
- A successful college-wide entrepreneurial program will endure until a critical mass
 of students understands the process of business development, thus lending to an
 ideal vessel for complimentary soft skills programming.
 - a. The entrepreneurial business environment is constantly changing, bringing with it new challenges and opportunities. The AgEI program exists to help students learn valuable entrepreneurial skills and offer resources for business development. Since students turnover every four years and new business ideas are constantly being created, an expiration date for the program is not a concern, thus giving an opportunity to expand programming into soft skills development that will couple nicely with the entrepreneurial skills the students are gaining.

4.1 Case study as the Preferred Research Strategy

It will be argued in this sub-section that the case study research strategy is best suited to accomplish the objectives of this research, as stated in Section 1.2. The case study

research method is a detailed examination of relatively few persons, items, or entities which focus on understanding the dynamics present within single settings. The method typically combines data collection techniques, such as, archives, interviews, questionnaires, and observations. The evidence may be qualitative, quantitative or both (Eisenhardt 1989). It uses a mixture of methods including: personal observation, the use of informants for current and historical data, straightforward interviewing, and the study of relevant documents and records. The concentrated, skill-intensive nature of the case study enables the use of both objective methods of measurement and the detailed probing of attitudes and background.

Case studies are best employed when the analyst is presented with an unusual opportunity to examine and interact with an actual, on-going process in its real-life context (R. K. Yin 1981). Studies of individual cases allow the researcher to learn intricate details and provide insight into the problem being considered which aids in the process of prescribing a course of action (Kennedy 1978). This detailed insight is required when it is necessary to probe deeply into systems behavior and the interrelationships between people and institutions: to establish and explain attitudes and beliefs, and to show why certain behavior occurs (Casley and Lury 1987).

Traditionally, case studies were thought only appropriate for the exploratory phase of an investigation, surveys and histories only for the descriptive phase, and experiments for explanatory or causal inquiries (R. Yin 1994). This hierarchal view of the research phases reinforced the idea that case studies could not be used to describe or test propositions; however a more appropriate view of these different strategies is that the case study strategy can be used for all three phases: exploratory, descriptive, and explanatory.

The case study method can be invaluable in the formative stages of investigation when hypotheses or propositions are not fully formed, and when engaging in the pursuit of clues or guidelines for further research. The challenge facing the researcher then is to investigate objectively and to describe what could be seen or confirmed by another observer (Simon 1978).

The case study approach, while used extensively in medical and psychological research, is beginning to gain acceptance in the agricultural economics profession as a valid research tool. The transition in academic research from clinical case studies to developing generalizations through induction has created a new research style utilizing falsification and multi-variate statistical methods (Rumelt 1991).

Case study research is well suited to inductive research methods, but has also found importance in deductive research. Its unique strength is its ability to deal with a full variety of evidence: documents, artifacts, interviews, and observations. The case study lends itself to the task of investigation of a complex process that contains many uncontrollable variables of unknown importance. It is the method of choice under such conditions where it is desirable to obtain a wealth of detail and primary data about the subject of interest (Simon 1978). The case study itself is best regarded as a self-contained analysis of an often complex situation, relationship, or system that seeks to test an explanation of what is observed rather than a single variable or factor (Woods, 1995).

Case studies have often been viewed as a less desirable form of inquiry than either surveys or experiments. The greatest concern has been over the lack of rigor of case study research. Unfortunately, all too often the case study investigator has been sloppy and has allowed equivocal evidence or biased views to influence the direction of the findings and

conclusions. What is often forgotten is that bias can also enter into the conduct of experiments and the designing of questionnaires, etc. Problems of bias are common to all five of the research strategies mentioned earlier, but in case study research, they may have been more frequently encountered and less frequently overcome (R. Yin 1994).

The case study method of research makes sense for analyzing the problems facing AgEI because:

- Allows for a detailed description of the program's development, giving the reader insight into why the objectives outlined were important to the future structure of the program.
- Data can be collected utilizing various methods including in-person interviews and online surveys. This gives AgEI the ability to pull information from many sources to develop a well-rounded business model for the incorporation of soft skills programming.
- 3. AgEI is currently in the exploratory phase of this investigation, therefore collecting as much information as possible from many different sources is crucial in making a decision. The case study format allows for the exploration of the history of the program and the opportunities the foundation has presented for its future.

CHAPTER V: DATA & ANALYSIS

This chapter analyzes the data collected from two analysis tools: an online student survey and in-person entrepreneur interviews. These tools were utilized to gain a better understanding of how AgEI can better serve ISU CALS students through soft skill development opportunities and whether these opportunities align with the industry's demands based on successful entrepreneurs' business development experiences.

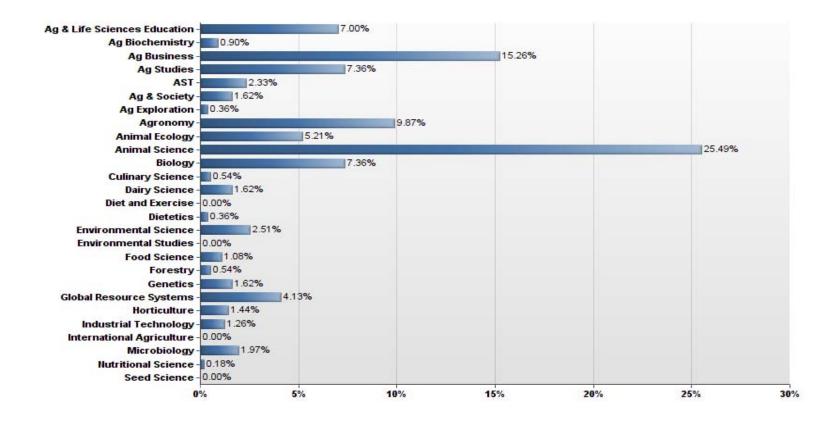
5.1: Student Online Survey Results

The online student survey gave an insight into ISU CALS students' knowledge of soft skills and their desire to build these skills during their college careers. A population of 3,000 ISU CALS students were encouraged to participate in the survey. An online survey tool, Qualtrics, was utilized to administer the survey and the current cals agri ugrad email list serve allowed a distribution channel to all of these students. Students surveyed ranged from freshman to senior level and included all ISU CALS majors: Agricultural & Life Sciences Education, Agricultural Biochemistry, Agricultural Business, Agricultural Studies, Agricultural Systems Technology, Agriculture & Society, Agricultural Exploration, Agronomy, Animal Ecology, Animal Science, Biology, Culinary Science, Dairy Science, Diet & Exercise, Dietetics, Environmental Science, Environmental Studies, Food Science, Forestry, Genetics, Global Resource Systems, Horticulture, Industrial Technology, International Agriculture, Microbiology, Nutritional Science, and Seed Science. To entice participation, a \$50 Target gift card was given away to one lucky respondent who left their contact information at the conclusion of the survey. A list of the survey questions can be found in Appendix B.

Over the course of two weeks, 593 students completed the survey, equating to a 20% response rate. Demographics for the survey were collected based on class level and major.

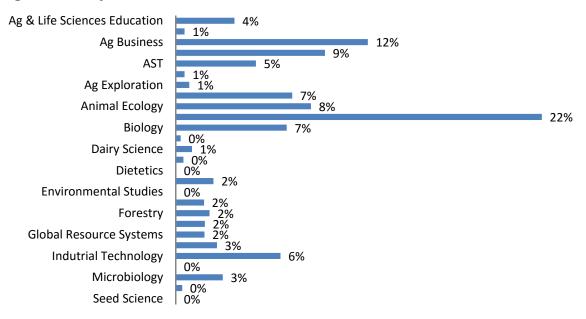
AgEI has primarily attracted students with an agricultural business major since the program and major are both housed in the Department of Economics at ISU. However, students from all CALS majors have become aware of the program through increased college-wide promotional efforts. This was apparent through the college major demographic data. Eighty-five percent of the CALS majors were represented by respondents. Results to the survey are presented in Figure 5.1 below. Although only 20% of students responded, Figure 5.2 gives a clear indication that the student respondents were an adequate representation of the college based on major.

Figure 5.1: Reponses Based on Major



(Percentage=percent of respondents)





Soft skills were defined to the student respondents as "personal attributes that indicate a high level of emotional intelligence." An example of possessing strong communication skills to be a great leader was given. Once defined, students were asked to rate how important they felt soft skills were to their future success on a scale of 1-5 (1-not important, 5-very important). A large number of students rated the importance between a 4 and 5, giving an average importance rating of 4.52.

Once an importance rating was established, students were asked to which soft skills they felt were important to their personal future success. A list of 84 soft skills were provided for the students. All of the soft skills on the list were chosen at least once, but the ten most popular were adaptability, critical thinking, decision making, friendliness, listening, public speaking, problem solving, self-confidence, time management, and verbal communication. Seventy-two percent of the respondents chose each of the top ten skills as

important to their future success. Networking, collaboration, dealing with difficult people, organization, planning, presentation skills, and self-leadership were also important to the respondents. Respondents could choose all that applied to them.

A large majority of the students who participated in the survey felt that there were enough opportunities for them to develop the soft skills they needed to be successful. Those that they pointed out as having been developed at Iowa State were adaptability, critical thinking, friendliness, listening, problem solving, public speaking, scheduling, school-life balance, time management, and written communication. Table 5.2 compares the skills that the students desired for future success and those they have been able to develop at ISU.

Table 5.1: Soft Skill Desires vs. Development at ISU Comparison

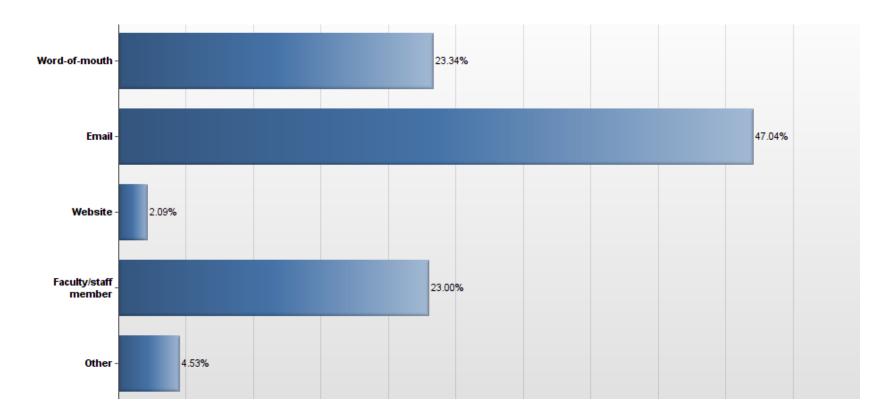
Table 5.1. Soft 5km Desires vs. Development at 150 Comparison			
	Desired for	Attained at ISU	
	Future Success		
Adaptability	X	X	
Critical Thinking	X	X	
Decision Making	X		
Friendliness	X	X	
Listening	X	X	
Public Speaking	X	X	
Problem Solving	X	X	
Scheduling		X	
School-life Balance		X	
Self Confidence	X		
Time Management	X	X	
Verbal Communication		X	
Written Communication		X	

Following their insight about the skills they had been able to develop at ISU, students were asked, in open ended question format, if there were any soft skills from the provided list in the preceding question they wished could expand upon or further developed, but have not been able to at ISU. Students replied with a wide range of skills,

but the most notable were personal branding, creativity, business ethics, team building, networking, people management, technology, self-confidence, problem solving, and public speaking.

The latter part of the questionnaire focused on the students' awareness of the ISU AgEI program. Sixty percent of the respondents were aware of program. The graph below depicts how these respondents had heard about the program. Email marketing is the main promotional tactic for AgEI, thus it makes up a majority of how students heard about the program. See Figure 5.2 below. Category "other" reflects students hearing about the program through courses taught by the AgEI director or the Program Coordinator's visits to orientation classes and club fests.

Figure 5.3: How Respondents Heard about the AgEI Program



Current involvement in AgEI was measured by asking the students if they had ever been involved and which programs they had taken part in. Only 33% of respondents had been involved in programs or courses offered by AgEI. If respondents indicated that they had not participated in any programs, they were excused from the survey as the rest of the questions were for those who had.

The survey proceeded by asking students which programs they had been involved in. Students could choose all that applied from the following list: Econ 334 – Entrepreneurship in Agriculture, Economics 234 – Small Business Management, summer internships, Semester Inc. internships, domestic business development course, international business development course, NAMA, student business incubator, student advisory team, fall/spring entrepreneur roundtable, "Entrepreneurship Around Iowa" industry tour, farmer entrepreneur panel, or ag innovation competition. A large number of these students had either participated in the Economics 334 – Entrepreneurship in Agriculture course (46% of respondents) or the fall/spring entrepreneur roundtables (53% of respondents).

After students indicated how they had been involved, they were given the same list of 84 soft skills that they had seen prior in the survey and were asked to share which soft skills they have been able to gain through their involvement with the program. The top 10 skills indicated were business ethics, critical thinking, decision making, entrepreneurial thinking, listening, networking, public speaking, research, and verbal communication. Similar to the first part of the survey, these students were asked, from the preceding list, to also share the soft skills they wish AgEI would offer programming for. A majority listed networking and strategic planning, with self-branding and negotiation following close behind.

The final two questions were used to gauge the students' interest in starting their own business after participation and learning what their main takeaways have been from their involvement. Seventy-six percent of these students indicated they have found an interest in starting their own business after participation in the program. When asked what the greatest benefit to being involved in the AgEI program was, a majority indicated the networking opportunities. Many also indicated that collaboration, confidence, establishing an entrepreneurial mindset, and building peer relationships were also important soft skills they were able to come away from the program with.

5.2: In-person Entrepreneur Interview Results

Understanding the impact AgEI is able to make on students while at ISU, and gaining a perspective on how this impact transitions into creating successful entrepreneurial businesses or being a tactful entrepreneurial-focused employee, was the main objective of this in-person entrepreneur interview process. Sixteen successful alumni of the AgEI program, as outlined in Appendix C, were interviewed. Jenna Lansing, undergraduate in Agricultural Business and AgEI student employee, conducted the interviews. She has been involved in the AgEI program for four years and has seen the value it has brought to her in the form of developing her soft skills. However, she was able to create a neutral ground for conversation, alleviating bias that may stem from staff performing the interviews.

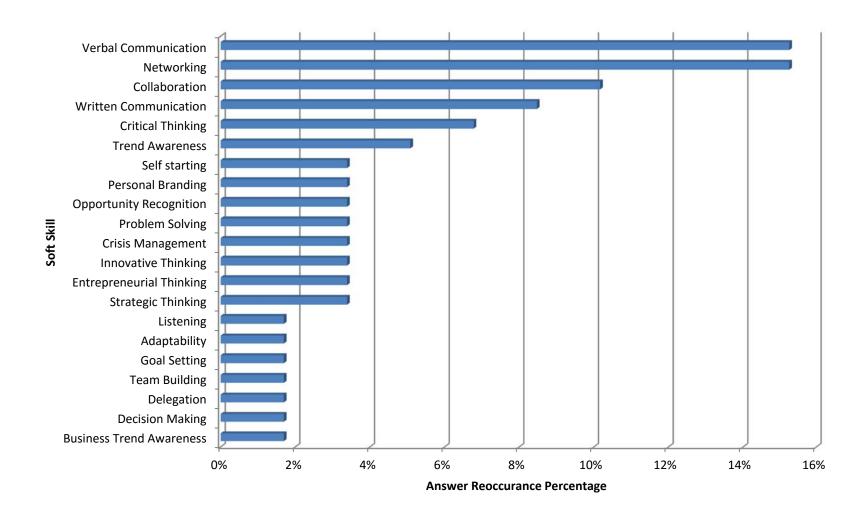
Lansing utilized a predetermined list of questions, as outlined in Appendix D, to conduct the in-person interviews. Additionally, she supplemented the survey with probing questions she felt necessary to fully understand the interviewees' thoughts and ideas. No incentive was given to those who participated in the interview process. It was found that the

participants were willing to share their thoughts, experiences, and insights to strengthen the program for future success.

Drawing on the research objectives, the interviews were able to assist in the identification of important soft skills deemed necessary to start a business or be a key contributor in an entrepreneurial business, as well as help build a comprehensive list of soft skills that the AgEI program can specialize in the development of. Four areas of interest were assessed through the data collected from these interviews. Areas included the interviewee's personal soft skills obtained through their participation in the program, their AgEI involvement as an undergraduate student, soft skills they wished their employees or coworkers to exude, and a qualitative analysis of other key takeaways.

Unlike the student survey, a list of soft skills was not provided to the interviewees, but was rather generated at the conclusion of the interviews based on feedback. As Figure 5.3 displays, there were twenty-one skills that the interviewees brought up that they had been able to develop while involved in the AgEI program, assisting them entrepreneurially or professionally. These skills included business trend awareness, decision making, delegation, team building, goal setting, adaptability, listening, strategic thinking, entrepreneurial thinking, innovative thinking, crisis management, problem solving, opportunity recognition, personal branding, self-starting, trend awareness, critical thinking, written communication, collaboration, networking, and verbal communication. The top ten soft skills identified were verbal communication, networking, collaboration, written communication, critical thinking, trend awareness, self-starting, personal branding, opportunity recognition, and problem solving. The percentages on the bottom axis of Figure 5.3 indicate the reoccurrence rate to which each soft skill came up in the interviews.

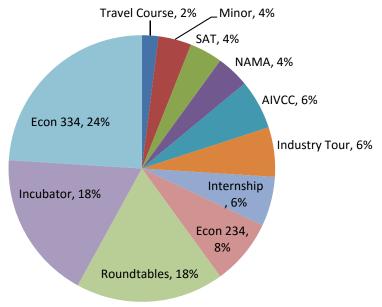
Figure 5.4: Soft Skills Developed through AgEI Program



Karl Kerns, founder and owner of PigGene Sustainable Solutions, shared his thoughts on the soft skills he was able to gain through his involvement with AgEI as a student. "From my experiences with AgEI, I realized how important all aspects of communication are including verbal, written, and visual forms. I was also able to develop my entrepreneurial way of thinking more, which included developing skills such as crisis management, critical thinking, and business trend awareness." (Kerns 2016) Kerns went on to explain that he believed the skills he learned had been crucial in his pursuit of his own entrepreneurial endeavors.

As a means of understanding where, with the AgEI program, the interviewees were able to gain the soft skills outlined in Figure 5.3, they were asked to list all of the AgEI program offerings, as listed in Table 1.2, they took part in as a student. A large majority obtained skills through enrollment in the Economics 334-Entrepreneurship in Agriculture course taught by AgEI director, Kevin Kimle. Brandon Maier, founder of Maier Trenching, explained "My first experience with AgEI was through the Econ 334 course. I was able to learn key business skills, but most importantly, I was able to develop a network for future business opportunities." (Maier 2016) Other popular offerings included the incubator program and the entrepreneur roundtables. See Figure 5.4 for results.





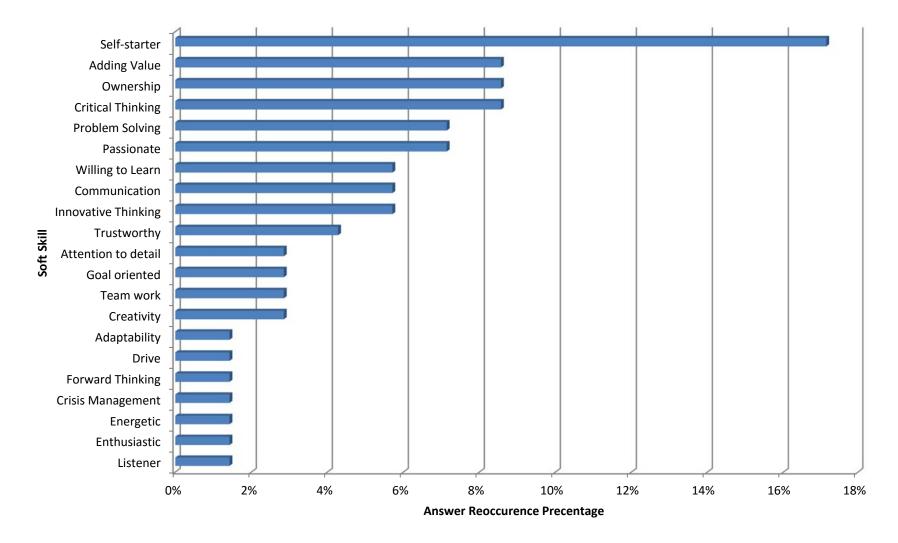
According to Rusty Johnson, creator of FieldMaxx Water Management, "I was encouraged to get involved in the AgEI Incubator program through a connection I had made as an Ag Engineering student. This program was key to my success for many reasons. Because of the structure of the incubator, I was able to pinpoint what I was trying to do exactly and learned how to market that idea to my target market and potential customers." (Johnson 2016) Johnson was motivated by the incubator structure as it kept him moving forward on his business idea by encouraging him to set goals, giving proper guidance through mentorship, and offering the tools necessary for him to be successful as a business owner.

Turning the focus to putting the interviewees in an employer's shoes, they were asked to verbalize the soft skills they look for when hiring talent for their own companies.

Twenty-one soft skills were identified from this inquiry. These included listening, enthusiasm, energy, crisis management, forward thinking, drive, adaptability, creativity,

team work, goal oriented, attention to detail, trustworthy, innovative thinking, communication, willingness to learn, passion, problem solving, critical thinking, ownership, adding value, and self-starting. The most popular of those identified were self-starting, adding value, ownership, critical thinking, problem solving, passion, willingness to learn, communication, innovative thinking, and trustworthiness. Figure 5.5 provides an overview of this list and an insight to each skill's importance to the interviewees.

Figure 5.6: Soft Skills Desired by Entrepreneurs when Seeking Employees



"My company, established in the AgEI program when I was a student, now has the opportunity to hire interns through the AgEI program," explained Stuart McCulloh, founding partner of ScoutPro. "We seek students who display creativity and critical thinking skills for these internships." (McCulloh 2016) McCulloh is now the talent acquisition specialist for their entrepreneurial company and wishes to hire interns and full time employees who will invest themselves into the company just like the founders do. In addition, he desires candidates who are self-starters and entrepreneurial in creative and innovative ways.

Once quantitatively assessed, a qualitative approach to analyzing the survey data was taken to help understand additional underlying messages that the interviewees shared and inadvertently agreed upon. Self-awareness of knowing what one is good at, maintaining humility when finding things one is not good at, and asking for assistance when needed was a common message heard from the group. As expressed by Colin Hurd, founder of TrackTill and Agriculture Concepts, "I became more self-aware [through my involvement in the AgEI Incubator program] by being able to identify my strengths, finding my weaknesses, and discovering areas he needed others and their expertise." (Hurd 2016) He said his ability to do so could be attributed to using his network he had established through his time in the AgEI program.

Aside from soft skills, professional networks and mentorship were also frequently referenced as important resources the interviewees were able to gain from the AgEI program. These professional and mentor networks, comprised of AgEI staff, successful

entrepreneurs, and business professionals, provided inspiration, motivation, and encouragement. Clayton Mooney, creator of Kinosol, stated, "The mentors and networks I gained through my time in the AgEI program afforded me the ability to learn beyond the classroom, build self-confidence, and confide in individuals who had experience I could learn from." (Mooney 2016) Many of the interviewees still keep in contact with the mentors they met through AgEI.

Experience is key when developing a company; whether it is through a mentor's guidance or personal opportunities. Reflecting back, many of the interviewees, who had created businesses after graduation, expressed their desire to have been able to be employed in the same profession to gain experience before diving into their own business. "Having the ability to 'job shadow' a business owner as their employee would have helped me be more prepared to start my own business," explained Andy Kleen, owner of Kleener Image Landscape Supply. "Although I had to learn by trial and error with little startup experience, it was a great way for me to learn quickly through the help of my mentors along the way." (Kleen 2016) As Andy alluded to in his interview, many of the respondents did agree that some of their inexperience allowed them to fail, teaching them the most important lessons in perseverance.

To conclude the interviews, interviewees were briefed on the importance of this study. All interviewees agreed that soft skills development while in college was important to their success. When asked if the AgEI program should take a more active role in assisting students in the development of their soft skills while also maintaining a startup environment, only one of the interviewees had concerns about the AgEI program losing its

original focus. All others agreed that a focus on soft skills development would only strengthen the program's offerings.

Although highly situational based on the interviewee and their experiences, these interviews gave valuable insight into where the program has been able to create value for its students, helped identify soft skills that both undergraduates and alumni were able to obtain through their participation, those skills they had wished they had before becoming an entrepreneur, and areas of improvement for the future of the program.

CHAPTER VI: DISCUSSION

This section discusses the online student surveys and in-person entrepreneur interviews assisted in answering the research question: Should the program continue to engage those students interested in participating in business startup activity while also accommodating for those with an ambition to take advantage of program offerings for soft skill development?

6.1: Entrepreneurship & Soft Skills Development Link

Becoming a successful entrepreneur takes technical expertise, whether it be in math, science, or technology. However, in today's world, technical proficiency is a necessity, but not a sufficient condition for entrepreneurship. Beyond technical skills, one must utilize soft skills to develop themselves as a marketable individual in the workplace, and this is no different for entrepreneurs selling ideas in the marketplace. Having the ability to effectively market their business, communicate its value to their customers, and listen to the market's needs, were all desired skills emphasized when speaking with each successful entrepreneur during their in-person entrepreneur interviews. These entrepreneurs stressed that their continued soft skill development, both through the AgEI program and their personal lives, had a positive impact on strengthening their companies as well.

6.2: Developing Soft Skills at the University Level

Soft skills are important building blocks in professional and personal development. At the university, we are in the business of building young professionals, not only through course work, but also through work-based professional experiences that take students beyond the classroom. By providing experiences that allow the learning of soft skills, educators have the opportunity to add significant value to a student's education. AgEI is one of the few programs at ISU that focus its offerings around work-based, real-life

experiences for their students. What started out as a mission to provide undergraduate students with practical business development and entrepreneurial experiences, to increase startup activity amongst younger individuals, has grown to make an even greater impact in the lives of the students who also seek out AgEI opportunities to develop their soft skills.

6.3: Important Soft Skills for Students & Entrepreneurs

As a means of initially understanding the overlying similarities in the two research methods, Table 6.1 draws on data feedback from both the online student surveys and inperson entrepreneur interviews to begin to create an understanding of the soft skills identified as highly desired by undergraduate students at Iowa State and those desired by entrepreneurs. Focusing comparison on these two categories allowed for an assessment of the skills AgEI should explore for programming improvements and additions.

Table 6.1: Most desired soft skills by students and entrepreneurs

able 0.1. Most desired soft	Student	Entrepreneur	Importance
	Desired by	Desired by	
Soft Skill	Students	Entrepreneurs	Percentage
Critical Thinking	Х	Х	100%
Problem Solving	Х	Х	100%
Verbal Communication		Х	50%
Listening	Х		50%
Public Speaking	Х		50%
Adaptability	Х		50%
Decision Making	Х		50%
Friendliness	Х		50%
Time Management	Х		50%
Entrepreneurial Thinking		Х	50%
Self-starting		Х	50%
Self Confidence	Х		50%
Adding Value to Company		X	50%
Ownership		Х	50%
Passion		Х	50%
Willingness to Learn		Х	50%
Trustworthiness		Х	50%

(X=majority of survey participants' choice)

The comprehensive analysis of these two categories generated a list of seventeen soft skills that the students and/or entrepreneurs identified as important to future success. Critical thinking and problem solving were the most desired soft skills by both parties. Fifteen other soft skills were identified, but not agreed upon. This made for a difficult task when choosing the remaining eight soft skills to round out the comprehensive list of ten to focus on as a part of soft skills programming. Before drawing further conclusions, the student survey results were assessed and indicated soft skills already gained through participation in AgEI programs. These skills included critical thinking, verbal communication, listening, public speaking, and adaptability. Due to limited financials

and capacity resources, it was important to keep these skills as a part of the list and build upon those programs already being offered. The last four soft skills, rounding out the comprehensive index, were identified as **decision making**, **entrepreneurial thinking**, **self-starting**, and **adding value**. Many of the other skills, such as self-confidence, that were listed, are difficult to teach, but rather inherited by students through building the ten identified skills.

With the original goal of students gaining entrepreneurial thinking skills through all programs offered by the AgEI program, a focus on building problem solving, decision making, self-starting, and value add skills still needed to be addressed in order to offer the complete index of soft skills through the program.

The comparisons between what softs skills students believe are important and what entrepreneurs deem important, suggest there is an opportunity for academic programming to bridge the gap between the two group's understandings. Perhaps a focus group gleaned from the student ranks and a select number of entrepreneurs could discuss the supply and demand need for soft skills. Students supply the characteristics and soft skills, which are often developed by participating in the AgEI program. The entrepreneurs represent the demand for the soft skills in the market place.

6.4: Implementing Soft Skills Programming

Soft skills are learned by doing, not taught in a classroom. The ability to give students unique experiences allowing them to develop the soft skills set forth through the index is and can continue to be an invaluable strength of the AgEI program. Having a greater understanding of the skills students seek to gain, and designing offerings from the feedback received from the entrepreneurs, will allow the program to build upon soft skill development opportunities, while keeping the original mission in mind. The following new

programming ideas will address how to implement the four soft skills not yet being obtained by students or entrepreneur through AgEI programming. These, as indicated as not fulfilled in both the student surveys and entrepreneur interviews, are problem solving, decision making, self-starting, and the ability to add value to a business. Ideas were generated through the insight of the AgEI staff and the AgEI Student Advisory Team.

Students on this team came from diverse backgrounds, interests, and majors:

Problem Solving – In order to integrate problem-solving lessons into current programming, the students had suggested implementing scenario analysis into the bi-weekly incubator meeting agendas. Guest speakers, or AgEI staff, would present a business problem to the group, students would team up and develop a solution to the problem. The ideas would be presented either at the end of class or the at the following meeting, depending on the complexity. This approach would allow the students to experience real-world entrepreneurial issues that they may experience. The collaboration of ideas at the end will give students the ability to not only develop solutions, but learn how others think which can be important to their future businesses.

Decision Making – Making business decisions can be stressful and overwhelming for a young entrepreneur. From partnerships to corporate investments, students often do not have the expertise to make these decisions on their own. A structured mentorship program will be instated as a component of the incubator program to assist students when making important business decisions. They will be paired with a mentor who has had entrepreneurship experience, allowing them to be confident in their decisions and learn alongside their trusted mentors.

Self-starting – Setting personal goals is the first step to becoming an individual who is self-motivated and accomplished. In order to create value to each students' AgEI experience, a staff member will sit down with them and assist them in setting personal goals they have for their time in the program and their life beyond ISU. These goals will be revisited with the students at least once a year to see how they are progressing and how the AgEI can further support them.

Adding Value – Currently, through the program's Econ 234 – Small Business Management course, students are introduced to case study evaluation, but in a unique way. Each semester, an entrepreneurial company is identified and used as a live case study. The company presents an issue they are having to the students and the students are to address it through their work in the course. This allows them to work on a real business, adding value to their bottom line. Continuing the structure of this course, and increasing promotion to all ISU CALS students, AgEI will be able to assist students in the identification of areas they can add value in any circumstance.

6.5: Recommendation

Due to the growing opportunities for students to get involved in the AgEI program, it has proven to be overwhelming to students. With the implementation of additional soft skill programming ideas, it is has been recommended by the Student Advisory Team that AgEI should more actively aid students in the navigation of the opportunities AgEI presents to them. It especially important to guide students through their AgEI journey to ensure a beneficial experience, but has been difficult with the limited staff capacity funds have allowed.

In order to service students more effectively and efficiently during their time with the AgEI program, and as a recruitment tool, it is recommended that a membership program be instated. The objective of this membership program would be to create a sense of place for each student actively participating in the AgEI programs, but also as a tool to tailor their experience within the program to their personal and professional goals. Two membership tracks will be developed: innovation and implementation.

The Innovation Track will be tailored to those students who know they want to own a business or those who have already started work on developing a business. These students will partake in programs, such as the incubator, Economics 334 – Entrepreneurship in Agriculture, and Economics 234 – Small Business Management. In addition, students would be encouraged to pursue the Entrepreneurial minor to supplement their major studies. A new StartUp U Accelerator will be introduced by the Office of Economic Development at ISU next year, therefore participation, as a part of the innovation track, will be encouraged. Students in this track will also be encouraged to participate in the soft skills focused programming depending on their future goals.

For students who have focus on a professional career, but wish to have a background in business development and entrepreneurship, the Implementation Track will encourage them to get involved with the AgEI through programming focused on building their soft skills through unique opportunities. These opportunities will include entrepreneurial internships, NAMA, roundtable events, business development courses, and the new soft skills programming. Students will also be able to build soft skills as they take on leadership roles through the AgEI student advisory team. Students in this track will be encouraged to also participate in other programming as they see fit.

Although the track structure will help group students by interest, it still will be a time intensive program to implement due to its individualistic nature. Students will be encouraged to set personal goals and share those with the AgEI staff to ensure they receive the best AgEI experience possible. In order to keep track of all of the students and their ambitions, an online database will be established. A landing page on the AgEI website will allow students to enter in their contact information as well as their interests and goals. One-on-one meetings will be scheduled on a need-by-need basis to ensure the students are properly introduced to AgEI and the track system. During these meetings, a course of action will be tailored to the students.

This membership structure not only allows the AgEI program to create a sense of place for the students, but also builds up a database, not yet established, that can be used to track success, tailor marketing material, and analyze the soft skills that are be attained through annual feedback. The next chapter will discuss the conclusions that can be drawn from the data and the vision for the future of the AgEI.

CHAPTER VII: CONCLUSION

The results from this research suggest that the implementation of soft skills programming would positively complement the ISU AgEI's current student offerings. The overall objective for this research was to establish the AgEI program's place in developing soft skills in undergraduates and understanding how the program could do so while still focusing on its original mission to provide undergraduate students at Iowa State University, specifically in ISU CALS, with practical business development and entrepreneurial experiences essential for their success in future careers and endeavors. The specific research objectives and how they were met are as follows:

The study identified soft skills designated by successful entrepreneurs as important for undergraduates to possess when looking to build their own businesses or when seeking full-time employment with an entrepreneurial firm. This was found through the in-person entrepreneur interviews conducted with 16 successful entrepreneurs. The top 10 skills identified included being a self-starter, having the ability to add value to a business, taking ownership in their role, critical thinking, problem solving, passion, willingness to learn, communication, innovative thinking, and trustworthiness. The study concluded there are measurable differences between student understanding of the importance of these skills and the skills required to be a successful entrepreneur. AgEI programming efforts should continue to explore the fundamental interests of the supplier of soft skills (students) with the demand for soft skills. The coordination and alignment of the supply and demand for soft skills is an ongoing opportunity in the labor market for not only hard skills, but soft skills. In order to remain up-to-date on skills needed for successful entrepreneurs, periodic

involvement with entrepreneurs who have experiences the business cycles will be valuable to student learning.

The establishment of a comprehensive index of the ten most important soft skills for AgEI students to possess has been developed. For the purposes of developing programs to meet the market demand for soft skills, the study indicated a need for a quantifiable and measureable list of skills. After adopting an initial list of 84 skills, the questionnaire administered to students and the information gleaned from the entrepreneurs suggest the following softs skills are the most important: critical thinking, problem solving, verbal communication, listening, public speaking, adaptability, decision making, entrepreneurial thinking, self-starting, and adding value. As such, the index provides a starting point to gauge the importance from each group, but also provides a direction for where to focus AgEI's programming resources to increase areas of weakness or verify areas of strength in the current program.

Overall, the results suggest the AgEI program could position itself as an outlet for soft skill development. Additionally, the research findings determined a sufficient need and desire for the additional program offerings. As such, this leads to an opportunity for AgEI's leadership to create a business model for the implementation of specific soft skill programming into the existing AgEI program. The model will serve to identify the value proposition of informing students of the ongoing importance of soft skill development and provide a means to help them develop their soft skills, allowing them to meet their personal and professional goals. AgEI will continue to coordinate its resources to help identify, recognize, and develop softs skills for students in ISU CALS. This could include the

utilization and maintenance of the student and project tracking system, which was discussed in section 6.5, and further development of program offerings listed in Table 1.2

AgEI intent is to deliver a value added offering to students, while continuing to deliver on the program mission. Some other program offerings might include: collaborations inter and intra university organizations, the development of entrepreneurship study or degree programs, student-led discussion and projects related to soft skill development, faculty development on enhancing skills in the classroom.

Today's knowledge economy requires the combination of hard and soft skills unlike previous generations of students. The identification and recognition, and development of soft skills require leaders to understand their importance in advancing the solutions to the problems faced by agriculture. Their development can play a key role in the success of students studying agriculture. Soft skills are ubiquitous and must be recognized as equal to the hard skills needed to complete transactions. The participants in this study have varying views on the degree of importance. However, there is an agreement that soft skills matter, and further development of soft skills will likely lead the agriculturalist to find solutions to our most pressing problems.

Revisiting the research question, should AgEI continue to engage those students interested in participating in business startup activities while also accommodating for those with an ambition to take advantage of program offerings for soft skill development purposes? The findings indicate the population of ISU CALS students understand the importance of soft skills to their careers. The combination of ongoing programming advancements for AgEI, the program's leadership, involvement of entrepreneurs, and board members, lend credence to the resources dedicated to AgEI programming and the rise in

importance of soft skills. The program's offerings are useful to students set on a career path as an entrepreneur ready for a start up venture, or those who recognized the importance of soft skill development regardless of their career. Although the data suggest differences in which soft skills are important, it provides AgEI an opportunity to bridge any gaps that exist and direct students to recognized their strengths and weaknesses.

CHAPTER VIII: FUTURE RESEARCH

The case study and research methods used in this thesis provide a natural guide for future research. This study, as with many others, raises more questions than it answers.

Many of these questions and other areas for follow-up research are below. Questions raised are intended to aid in the future development of research studies to further strengthen the AgEI program for students, faculty, and industry.

The first, and arguably the most important, question raised is: How would the data from the online student survey compare overtime? It will be interesting to take the ideas from the conclusion of this thesis, implement those, and redo the survey 2-5 years down the road to see what impacts the new programming changes made for students enrolled as undergraduates in ISU CALS. Continuing to monitor how the AgEI program is making an impact in students' college careers, professional careers, and life will only create greater opportunity for the classes to come

Secondly, it would be interesting to track the development of each individual student as they grew through the AgEI program, whether they are involved all four years, or just a select few. This could be accomplished through the membership program as outlined in the Discussion session of the research. Each member would be monitored through annual feedback surveys and assessed through personal goals established at the beginning of each year. An highly-integrated tracking system would be desired to be able to accomplish to track the data for this research, but the results could provide endless possibilities to tailor the program for each individual who participates.

Lastly, researching and developing the habits of highly effective AgEI entrepreneurs, just like Stephen Covey does for highly effective people, would be an interesting way for the program a gain sense of how they are helping their future

entrepreneurs progress before graduating. This would require staying in contact with alumni of the AgEI program who find success in the entrepreneurial world and asking them to continually share what made them successful in the field.

There are a number of possibilities for future research methods that the AgEI program could pursue to strengthen their program for future generations to come. Learning from their own students, as well as other programs around the country, will afford them the ability to stay current and relevant in the agriculture industry.

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APPENDIX A: SUCCESSFUL AGEI STUDENT STARTUPS

AccuGrain – Owner: Ryan Augustine | Est. 2014 | Oskaloosa, IA

As a student at Iowa State University, Ryan teamed up with a researcher to utilize a patent that had never been explored beyond the confines of the research station. As a means grain measurement, this unique technology allows farmers to accurately measure the weight of flowing grain with no moving parts and no need for calibration. Ryan was awarded the \$30,000 American Farm Bureau Federation Rural Entrepreneurship Challenge in 2016 with this concept.

Agriculture Concepts/TrackTill – Owner: Colin Hurd | Est. 2014 | Nevada, IA

Growing up, Hurd was surrounded by farm equipment as the nephew of Don Van Houweling, founder of Van Wall Equipment. His knowledge of the industry and his desire to become an entrepreneur drove him to create parent company, Agriculture Concepts. Within his company, he developed TrackTill and CadenEdge, both of which have been sold off to Yetter Farm Equipment. See "Smart Ag" below for Hurd's new entrepreneurial venture.

Annie Johnson Equestrian – Owner: Annie Johnson | Est. 2011 | Cedar Rapids, IA

For over 15 years, Annie Johnson has been riding, training, and competing in the equestrian world. Two years after graduating with her bachelor's degree in animal science from Iowa State University and receiving proper training, Annie began her own equestrian training business. She trains riders and their horses based on their goals and needs.

Arctic Stick – Owner: Brandon Adams | Est. 2013 | Des Moines, IA

Designed by an undergraduate in the College of Business at Iowa State University, through time in Econ 334, this product promises to keep bottled beverages cooler, longer. Once frozen, the stick's cylinder design fits easily into a bottle and can be filled with flavorings to liven up any drink. Adams is currently selling his product on Amazon.com.

Buckeye Fish Company – Owner: Joe Sweeney | Est. 2014 | Buckeye, IA

Raising fresh fish in Iowa has become a popular and important part to the state's agriculture ecosystem. Sweeney was on the cutting edge when he started raising Barramundi Seabass for sale to high-end restaurants in the Des Moines, Omaha, and Minneapolis metropolitan areas. His goal was to meet the demand for seafood while growing the production portfolio of ag producers in the Midwest.

ClinicNote – Owners: Tyler Fox, Justin Coadrake, Morgan Hampel | Est. 2015 | Ames, IA

ClinicNote is the first technology to revolutionize how speech pathologists submit reports to insurance companies. Traditionally, therapists submit written reports without any type of consistent formatting. This inconsistency causes confusion and frustration between therapists and insurance companies. ClinicNote provides a certified standardized form, helping to eliminate errors in communication.

Continuum Ag, LLC – Owner: Mitchell Hora | Est. 2014 | Ames, IA

Continuum Ag, LLC is a consulting and data management company that utilizes the technologies available to put to use the "dots" collected in the field. By using data and analysis, growers can make improvements and develop the best plan for managing every acre. By analyzing data in the continuum, the differences can be found and managed appropriately. With an emphasis on soil health, every acre will be approached from the soil up.

FieldMaxx Water Management – Owner: Rusty Johnson | Est. 2015 | Deerfield, MO

Sub-surface drainage, also commonly referred to as tiling, is a practice many farmers around the Midwest have been utilizing to mitigate negative effects of soil erosion and extreme wetness. Although this practice is nothing new, new advancements are being integrated to improve these practices. Johnson, Iowa State University graduate, has recently developed his business in reverse irrigation.

G-Pops Popcorn – Owner: Garrett Ley | Est. 2014 | Alleman, IA

Ley is what some refer to as a "serial entrepreneur." As a child, he was always coming up with new and innovative ways to make buck here and there, but he hit the jackpot when he created G-Pops Popcorn. This gourmet popcorn business has pops up any flavor you could think of for school fundraisers, special events, or just to enjoy at home.

HydroMax – Owner: Peter LaMair | Est. 2014 | Des Moines, IA

Making sure cattle have 24-hour access to water is important, but can be a hassle in the winter when temperatures dip below freezing. It is difficult for producers to keep waterers open constantly, but with HydroMax they can be alerted in a timely manner via a smartphone app when the temperature dips below freezing and ice begins to form.

Inland Sea – Owner: Jackson Kimle | Est. 2015 | Ames, IA

Inland Sea Company, LLC will build state-of-the-art recirculating aquaculture system (RAS) facilities for salmon production, in Iowa. The first facility, with a 2-acre footprint, will result in weekly harvest of approximately 90,000 pounds of salmon, 4.4 million pounds annually. This facility will be the first in a series of large-scale, efficient, bio-secure aquaculture production sites in U.S. and global inland locations.

KinoSol – Owners: Clayton Mooney, Mikayla Sullivan, Ella Gehrke, Elise Kendall | Est. 2015 | Ames, IA

Together, the KinoSol team created a mobile, solar-powered food dehydrator designed to decrease post-harvest loss for subsistence farmers in developing countries. The system has been field tested in Uganda and sold to non-governmental organizations (NGOs) for further introduction into third world country communities.

Kleener Image Landscape Supply – Owner: Andy Kleen | Est. 2013 | Grimes, IA

After being influenced by his entrepreneurial parents, Kleen had a desire to start his own business after he graduated from Iowa State University. He had an idea, did some research, and started working to open a landscape supply company in Grimes, IA. The business supplied hardscape goods, including mulch, rock, and patio pavers to residential homeowners and landscape contractors.

Maier Trenching – Owner: Brandon Maier | Est. 2014 | Eagle Grove, IA

With a wide array of earth-moving equipment, Maier has been able to offer his clients a multitude of service including drainage tile installation, excavating, sewer and water line repairs, and tile line repairs. Growing up on his family farm, he had a firsthand look at what it takes to conserve Iowa's soil while maintaining optimal production conditions through the use of tile, drainage ditches, and water ways.

Mairet's Garden Center – Owner: Shane Mairet | Est. 2009 | Muscatine, IA

As the southern Iowa's most comprehensive place for all things garden, Mairet's Garden Center offers a wide selection of plants, fertilizers, and decorations to meet their customer's needs. Shane started his business right after graduation from Iowa State University and has grown his business to include self-serve melon and pumpkin patches as well as an ice cream shop.

PigGENE Sustainable Solutions, LLC – Owner: Karl Kerns | Est. 2013 | Columbia, MO

Kerns is developing the BioFlex Pig, a pig that can beeter digest and utilize nutrients from cellulosic feedstuffs. The innovative pig makeup of this pig creates a more sustainable process for producing animal based proteins for a growing world population. This one-of-a-king technology offers producers improved pig cellulosic digestibility to help alleviate the competition for cereal grains.

ScoutPro, Inc. – Owners: Michael Koenig, Holden Nyhus, Stuart McCulloh | Est. 2011 | Urbandale, IA

ScoutPro, Inc. was created when the three founders were taking the AgEI Entrepreneurship in Agriculture course at Iowa State University. This product replaced paper pest manuals with an easy-to-use application that reduces the time and effort it takes to identify pests in corn, soybean, and wheat fields. They were awarded the \$30,000 American Farm Bureau Federation Rural Entrepreneurship Challenge in 2015 with this concept.

Smart Ag – Owner: Colin Hurd | Est. 2016 | Ames, IA

Hurd's mission is to redefine the way we farm. Smart Ag's products will enable farm operators, big and small, to benefit from affordable and cutting edge technology. Smaller, cheaper, and smarter equipment can transform how food is grown by making farming easier and more sustainable.

Tillage – Owner: Steven Brockshus | Est. 2016 | Ames, IA

This web-based farmland realty application increases access and usability of farmland data. It does this for farmers and farmland brokers by providing alerts about farmland for sale and rent, a land management dashboard and marketing creation tools.

Wolters Custom Yardens – Owner: Josh Wolters | Est. 2015 | Des Moines, IA

Wolters, Iowa State University horticulture graduate, offers a unique service providing labor and maintenance for home gardens. His services include preparing, planting, and guiding families through the process of choosing the appropriate vegetables and fruits for their location and tastes. His customers do not only experience the satisfaction of growing their own produce, but they have a crop valued to rival that of any local supermarket at harvest.

APPENDIX B: ONLINE STUDENT SURVEY QUESTIONS

- 1. What is your classification at Iowa State University?
 - a. Freshman
 - b. Sophomore
 - c. Junior
 - d. Senior
- 2. Are you a student in the College of Agriculture and Life Sciences?
 - a. Yes
 - b. No
- 3. If no: Thank you for your time.
- 4. If yes: Proceed
- 5. What is your major in the College of Agriculture and Life Sciences?
 - a. Ag & Life Sciences Education
 - b. Ag Biochemistry
 - c. Ag Business
 - d. Ag Studies
 - e. AST
 - f. Ag & Society
 - g. Ag Exploration
 - h. Agronomy
 - i. Animal Ecology
 - j. Animal Science
 - k. Biology
 - 1. Culinary Science
 - m. Dairy Science

- n. Diet and Exercise
- o. Dietetics
- p. Environmental Science
- q. Environmental Studies
- r. Food Science
- s. Forestry
- t. Genetics
- u. Global Resource Systems
- v. Horticulture
- w. Industrial Technology
- x. International Agriculture
- y. Microbiology
- z. Nutritional Science
- aa. Seed Science
- 6. Soft skills, often times referred to as 'people skills,' describe those personal attributes that indicate a high level of emotional intelligence. On a scale of 1-5, how important do you feel social skills are to your future success?
 - a. Scale of 1-5
- 7. From the list below, which soft skills do you feel are important to your personal future success?
 - a. *Provided list of social skills
- 8. Do you feel there are enough opportunities on campus for you to develop these soft skills?
 - a. Yes
 - b. No
- 9. What soft skills have you been able to develop here at Iowa State?
 - a. *Provided list of social skills
- 10. Which of the soft skills from the list above do you wish you could expand upon or further develop, but haven't had the opportunity to at Iowa State?
- 11. Are you aware of the Iowa State Agricultural Entrepreneurship Initiative (AgEI)?
 - a. Yes
 - b. No
- 12. If so, how did you hear about the AgEI program?

- a. Word-of-mouth
- b. Email
- c. Website
- d. Faculty/staff member
- e. Other
- 13. Have you been involved in any programs or courses that the Iowa State AgEI offers?
 - a. Yes
 - b. No
- 14. If yes, please check all that apply.
 - a. Econ 334-Entrepreneurship in Agriculture
 - b. Econ 234-Small Business Management
 - c. Summer Internship program
 - d. Semester Inc. internship program
 - e. Domestic Business Development course
 - f. International Business Development course
 - g. National Agri-Marketing Association (NAMA) team/club
 - h. Student Business Incubator
 - i. Student Advisory Team (SAT)
 - j. Fall/Spring Entrepreneur roundtable
 - k. Entrepreneurship in Iowa industry tour
 - 1. Farmer Entrepreneur Panel
 - m. Ag Innovation & Value Creation Competition
- 15. Through your involvement, what soft skills have you been able to gain from the program?
 - *Provided list of social skills
- 16. What soft skills listed above do you wish the initiative offered programming for?
- 17. Were you interested in starting your own business prior to participating in the AgEI program?
 - a. Yes
 - b. No
- 18. Are you now interested in starting your own business after your participated?
 - a. Yes
 - b. No
- 19. What has been the greatest benefit to you of being involved in the AgEI program?

*Provided list of soft skills:

Adaptability Coaching Dealing with Difficult Artistic Sense Collaborating People Competitiveness Assertiveness **Decision Making** Conflict Resolution Body Language Delegation Design Sense **Business Ethics** Crisis Management Diplomacy **Business Etiquette** Critical Thinking **Business Trend** Customer Service **Disability Awareness** Dispute Resolution Awareness

Diversity Awareness Emotion Management Emotional Intelligence

Empathy Enthusiasm

Entrepreneurial Thinking

Facilitation Friendliness Giving Feedback

Humor

Innovation Inspiring
Intercultural Competence

Interpersonal Relationships Interviewing

Knowledge Management

Listening

Managing Difficult Conversations Managing Remote

Teams

Managing Virtual Teams

Managing

Meeting Management

Mentoring
Negotiation
Networking
Office Politics
Organization
Performance
Management
Personal Branding

Persuasion

Physical Communication

Planning

Presentation Skills Problem Solving

Process Improvement

Public Speaking

Quick-wittedness

Research Resilience

Scheduling

School-Life Balance

Self Assessment

Self Awareness

Self Confidence Self Leadership

Selling Storytelling

Strategic Planning Stress Management

Supervising
Taking Criticism
Team Building
Technology Savvy
Technology Trend

Awareness

Time Management Tolerance of Change

Training

Troubleshooting

Verbal Communication Visual Communication Writing Reports and

Proposals Writing

APPENDIX C: IN-PERSON ENTREPRENEUR INTERVIEW PARTICIPANTS

Company	Founder(s)
AccuGrain	Ryan Augustine
Agriculture Concepts/TrackTill	Colin Hurd
Buckeye Fish Company	Joe Sweeney
Continuum Ag LLC	Mitchell Hora
FieldMaxx Water Management	Rusty Johnson
G-Pop's Popcorn	Garrett Ley
Inland Sea	Jackson Kimle
Kleener Image Landscape Supply	Andy Kleen
Kinosol	Clayton Mooney
Maier Trenching	Brandon Maier
Mairet's Garden Center	Shane Mairet
PigGene Sustainable Solutions	Karl Kerns
ScoutPro	Michael Koenig, Stuart McCulloh, Holden Nyhus
Tillage	Steven Brockshus

APPENDIX D: IN-PERSON ENTREPRENEUR INTERVIEWS

- 1. Graduation Year
- 2. Major at Iowa State University
- 3. Involvement in AgEI:
 - a. What activities did you participate in?
 - b. What soft skills did you learn through this program?
 - c. How have they helped you throughout your career?
 - d. What skills were most desirable that you learned through your involvement?
 - e. Are there skills you felt you did not learn through AgEI that you wished you could have?
 - f. Other benefits to the program?
- 4. Career Path:
 - a. Who do you currently work for or are you self-employed as an entrepreneur?
 - b. Did you feel the program prepared you to enter into the workforce in terms of soft skills?
 - c. What skills were the most desirable?
- 5. Employees:
 - a. Have you hired employees that have participated in AgEI?
 - b. Do they display developed soft skills? Or do they need more development?
 - c. What skills are the most desirable?