

**INDIANA 4-H MEMBERS AND THEIR PARENTS/GUARDIANS
PERCEPTIONS OF 4-H MEMBER DEVELOPMENT THROUGH THE 4-H
YOUTH DEVELOPMENT PROGRAM**

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ABSTRACT

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This study utilized qualitative and quantitative methods to determine which areas of the *Four Essential Elements* of 4-H were being reinforced in Indiana 4-H Youth Development programs. The *Four Essential Elements* are Mastery, Generosity, Belonging and Independence. Data were collected through the use of a survey instrument and three focus group sessions. Indiana 4-H youth and their parent/guardians participated in a written survey (n=154), which was followed up with three 4-H member focus group sessions (n=25). Results indicated that 4-H members that were surveyed perceived themselves as gaining aspects of the *Four Essential Elements* through their participation in the Indiana 4-H Youth Development Program. Parents/guardians of 4-H members in the study perceived their children to develop aspects of the *Four Essential Elements* through 4-H participation. Data provided evidence that supported a positive correlation between the number of activities that a 4-H member participated in and the level of agreement on survey statements. Both parents/guardians and 4-H members showed significant agreement for all *Four Essential Elements*. Results are in agreement with

previous studies in other states. An environment in which the *Four Essential Elements* are present will assist 4-H members in becoming successful adults in our society.

CHAPTER 1: INTRODUCTION AND LITERATURE REVIEW

Statement of the Problem

The 4-H program has helped to strengthen the youth of America for over 100 years. 4-H began because of a need and it is the needs of each and every community that keeps the 4-H program alive today (Reck, 1951). Due to unhealthy societal influences on youth today there is the need for well planned and organized activities for all youth.

Youth programs, like 4-H, exist to help nurture the learning process in a healthy learning environment. The 4-H program prides itself on the “learn by doing” method. It was the “Father of Extension”, Seaman Knapp who has long been quoted as saying, "What a man hears, he may doubt; what he sees, he may possibly doubt, but what he does, he cannot doubt" (Rasmussen, 1989). Children involved in 4-H learn through practical application. This method is also known as experiential learning.

Societal issues such as poverty, underage drinking, drug use, and violence affect the youth of today and could hamper their ability to function as successful adults. In

2004, the number of children living in families with incomes below the poverty threshold was 12.5 million or 17 percent (Federal Interagency Forum on Child and Family Statistics, 2006). These children are likely not receiving the support in the home that is needed to assist in proper youth development due to parents' work schedule, poor learning environment and/or the lack of knowledge by parents on how to help children develop.

“At-risk situations” are very prevalent in the world that children now grow up in. Statistics show that illicit drug use over a 30 day period among eighth-graders was nine percent in 2005; that number rose to twenty-three percent for twelfth graders (Federal Interagency Forum on Child and Family Statistics, 2006). Additionally eleven percent of eighth-graders, twenty-one percent of tenth-graders, and twenty-eight percent of twelfth graders reported having five or more drinks in a row at least once in the past 2 week period. Reports also show that the victimization rate of serious violent crimes (homicide, rape, aggravated assault, and robbery) against juveniles ages 12–17 was 11 per 1,000 in 2004. The rate of serious violent offending in 2004 was 14 crimes per 1,000 youth (Federal Interagency Forum on Child and Family Statistics, 2006). Children who are in “at risk situations” or those who are less privileged are in need of programs that encourage development, make them feel safe and keep them out of trouble during after school hours.

Programming that encourages youth to become successful adults in our society has become a national concern. Awareness efforts like that from First Lady Laura Bush, who began the Helping America's Youth effort in 2004, are spreading the word of the issues facing youth in our world. The Helping America's Youth initiative also encourages

adults to become a part of the lives of youth in three areas, “family, school, and community” (Helping America’s Youth, n.d.). In addition, because of research, information is being gained to help in the creation of effective youth programming. Carmona and Stewart (1997) suggest that “alternative” youth programs (such as: participation in community service programs, athletics, artistic programs, and programs aimed towards at-risk youth) are likely to include one or more of the following elements: (1) promotion of skills, knowledge, and/or attitudes that might cause participants to refrain from future alcohol and drug use; (2) occupying free time that might otherwise be idle or unstructured; (3) community service and other activities that provide meaningful involvement in pro-social activities; (4) opportunities to interact with pro-social peers; and (5) adult supervision or the development of positive relationships with adults.

While Carmona and Stewart (1997) have established their own set of elements to guide youth programming, the 4-H Youth Development Program has created a set of characteristics that encompassed the goals and visions of 4-H and that were most likely to produce positive youth outcomes when integrated with 4-H Youth Development programming (National 4-H Headquarters, 2001). The 4-H Youth Development Program is a national organization funded in a joint effort by the USDA, the land-grant university in each state and individual county governments, thus accountability for educational programming has become mandatory. The National 4-H Impact Assessment Project (2001) was the first of its kind to attempt to research the impact the 4-H Youth Development Program has on youth across the nation. The National 4-H Impact Assessment Project (2001) led to the creation of the *Eight Critical Elements*. The *Eight Critical Elements* were developed after an extensive youth development literature review.

These eight elements were later condensed into the *Four Essential Elements*, which are the elements being evaluated for this study. These four elements are Mastery, Belonging, Generosity, and Independence. It is the goal of the 4-H Youth Development Program throughout the nation to create new programs that enforces these elements while still making learning fun and interactive.

Purpose of the Study

The purpose of this research was to determine which areas of the *Four Essential Elements* of 4-H were being experienced in Indiana 4-H Youth Development programs. The results of this research will assist Indiana 4-H Youth Development Specialists, Educators and staff in future program development that reinforces key aspect of the *Four Essential Elements*.

Hypotheses and Research Questions

Hypotheses

1. 4-H member reports of their experiences in 4-H youth development events and activities will align with the framework of the *Four Essential Elements* of 4-H Youth Development programs.
2. Parents/guardians of 4-H members will report perceiving their children as having experienced aspects of the *Four Essential Elements* resulting from their child's involvement in the 4-H Youth Development Program.

3. 4-H members who participate in 4-H Youth Development events and activities for prolonged periods of time will report a higher level of agreement to statements on the survey than 4-H members who have been involved in events and activities for a shorter amount of time.
4. The components of the *Four Essential Elements* reported as being experienced by 4-H members will be uniformly experienced.

Research Questions

1. Based on their 4-H participation, do 4-H members report that they experienced aspects of the *Four Essential Elements* of 4-H Youth Development?
2. Do parents/guardians of 4-H members perceive that their children have experienced aspects of the *Four Essential Elements* as a result of their child's involvement in the 4-H program?
3. Do the activities 4-H members report to have been involved in over time relate to their responses to the influence of 4-H on their life?
4. Is any one of the *Four Essential Elements* perceived more positively by respondents than the others?

Review of Literature

History of 4-H

The rich history of 4-H is different in every state. Reck (1951) stated that, “Club work began wherever a public-spirited man or woman did something to give rural boys and girls respect for themselves and their way of life.” The one thing that has remained the same since the evolution of 4-H is its mission to educate and enrich the lives of the youth of America.

A Step in the Right Direction

The history of the 4-H Youth Development Program is reflective of the changes in society and America’s history. The beginning of 4-H was reflective of the needs of the agriculture industry and the effect it had on the changes occurring in society at that time. In the mid to late 1800s agriculture in the United States moved into the world of education. Technological advances in agriculture in the nineteenth century required more research and the land-grant institutional setting was the location for this research to occur. Land-grant institutions needed to be able to educate young people who would continue a life in farming. Classes in business and science were seen as necessary in order to be successful in agricultural in the United States. Before land-grant institutions were introduced, the United States educated students in ministry, medicine and law (Seevers, Graham, Gamon, and Conklin, 1997).

A few agricultural based institutions were created around the United States between 1823 and 1862. Kings College and Harvard College were some of the first to

offer agricultural courses. In 1855, Michigan became the first state to have a college of agriculture. Other states, such as Pennsylvania and Maryland, also implemented a college of agriculture (Seevers et al., 1997).

While these institutions were making some progress in educating students about agriculture, the lack of funding led to under-qualified teachers and a lack of proper curriculum. Continued growth of agricultural based institutions was contingent on assistance from the Federal government (Seevers et al., 1997). Vermont congressman, Justin Morrill introduced a bill to create land-grant based institutions in 1857. This bill would have given each state federal land for building an agriculture and mechanical arts (engineering) based institution. President Buchanan vetoed the bill, declaring it unconstitutional (Rasmussen, 1989). In 1862 Morrill went before Congress with a similar bill that “added provisions for teaching military tactics” (Seevers et al.). President Abraham Lincoln signed the bill naming it the Morrill Act of 1862. In addition, while President Lincoln was in office he passed an act that established the United States Department of Agriculture, which assisted in furthering agriculture education (Rasmussen, 1989).

Continual funding was provided through the Morrill Act of 1890 which additionally prohibited schools from racial discrimination. This act would later be known for the creation of the 1890 colleges. The 1890 colleges were preexisting educational institutions for African Americans. The Morrill Act of 1890 took funds from seventeen land-grant institutions and redistributed the funds to the 1890 colleges to educate African American students about developments in agriculture and engineering (Rasmussen, 1989).

The lack of research in the area of agriculture made it difficult for land-grant institutions to educate students in the beginning (Rasmussen, 1989). In order to conduct research, the idea of experiment stations was introduced by John Pitkin Norton, a professor at Yale, in 1845. Under the leadership of one of Norton's students, William Johnson, the Connecticut Experiment Station was started in 1875 (Rasmussen, 1989). After the Connecticut Experiment Station was created, other states discussed introducing experiment stations as well. The large amount of interest in experiment stations led William Hatch and J. Z. George to go before Congress in 1882 to introduce a bill that would grant yearly federal aid to every state for the implementation and growth of an experiment station. The bill was eventually passed in 1887 as the Hatch Act (Rasmussen, 1989).

Once experiment stations produced results that could be disseminated, bulletins were developed and sent to farmers informing them of research being conducted. However, there was also a desire for face-to-face contact between the farmers and the researchers. The development of Farmers Institutes was a way for this interaction to occur (Rasmussen, 1989). Farmers Institutes allowed the land-grant institution to send researchers into communities to hold demonstration and informational meetings for the farmers. Unfortunately, the Farmer Institutes came to be time intensive and thus many communities were not being reached in a timely fashion.

Perry G. Holden of Iowa State University, developed "movable schools" as a way of interacting with communities (Rasmussen, 1989). By utilizing the railroad system as a way to present information, topics such as how to plant a better corn crop could reach more communities. When the movable school stopped in a community, farmers could

listen to a presentation, pick up publication material and walk through the train cars and see exhibits (Rasmussen, 1989).

Between 1900 and 1910 steady growth and changes were occurring throughout the nation. Farmers became more profitable because of rising farm prices, urban development was progressing, and new technology, such as the crank telephone and mail delivery, made simple everyday tasks less time consuming (Reck, 1951). Those in charge of the public school system saw this progress as an opportunity to modify the mission of the public education and help children transition better into this new modern lifestyle.

This growth in American history led to a difficult transition period for rural Americans. The farming community became worried that the education that was being taught had little benefit to children who wished to continue life on the farm after finishing school. It was believed that the public school system was trying to push students towards a life off the farm (Reck, 1951).

Due to the disconnect between rural Americans and public school officials, those who were concerned with the development of agriculture took steps to educate youth about the agricultural development and technological advancements outside the classroom. This interest in preserving agricultural education was the first step towards the development of today's largest youth program in the nation, 4-H. Wessel and Wessel (1982) stated that, "Here and there, among farm families, agricultural scientists, school teachers, administrators and concerned citizens, the seeds of 4-H were scattered" (p. 2).

Dr. Liberty Hyde Bailey was an inspirational motivator in the rural education movement (Kelsey & Hearne, 1963; Reck, 1951). Bailey was a naturalist at Cornell University, who promoted the natural environment as a classroom (Wessel & Wessel,

1982). In 1896, Bailey started sending out nature study leaflets to school teachers around the state of New York. The material was designed for use by teachers to educate rural youth about the environment around them (Reck, 1951). Cornell University bulletins were funded by an “Experimental Station Extension Bill,” passed in 1894 (Reck 1951, p. 9).

In order to ensure that teachers were using the leaflets, Cornell University organized clubs in which youth were given membership buttons and issued club charters. Members were required to send a weekly letter to John Spencer, club organizer (Reck, 1951). The letter was a way of learning how teachers were using the leaflets in school. The letters were also considered compensation for membership in replace of a membership fee. The leaflets later turned into the magazines, *Junior Naturalist Monthly* and *Rural School Leaflet* (Reck, 1951).

Word was spreading across the United States of the work that New York Extension and Cornell University were doing to promote agriculture education outside the classroom. In 1901, A.B. Graham, Superintendent of Schools for Springfield Township in Ohio created experimental clubs and by 1902 they began to take the shape of what we know as traditional 4-H (Wessel & Wessel, 1982). The clubs had meetings on Saturday mornings with youth who took officer positions and worked on projects while at the meetings. The first project that Graham had members take part in required them to take litmus paper home and test the soil on the family farm. Other lessons included knot tying and using a microscope to look at mold droplets (Wessel & Wessel, 1982). Soon projects such as corn growing, soil testing and vegetable and flower garden growing started to develop (Reck, 1951).

Popularity of the clubs allowed Graham to approach the Ohio Agricultural Experiment Stations for additional support. These clubs were viewed as an opportunity to get the work of the university out to the farming communities in Ohio (Severs, Graham, Gamon, & Conklin, 1997). As discussed previously, there was already a push by experiment stations to disseminate information to farmers and the club system developed by Graham afforded a new method of delivering information to farmers. Graham traveled to different townships to publicize club work and dispense seed corn, provided by Ohio State University, to rural youth. By the end of 1903, there were over 100 club members (Wessel & Wessel, 1982). The next year the concept grew to have 13 township-wide clubs. Due to the success, Ohio State University issued educational material for club members starting in 1904 (Rasmussen, 1989).

In 1902, O.J. Kerns, superintendent of schools in Winnebago County Illinois, took the modern teaching of land-grant institutions and applied it to farming for rural youth (Reck, 1951). Kerns volunteered thirty-seven young men for a project that would demonstrate to Ohio farmers the great advancements that had been made in corn production. Each participant was given 500 grains of selected seed corn from the local Farmers' Institute (Reck, 1951). Participants were also given sugar beet seeds to plant, because at that time the college experiment station wanted to know if sugar beets could be a profitable crop for the area. Information was sent to guide the participants as they grew their crop (Reck, 1951). After the crops had been harvested, participants put their formal school education to work through the method of bookkeeping. Participants were required to record how much it cost to farm and harvest the crop. Through this process

the participants learned practical application of the arithmetic that had been taught previously in the classroom.

While Graham and Kern's work emphasized the "learn by doing" aspect of 4-H, Will B. Otwell added the recognition and encouragement aspect. Otwell realized that the new forms of educating farmers were not supported by many of the farmers in Illinois (Wessel & Wessel, 1982).

Otwell envisioned a new way of educating farmers by reaching out to youth who would in turn take what they learned and tell their parents. His concept led to a corn contest in which he offered a one-dollar premium for the best corn yield. There were 500 boys who requested seed corn for the first contest (Seevers et al., 1997; Wessel & Wessel, 1982). Corn contests date back to 1856 when the Watertown, New York Fair first place winner received fifty dollars (Reck 1951). As Otwell's concept grew, so did the number of participants and the grandeur of the prizes. Not only were these participants learning, they were also being recognized for their efforts. In 1902, 50,000 packages of seeds were sent to boys all over the state. The results of the statewide boys corn contest were displayed at the Illinois Agricultural Exhibit for the St. Louis Fair. There were 1,250 samples of corn and over 600 photographs of the contestants on display (Reck, 1951).

The First Demonstration Worker

Seaman Knapp is credited as an Extension Education pioneer because of his work in Southern states (Seevers et al., 1997). He worked for the USDA to create cooperative agricultural work among states that brought together education for youth as well as the

community. Due to an extensive boll weevil infestation in Texas during the early nineteen hundreds, Knapp went to Texas on behalf of the USDA Bureau of Entomology to introduce a practice for reducing the infestation. Knapp found, like many others had, that talking with the farmers directly had had little impact. Through the use of demonstration work and showing the farmers actual results that led to a profit, Knapp convinced farmers of the new farming method. In 1903, the USDA Office of Farmer's Cooperative Demonstration Work was created because of Knapp's demonstration method (Wessel & Wessel, 1982).

Due to the popularity that grew from the demonstration work the farmers and businessmen of Smith County, Texas petitioned that Knapp place a man in the county to work full time on new farming methods. W. C. Stallings would become the first demonstration agent by the USDA in 1906 (Seevers et al., 1997). The formal title used to address people who were hired to work with the community by the USDA started as demonstration agents.

Club Work Helps Create Successful Southern States

In 1907, Mississippi was still suffering from the effects of the Civil War. Farmers could not afford to support a good school system because of their own lack of education. At the time, Mississippi was using a "one-crop system" for farming (Reck, 1951). This meant that farmers were only growing cotton. When it came to food for their families and livestock, farmers were buying on debit until the cotton was harvested. After paying off the debt the farmers again had no money to live on and the cycle continued (Reck, 1951).

This cycle of harvest to debt needed to change for the state to see forward progress. In 1907, William Hall Smith gathered teachers and rural youth together to create the first corn club in Mississippi (Rasmussen, 1989). By introducing the production of corn in Mississippi, farmers would be able to feed their livestock and not have to buy it from the supply store. Money saved allowed the opportunity to diversify their farms to include more livestock. Mississippi State University (MSU) provided seed corn for all 120 boys who agreed to be part of the corn club. The College of Agriculture at MSU also provided bulletins and instructions for each participant to guide them through the process (Wessel & Wessel, 1982).

The work in Mississippi caught the eye of one of the demonstration agents in the state, A.F. Meharg. It was Meharg who informed Seaman Knapp about the accomplishments of Smith. In 1907, Knapp gave Smith a collaborative position with the USDA. This position made Smith the first federally funded person to work with rural youth in club settings. The position also allowed Smith to use federal funds to mail information and literature to youth throughout the state. By December 1908, there were corn clubs through out the state of Mississippi, and an outline for a partnership between county officials, the state land-grant college, and the federal government had been created (Wessel & Wessel, 1982). This partnership is what we know today as the Cooperative Extension Service (CES), which supports local communities throughout each state in the United States.

Club Work for Girls

While corn clubs were spreading across the nation and financial entities were being developed to support the corn clubs, some county agents wondered if this same financial entity should sponsor rural clubs for girls (Reck, 1951). Traditional corn clubs were made up of boys. The inspiration for corn clubs was out of the need to educate the farmer indirectly. Having clubs for girls could do the same thing in the area of home economics.

Seaman Knapp had been approached with the idea of creating girl's clubs much like the corn clubs. In 1909, Oscar B. Martin took it upon himself to expand beyond just the idea of girls canning clubs (Wessel & Wessel, 1982). Martin went to annual meeting of the South Carolina Education Association meeting in December of 1909. During the meeting he caught the attention of one schoolteacher, Marie Cromer of Aiken County, South Carolina, who agreed to start a canning club for young girls (Rasmussen, 1989; Wessel & Wessel, 1982). Forty-six girls in the county were given the task of growing 1/10 of an acre of tomatoes. When the tomatoes were ready to be canned, club members in the project participated in a three-day canning bee organized by Martin (Wessel & Wessel, 1982). The canning bees throughout the summer were a huge success. Mothers learned the technique from watching their daughters demonstrated how to can (Wessel & Wessel, 1982).

The same year that tomato canning clubs were created in North Carolina, Virginia's Superintendent of schools, J.D. Eggleston, appointed Ella Agnew as the first ever women's state demonstration agent and later the first home demonstration agent ever

appointed by the Department of Agriculture (Reck, 1951). By the end of 1910 Knapp had secured funding to hire seventeen home demonstration agents in the southern states.

Extension Work Moves North

By 1910, there was a successful cooperative program in southern states, but there was a need to grow the program nationally. Demonstration work in northern states was much different than in southern states. The biggest difference was that southern states had federal funding, northern states did not. Many northern states did have a working relationship between local educators and the land-grant university, but not with the federal government (Reck, 1951). Up until 1912, demonstration agents and school superintendents had only concentrated on creating and teaching about advancements in farming methods. In 1912, Oscar H. Benson was transferred to the Office of Farm Management where he oversaw the development of club work in northern and western states (Reck 1951). Between 1912 and 1916 Benson was able to acquire twenty-eight cooperative agreements between the Office of Farmers' Cooperative Demonstration Work and the land-grant colleges (Wessel & Wessel, 1982).

Smith-Lever Act

In 1910 there was a movement towards developing one entity that would work with the land grant institution in each state to provide agricultural information from the federal and state levels down to the local farmers, as well as administer the boys and girls clubs that were continuing to grow in large numbers. That same year, a bill went before Congress that would create the Agricultural Extension Service run by the land grant

university system, but the bill did not pass (Reck, 1951). The USDA went on to start the development of the CES without the help of Congress out of necessity (Seevers et al., 1997).

It took several years to pass a bill that unified Extension work and at that time many elected officials fought to get funding for Knapp's ever growing programs (Reck, 1951). One reason for the delay in passing the bill was because of a disagreement among the land-grant institutions and the USDA. It was Secretary of Agriculture James Houston who finally mediated the compromise between conflicting parties on this issue (Wessel & Wessel, 1982). The Association of Land-Grant Colleges was promised their freedom to conduct their work in the same manner, without the USDA controlling what they did. On the other hand the USDA was promised that they would be able to use Knapp's methods of educating rural areas in the most effective manner possible (Wessel & Wessel, 1982).

Another reason the bill took so long to pass was the fact that many of the bills that went before the House wanted to bring vocational schooling and Extension work into one entity. Members of the House fought back and forth as to whether both styles of education should be combined or if one program needed more emphasis at the time over the other program (Reck, 1951).

In 1913 A.F. Lever of South Carolina became chairman of the House Committee on Agriculture. He had watched Knapp turn southern states into successful farming communities. Lever strongly believed in demonstration work and the "Extension Idea" (Reck 1951). Lever utilized the agreement made by Houston and created the first Extension bill that passed the House. At the same time that Lever was appointed chairman of the House Committee, Senator Hoke Smith of Georgia was a member of the

Senate Committee on Agriculture and Forestry. Smith also had a passion for Extension work. As soon as the Lever bill passed the House, Smith took a similar proposed bill to the Senate (Wessel & Wessel, 1982). The work of Smith and Lever led to the passing of the Smith-Lever Act of 1914 which created a nationally recognized home for Extension work.

4-H Work and War Efforts

When America entered World War I, 4-H members and 4-H volunteers became very involved in the war effort (Wessel & Wessel, 1982). Between 1913 and 1918 club membership grew from 169,000 to 500,000. Paid 4-H club leaders grew from 391 to 985 during the same time period (Wessel & Wessel, 1982). The federal government gave Extension the duty of helping farmers meet the demanding needs of Americans during the war. At that time the federal government had created the “Food for Freedom Campaign” (Wickard, 1942). This campaign was a way to encourage farmers to increase their food production for the better good of their neighbors and country. Through the interest of young 4-H members who also wanted to help with the campaign, 4-H began programs that upgraded the quality of livestock and crops that 4-H members raised. New projects were developed that led to alternative food options for the nation. Sugar beets were grown to help with the sugar supply and rabbits were raised as an alternative meat (Wessel & Wessel, 1982).

The biggest change came when 4-H reached out to urban schools during the war. In these schools students were taught how to garden and can so that their families could eat healthy, but not take away from the supply of food sent to soldiers (Reck, 1951).

When World War II began, the farming community was ready (Rasmussen, 1989). With the advancements made in production there was no shortage of food for the military and or civilians at home. There was however, a shortage in the number of farmers to produce the food. Younger 4-H members stepped in for farmers and older 4-H members who were sent to war (Wessel & Wessel, 1982). There were a record number of crops grown and livestock raised during the war, because of 4-H members help. It is reported that in 1942, there were 77,000 head of dairy cattle, 246,000 swine and 210,000 head of other livestock were cared for by 4-H members (Rasmussen, 1989). At the same time 4-H enrollment reached over one million (Wessel & Wessel, 1982).

Reaching New Audiences

After World War II ended there was a shift in American society. Fifty percent of rural youth were leaving the farm for urban life and it was crucial that Extension step in to help prepare youth for careers outside farming (Wessel & Wessel, 1982). 4-H projects were created to build the skills members would need for other careers. Demonstrations and public speaking became an emphasis in club work. Presentations on health and safety issues in the home and on the farm were very useful to the community (Wessel & Wessel, 1982). Starting in 1950 there was a growing number of female members while male participation was decreasing (Wessel & Wessel, 1982).

Urban 4-H programs were introduced during World War I, but it was Ray Lamb in 1949, who started the first urban 4-H program in Detroit (Reck, 1951). The program was organized and supported financially through the Wayne County Extension Service (Reck, 1951). As with urban 4-H programs today, projects were developed that would be

suited for urban 4-H members. Projects for girls remained similar to traditional projects such as: cooking, sewing, canning and gardening, but for boys it was more difficult (Reck, 1951). Urban areas were not suited for livestock or crop projects so leaders and county agents had to find alternative projects that would still be beneficial to members. Projects such as dog training, home mechanics and home improvement were created for urban settings (Reck, 1951).

In the 1970's the development and implementation of urban programs truly began nationally (Wessel & Wessel, 1982). Many who were against urbanizing 4-H said that the traditional programs were not going to work in urban areas and there was no extra funding for new programs. But with the increasing urban development and more rural youth attending school in cities, it was natural that 4-H reach out to urban children just as much as rural children (Wessel & Wessel, 1982).

When Extension realized that the federal funding need for urban programming was unavailable the Extension Service took action and created Operation Expansion in 1964 (Wessel & Wessel, 1982). Operation Expansion was going to bring needed urban programming to youth one county at a time. The mission of Operation Expansion was to bring urban youth programs and projects that would benefit them. Program topics included: "being a popular babysitter, a top cyclist, a home gardener and an outdoor chef" (Wessel & Wessel, 1982). Other states began to catch on to the idea of urban programming and started their own urban 4-H clubs.

Eventually, funding for urban programs was realized and became a reality by the federal government in 1969 because there was a concern with the number of low-income families in the country. The Expanded Food and Nutrition Education Program (EFNEP)

was developed to address the issues of health, nutrition and gardening with low-income families through CES (Wessel & Wessel, 1982 and Rasmussen, 1989). Extension saw that as an opportunity to not only get Home Economists out into urban communities to teach this program, but also 4-H agents could teach the program to urban youth. Again, the hope was that youth would take what they learned at club meetings home and teach their parents what they had been taught. There were challenges to getting programming to this audience because many parents worked more than one job and had little time to go to an educational program for themselves (Wessel & Wessel, 1982). Bringing the EFNEP program into the schools was a logical way to teach all members of the family how to eat healthy. In 1972 the federal government gave the 4-H Youth Development Program its own funding to develop effective educational programming that was appropriate for urban youth (Wessel & Wessel, 1982).

Throughout the history of 4-H, the program has worked with children of all different backgrounds. Unfortunately not all children received the same quality of programs or equal opportunity to be part of state and national activities (Wessel & Wessel, 1982). The Civil Rights Movement raised the concern of this inequality. Club programs had been developed for African American youth which taught them about farming, gardening, cooking and sewing, but many of the new projects that white children were able to participate in were not financially possible for African American children (Wessel & Wessel, 1982). It was the Civil Rights Act of 1964 that required the CES to develop equal programming for all members of society (Wessel & Wessel, 1982).

During the start of desegregation, the schools in the south lost thousands of 4-H members. The federal 4-H office mandated that 4-H club work had to become integrated.

With most of the southern 4-H clubs operating within the school it became very difficult for programs to survive (Wessel & Wessel, 1982). Many of the schools that had 4-H programs were refusing to become integrated and those that did, waited till the federally mandated deadline to do so. 4-H clubs were forced to stop holding meetings if racial exclusion in the club was discovered. In 1967, a Georgia newspaper reported a loss of 20,000 4-H members in the state (Wessel & Wessel, 1982). The 4-H program not only lost African American members, white members were also affected and had difficulty finding a 4-H program in their community to join (Wessel & Wessel, 1982).

African Americans were not the only minority that struggled to become part of the 4-H community. The Native American and Hispanic populations both had to wait for the CES to come to them (Wessel & Wessel, 1982). It was a struggle for county agents to realize that cultural differences required them to work differently with minority groups.

The Bureau of Indian Affairs created an arm of CES, known as the Indian Extension Service. The Indian Extension Service had Native American agents who were taught traditional programming that would fit the Native American culture, such as clothing, animal and food production and grain (Wessel & Wessel, 1982). This system lasted until 1956. After that Indian Reservations contacted the local CES and asked that agents come and do programming on the reservation (Wessel & Wessel, 1982). In the late 1960s Native Americans' were attempting to separate themselves from the federal government, so at that time Native American tribes stopped working with CES and went on to create their own programs (Wessel & Wessel, 1982).

The Hispanic population in the rural southwest was very much a part of the 4-H program (Wessel & Wessel, 1982). However, in urban areas there was less of an interest

in the program. With time and funding, county agents were able to provide bilingual 4-H literature. In 1976 CES developed a national workshop to address the needs of the Hispanic community for youth agents (Wessel & Wessel, 1982). The workshop, *Effective Programming for Spanish and Mexican-American Youth*, discussed trouble areas that agents had discovered when working with the Hispanic community. Many agents agreed that cultural differences, language barriers and working with volunteers were areas that needed improvement (Wessel & Wessel, 1982).

The Current 4-H Youth Development Program

The 4-H program of the twenty-first century strives to help nurture the development of life skills of all youth (Van Horn, Flanagan, Thomas, 1999). School programs have been developed to allow youth who would not normally be reached by traditional 4-H programs to still gain the benefits of the program. Some of those who benefit from the school programs include those with physical and learning disabilities (Van Horn et al., 1999).

With the rapid development and growth of technology, new opportunities have been realized for national, state and local 4-H Youth Development programs. Extension staff need to have the ability to use technology as a tool to meet the needs of their clientele, which include performing research and conducting daily administrative tasks (Gregg & Irani, 2004). Nebraska created a program using technology to teach youth about science and introduces them to women who work in the science world. “Wonderwise 4-H: Women in Science Learning Kits”, was designed to give youth an opportunity to learn about nine different scientists' occupations and learn through hands-

on science activities that are similar to the actual work of female scientists (Spiegel, Rockwell, Acklie, Frerichs, French & Diamond, 2005).

Other programs such as the Teens Teaching Internet Skills (TTIS) Pilot Project used in Connecticut, Florida, Iowa, Maryland, Virginia, and Washington gave 4-H members the opportunity to teach senior citizens the basics of how to use the internet (Kolodinsky, Cranwell and Rowe, 2002). This program also allowed 4-H members to demonstrate the ability to speak in public and improve their leadership skills (Kolodinsky, Cranwell and Rowe, 2002).

Across the United States many counties have websites where the public can go to find information about their local Cooperative Extension office (Albright, 2000). In some Indiana counties 4-H enrollment is now being done over the internet and items such as newsletters and downloadable forms can be found online. The advancement of technology allows the CES to meet the needs of their audience in a more timely fashion and allows them to market and deliver their programs in new ways. Purdue University is using technology to introduce new topics and make resources readily available to Extension Educators and the general public. In addition, State Specialists at Purdue University are using IP Video to inform Extension Educators and volunteers about the *Four Essential Elements* of Youth Development (McKinley, 2007).

Experiential Learning

The 4-H Youth Development Program has a rich history of educating youth in a way that promotes positive youth development through active participation in the learning

process (Diem, 2001). The approach that was utilized to teach youth about new farming methods at the start of the 4-H history was experiential learning. Experiential learning is also known as “learning by doing” which is the educational philosophy most commonly associated with 4-H (Diem, 2001). This method of learning is the backbone of today’s 4-H Youth Development Program (Enfield, 2001). Experiential learning can be defined as “education that makes conscious application of the students’ experiences by integrating them into the curriculum. Experience consists of senses, emotions, physical conditions, and cognition” (Carver, 1998). Many times the word “experiential learning” will be associated with phrases such as “hands on learning” or “informal education”.

While experiential learning was being utilized nationally through 4-H in rural communities, there was not an educational theory underlying this teaching methodology (Enfield, 2001). Cognitive learning theorists, Jean Piaget and Lev Vygotsky discovered through their research the necessity of active participation by youth during learning opportunities and cognitive learning theory did not allow for this exception (Miller, 1993). From this discovery came the creation of constructivist learning theory. The development of constructivism or constructivist learning theory has led to various approaches of incorporating the theory into teaching methodology. Experiential learning is one of these methodologies.

While both Piaget and Vygotsky are credited for research within cognitive and constructivist learning theories, it is John Dewey that is often cited as the founding researcher of constructivist learning theory. Dewey believed that learning was taught through real world experience in addition to the classroom. The school in itself should be the community, allowing for shared interest and open dialog (Peters, 1977). Dewey was a

pioneer of the progressive education movement (Geiger, 1958; Malekoff, 2004). In his book, *Experience and Education*, Dewey (1938) wrote the following as an example of how experiential learning works.

What he [the student] had learned in the way of knowledge and skill in one situation becomes an instrument of understanding and dealing effectively with the situation which follows. The process goes on as long as life and learning continue (p. 43).

While this may seem like a simple task, Dewey also believed that not all education is actually educating the child even if education is taught through experience (Geiger, 1958). In order for the experience to be educating, an educator must take into account the quality of the experiences (Dewey, 1938). Educators must also assess the “continuity” of the experience (Dewey, 1938). During youth development there is constant intellectual growth due to new experiences that slightly change the student’s perception of previous experiences. The constant development of new experiences will then influence experiences in the future.

Due to this constant development of new experiences, it is important that youth reflect back on a situation so that the full potential of experiential learning is experienced. Reflection allows a person to examine the present experience and compare that to similar experiences that occurred in the past and make assumptions that will help with similar situations that happen in the future (Dewey, 1938, Geiger, 1958). Because of the depth that experiential learning requires of the learner, it is the responsibility of the educator to facilitate experiential learning and present youth with the opportunity to go through the factors that will lead to a genuine experience (Dewey, 1938).

Freire (1973) also delved into constructivist learning theory when he critiqued Extension agents and noted that they must not just explain and show the new method of farming, but they must share in dialog with the “peasant” (farmer) and combine their common knowledge to create a final product. Through sharing in dialog the “peasant” can work with the knowledge that is gained from the Extension agent. In turn the Extension agent gains knowledge from the “peasant” about the culture and world view, and thus utilize this information to teach others in the most effective manner. The use of dialog is important when educating adults or youth because any pupil must be able to reflect back on the foundation upon which knowledge is being built (Freire, 1973).

Additional research in experiential learning led to the creation of a learning model for educators to use in developing a complete experiential learning experience (Kolb & Fry, 1975). The four stages of this experiential learning model were: concrete experiences, observation and reflection, forming abstract concepts, and testing in new situations.

The 4-H Youth Development Program bases its educational practices on the Experiential Learning Model created by John Wiley & Sons (Pfeiffer & Jones, 1983). This model is used to guide the National 4-H Curriculum. The Experiential Learning Model has five stages: Experience, Share, Process, Generalization, and Apply (Pfeiffer & Jones, 1983).

The 4-H Youth Development Program allows youth to create their own learning through real-life experiences with support and guidance from adult family members and adult volunteers (Seevers et al., 1997). For example, the traditional 4-H club system and school enrichment programs allow for youth to be presented with a variety of

experiences, which in turn allow youth to practice and apply new concepts (Van Horn, Flanagan, Thomson, 1998).

Positive Youth Development

Youth development theories (Dewey, 1938; Piaget, 1954; & Lev Vygotsky, 1978) are taken into consideration when creating educational programs for youth in today's society. In youth development programs there are two types of approaches that can be taken by educators: prevention and positive youth development. Much of the early work on youth development examined prevention programming (Leffert & Blyth, 1996). Prevention programs emphasized topics on prevention such as drug abuse, smoking, truancy and teen pregnancy (U.S. Department of Health and Human Services, 2007). While prevention programs still exist, there has also been the establishment of positive youth development programs.

“Positive Youth Development occurs from an intentional process that promotes positive outcomes for young people by providing opportunities, choices, relationships and the support necessary for youth to fully participate. Youth development takes place in families, peer groups, schools, neighborhoods and communities” (Smith, 2002).

This approach does not try to “fix” youth, but instead builds on the existing strengths of youth (Afterschool Alliance, 2003). Building programs based on positive youth development is not a substitute for prevention programming. Instead, both approaches

allow for an expanded framework that promotes positive outcomes for youth (Smith, 2002).

One of the most comprehensive research initiatives on positive youth development is, “The Search Institute’s 40 Developmental Assets” (U.S. Department of Health and Human Services, 2007). These assets demonstrate that through a support base of peers, parents and other caring adults and with the assistance of youth development programming, youth are less likely to take part in at-risk behaviors (Leffert & Blyth, 1996).

The Developmental Asset framework is sorted into two groups of 20 assets; external and internal assets. The 20 external assets involve motivating and guiding young people, helping them set boundaries and creating expectations for themselves, and encouraging them to develop time management skills. The Internal Assets include: building self esteem, social competencies, and developing a passion for learning (Leffert, Benson, & Roehlkepartain, 1997).

Research from the Search Institute revealed a relationship between the number of developmental assets that a child experiences and how positive and successful the child’s development will be. The more development assets that the child experiences the more positive and successful the child’s development will be (Leffert, Benson, & Roehlkepartain, 1997). The reverse is true, leading to a greater likelihood of the child engaging in risky behavior. The fewer developmental assets a child experiences leads to a greater possibility that the child will engage in risky behaviors (Leffert, Benson, & Roehlkepartain, 1997).

Konopka's (1973) research resulted in eight opportunities that need to be accessible to youth. These eight opportunities allow youth to develop in a healthy method. Konopka (1973) stated the following:

“Because of the conflicting values adolescents encounter in a rapidly changing world, they should have the opportunity to thrash out their reactions, consider the pluses and minuses and try to determine where they themselves stand so they will be better able to deal with ideas of all shades- including demagoguery” (p. 302).

Those eight opportunities include: (1) the ability to participate as citizens, as members of a household, as workers, as responsible members of society; (2) to gain experiences in decision making; (3) to interact with peers and acquire a sense of belonging; (4) to reflect on self in relation to others and to discover self by looking outward as well as inward; (5) to discuss conflicting values and formulate their own value system; (6) to experiment with their own identity, with relationships to other people, with ideas, to try out various roles without having to commit themselves irrevocably; (7) to develop a feeling of accountability in the context of a relationship among equals; and (8) to cultivate a capacity to enjoy life (Konopka, 1973, p. 304). Konopka goes on to state that educators who work with youth must encourage open dialog among youth and not impose values on them. This will lead youth to develop sound values (Konopka, 1973).

Another positive youth development framework that has been used in youth programming is the Five Cs model. Lerner (2004) addresses the Five Cs as: (1) competence, (2) social connections, (3) character, (4) confidence and (5) compassion (p. 24). When youth are put in a situation where they can attain these Five Cs they also attain positive youth development. Once the Five Cs are developed and youth make the

decision to be a productive contributor to themselves and the world around them, they attain the Sixth C, contribution (Lerner, 2004, p. 24).

The America's Promise Alliance has also created its own youth development framework. America's Promise stemmed from the Presidents' Summit for America's Future in 1997. At this summit the current President of the United States, George W. Bush and former Presidents: Bill Clinton, George Bush, Jimmy Carter and Gerald Ford and former first lady, Nancy Regan (representing President Regan) were on hand to establish five promises needed for the nation's youth to help them develop into productive adults (America's Promise, 2007) If youth in our society have these "Five Promises," or five things present during their adolescent development, then they are more likely to be productive adults. These Five Promises are, (1) caring adults, (2) safe places, (3) a healthy start and future, (4) effective education and (5) the opportunity to help others (America's Promise, 2006, p. 3). Since the summit, the National Promises Study was conducted in partnership with Search Institute, Child Trends and the Gallup Organization. The study examined the extent to which the youth of this nation are actually receiving the "Five Promises" (America's Promise, 2006).

The study examined four areas: (1) Academic Achievement, (2) Volunteering, (3) Avoiding Violence and (4) Social Competence. The main finding of the research was that the more "Promises" a child has, the better off they are. Below are the results from the National Promises Study (2006) according to the four areas.

Academic Achievement: Teens and younger children with 4 or 5 Promises are more than twice as likely to get mostly A's in school, as compared to teens and younger children with just 0 or 1 Promise.

Volunteering: Young people with 4 or 5 Promises are 40 percent more likely to volunteer in their communities than those with just 0 or 1 Promise.

Social Competence: Teens who receive 4 or 5 Promises are nearly 2/3 more likely than those with 0 or 1 Promise to be generous, respectful and empathetic and resolve conflicts calmly. Younger children with 4 or 5 Promises are twice as likely to be socially competent than their peers with 0 or 1 Promise.

Avoiding Violence: Teens who receive 4 or 5 Promises are nearly twice as likely to refrain from using violence compared to teens with only 0 or 1 Promise (America's Promise, 2006, p.4).

One of the frameworks used by the national 4-H Youth Development Program is the Targeting Life Skills Model (Hendricks, 1998). Using this model, youth are presented with situations and then youth are able to participate in experiences that led to the development of life skills. These life skills will then assist youth in their daily lives as adolescents and on into adulthood. This model is often referred to as the Targeting Life Skills Wheel, because the actual depiction of the model is circular (Hendricks, 1998). The inner circle contains the Four H's (Head Heart, Hands, & Health). Related to Four-H's are the middle circle topics of: Caring, Giving, Working, Being, Living, Thinking, Managing, and Relating. The outer circle of the wheel contains the thirty-six specific life skills that 4-H Youth Development Educators utilize. Life skills in this model include:

sharing, empathy, self-esteem, self-discipline, stress management, problem solving, teamwork, conflict resolution, etc. When using this model, educators do not have to develop a program that contains all thirty-six life skills. The model has been generalized so that Educators can use it to achieve certain outcomes (Hendricks, 1998).

Another framework for positive youth development is the *Eight Critical Elements* that was created out of the National 4-H Impact Assessment Project in 2001. An extensive literature review on youth development to create the *Eight Critical Elements* was done by a team of five, called the Critical Elements work group (National 4-H Headquarters, 2001). The *Eight Critical Elements* were then used to guide the construction of the research instruments used in the National 4-H Impact Assessment Project. Since the release of the results from the National 4-H Impact Assessment Project, research has continued and led to the development of the *Four Essential Elements: Mastery, Generosity, Belonging and Independence* (Kress, 2004). The *Four Essential Elements* are the theoretical framework for this research project. These four elements have been presented to 4-H Youth Development Educators, staff and volunteers to assist in developing and carrying out positive youth development programming.

In summary, there are many frameworks from which to approach positive youth development. It is the mission of the individual organization that drives educational programming to meet the developmental needs of youth (Walker, 1998).

National 4-H Impact Assessment Project

The Eight Critical Elements were conceived to guide 4-H Youth Educators with the implementation of positive youth development programs (National 4-H Headquarters, 2001). The University of Arizona spearheaded a national impact study of the 4-H Youth Development Program. In 1997 funding was provided by the U.S. Department of Agriculture in the amount of \$25,000 (National 4-H Headquarters, 2001). This research was the first ever attempt to address the following question at a national level, “What positive outcomes in youth result from the presence of critical elements in a 4-H experience?” (National 4-H Headquarters, 2001).

The development of the National 4-H Impact Assessment Project began in Tucson, Arizona with forty five people from twenty-three states in December of 1997 (National 4-H Headquarters, 2001). At the meeting, purpose statements and research questions were drafted and work groups were created. The work groups were: Critical Elements, Outcomes, Methods and Current Efforts. The Critical Elements work group created the *Eight Critical Elements* related to youth development in 4-H (1) a positive relationship with a caring adult; (2) a physically and emotionally safe environment; (3) opportunity for mastery; (4) opportunity to value and proactive service for others; (5) opportunity for self-determination; (6) an inclusive environment; (7) opportunity to see oneself as an active participant in the future and (8) engagement in learning (National 4-H Headquarters, 2001). In order to create these elements, the team examined existing literature which would then allow the team to determine the impact of positive youth development programs on youth around the nation.

The other three groups formed during the initial meeting in Arizona, Outcomes Work Group, Current Efforts Work Group and Methods Work Group continued the work of the Critical Elements Work Group. The Outcome Work Group searched for the positive outcomes that would be related to the critical elements. They came up with the following potential positive outcomes: problem solving, goal setting, social responsibility, subject matter knowledge (National 4-H Headquarters, 2001). The Current Efforts Work Group searched for other data available about 4-H youth. The Methods Work Group drafted the sampling design and survey instruments (National 4-H Headquarters, 2001).

From late 1998 to early 1999 the pilot study was conducted. After the survey instruments were fine tuned and adjustments were made, the sampling process and national data collection began in June of 1999 (National 4-H Headquarters, 2001). States were randomly selected from each of the four regions, and counties were then randomly selected to survey youth. Three states from each region were selected for the surveys that were sent to 4-H clubs, special interest groups and school enrichment programs. Surveys that were utilized for afterschool programs were given to states with the highest afterschool enrollment in each region. For all audiences, the number of surveys given in each state was proportionate to the size of the program in each state (National 4-H Headquarters, 2001).

Two questionnaires were utilized: one for youth and one for adults affiliated with the 4-H program. Both surveys asked the same questions, but each was written for that specific audience (National 4-H Headquarters, 2001).

The results of the study showed that both youth and adults were very positive about the 4-H program and about specific areas of the 4-H program (National 4-H Headquarters, 2001). Of the *Eight Critical Elements*, (1) belonging, (2) physical and emotional safety, and (3) positive relationship with adults were found to be particular strengths of the 4-H program. Research found that in the area of “Inclusive Environment” all youth were welcome and there was a sense of belonging in the program. Research also found that in the element “Feeling Emotionally and Physically Safe,” a majority of 4-H members felt safe when doing 4-H activities and they felt safe to try new activities in 4-H. In the element of “Positive Relationship with a Caring Adult,” results indicated that 4-H leaders made them feel good about themselves and helped them to work in team settings (National 4-H Headquarters, 2001). Research also showed that younger 4-H members responded more positively to questions than did older 4-H members and that girls, overall, reported higher scores than did boys. When assessing the results from the adult subject group, results showed that the adults responded more positively than did 4-H members (National 4-H Headquarters, 2001).

The work done in the National 4-H Impact Assessment Project has led to similar work in individual states. Kansas, Missouri, Montana and South Dakota have conducted impact studies using the survey created and basing their research on the concepts created by the National 4-H Impact Assessment Project (National 4-H Headquarters, 2001). The *Eight Critical Elements* created from the National 4-H Impact Assessment Project (2001) informed this research study.

In 2004, the *Eight Critical Elements* were then condensed into the *Four Essential Elements* (Kress, 2004). All eight elements are still present the *Four Essential Elements*

which are: (1) Belonging; (2) Mastery; (3) Independence and (4) Generosity. The Four Essential Elements are further described below (National 4-H Headquarters, n.d.).

- Belonging: Youth need to know they are cared about and accepted by others. Youth also need to experience a sense of physical and emotional safety. They need to feel a sense of connection to others in the group. Current research emphasizes how important it is that youth have opportunities for long-term consistent relationships with adults other than their parents. In fact, the research suggests that a sense of Belonging may be the single most powerful positive ingredient we can add into the lives of children and youth.
- Mastery: Mastery includes the development of skills, knowledge, and attitudes followed by the competent demonstration of these skills and knowledge. In order to develop self-confidence and a sense that they matter, young people need to feel that they are capable. They must also experience success at solving problems and meeting meaningful challenges. Mastery is sometimes called “self-efficacy.” Settings that promote self-efficacy and mastery encourage youth to take risks, seek out challenges, and focus on self-improvement rather than comparing themselves to their peers.
- Independence: Youth need to know that they are able to influence people and events through decision-making and action. Independence refers to an adolescent's growing ability to think, feel, make decisions, and act on her or his own. This continues to develop whenever someone is challenged to act with a

new level of self-reliance. By gaining a sense of Independence, youth develop personal responsibility and discipline.

- Generosity: Young people need to feel their lives have meaning and purpose.

They need opportunities to connect to their communities and learn how to give back to others. As part of this process, youth gain an understanding of others' needs and learn how to respond to these needs. Generosity may also include the development of values such as compassion and tolerance for diversity and the ability to take the perspective of others, and to approach problems as 'a member of a global society,' through participation in local, and national politics.

Whether using the *Eight Critical Elements* or the condensed version, *Four Essential Elements*, when planning a program for youth, the goal is the same. Every 4-H Youth Educator wants his/her youth programs to promote leadership, citizenship and the development of life skills. These elements are experiences that build the whole person into a successful adult, not just develop a single characteristic (Kress, 2004).

Related Studies

The research conducted in this study was based on the *Four Essential Elements* which originated from the *Eight Critical Elements*. The *Eight Critical Elements* were derived from the National 4-H Impact Assessment Project. There had never been a national 4-H impact study done in the almost 100 year history of 4-H (National 4-H Headquarters, 2001). The National 4-H Impact Assessment Project presented an explanation for why this had not happened. The explanation acknowledged that because

of the diversity among 4-H programs within each county in each state and because of the diverse programming and needs of the communities throughout the United States, it was difficult to create and implement a single evaluation method (National 4-H Headquarters, 2001).

From the National 4-H Impact Assessment Project, researchers stated that the, “next step is to combine the critical elements more explicitly with locally, relevant, clearly specified outcomes” (National 4-H Headquarters, 2001, p. 41). Other states since 1997 have conducted their own state impact studies (Astroth & Haynes, 2002; Goodwin, Barnett, Pike, Peutz, Lanting, & Ward, 2005; Goodwin, Carroll, & Oliver, 2005; Lee, Beard, & Straquadine, 2003). Some of these studies have used the research instruments of the National 4-H Impact Assessment Project (Lee et al., 2003), while other studies have used different research instruments (Astroth and Haynes, 2002; Goodwin, Barnett, et al., 2005; Goodwin, Carroll et al., 2005) to determine the impact 4-H had on their members.

At Utah State University Cooperative Extension researchers Lee, Beard and Straquadine (2003) examined the impact of 4-H in the state of Utah using the youth research instrument derived from the National 4-H Impact Assessment Project. The subject group for the study consisted of 200 traditional 4-H club members from 21 of the 29 counties in the state. Results from the study showed that more than 97 percent of the participants of the study indicated that they had experienced all eight critical elements through their 4-H experiences. Results also showed that the following elements were the most strongly agreed upon: (1) adults in 4-H expect me to respect the feelings and property of others; (2) I feel safe when I do 4-H activities; (3) 4-H rewards me for being successful; (4) 4-H shows me that volunteering is important; (5) 4-H teaches me to be

responsible to my actions; and (6) both boys and girls can be leaders in 4-H (Lee et al., 2003).

The Montana CES partnered with Montana State University in 2000 to conduct a state impact study (Astroth & Haynes, 2002). The study examined all 5th, 7th and 9th graders in two school districts selected from each of the twenty-one randomly selected counties. Students were asked to complete a survey that was created from questions utilized in other state and national surveys, which included demographic and family composition questions. Questions were grouped into eight subscales: (1) leadership; (2) social competency; (3) positive self-identity; (4) relations with adults; (5) self-confidence; (6) empowerment; (7) compassion; and (8) skills. The study compared active and non-active students as well as 4-H members and non-4-H members (Astroth & Haynes, 2002). When comparing active and non-active students, results showed that active students were less likely to be involved in “at-risk” behaviors (alcohol consumption, shoplifting, drug use, driving intoxicated, riding in car with intoxicated driver, purposely damaging property) than those who were non-active. Active students also had higher grades (Astroth & Haynes, 2002). When comparing the 4-H members to non-4-H members, 4-H members had higher grades, had participated in “at-risk” behaviors less often in the past six months, were more likely to take part in leadership opportunities and more likely to contribute to their community (Astroth & Haynes, 2002).

The Idaho 4-H Impact Study was a replication of Astroth and Haynes (2002). In Idaho, eighteen counties were randomly selected to participate in the study. In each of those eighteen counties four schools were randomly selected. Just as in the Astroth and Haynes study (2002), 4-H members were less likely to engage in “at-risk behaviors. The

research also revealed that, “4-H members are more likely to succeed in school, help others within their communities, and be involved as leaders in their school” (Goodwin, Barnett et al. ¶ Finding and Discussion). Results also showed 4-H members had a better relationship with adults; they were also more likely to talk to parents about issues related to drugs, alcohol and sex. When asked “world view” questions in the following five areas: (1) Positive Identity, (2) Social Competency, (3) Social Competency, (4) Self-confidence, Character, and Empowerment, and (6) Skills Learned, 4-H members scored more favorably than did non 4-H members (Goodwin, Barnett, et al.).

The Public School Student’s Out of School Time Study was a state wide impact study conducted in Colorado (Goodwin, Carroll, et al.). It was also based on the research protocol used by Astroth and Haynes (2002). Results showed that active students were less likely to take part in “at-risk” behaviors than their non-active classmates. These results are consistent with the findings of Astroth and Haynes (2002) and Goodwin, et al. (2005). There was a difference between the Colorado study and past studies when analyzing “at-risk” behaviors of 4-H and non 4-H members. Results from the Colorado study showed no statically significant differences between the two groups in “at-risk” behavior involvement. Results were also consistent with other studies (Astroth and Haynes, 2002 and Goodwin, et al. 2005) when comparing grades, leadership involvement and community involvement. When analyzing the “world view” questions, results were similar to those of Goodwin, et al. (2005); 4-H members responded positively to the “world view” questions (Goodwin, Carroll, et al.).

The *Life Skills Development in Youth: Impact Research in Action* study in 2005 evaluated the long-term impact of Maine’s 4-H Youth Development Program

(Fitzpatrick, Gagne, Jones, Lobley, & Phelps, 2005). Researchers used selected qualitative questions from a New York study (Rodriguez, Hirschl, Mead, & Goggin, 1999). Participants of the study were made up of 4-H alumni and adult 4-H volunteers. 4-H alumni were asked questions pertaining to what they had gained from being in the 4-H program (Fitzpatrick et al., 2005). Adult 4-H volunteers were asked their perception of what youth have gained from the 4-H program. When asked “What life skills did you gain in your involvement in 4-H?” or “What life skills do you think 4-H members gained from being 4-H club members?” results showed that the common themes among both groups were: self-esteem, teamwork, responsibility, planning/organizing and cooperation (Fitzpatrick et al.). When alumni were asked “What are your future plans?” eighty percent of alumni responded with furthering their education. When alumni were asked, “Compared to other youth your age, how well did you do in school?” results showed that Maine 4-H alumni rated themselves above or much above average (Fitzpatrick et al.).

Additional studies were conducted to determine if specific positive youth development traits had been developed through the 4-H program (Boyd, Herring, & Briers, 1992; Fox, Schroeder & Lodl, 2003; Pennington & Edwards, 2006; Singletary, Smith, & Evans, 2006). While they are not directly tied in any way to the National 4-H Impact Assessment Project (2001), the positive youth development traits in these additional studies are indirectly linked to the *Eight Critical Elements*.

In 1991, researchers sought to determine if leadership life skill development was occurring in 4-H members (Boyd et al., 1992). Participants consisted of 309 4-H club members ages 13 to 19 from 19 randomly selected Texas counties and 558 non-4-H youth from 28 randomly selected schools in Texas in grades seven through twelve. A

leadership life skill inventory asked participants their perceived leadership life skill development through the use of a six point Likert scale (Boyd et al.). Results showed that 4-H Club members' perceptions of their development of leadership life skills were significantly higher than the perceptions of non 4-H youth for all of the questions. 4-H Club members rated their skill development higher on the following items: "working with groups", "understanding self", "communicating", and "making decisions". The non 4-H participants perceived their skill development as higher on the following items: "understanding self" and "working with groups" (Boyd et al.). When assessing just 4-H members and the level of participation in the listed activities from the leadership life skill inventory, the analysis revealed that those who had higher levels of 4-H participation had perceived themselves as developing leadership life skills (Boyd et al.).

In Nevada researchers sought to determine the effect of 4-H volunteer leaders on the development of life skills by 4-H members. The study assessed (1) 4-H volunteer leaders' perception of the life skills youth learn through 4-H, (2) the specific skills volunteer leaders possess to promote positive development of 4-H youth, and (3) which leader skills help predict the perceived life skills youth learn through 4-H program participation (Singletary et al., 2006). All current 4-H parents and adult volunteer 4-H leaders of Nevada were asked to be part of the study and were mailed a survey to complete. A total of 19 percent of the state's 4-H parents and adult volunteer 4-H leaders returned the survey (Singletary et al.). Results showed that physical and psychological safety is the most important skill 4-H leaders perceive themselves as possessing and that this skill influences the life skills youth learn through participation in the 4-H Youth

Development Program. Researchers for this study defined physical and psychological safety as: “keeping youth from hurting each other's feelings; keeping youth from bullying each other; managing conflict between youth; making sure that the facility where 4-H activities occur is safe” (Singletary et al. ¶ Results). In addition, 4-H leaders perceive themselves as possessing efficacy and mentoring skills as well, but these do not influence the life skills of 4-H members to the extent that physical and psychological safety did (Singletary et al.).

Using the Targeted Life Skills Model, (Hendricks, 1998) Fox, Schroeder and Lodl (2003) desired to learn if 4-H alumni perceived themselves as having gained life skills through the 4-H Club experience and, if so, to what degree. 4-H alumni from 17 southeast Nebraska counties who participated in a 4-H Club from 1982-1988 were the sample group for the study. Participants were part of a focus group and were asked to complete the “4-H Club Impact Survey” (Fox et al.). Results demonstrated that the 4-H Club experience does affect the development of life skills. A majority of the 4-H alumni said the 4-H club involvement influenced the development of the following life skills: responsibility, product production skills, the ability to handle competition and gaining the ability to meet new people. Less than half of the 4-H alumni said that the following life skills were influenced by 4-H club involvement: leadership skills, project skills, sportsmanship and presentation skills, self-confidence and a willingness to try new things (Fox et al.). When asked what technical skills had been developed through the 4-H club experience, 4-H alumni responded with: consumer sciences, animal sciences, science and technology and quality of workmanship. When asked about the communication skills

gained through 4-H club involvement respondents answered with “asking questions” and the “ability to meet others outside of the county” (Fox et al. ¶ Communication Skills). Under personal and social skills, respondents stated they learned “to teach others” and when asked about leadership skills, responses revealed “citizenship skills” and “networking skills” as common responses (Fox et al. ¶ Personal and Social Skills & Leadership Skills).

In Oklahoma there was a desire to research the perceptions of former Oklahoma 4-H Key Club members in regards to the “application of ‘giving’ life skills preparation on their civic engagement” and in regards to the “impact of participation in youth organizations on their acquisition of ‘giving’ life skills” (Pennington & Edwards, 2006 ¶ Objective). The subject group consisted of 356 former Oklahoma 4-H Key Club members who agreed to participate in a phone interview. Questions were designed using the Targeted Life Skills Model (Hendricks, 1998). Results from former Oklahoma members’ perceptions about their application of "giving" life skills showed that “Citizenship” earned the highest composite mean score followed by “Leadership”, “Community Service” and “Volunteering”, respectively (Pennington & Edwards, 2006 ¶ Findings). When asked about the impact of “giving” life skills preparation for civic engagement respondents rated 4-H as “either approaching or exceeding having a ‘major’ impact on their acquisition of the ‘giving’ life skills they applied when engaged in civic activities (Pennington & Edwards, 2006 ¶ Findings).

In summary, the researchers in each of these state impact studies have taken their research in slightly different directions. The individuality of each study demonstrates how

difficult it is to conduct a national impact study, which the researchers of the National 4-H Assessment Impact Study (2001) addressed. Whether it is the difference in the research instrument, subject group or individual characteristics that were examined, all of the studies came to similar conclusion, that the 4-H program is making a positive difference in the lives of youth.

Mixed Method Research

Research presented in this paper utilized a mixed-method study. Mixed method studies approach data collection by using both quantitative and qualitative research procedures in the same study (Tashakkori & Teddlie, 1998). Creswell (2005) states that as a researcher “you conduct a mixed methods study when you have both quantitative and qualitative data and both types of data, together, provide a better understanding of your research problem than either type by itself” (p. 510).

Both qualitative and quantitative research methods have their advantages. Qualitative data is collected through detailed descriptions, direct quotations, and case documentation. Qualitative research typically will give the researcher rich and detailed data about a few people or cases. Quantitative data can not get at this information due to the existence of predetermined categories (Patton, 1987).

When examining the benefits of quantitative data, Patton (1987) points out that quantitative data collection allows for a larger group of people to be part of the study. In addition, the researcher is then able to perform statistical analysis of the data and for a broader generalization of the findings can be made (Patton, 1987).

Within a mixed method study there are three specific types of design from which researchers can choose (Creswell, 2005). Researchers can use triangulation mixed methods designs, the explanatory mixed methods designs or the exploratory mixed methods design. In the triangulation methods the researcher conducts qualitative and quantitative research simultaneously (Creswell, 2005). With explanatory mixed method design the researcher does quantitative research first and then qualitative data are used to elaborate on the quantitative findings (Creswell, 2005). The exploratory method first assesses the qualitative data and then quantitative data are collected to help explain the relationships that were discovered in the qualitative data (Creswell, 2005). The explanatory mixed method design was used in this study.

Focus Group

There are three types of qualitative data: observation, open-ended interviews and written documents (Patton, 1987). Observational data allows the researcher to observe the environment around the subject group being studied and later allows the reader to mentally go to this setting through the researcher's detailed description (Patton, 1987). Open-ended interviews such as focus groups allow participants of the study to give explanations or elaborate on experiences. Open-ended interviews may also present new ideas from participants. Analysis of written documents can give researchers data in several different forms including: quotations, information from records and official reports (Patton, 1987). For the qualitative portion of this research, open-ended interviews were conducted in the form of focus groups. The following describes what a focus group consists of.

In qualitative research where focus groups are the means of collecting data, the researcher takes the role of moderator who supplies topics for discussion. Participants interact and exchange opinions and thoughts without input from the researcher. Transcripts are then produced from the discussion of the focus group sessions (Morgan, 1988).

In a focus group situation, participants communicate in an environment where they can speak their opinions and beliefs freely. It is encouraged that others add additional comments, whether they be in agreement or disagreement with other participants' comments. The size of a focus group can vary, but generally consists of seven to ten people (Marshall & Rossman, 1995). If researchers want more participants' comments, then multiple focus groups would be conducted. Results of qualitative data are most often reported as direct quotations from the participants. Direct quotes are used to expose the reader to how strongly the respondent feels about the issue or topic being discussed (Patton, 1987).

Using qualitative methods, such as a focus group format, allows the researcher to gain a holistic understanding of the culture he/she is studying. Researchers Rubin and Rubin (1995) state that, "In-depth qualitative interviewing helps explain how and why culture is created, evolves and is maintained" (p. 3). Qualitative interviews also allow the researcher to explore past and current events and topics in order to better understand the culture and those who contribute to it (Rubin & Rubin, 1995).

Summary

Literature shows numerous research studies over the past decade that evaluated positive youth development by 4-H members through 4-H Youth Development programs. Some of the studies have used theoretical frameworks that create a holistic view of the impact 4-H Youth Development programming has had on youth, while other studies have focused on one aspect or element of positive youth development in order to analyze the impact on youth development.

Where the literature falls short is in impact studies that utilize the framework behind the National 4-H Impact Assessment Project. Therefore, this study was developed to assess the impact that the Indiana 4-H Youth Development Program has had on 4-H youth in the state of Indiana by utilizing the *Four Essential Elements* that evolved from the original framework of the National 4-H Impact Assessment Project. This study utilized both quantitative and qualitative methodology. The use of mix methods allowed for richer data to be analyzed. Perceptions of both 4-H members and their parents on the 4-H member's experiences in the 4-H program were investigated in an effort to assess the impact the Indiana 4-H Youth Development Program has had on these individual 4-H members. The results of this study can not be generalized to every Indiana 4-H member, due to the use of a convenience sample.

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CHAPTER TWO: METHODS OF RESEARCH

Introduction

Providing our nation's youth with positive developmental programming and experiences has become a national concern as the challenges facing our youth continue to grow. With the challenges youth face, a need exists to create programs that will successfully guide them into adulthood.

Awareness efforts like that of First Lady Laura Bush, who began the "Helping America's Youth" effort in 2004, are spreading the word of the issues facing youth in the world. The Helping America's Youth initiative also encourages adults to become a part of the lives of youth in three areas, "family, school, and community" (Helping America's Youth, n.d.).

In 2004, the number of American children living in families with incomes below the poverty threshold was 12.5 million or 17 percent (Federal Interagency Forum on Child and Family Statistics, 2006). Children living in poverty may not receive the developmental support in the home that is needed to assist in healthy development due to many reasons including: parents' work schedules, poor school environment, a lack of community support, and/or the lack of knowledge by parents on how to help children develop.

In addition to facing negative development issues such as poverty, children may be confronted with “at risk situations.” Programs that keep children safe and out of trouble during after school hours are a necessity. Statistics show that illicit drug use (over the past 30 days) among eighth-graders was nine percent in 2005; that number rose to 23 percent for twelfth graders (Federal Interagency Forum on Child and Family Statistics, 2006). Reports also show that the victimization rate of serious violence against juveniles ages 12–17 was 11 per 1,000 in 2004.

Programs are needed to give youth an alternative option to turn to find a place to belong and feel accepted. The 4-H Youth Development Program has made it a priority to guide and educate youth for over 100 years. The 4-H Youth Development Program is an arm of the Cooperative Extension Service (CES) that provides educational programming to all audiences. Through a partnership between the United States Department of Agriculture and Land Grant Institutions, the CES is capable of providing programming based on university research. The 4-H program began for many reasons, but one of the primary educational programs that 4-H developed early in its history was educating rural youth on farming technology (Reck, 1951). Today, the type of programming that 4-H brings to communities around the United States and the world is often dependant on the needs of each community. The traditional 4-H program offers projects such as: web development, scrapbooking, genealogy, art and crafts, livestock and crops that 4-H members can participate in. Other 4-H programming such as the 4-H Afterschool program and Operation Military Kids reach out to youth who may not otherwise be reached by the 4-H program. All of these programs not only keep youth away from dangerous situations, they also can serve to educate youth on topics that are interesting to

them and add life skill development (Cooperative State Research Education and Extension Service, 2004).

Children involved in 4-H learn through application. They can apply what they have learned through their 4-H experience in other similar situations. This teaching method is called, “learn by doing” in the 4-H program. This method, also known as experiential learning, builds confidence in youth (Enfield, 2001). 4-H builds upon this confidence by allowing members to not only be the student, but also the teacher in many situations. As a result of the National 4-H Impact Assessment Project the following *Eight Critical Elements* were created: (1) a positive relationship with a caring adult; (2) a physically and emotionally safe environment; (3) opportunity for mastery; (4) opportunity to value and proactive service for others; (5) opportunity for self-determination; (6) an inclusive environment; (7) opportunity to see oneself as an active participant in the future and (8) engagement in learning (National 4-H Headquarters, 2001).

Little research has been done in the area of impact at the national and/or state level of the 4-H Youth Development Program; even though the program consistently claims it impacts the lives of youth. At the national level it has been difficult to research 4-H youth, due to the variety of the 4-H programs in each state and in each county. With such a wide variety of programs and services that the 4-H Youth Development program provides the youth in every community, evaluating them on the same level has been difficult. In the last ten to fifteen years, impact studies have become an emphasis in Extension research and programming. Since the CES is partially funded through federal money, the CES must be able to provide results or impact from the programming that is

conducted using federal funds (United States General Accounting Office, 1996). The National 4-H Impact Assessment Project (2001) was the first of its kind. In 1997 a group of Extension and 4-H Youth Development staff came together to construct a plan for carrying out a national 4-H study. Results provided evidence for what Cooperative Extension already believed to be true, that 4-H Youth Development programs and activities do have a positive impact on the development of youth (National 4-H Headquarters, 2001).

The *Eight Critical Elements* were condensed into the *Four Essential Elements* by Dr. Cathann Kress, Director, Youth Development of the Cooperative State Research, Education, and Extension Service. These four elements are Mastery, Belonging, Generosity, and Independence (Kress, 2004). It is the goal of 4-H Youth Development nationally to create new programs that reinforce these elements, while still making learning fun and hands-on.

The National 4-H Impact Assessment Project constructed a pathway for others to follow. Since the release of the results from the study a few individual states have also developed similar impact studies (Lee, Beard, & Straquadine, 2003; Astroth and Haynes, 2002; Goodwin, et al., 2005; Goodwin, Carroll, & Oliver, 2005). However, state impact studies have not all directly utilized the actual National 4-H Impact Assessment Project research instrument (Lee, Beard, & Straquadine, 2003). There are other positive youth development frameworks available; therefore, many studies have utilized other research instruments that best fit their research (Astroth and Haynes, 2002, Goodwin, et al., 2005, Goodwin, Carroll, & Oliver, 2005).

As discussed previously, the 4-H Youth Development Program utilizes the educational method of experiential learning. Experiential learning was used in 4-H programs before there was a formal theory to support it. It wasn't until researchers such as John Dewey, Jean Piaget and Lev Vygotsky began to acknowledge this type of learning, that educators took notice of this new educational approach. Experiential learning is a teaching methodology that is derived from the constructivist learning theory.

The methodology behind experiential learning requires that the learner be an active participant in what is being taught. Dewey believed that learning was taught through real world experience in addition to the classroom. The school in itself should be the community, allowing for shared interest and open dialog (Peters, 1977). Research led Dewey to the conclusion that in order for a child to actually learn there needs to be an element of reflection at the end of each learning experience so that the child can fully understand and learn from the experience (Dewey, 1938). The use of experiential learning models guides 4-H Youth Development Educators, Specialists and staff when developing positive youth development programs. The 4-H Youth Development Program has adopted Pfeifer & Jones' (1983) Experiential Learning Model, which has five stages (Experience, Share, Process, Generalization, and Apply).

In youth development programs there are two types of approaches that can be taken by educators: prevention and positive youth development. Much of the early work on youth development evaluated prevention programming. Prevention programs emphasized topics on prevention such as drug abuse, smoking, truancy and teen pregnancy (U.S. Department of Health and Human Services, 2007). While prevention programs still exist, there has also been the establishment of positive youth development

programs. This approach does not try to “fix” youth, but instead builds on the strengths that youth already exhibit (Afterschool Alliance, 2003). Building programs based on positive youth development is not a substitute for prevention programming, instead both approaches allow for an expanded framework that promotes positive outcomes for youth (Smith, 2002). Previous research has examined the factors needed for educational programming that will result in positive youth development (U.S. Department of Health and Human Services, 2007, Konopka, 1973, Hendricks, 1998, Lerner, 2004, America’s Promise, 2006). The *Eight Critical Elements* were developed out of an extensive literature review, such as the previous models and frameworks described.

This study utilized the framework of the *Four Essential Elements*. The purpose of this research was to determine which areas of the *Four Essential Elements* of 4-H were being reinforced in Indiana 4-H Youth Development programs. The following research questions were developed:

- 1) Based on their 4-H participation, do 4-H members report that they experienced aspects of the *Four Essential Elements* of 4-H Youth Development?
- 2) Do parents/guardians of 4-H members perceive that their children have experienced aspects of the *Four Essential Elements* as a result of their child’s involvement in the 4-H program?
- 3) Do the activities 4-H members report to have been involved in over time relate to their responses to the influence of 4-H on their life?
- 4) Is any one of the *Four Essential Elements* perceived more positively by respondents than the others?

To answer these questions a mixed methods study was conducted. Mixed methods research involves combining qualitative and quantitative research methods to collect data in a single study (Tashakkori & Teddlie, 1998). The 4-H member survey and a parent/guardian survey were utilized to acquire quantitative data, and focus groups were utilized to collect qualitative data. Collecting both quantitative and qualitative data produced a holistic picture of what 4-H members gained from participating in the Indiana 4-H Youth Development Program.

Materials and Methods

Survey

Research Procedure

The 4-H member survey measured 4-H member perceptions of the impact of 4-H experiences on their development (see Appendix A). Each of the questions on the survey were grouped into one of the following four categories: Belonging, Mastery, Generosity and Independence. The survey was also designed to analyze demographic variables, the number of 4-H events/ activities participated in, and the affects of these variables in relation to 4-H member perceptions of 4-H experiences. The parent/guardian survey measured parent/guardian perceptions of how particular 4-H experiences had impacted their child (see Appendix B).

Both quantitative instruments were created by the researchers of this study, based on the 4-H Essential Elements Assessment Tool. This tool was designed to help 4-H volunteers and Extension Educators evaluate and improve positive youth development

programs (National 4-H Headquarters, n.d.). It was created in partnership with the Arizona CES and the National 4-H Headquarters. At the time when the 4-H member and parent/guardian survey were developed for this study, the 4-H Essential Elements Assessment Tool was in the pilot stage. The 4-H Essential Elements Assessment Tool questions for 4-H volunteers and 4-H Youth Development Educators was examined and adapted by researchers for 4-H members and parents/guardians of the current study.

Questions in both the 4-H member and parent/guardian surveys were categorized by the researcher into *Four Essential Elements*. Questions that addressed feeling safe in the 4-H environment, building relationships with others in the 4-H program, being able to express themselves and understand their emotions were categorized as Belonging. Questions related to knowledge gained, ability to express themselves and trying new things were categorized as Mastery. Questions that addressed giving back to the community, working with others who are different from themselves and working as a team were categorized as Generosity. Questions that pertained to leadership, setting goals, thinking independently and being a responsible person were categorized under Independence. The 4-H member and parent/guardian surveys can be found in Appendix A and Appendix B. Table 1 shows question groupings for each survey categorized by element.

Table 1

 Survey Question Numbers Categorized By Element

Element	Question Numbers
Belonging	2, 8, 12, 15, 17, 19, 21, 24, 28, 34 & 37
Mastery	3, 6, 11, 23, 27, 30 & 32
Generosity	5, 9, 13, 18, 26 & 35
Independence	1, 4, 7, 10, 14, 16, 20, 22, 25, 29, 31, 33 & 36

A five-point Likert scale was chosen for the research instruments in this study. A Likert scale consists of a series of statements used to measure participants' perceptions on an attitudinal scale (Ary, Jacobs, Razavieh, & Sorensen, 2006). The participant could rate his/her perception of the statement based only on 4-H participation. Likert scale responses consisted of: (1) strongly agree, (2) agree, (3) undecided, (4) disagree, or (5) strongly disagree. The Likert scale was recoded for the purpose of better understandability of the results by readers. The recoding is as follows: (5) strongly agree, (4) agree, (3) undecided, (2) disagree, or (1) strongly disagree. For each question, the 4-H member was instructed to circle the number that indicated how well he/she agreed with each of the following statements. The following example was given:

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
I was encouraged to learn new things that were interesting to me	1	2	3	4	5

The parent/guardian survey instructed the participant to circle the number that indicated how well he/she agreed with each of the following statements based on their child's experience in the 4-H program. The following example was given:

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
My child was encouraged to learn new things that were interesting to him/her	1	2	3	4	5

In addition to Likert-scale questions, 4-H members were provided a list of local, state and national 4-H events/activities to select from based on their participation in those events. If participants answered yes to participating in any of the events and activities, they were asked to include the number of years they participated in that particular event/activity. Participants also were allowed to write in additional events/activities in which they participated that were not on the survey list and again asked for the number of years they had participated in each event/activity. Demographic information collected from participants included: age, gender, race and number of years in the 4-H program. The parent/guardian survey did not include event/activity or demographic information.

Both survey instruments were examined for readability. The 4-H member survey was examined by former Indiana 4-H members and the parent/guardian survey was examined by a selected group of parents of former Indiana 4-H members. There were six responses from former 4-H members and six responses from parents/guardians of former 4-H members. Grammatical corrections were made on the cover letter and rephrasing of some of the statements in the surveys based on the comments made by those who examined the original surveys.

Difficulties encountered with data collection included: a short time frame for participants to complete and return surveys, inaccurate reporting by county Extension staff of scholarship applicant's name and information, and surveys returned with missing data. The shortened turnaround time frame was due to a winter storm and preparation issues.

As a result of these difficulties, changes were made in the procedure. An additional three weeks were given for data collection. Surveys were sent to two 4-H members who had been mixed up with their siblings by their local Extension office. Special markings were made to the selected sibling's survey to distinguish them from the surveys sent to the wrong sibling. The siblings that were not to receive the surveys initially did not return them. The use of coding of each 4-H member allowed the researcher to trace these two instances and assure correct data were included in the final results. Some of the surveys returned and used in the analysis included missing data. Statistical analyses were performed to determine the percentage of missing data from the 4-H member survey and the parent/guardian survey. Results determined that less than one percent of the data were missing from each of the surveys. Based on these results, missing data were deleted from the analysis. There were a total of seventeen questions that were unanswered by 4-H members and thirteen questions unanswered by parents/guardians. Appendix C provides the detailed information on the elements in which the missing data were found for both the 4-H member and the parent/guardian survey (see Table C1 and Table C2).

Population and Sample

The target population for this research included 328 applicants for the Indiana 2007 State 4-H Accomplishment Scholarships and their parents/guardians. In order to apply for the 4-H Accomplishment Scholarships, applicants had to be in at least the 10th grade at the time of the application due date and could not have been out of the 4-H program longer than the year following the final year of 4-H eligibility. This meant that the scholarship applicants ranged in age from fifteen to twenty years old. All applicants had to be participants of the 4-H program in the state of Indiana.

One parent or guardian of each scholarship applicant was asked to complete the parent/guardian survey and return it in the self addressed stamped envelope along with the completed 4-H member survey from the 4-H Achievement Scholarship applicant. This 4-H member population was chosen as a sample of convenience for the following reasons:

- Participants had the opportunity while in the 4-H program to develop aspects of the essential elements over time.
- Participants had likely been in situations where they had experienced aspects of the essential elements.
- Participants were of an age where they had the ability to comprehend the questions asked on the survey and provide informative feedback.
- Participants represented a variety of counties in the state of Indiana.

Data Collection

The target population received by mail the cover letter, one 4-H member survey, one parent/guardian survey and one self addressed stamped envelope (See Appendix A, B and D). Each 4-H member and parent/guardian survey was assigned a random number that was used to match 4-H member and parent/guardian surveys. Only surveys returned by both the 4-H member and his/her parent/guardian were included in the final analysis. The population was originally given one and a half weeks to return the surveys. The short turnaround time for completion and return of the survey was due to weather and printing complications. Additional time was allowed in order to increase responses. The target population was notified regarding the additional time through a reminder post card sent out one week after the original mailing. The second reminder was sent out three weeks after the original deadline for returning the surveys and asked that 4-H members and their parent/guardian complete the survey as soon as possible and return it. All mailings included contact information for the researcher in the event of questions. 4-H members who contacted the researcher about additional copies of the survey were sent a new copy of the original mailing. Duplicate copies of the survey that were sent to subjects had the same coding label on the surveys, but instead of the coding being typed on the survey it was hand written. This was done to distinguish the original copy from the duplicate in case two copies of a survey with the same coding were returned to the researcher. There were 154 usable survey sets (4-H members and parents/guardians) out of the 328 sent (47 percent response rate). Five surveys were unusable because only one of the two required surveys was returned (parent/guardian or 4-H member). Three surveys (both the

parent/guardian and 4-H member) were received after data analysis had begun and were not included in the final research.

Data Analysis

Microsoft Excel was utilized to enter the survey responses for each of the 154 4-H member surveys and the parent/guardian surveys. Quantitative data were entered and analyzed in SPSS 14.0. A statistician from Purdue University, Department of Statistics was consulted for the analysis of the data. The SPSS program was used to obtain the frequencies of the demographic variables of the participating 4-H members.

Frequencies and descriptive statistics included: mean, range, standard deviation, minimum and maximum. They were obtained on each of the *Four Essential Elements* for both parents/guardians and 4-H members' responses (see Tables 11 & 16). To determine if 4-H members reported experiencing aspects of the *Four Essential Elements* of 4-H Youth Development, collected data were analyzed after acquiring frequencies and descriptive statistics on each of the Four Essential Elements (Master, Generosity, Belonging and Independence) (see Tables 12-15). The same was completed to determine if parents/guardians perceived their child as experiencing aspects of the *Four Essential Elements* of 4-H Youth Development (see Tables 17-20). Each of the thirty-seven questions was categorized into groups based on the Elements to which they applied. Following grouping, frequencies and descriptive statistics were conducted for each element. A scale was created to help segregate data in to five Likert scale categories. Table 2 illustrates the scale used for the data analysis.

Table 2

Scale for Data Analysis of Individual Elements for Both 4-H Member and Parent/Guardian Survey Responses.

Likert Scale Value	Level of Agreement
1	Strongly Disagree
2	Disagree
3	Uncertain
4	Agree
5	Strongly Agree

Comparisons and correlations were conducted for each of the *Four Essential Elements*. Correlations were utilized to answer the following three questions: (1) was there a correlation between the perceptions of 4-H members for each element and the perception of the parents/guardians for each element; (2) was there a correlation between each of the elements among 4-H members; (3) were each of the elements among parents/guardians correlated (see Tables 21-23). Three statistical operations were utilized to address these three questions. To address the first question, the average of the four individual elements for parents/guardians was compared to the average of the four individual elements for the 4-H members. For question two, the 4-H member survey averages for each element were compared against each other. The averages of the four elements from the parents/guardians survey were compared against each other in response to question three.

An Analysis of Variance (ANOVA) was utilized to determine if there were differences between male and female 4-H members and their responses to questions categorized into elements (see Table 24). A One-Way ANOVA evaluated the gender of

each 4-H member and the average of each element for 4-H members. The alpha level for this test was set at 0.05. The effect size was also reported to determine practical significance. Bonferroni was not utilized for this test.

A correlation was utilized to determine if the quantity of activities 4-H members participated in affected their responses to survey questions (see Table 25). The total number of years each participant reported participating in each of the activities/events listed on the survey, as well as the additional 4-H activities and events listed by the individual 4-H members was compared to the average of each element for the individual 4-H member.

Finally a paired sample t-test was conducted in SPSS to determine statistical significance between the four elements for both 4-H members and parents/guardians (see Tables 26 & 27). This was performed by separately comparing the average of each element for 4-H members and the averages of each element for parents/guardians. Effect sizes were reported to determine practical significance between the four elements for both 4-H members and parents/guardian. Bonferroni was not utilized for this test.

Focus Groups

Research Procedure

Focus groups were conducted to gain a better insight into how these 4-H members perceived their 4-H experiences. Eight focus group questions were developed based on the following question types: opening, introductory, transition, key, and ending (Krueger, 1998). The first interview question was an opening question and allowed participants to

get to know each other and feel connected (Krueger, 1998). Question two was an introductory question and began the discussion of the theme presented in the focus group. Questions three and four were transition questions that allowed the 4-H members to begin thinking deeply into their 4-H experiences and were meant to make a smooth transition into the key questions (Krueger, 1998). Questions five, six and seven were the key questions which allowed the researcher to gain insight into how these 4-H members perceived their 4-H experience (Krueger, 1998). Question eight, the ending question, allowed participants an opportunity to reflect back on what had been said and gave them a chance to say something that they may not have been able to express earlier in the interview. Below are the eight focus group questions asked during each of the three focus group sessions.

- 1) Would each of you please provide me with a little background about your personal 4-H experiences: how long you have been in 4-H and what types of projects you have done?
- 2) If someone asked you why you have been involved with the 4-H program, what would you tell them?
- 3) What is the most important thing you have learned from your 4-H experience?
- 4) Which 4-H events or activities do you feel you have learned the most from and why?
- 5) Can you give me an example of how you have applied what you have learned in 4-H to your life outside 4-H or in other organizations?
- 6) Are there differences in the overall environment of the 4-H program and other organizations you have been involved in?

- 7) What have you learned from participating in community service projects through the 4-H program?
- 8) Is there any thing else that you have gained from your 4-H experience that you would like to add?

Population and Sample

Focus groups were conducted with State 4-H Achievement Scholarship applicants who had been selected for the second phase of the selection process, which brought them to the Purdue University campus for scholarship interviews the day the focus groups were conducted. The participant pool for the focus group sessions included 102 4-H members in the second round of the scholarship process. All potential focus group participants were assigned a random number placed in numerical order. Participants were contacted by phone in descending order by the researcher to schedule participants for one of the focus group sessions. All possible participants were phoned. Twenty-five second round scholarship applicants agreed to participate in of one of the three focus groups. Those who agreed to participate in the focus groups were mailed assent forms to sign and a consent form for a parent/guardian to sign if the focus group participant was under the age of eighteen (Appendix E and F). Signed assent forms and consent forms were collected in person by the researcher at the time of the focus groups.

Data Collection

Focus group participants were asked questions that allowed them to discuss what they had gained from their experiences in 4-H and how their 4-H participation had helped

them through other experiences in their lives. The scholarship interviews and three focus groups were conducted on March 17, 2007. Three focus groups were conducted with each session ranging from seven to nine participants.

The researcher led the focus group sessions, using the same eight interview questions and took notes during the sessions. Each participant was assured at the beginning of each session that their participation in this study would have no bearing on the outcome of the scholarship process. A colleague familiar with focus group research also observed each of the focus groups and took notes which were later used as a guide during the data analysis. Focus group dialogs were audio-taped on two tapes per session and transcribed after the completion of the focus group. Each focus group session lasted between twenty and thirty minutes. At the end of each session, participants were given a 4-H promotional item as a thank you for their participation and time.

Data Analysis

A transcriber was employed to compile the voice recordings from each of the three sessions. The transcriber was given one tape per session. The employed transcriber had no prior experience with the 4-H Youth Development Program. Session transcripts were reviewed and analyzed by the researcher. Corrections made were due to the transcriber's lack of knowledge in 4-H terminology. Other errors were due to audibility issues with the tapes that were given to the transcriber. The second sets of tapes were used by the researcher to correct these errors.

Following the final review of the transcripts, statements were analyzed by placing statements into one of the *Four Essential Elements* (Mastery, Generosity, Belonging and

Independence). A complete list of the categories and the categorized quotes can be found in Appendix G.

Demographic information for the focus group participants was obtained in the earlier data collection from participants when they applied for State 4-H Achievement Scholarships. Only demographic information on the focus group participants' age and gender was obtained.

Human Subjects

A formal approval for this study was obtained by the expedited process through Purdue University's Committee on the Use of Human Subjects. In a cover letter sent with each survey, participants were told that their participation in the survey was voluntary. Focus group participants were informed at the beginning of the session that their participation was also voluntary and they could refrain from answering any questions that they did not feel comfortable answering. For confidentiality purposes, all possible survey participants were assigned a random three digit code that could only be tied to the researcher's files. Focus group participants' responses were also coded using an alphabetical letter to assure confidentiality of their names. These letters were also utilized in the reporting of focus group data to protect the amenity of each participant.

Results

Descriptive Statistics

In an effort to identify general background information about each 4-H member survey participant, the survey asked the following questions: age, gender, race and number of years in the 4-H program. Demographic information (age and gender) were collected on focus group participants based on information provided from the scholarship applications. The demographics will be discussed in the following section.

Age

The survey participants ranged from 15 years in age to 20 years of age. Table 3 provides detailed information about the age of survey participants.

Table 3

Frequency and Percentage of Age for Participants Who Completed the 4-H Member Survey

Age	Frequency	Percent
15	4	2.6
16	19	12.3
17	42	27.3
18	77	50.0
19	11	7.1
20	1	0.6
Total	154	100

Focus group participants ranged from 16 years in age to 19 years of age. Table 4 provides detailed information about the age of focus group participants.

Table 4

Frequency and Percentage by Age of Focus Groups Participants

Age	Frequency	Percentage
16	3	13.0
17	7	30.4
18	9	39.1
19	4	17.4
Total	23	100

Gender

Demographic information on the gender of 4-H members surveyed and the gender of 4-H members who returned the survey can be seen in Table 5.

Table 5

Frequency and Percentage by Gender for Those Who Were Sent the 4-H Member Survey and Those Who Returned a Completed 4-H Member Survey

	Gender	Frequency	Percent
Sent	Female	232	70.7
	Male	96	29.3
	Total	328	100
Returned	Female	111	72.1
	Male	43	27.9
	Total	154	100

Gender information of 4-H members who participated in the focus group is displayed in Table 6.

Table 6

Frequency and Percentage by Gender of Focus Group Participants

Gender	Frequency	Percent
Female	14	60.9
Male	9	39.1
Total	23	100.0

Ethnicity

The ethnicity of 4-H members who returned the survey can be found in Table 7. The response by one 4-H member that they were Polish American was not an original option on the survey.

Table 7

Frequency and Percentage of Ethnicity for Participants Who Completed the 4-H Member Survey

Ethnicity	Frequency	Percentage
Multiracial	1	0.6
Polish American	1	0.6
White	152	98.7
Total	154	100

Tenure in 4-H Program

The range in 4-H tenure of those who completed the survey was as few as three years and as many as ten years, which is the longest any person can participate in the 4-H program. More detailed information about the tenure of those who returned the survey can be found in Table 8.

Table 8

Frequency and Percentage of 4-H Tenure for Participants Who Completed the 4-H Member Survey

4-H Tenure	Frequency	Percent
3	3	1.9
5	3	1.9
6	4	2.6
7	4	2.6
8	21	13.6
9	28	18.2
10	91	59.1
Total	154	100.0

Reliability of Scales

All categories (i.e., Mastery, Belonging, Generosity, and Independence) were tested for reliability by using Cronbach's alpha measure of internal consistency.

According to George and Mallery (2003) alpha levels higher than $\geq .7$ are acceptable.

Results showed strong alpha levels among the items in each category for both 4-H

members and parents/guardians. Table 9 demonstrates the results from the reliability test performed for 4-H members. Table 10 demonstrates the results on parents/guardians reliability tests.

Table 9

Reliability Test for Survey Questions Categorized by Elements for 4-H Members

<u>Element</u>	<u>Number of Questions</u>	<u>Crombach's Alpha</u>
Mastery	7	0.783
Generosity	6	0.819
Belonging	11	0.836
Independence	13	0.867

Table 10

Reliability Test for Survey Questions Categorized by Elements for Parents/Guardians

<u>Element</u>	<u>Number of Questions</u>	<u>Crombach's Alpha</u>
Mastery	7	0.804
Generosity	6	0.811
Belonging	11	0.872
Independence	13	0.91

4-H Member Perceptions for Individual Elements Expressed Through Survey Frequencies, Percentages, Descriptive Statistics and Focus Group Responses.

Data from the 4-H member survey showed little difference in the responses given by 4-H members for each of the *Four Essential Elements*. A majority of 4-H members who responded to the survey either “strongly agreed” or “agreed” with statements

pertaining to all four essential elements. The Likert scale for this study was as follows: 1= Strongly Agree, 2= Agree, 3= Uncertain, 4= Disagree, 5= Strongly Disagree. In an attempt to make the analysis easier for readers, the Likert scale was reversed. Data were recoded as: 5= Strongly Agree, 4= Agree, 3= Uncertain, 2= Disagree, 1= Strongly Disagree. Table 1 demonstrated each of the *Four Essential Elements* and indicated which questions from the survey pertained to each element. Focus group responses supported the results from the surveys. 4-H members discussed in the focus group what they had gained from 4-H and how it had helped them in situations outside of 4-H. Focus group results are included in this section to support results from the survey and provide a detailed description of what these Indiana 4-H members have gained from participating in the Indiana 4-H Youth Development Program.

Table 11 demonstrates the descriptive statistics for all of the *Four Essential Elements*. Results show that each of the elements had similar responses. The mean for all four of the elements were between 4.01 and 5, which indicates a mean response of strongly agree.

Table 11

Descriptive Statistics for the Average of Each of the Four Essential Elements for 4-H Member Survey

Element	Range	Minimum	Maximum	Mean	Std. Deviation
Mastery	1.857	3.143	5.000	4.455	0.397
Generosity	3.000	2.000	5.000	4.480	0.503
Belonging	2.455	2.545	5.000	4.393	0.445
Independence	2.000	3.000	5.000	4.531	0.389

Tables 12 through 15 show the results of the analysis for each of the elements and the percentage of scores equivalent to “strongly agreed” or “agreed”. In a small number of instances, 4-H member responses to an element were equivalent to “uncertain”. Only in one case was there an element (Generosity) that had an equivalent average of “disagree” (Table13). None of the elements had a participant response average score equivalent to “disagree”.

The Mastery element examines the following characteristic: opportunity for mastery and engagement in learning (Kress, 2005). Survey results indicated that for the element of Mastery, 81.82 percent of participants “strongly agreed” to the questions that pertained to that particular element (see Table 12). Results show the remaining 18.18 percent of participants “agreed” that they had developed aspects of the Mastery Element through 4-H events, activities and/or programs.

Table 12

Likert Scale Response Values in Frequency and Percentages for 4-H Members Survey Questions for the Element of Mastery

Likert Scale		
Value	Frequency	Percent
5.00	20	12.99
4.86	14	9.09
4.83	1	0.65
4.71	23	14.94
4.57	18	11.69
4.50	1	0.65
4.43	18	11.69
4.33	1	0.65
4.29	15	9.74
4.20	1	0.65
4.14	14	9.09
4.00	16	10.39
3.86	3	1.95
3.83	1	0.65
3.71	2	1.30
3.57	4	2.60
3.29	1	0.65
3.14	1	0.65
Total	154	100.00

During the focus group sessions numerous statements were made that were categorized as Mastery. Several 4-H members discussed how they had taken what they learned in 4-H and applied it to their life outside of the 4-H program. The following quotes are examples of the development of Mastery through the 4-H Youth Development Program. Person M stated, “For me it [4-H] has been a great place to develop skills...but it’s [also] a great practical place to put them into action...”

...I'm president of Sunshine Society and one of the things that I'm working on right now is a brochure. I feel that I have a better layout of things just because I've worked with pictures and posters [in 4-H] and I've received a lot of comments and feedback saying that they are really nice. I feel 4-H has definitely prepared me to do presentations. For example, I just did a presentation at the Governor's house in Indianapolis last week and my PowerPoint presentation was one of the things that we showed... (Person B).

I also think just being able to start and finish something and doing that to the best of your abilities [is something that I have learned from 4-H]. It's definitely taught me that even though it's not the project that I thought it was going to be, I'm [still] going to finish it (Person B).

...For some of the projects we are supposed to put together a notebook or a written report of what we've done on our project, which has really helped me. For example, in home environment we're suppose to have a notebook and that has helped me now that I am in college...for a writing class. I put together my portfolio of everything that I've written... ..4-H really prepared me for what it would be like to keep all the records of what I have done and what I've written... for my college writing project (Person F).

I would say leadership skills are what I have learned through 4-H. I have held multiple offices in the club, so I am used to taking what I have learned through

4-H and applying it. [For example] when [I was] a younger [4-H member] I watched how the older [4-H] members used to run the clubs and now that's me (Person I).

...The livestock judging I started as early as I could and it just enabled me. I used to not want to talk in front of people, but after so many sets of reasons it's no big deal. I can memorize stuff pretty easily now. ...You [also] have to make [decisions] on a quick basis. And now that I'm an older member, just helping out and coaching the younger members is a thrill for me, [its great] to see them improve (Person R).

I would say the [rabbit] ambassador program is probably the best experience I've had [in 4-H]. It taught me how to study for test, how to write a resume, and how to interact with people. It also allowed me to be more knowledgeable in other projects as well. It has also allowed me to go to Washington, D.C. and meet other people and interact with them and see the country (Person T).

The element of Generosity is defined as the “opportunity to value and practice service to others” (Kress, 2005). For Generosity, data revealed a large percentage of participants strongly agreed to the questions pertaining to this element. A total of 77.92 percent “strongly agreed”, while an additional 20.78 percent of participants “agreed” with the same statements (see Table 13). Of the remaining responses, 0.65 percent responded

with an answer of “uncertain” and another 0.65 percent “disagreed” with statements that pertained to the Generosity Element.

Table 13

Likert Scale Response Values in Frequency and Percentages for 4-H Members Survey Questions for the Element of Generosity

Likert Scale		
Value	Frequency	Percent
5.00	35	22.73
4.83	27	17.53
4.67	14	9.09
4.60	1	0.65
4.50	16	10.39
4.33	16	10.39
4.17	11	7.14
4.00	16	10.39
3.83	6	3.90
3.67	6	3.90
3.50	2	1.30
3.33	1	0.65
3.17	1	0.65
2.83	1	0.65
2.00	1	0.65
Total	154	100.00

In the focus group sessions, participants discussed that they had participated in community service projects and given back to the 4-H program. The following quotes demonstrate the opinions of the focus group participants in relationship to the element of Generosity. Person X stated, “Everybody takes something different out of 4-H. But when it comes full circle and you get to help someone else out, I think that is the greatest

experience that 4-H can give [a person].” Person A added, “When I’ve done community service, it gives me a sense of fulfillment and it just makes me feel really good. Usually [outside of 4-H] I wouldn’t do stuff like that.” Person X stated, “A lot of people in our society today have feelings like: What can I get from this? What can I take [away]? Through community service we are able to give back to the community who has given us so much.” Person M talked about helping others and discussed the following experience, “...I helped with the food co-op...and I used my communication skills in order to write letters and e-mails about the food co-op and helped the people.” Person S stated “...There’s always something that you can do to help out the community. [Even] if that’s just picking up trash, it helps out the community.”

It’s not always about the trophies; I [have] found more enjoyment in teaching others especially in showmanship and watching them win. It’s more rewarding to me. I feel like I’ve won so many things and I have so many trophies that it doesn’t really matter anymore. It’s more what I’ve achieved without the ribbons and trophies (Person T).

I think it (volunteering) is sort of a humbling experience. Maybe you really don’t want to get messy and pick up trash..... I know we planted flowers at the Indiana Veteran’s Home and it’s kind of neat to watch people come out and see your work and they enjoyed it (Person T).

I think when you start to do community service...you think...why am I doing this for that person. Then as you get older you realize you're not just doing it for them but you're doing it for yourself too. It's something that you can take away and it's...heart warming when you help someone else (Person R).

The Belonging element encompasses three characteristics: (1) positive relationships with caring adults, (2) an inclusive environment, and (3) a safe environment (Kress, 2005). Of the questions that pertained to Belonging, 81.82 percent of participants “strongly agreed” with the statements (see Table 14). Another 17.53 percent of participants “agreed” with the statements. The final 0.65 percent were “uncertain” if 4-H events, activities and/or programs had the element of Belonging present.

Table 14

Likert Scale Response Values in Frequency and Percentages for 4-H Members Survey Questions for the Element of Belonging

Likert Scale		
Value	Frequency	Percent
5.00	14	9.09
4.91	13	8.44
4.82	6	3.90
4.73	10	6.49
4.64	7	4.55
4.60	1	0.65
4.55	14	9.09
4.50	3	1.95
4.45	15	9.74
4.36	13	8.44
4.27	12	7.79
4.18	9	5.84
4.09	9	5.84
4.00	7	4.55
3.91	2	1.30
3.82	6	3.90
3.73	3	1.95
3.64	1	0.65
3.55	1	0.65
3.45	2	1.30
3.36	3	1.95
3.27	1	0.65
3.18	1	0.65
2.55	1	0.65
Total	154	100.00

During the focus group sessions, 4-H members discussed the 4-H environment and the interaction with other 4-H youth and volunteers and how they impacted their 4-H experience.

The following statements pertaining to Belonging were made.

I think the difference [in 4-H] is the openness.... We are all 4-H'ers and we have that in common, but we all have different backgrounds. It's really cool because there is a huge difference between each 4-H'er, but we're all coming together for the common goals and that is really cool to see (Person X).

4-H has taught me to interact better with adults. In school and other stuff you just don't get that quite as much. Your 4-H leaders and you become really close through doing community service [projects]..... You [also] get [to be] really interactive with other adults and hopefully you are going to use it [social skills] for the rest of your life (Person H).

... When you go to school, kids don't seem to work together as well. But when you go to 4-H events, no matter if they [4-H members] show horses or they do electricity, they get along together... [it is] totally different from school (Person R).

I think the 4-H program does a really good job of creating a network of adults that you can turn to if you have any questions. There is always somebody there to help you with your projects, and you know they don't hesitate in doing it. They

[adults] don't find it any trouble at all and you really have a support system that increases your knowledge and makes you feel more comfortable in doing your project (Person U).

...I've noticed [that] with 4-H activities during the summer like [4-H] camps...[kids] seem to be a lot friendlier than at school, because [in 4-H] people don't really want to label you or put you into categories. They [4-H members] are all equal (Person A).

The final element, Independence, consists of the following criteria: (1) opportunity for self-determination and (2) opportunity to see oneself as an active participant in the future (Kress, 2005). Independence had the highest percentage of "strongly agree" responses, 89.61 percent of any of the *Four Essential Elements* (see Table 15). An additional 9.74 percent of participants "agreed" while the remaining 0.65 percent was "uncertain" if aspects of Independence were developed through the 4-H program.

Table 15

Likert Scale Response Values in Frequency and Percentages for 4-H Members Survey Questions for the Element of Independence

Likert Scale		
Value	Frequency	Percent
5.00	21	13.64
4.92	17	11.04
4.85	8	5.19
4.77	9	5.84
4.69	10	6.49
4.67	1	0.65
4.62	9	5.84
4.58	1	0.65
4.54	12	7.79
4.46	14	9.09
4.38	6	3.90
4.31	12	7.79
4.27	1	0.65
4.23	3	1.95
4.15	9	5.84
4.08	5	3.25
4.00	4	2.60
3.92	2	1.30
3.85	3	1.95
3.77	1	0.65
3.69	1	0.65
3.62	1	0.65
3.54	2	1.30
3.50	1	0.65
3.00	1	0.65
Total	154	100.00

Throughout the focus group sessions, participants discussed the development of the Independence element through their 4-H experiences. The following statements best represent the opinions of the focus group participants. “I think it [4-H] helps with the development of people’s futures and [4-H] also gives them [4-H members] a sense of what they want to do for the rest of their lives” (Person Q). Person A stated, “One thing 4-H has helped me learn is how to talk in front of people, for example in meetings. We don’t do that a lot in school.” Person J added to that statement, “...I’ve learned a lot [from] all these public speaking opportunities and that has really given me the opportunity to step out of my shell and not be quite as shy as I use to be.” Person E stated, “I think learning leadership [skills] in 4-H helped me a lot.... In school I was captain of the swim team and [other] sports.... It [leadership skills] helped out a lot [with] encouraging kids...” Other focus group participants added the following statements pertaining to the element of Independence.

I think team work is one of the things that I’ve learned [in 4-H]. ...How to interact with your club members and do things as a club.And the projects aren’t just teaching [4-H members] one skill. They are teaching me life skills [such as] communication and that kind of stuff. You can use that in college and the rest of your life (Person C).

For me, I’ve really learned life skills that I needed [such as] organization [from the 4-H program]. In college...there is so much to do and you just have to plan

your time and organize it. You have to know when your papers are due, when to study for your test, and to make time for things like that... (Person H).

...I have been my [4-H] club president for the past 3 years and when I went into school and was doing various activities, extra curricular activities; it pushed me to want to go for the officer position and run things the best that I knew [how]. I really started learning how to do that through 4-H (Person U).

...4-H directs you a lot of time in the way that you want to go [in your future]. I know, with school you probably don't have the opportunity to work with animals or you may not have the opportunity to do electricity projects. ...With 4-H there are so many diverse projects that you can take that you would not have the opportunity [to do] any where else. [And] maybe [these projects] could lead you down the road to what you want to be doing the rest of your life (Person R).

*Parent/Guardian Perceptions of Individual Elements Expressed Through Survey
Frequencies, Percentages, and Descriptive Statistics.*

In addition to examining 4-H member development of the *Four Essential Elements*, this study also sought perceptions of the parent/guardian towards their child's development as a result of 4-H participation. Analysis of parent/guardian perceptions was desired to determine the relationship between the 4-H member responses and the parent/guardian responses. The same coding scale was used for the parent/guardian analysis as the 4-H member analysis (Table 1). In addition, the Likert scale was reversed

to allow for easier translation of the results (ex: 5= strongly agree and 1= strongly disagree).

The mean of each participant response to questions categorized by elements was calculated. Results show that each element had similar responses. The mean for all four of the elements was between 4.40 and 4.60, which indicates a mean response of strongly agree (See Table 16).

Table 16

Frequency and Descriptive Statistics for the Average of Each of the *Four Essential Elements* for Parent/Guardian Survey

Element	Range	Minimum	Maximum	Mean	Std. Deviation
Mastery	2.29	2.71	5.00	4.54	0.39
Generosity	2.00	3.00	5.00	4.49	0.45
Belonging	2.36	2.64	5.00	4.40	0.47
Independence	2.08	2.92	5.00	4.60	0.40

Analysis of the parent/guardian survey provided similar data to that of the 4-H member survey. A majority of parents/guardians answered “strongly agreed” or “agreed” to the questions for each of the elements (Tables 17-20). Only a small percentage of parents/guardians had an average score that was equivalent to “uncertain” in each of the elements. No parent/guardian surveyed had an average of “strongly disagree or disagree” for any of the *Four Essential Elements*.

Results show 85.06 percent of parents/guardians “strongly agreed” with questions pertaining to Mastery Elements (Table17). An additional 14.29 percent “agreed” to the same questions. The remaining 0.65 percent were uncertain.

Table 17

Likert Scale Response Values in Frequency and Percentages for Parent/Guardian Survey Questions for the Element of Mastery

Likert Scale		
Value	Frequency	Percent
5.00	34	22.08
4.86	19	12.34
4.71	15	9.74
4.57	19	12.34
4.43	17	11.04
4.29	19	12.34
4.20	1	0.65
4.14	7	4.55
4.00	15	9.74
3.86	4	2.60
3.71	3	1.95
2.71	1	0.65
Total	154	100.00

Analysis of the Generosity Element indicated that 78.57 percent of parents/guardians answered “strongly agree” (Table 18). The remaining 21.43 percent “agreed” to statements pertaining to generosity.

Table 18

Likert Scale Response Values in Frequency and Percentages for Parent/Guardian Survey Questions for the Element of Generosity

Likert Scale Value	Frequency	Percent
5.00	38	24.68
4.83	18	11.69
4.67	18	11.69
4.50	18	11.69
4.40	1	0.65
4.33	14	9.09
4.20	1	0.65
4.17	13	8.44
4.00	14	9.09
3.83	9	5.84
3.80	1	0.65
3.67	4	2.60
3.50	2	1.30
3.33	2	1.30
3.00	1	0.65
Total	154	100.00

The element of Belonging had a 78.57 percent responded with “strongly agree”.

An additional 20.13 percent “agreed” and the remaining 1.3 percent were in the “uncertain” category.

Table 19

Likert Scale Response Values in Frequency and Percentages for Parent/Guardian Survey Questions for the Element of Belonging

Likert Scale		
Value	Frequency	Percent
5.00	18	11.69
4.91	8	5.19
4.82	13	8.44
4.80	1	0.65
4.73	11	7.14
4.64	9	5.84
4.55	11	7.14
4.50	1	0.65
4.45	13	8.44
4.36	11	7.14
4.27	8	5.19
4.18	7	4.55
4.09	10	6.49
4.00	8	5.19
3.91	8	5.19
3.82	4	2.60
3.73	1	0.65
3.64	3	1.95
3.55	3	1.95
3.36	1	0.65
3.27	3	1.95
3.00	1	0.65
2.64	1	0.65
Total	154	100.00

The final element, Independence, had the highest percentage of “strongly agree” at 87.66 percent. Another 11.69 percent “agreed” and 0.65 percent were “uncertain.

Table 20

Likert Scale Response Values in Frequency and Percentages for Parent/Guardian Survey Questions for the Element of Independence

Likert Scale Value	Frequency	Percent
5.00	34	22.08
4.92	13	8.44
4.85	16	10.39
4.83	1	0.65
4.77	7	4.55
4.69	8	5.19
4.62	11	7.14
4.58	1	0.65
4.54	10	6.49
4.46	10	6.49
4.38	7	4.55
4.31	5	3.25
4.23	5	3.25
4.15	2	1.30
4.08	5	3.25
4.00	10	6.49
3.92	3	1.95
3.85	1	0.65
3.83	1	0.65
3.77	1	0.65
3.62	1	0.65
3.15	1	0.65
2.92	1	0.65
Total	154	100.00

Comparison and Correlation among Individual Elements and Subject Groups

Correlations were performed to determine if there was any association among the *Four Essential Elements* between the subject groups. The average score of each element for each subject group was used for the correlations. Table 21 shows the results of the correlation among the 4-H members' perception of each element and the perception of the parents/guardians for each element. Results revealed a correlation between the elements for both 4-H members and parents/guardians. Pearson's product moment correlation showed a medium to large effect for all reported differences. Practical significance (r^2) was determined to be small to moderate for all reported difference. The correlation coefficient indicates that 4-H members and their parent/guardian may have had similar responses to questions from the survey, but due to the small value for practical significance the ability to state that 4-H members and parents/guardians had similar responses is debatable.

Table 21

Correlation among Individual Elements for 4-H Members and Individual Elements for Parents/Guardians (N= 154)

			Parent/Guardian			
Element			Mastery	Generosity	Belonging	Independence
4-H Member	Mastery	r	0.433**	0.312**	0.418**	0.442**
		r ²	.187			
	Generosity	r	0.419**	0.406**	0.464**	0.437**
		r ²		.165		
	Belonging	r	0.420**	0.397**	0.582**	0.465**
		r ²			.339	
	Independence	r	0.372**	0.328**	0.459**	0.527**
		r ²				.278

** . Correlation is significant $p \leq 0.01$ level (2-tailed).

Correlations were also calculated to determine an association among each of the elements for 4-H members (see Table 22). Results from the Pearson's product moment Correlation showed a significant relationship among all of the elements for 4-H members. This indicates that 4-H members had similar responses to all of the elements. These values also indicate that there may be similarities between the characteristics of the Four Essential Element.

Table 22

Correlation among Individual Elements for 4-H Members (N= 154)

Element		Mastery	Generosity	Belonging	Independence
Mastery	r	1.000	0.706**	0.732**	0.839**
Generosity	r	0.706**	1.000	0.715**	0.722**
Belonging	r	0.732**	0.715**	1.000	0.783**
Independence	r	0.839**	0.722**	0.783**	1.000

** . Correlation is significant at $p \leq 0.01$ level (2-tailed).

Correlations were also performed to determine an association among each of the elements for parents/guardians (see Table 23). Results show a significant correlation among all of the *Four Essential Elements* for parents/guardians. This indicates that parents/guardians had similar responses to all of the elements.

Table 23

Correlation among Individual Elements for Parents/Guardians (N= 154)

Element		Mastery	Generosity	Belonging	Independence
Mastery	r	1.000	0.652**	0.802**	0.822**
Generosity	r	0.652**	1.000	0.754**	0.739**
Belonging	r	0.802**	0.754**	1.000	0.834**
Independence	r	0.822**	0.739**	0.834**	1.000

** . Correlation is significant at $p \leq 0.01$ level (2-tailed).

Analysis of Variance between Gender and Individual Elements (ANOVA)

Analysis of Variance (ANOVA) was utilized to detect differences between male and female 4-H members and between the *Four Essential Elements*. Results determined there were significant differences between males and females on three of the four elements (Table 24). When comparing gender, females responded with a higher degree of agreement than males did on the following elements: Mastery, Belonging and Independence.

Although the ANOVA showed that the means were significantly different for three of the elements (Mastery, Generosity and Independence) the effect sizes for all of the elements were moderate to large. Cohen's *d* for each of the elements was moderate to large; therefore it is reasonable to conclude that gender may influence a 4-H member's response.

Table 24

ANOVA by Gender and Each of the Four Essential Elements

		N	Mean	Std. Deviation	F	p	d
Mastery	Females	111	4.523	0.348	12.241	0.001	.588
	Males	43	4.282	0.462			
	<i>Total</i>	<i>154</i>	<i>4.455</i>	<i>0.397</i>			
Generosity	Females	111	4.538	0.490	5.501	0.020	.417
	Males	43	4.329	0.512			
	<i>Total</i>	<i>154</i>	<i>4.480</i>	<i>0.503</i>			
Belonging	Females	111	4.437	0.445	3.847	0.052	.354
	Males	43	4.281	0.432			
	<i>Total</i>	<i>154</i>	<i>4.393</i>	<i>0.445</i>			
Independence	Females	111	4.583	0.357	7.493	0.007	.470
	Males	43	4.396	0.435			
	<i>Total</i>	<i>154</i>	<i>4.531</i>	<i>0.389</i>			

Note: Significant at p-value ≤ 0.05

*Correlation Between the Sum of Activities and the Individual Elements' Average
for Each 4-H Member*

Statistical significance between the total number of activities that each 4-H member reported to have participated in and the average of each essential element from the Likert scale survey for each 4-H member was examined. Results indicate a strong correlation ($p \leq 0.01$) among the sum of activities and the average of each 4-H member for the individual elements (Table 25).

Table 25

Correlations between Total Activities of 4-H Members and Individual Elements (N=154)

Element		Total Activities
Mastery	r	0.216**
Generosity	r	0.281**
Belonging	r	0.284**
Independence	r	0.277**

** Significant at $p \leq 0.01$

*Mean Comparison/ Paired Sample T-tests of Four Essential Elements Among
4-H Members and Parents/Guardians.*

Likert-scale questions were individually grouped by category type to evaluate the *Four Essential Elements* (Mastery, Belonging, Generosity, and Independence). A paired sample t-test was conducted for the four elements to determine statistical significance when comparing any two of the elements (Table 26 and Table 27). When the paired difference mean is a negative number then the second element in the pairing had the higher mean of the two. When the paired difference mean is positive then the first element in the pairing had the highest mean of the two elements.

Data were evaluated to determine if any of the elements appeared to be more developed than others for both 4-H members and parents/guardians. By examining the paired mean difference for 4-H members, results revealed that the element of Independence had the highest mean of all four elements, followed by Generosity, Mastery, and Belonging (see Table 26).

Further analysis revealed that four of the groupings were statistically significant (pairs: 2, 3, 4, and 6). Pairs 1 and 5 were not statistically significant (significant at $p \leq 0.05$) (see Table 26). Thus, there is little to no difference between the elements when examining the perception of 4-H members. Effect sizes were small for all reported differences.

Table 26

Paired Samples Test of Paired Elements from 4-H Member Results

	Paired Differences		<i>t</i>	<i>p</i>	Effect Size
	Mean	Std. Deviation			
Mastery & Generosity	-0.025	0.359	-0.855	0.394	-0.027
Mastery & Belonging	0.062	0.311	2.478	0.014	0.073
Mastery & Independence	-0.076	0.223	-4.212	< 0.000	-0.095
Belonging & Independence	-0.138	0.280	-6.123	0.003	-0.162
Generosity & Independence	-0.051	0.349	-1.815	0.071	-0.056
Generosity & Belonging	0.087	0.362	2.979	< 0.000	0.091

A mean comparison was performed on the parent/guardian survey to examine if one element was perceived more positively than the others. Results from mean paired differences showed that Independence had the highest mean of all four Essential Elements. This was consistent with results from the 4-H member survey. Mastery has the

second highest mean followed by Generosity. This is the opposite of what the 4-H member data showed. Data from both parent/guardian and 4-H members were in agreement on the final element, Belonging, with this being the least developed element.

Results from parent/guardian paired sample test revealed a slight variation, but only one pairing (pair 1) showed was not statistically significant (significant at $p \leq 0.05$). The remaining five pairs were statically significant, thus there is no difference between the elements when examining the perceptions of parents. After examining effect sizes, practical significance was determined to be small (Table 27).

Table 27

Paired Samples Test of Paired Elements for Parents/Guardians

	<u>Paired Differences</u>		t	p	Effect Size
	Mean	Std. Deviation			
Generosity & Mastery	-0.052	0.359	-1.796	0.074	-0.070
Mastery & Belonging	0.138	0.279	6.117	< 0.000	0.157
Mastery & Independence	-0.056	0.236	-2.924	0.004	0.060
Belonging & Independence	-0.193	0.258	-9.319	0.001	-0.217
Generosity & Independence	-0.108	0.312	-4.274	< 0.000	-0.124
Generosity & Belonging	0.086	0.342	3.293	< 0.000	0.092

Discussion

The purpose of this study was to determine which areas of the *Four Essential Elements* of 4-H were being reinforced in Indiana 4-H Youth Development programs. Both current and recently tenured 4-H members and their parents/guardians were asked to participate in this study in order to determine if the *Four Essential Elements* of 4-H were being reinforced through the events, activities and programs in which these 4-H members participated. The researcher for this study proposed four hypotheses. The results from the study support the research hypotheses.

Research question one asked: Based on their 4-H participation, do 4-H members report that they experienced aspects of the *Four Essential Elements* of 4-H Youth Development? The results from 4-H members' answers to the survey indicate that 4-H members do report that they experienced aspects of all four of the elements through 4-H Youth Development programming. These results are consistent with the results from the Utah state wide study that found 97 percent of participants in the study were found to have experienced all *Eight Critical Elements* (Lee et al., 2003).

Statements made during focus group sessions validate quantitative data from the survey. The element of Mastery was present in answers pertaining to taking what they had learned in 4-H and applying it to other situations. Generosity was addressed when asked specifically about what they had learned through community service projects. One participant discussed the aspect of Generosity when focus group participants were asked what was the most important thing they had learned from being in 4-H. The element of

Belonging was present in many of the responses to focus group questions. Many times the topic of adult support and support from other 4-H members was discussed, especially when compared to the environment of other organizations that focus group participants were part of. Independence was not mentioned as a result of a direct question about the element. Rather, Independence was present in answers that showed how these 4-H members had taken leadership positions in 4-H and had the initiative to get things done without the persistence of others.

Focus group responses are in agreement with qualitative data from previous related studies on youth development in the 4-H program. The *Life Skills Development in Youth: Impact Research in Action* study stated that research participants gave responses of self-esteem, teamwork and planning/organizing when asked what they had gained from being a 4-H club member (Fitzpatrick et al., 2005). These responses are similar to those identified as Independence in the current study. Pennington and Edward's (2006) examined "giving" life skills in former Oklahoma 4-H Key club members. Results showed that these former 4-H members had learned "Citizenship" followed by "Leadership", "Community Service" and "Volunteering", respectively, from their participation in the 4-H program. These four concepts are categorized under the element of Generosity. In the current study, focus group participants mentioned these terms in their responses. Fox, Schroeder and Lodl (2003) found that 4-H club involvement influenced the development of the following life skills: responsibility, leadership, and the ability to meet new people. Respondents stated they learned "to teach others," which indicates personal and social skills. When asked about leadership skills, responses revealed "citizenship skills" and "networking skills" as common responses (Fox et al.,

2003). These responses encompass all of the essential elements and are similar to the responses found in the current study.

The results from both the quantitative and qualitative data imply that this group of 4-H members has gained aspects of all four of the essential elements through their 4-H participation. Because of the subject pool from which these 4-H members came from, it cannot be said that all Indiana 4-H members will have the same result after participating in the 4-H program for a prolonged amount of time. This group of 4-H members appears to be highly motivated people who have enjoyed their experiences while part of the 4-H program. This statement is made because these are the 4-H members who chose to apply for an Indiana State 4-H Achievement Scholarship. Typically, scholarship applicants are highly active participants in the 4-H program who have had previous achievements through their 4-H participation. Results demonstrate that 4-H members perceive themselves as gaining the most in the element of Independence. This is not a surprising result, since it appears that this group of 4-H members is comprised of highly self-motivated people who probably enjoy the ability to be independent.

Parents and guardians were also asked to complete a survey that allowed them to give their perception of the 4-H experiences that their child had been part of and how those experiences had influenced their child's development as pertaining to the *Four Essential Elements*. The parent/guardian responses were used to answer the second research question: Do parents/guardians of 4-H members perceive that their children have experienced aspects of the *Four Essential Elements* as a result of their child's involvement in the 4-H program?

Results indicate that parents/guardians have the same opinion as their 4-H children about youth development through the 4-H program. One explanation for why the results for both groups were so similar could be because parents and children often work closely together in the 4-H program. Parents and guardians are able to see the development that is occurring in their child. The 4-H members on the other hand may be aware of their development from receiving positive feedback from their parents or guardians who are also present in the 4-H environment. It also is suspected that these parents/guardians are ones who are involved in their child's life and have raised well rounded youth.

A comparison and correlation also were performed to determine if there was a relationship among each of the elements when comparing the results of the 4-H member survey and the parent/guardian survey. Data showed that all four elements, whether the elements were compared among 4-H members only, among parents/guardians only, or between 4-H members parents/guardians were all statistically significant. This provided evidence that all four elements were similarly agreed upon and expressed among both 4-H members and parents/guardians. Additionally, results indicate strong agreement or agreement on all of the elements. This implies that both parents/guardians and 4-H members believe that these 4-H members experienced aspects of all four of the essential elements. Future research with a representative sample of Indiana 4-H members would be expected to show a lesser degree of agreement to statements on the survey and more diverse answers to focus group questions relating to the *Four Essential Elements*. This new hypothesis is made because not all 4-H members will have an optimal experience in the 4-H program and not all of them will take the same things away from the program,

even if the best attempts are made by those who professionally work with the 4-H Youth Development program.

When comparing the level of agreement between the male and female 4-H members, statistical significance showed female 4-H members scored questions more positively than males. In addition, practical significance was moderate to large. This indicates that gender may be an influence on responses by 4-H members.

The third research question asked: Do the activities 4-H members report to have been involved in over time relate to their responses to the influence of 4-H on their life? A correlation between the total number of activities that each 4-H member had participated in and the level of agreement they reported on the survey was examined. Data provided evidence that the number of 4-H events and activities that a 4-H member participates in does have an affect on the level of agreement they reported on the Likert scale survey questions. When each element was compared to the number of activities that 4-H members participated in, there was a strong correlation among the two. Boyd, Herring, and Briers (1992) found similar results when assessing the development of leadership life skills. The 4-H members who had higher levels of participation in the 4-H program perceived themselves as developing leadership life skills. The amount of activities a 4-H member participates in allows them more opportunities for youth development. Through 4-H activities and events there are many opportunities for 4-H members to experience hands on learning, practice social skills, develop leadership skills, help others and become more comfortable in the 4-H environment and with adult volunteers.

In an effort to address the fourth research question (Is any one of the *Four Essential Elements* perceived more positively by respondents than the others?), a paired sample test was performed. Results showed there was little to no statistical difference between each of these elements for both 4-H members and parent/guardians. However, to address the research question, the elements were ranked highest to lowest by examining the mean difference between each of the elements for both 4-H members and parents/guardians. Data from 4-H member surveys revealed that the element of Independence had the highest mean followed by Generosity, Mastery and Belonging, respectively. Results on the parent/guardian survey showed again Independence had the highest mean, but was followed by Mastery, Generosity and Belonging.

The element Independence directs youth to become leaders and independent thinkers. By allowing youth to grow and learn without constant assistance, youth learn to build confidence and develop the ability to make their own decisions. Once youth have built confidence from making their own intelligent decisions, they are more likely to want to guide others. Mastery is related to the development of self-worth and confidence. Once youth succeed at something they tend to have the motivation to achieve their goals. In order for youth to build confidence and try new things they must have an environment where they feel safe and comfortable, which leads to the element of Belonging.

Belonging examines ways in which youth feel they are important in the lives of others. Youth need to feel a sense of belonging when they are in social settings where they can contribute their thoughts and opinions as well as help others. Youth also need the support of other youth and adults when building environments that support Generosity to guide them towards a meaning and purpose in their lives. Through the

element of Generosity, youth give back to their community and learn about the world around them while allowing them to decide what is personally important to in their lives.

One possible explanation for why Independence had the highest mean for 4-H members could be a result of the subject group that was used in this research. These are the oldest 4-H members in the 4-H program and in many cases they are the most successful, accomplished and highest achieving 4-H members currently in or recently tenured in the 4-H program. Another explanation for the results could be that traditional 4-H allows for leadership among clubs, projects and through the Jr. Leaders program. In addition, through the club experience and in Jr. Leaders, 4-H members are given the opportunity to hold offices, demonstrate parliamentary procedure, take part in creating meeting agendas, present new ideas and present public demonstrations. These experiences allow 4-H members to work on public speaking as well as teaching others. Members of the 4-H program are also able to choose their own projects.

The reasoning behind the parent/guardian findings could be that parents and guardians see their children displaying characteristics of Independence when in the 4-H setting or when working on 4-H related projects. Both of these aspects of the 4-H Youth Development Program build on the element of Independence.

The elements of Mastery and Generosity were reversed when comparing 4-H members and parent/guardian results. 4-H members may have perceived themselves as gaining more of the Generosity element rather than the Mastery element because 4-H members many times do not realize that they are experiencing mastery due to the fact that Mastery happens through experiential learning in the 4-H program. 4-H members may realize the development of the Generosity element because they remember the times that

they did community service projects and helped out other 4-H members. These types of activities can leave an impression on the 4-H member. Parents/guardians on the other hand may see Mastery from their child occurring in front of them and they are more likely to realize it. Parents/guardians probably know that their children are taking part in activities that encourage Generosity, but they may not see the affect that it actually has on the youth's development

While Belonging was determined to be the least developed of the elements, there was little difference between each of the elements and statements pertaining to Belonging were still strongly agreed upon in survey responses. The explanation for why results revealed that Belonging was the least developed element could be because 4-H members don't feel a strong connection to the adults in the 4-H program. Youth may not have many opportunities to interact with the 4-H Youth Development Educator.

Parents/guardians may have responded the way they did because they don't see that connection between adult 4-H volunteers and the 4-H member. While formal research results aren't available, researchers suspect that if this study were done with younger 4-H members, the Belonging element would be higher. This is suspected because younger children rely more on adults and older 4-H member, while older 4-H members are more likely to be independent.

Summary

Limitations of Research

This research was conducted using a convenience sample. The sample group was a predetermined group of individuals who do not represent the demographics of the entire 4-H population.

The following are limitations to this study:

- (1) This sample group was chosen for the following reasons: (1) they had the opportunity while in the 4-H program to experience aspects of the essential elements over time; (2) they had likely been in situations where they had experienced the essential elements; (3) they were of an age where they had the ability to comprehend the questions asked on the survey and provide informative feedback; (4) they represented a variety of counties in the state of Indiana.
- (2) Research Instruments: The research instruments for this survey were not used in previous research.
- (3) Missing Data: Some of the returned surveys had missing responses to the Likert-scale questions. Missing data points were deleted when analysis was being conducted.
- (4) Role of Researcher: The researcher for this study has been involved in the 4-H program and is familiar with the CES prior to this research.
- (5) Pilot Stage: There was no pilot study done in this study.

Recommendations

From this study we learned that this convenience sample of Indiana 4-H members perceive themselves as gaining aspects of all four of the Essential Elements from the 4-H Youth Development Program. We have also learned that one of each of 4-H member's parents/guardians also perceives their child as developing aspects of the Four Essential Elements. What we cannot learn from this study is whether all Indiana 4-H members leave the Indiana 4-H Youth Development Program having had the same positive youth development experiences and gaining aspects of the Four Essential Elements. It is recommended that further research be conducted in Indiana using participants that are more representative of the Indiana 4-H population to determine the impact that the 4-H Youth Development Program has on Indiana 4-H members.

If this study were to be conducted again, it would be interesting to learn the 4-H background of parents and their level of involvement in the 4-H program while having a child currently in the program. These two factors could possibly better explain the level of agreement among 4-H members and their parent/guardian.

It should be noted that through the research for this study it was discovered that literature related to *Eight Critical Elements* and *Four Essential Elements* used these two terms interchangeably. In addition, the terms Eight Essential Elements and the Four Critical Elements have been used in previous literature and these are confusing uses of the terminology. It is recommended that researchers using the framework of the *Eight Critical Elements* or the *Four Essential Elements* be aware of this inconsistency and that future research and instructional material remain consistent with proper terminology.

Conclusion

There is a national concern for programming that encourages youth to become successful adults in our society. The 4-H Youth Development Program has created programming for youth for over 100 years. The 4-H program promotes the empowerment of youth to become the best person they can be with the guidance of caring adults. It is through this mission that the result of participation in the 4-H program leads to many productive adults in today's society. The programs and activities the 4-H Youth Development program develop for youth give them the needed tools to make wise choices through their adolescents into adulthood.

The research in this study used the *Four Essential Elements* theoretical framework in an attempt to evaluate positive youth development in the Indiana 4-H Youth Development Program. The findings of this study suggest that the convenience sample of Indiana 4-H members perceive themselves as experience positive youth development through the 4-H Youth Development program. From the findings it is suggested that these youth perceive themselves as gaining many of the aspects of Independence through the 4-H program. The development of Independence will help these youth when they are faced with difficult situations, such as peer pressure. Having the self confidence, ability to think independently and knowing wrong from right, these youth will probably be more likely to do the right things. Building aspects of the *Four Essential Elements* will help guide youth towards becoming productive adults in our society.

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Appendix A

4-H Member Survey

Completion of this questionnaire is voluntary and information will be kept anonymous. Please take a moment to complete this questionnaire. Thank you for your time!

Events/ Activities that I participated in while in 4-H

For each activity please place an "X" in either the Yes or No column. If you answer **YES** to an event please write the number of years you have participated in that activity.

Event/ Activity	Yes	No	Number of Years
4-H Camper			
4-H Camp Counselor			
Livestock Judging Event			
4-H Club Officer			
Jr. Leader			
Jr. Leader Officer			
Public Speaking/ Demonstration			
Share the Fun			
Community Service Participation			
Indiana 4-H Youth Congress			
State Electric Workshops			
State 4-H Jr. Leader Conference			
State 4-H Band			
State 4-H Chorus			
State Fair Achievement Trip			
4-H Roundup			
Purdue Science Workshops			
Indiana State Fair Youth Leadership Conference			
National 4-H Conference			
National 4-H Youth Congress			
National Dairy Conference			
Citizenship Washington Focus			

Please list any other event/activities that are not listed, but that you have participated in while in 4-H (include how many years):

Purdue University is an Affirmative Action/ Equal Opportunity Institution

We know you have had experiences at home, at school and in many other organizations outside of the 4-H program that have influenced you. Please base your answers to the following survey questions only on your experiences in 4-H. Please circle the number that indicates how well you agree with each of the following statements:

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
I know that I can reach my goals if I work hard enough for them.	1	2	3	4	5
I appreciate myself because of who I am.	1	2	3	4	5
I have the ability to solve problems.	1	2	3	4	5
I know how to achieve the goals needed for the career I want.	1	2	3	4	5
I worked with my club in community activities.	1	2	3	4	5
I can effectively express my ideas.	1	2	3	4	5
I have had the opportunity to plan for my future goals.	1	2	3	4	5
I felt like I could turn to a 4-H adult volunteer when I needed help.	1	2	3	4	5
I have learned to respect people of different cultures other than my own.	1	2	3	4	5
I feel that I can influence others because of my ability to express myself.	1	2	3	4	5
I was encouraged to learn new things that were interesting to me.	1	2	3	4	5
I had a caring relationship with adults involved in the 4-H program.	1	2	3	4	5
I have been involved in activities that required teamwork.	1	2	3	4	5
I am a responsible person.	1	2	3	4	5
I am able to reflect back on the reasons for the feelings I experience.	1	2	3	4	5
I am motivated to pursue challenging goals.	1	2	3	4	5
I developed a caring relationship with the 4-H Youth Educator.	1	2	3	4	5
I have learned how to give back to my community.	1	2	3	4	5

We know you have had experiences at home, at school and in many other organizations outside of the 4-H program that have influenced you. Please base your answers to the following survey questions only on your experiences in 4-H. Please circle the number that indicates how well you agree with each of the following statements:

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
I have developed positive relationships with other youth.	1	2	3	4	5
I am able to think independently.	1	2	3	4	5
I know I have control over my actions.	1	2	3	4	5
I am able to make decisions in my daily life.	1	2	3	4	5
I have an appreciation for creative expression.	1	2	3	4	5
I am able to make decisions about the person I want to become.	1	2	3	4	5
I helped teach others the skills that I have learned through 4-H.	1	2	3	4	5
I was encouraged to contribute to my community.	1	2	3	4	5
I have developed a broad base of knowledge through the activities in which I have participated.	1	2	3	4	5
I received support to help make healthy choices.	1	2	3	4	5
I have had the opportunity to work towards my future goals.	1	2	3	4	5
I received positive feedback.	1	2	3	4	5
I take part in leadership opportunities.	1	2	3	4	5
I can make informed decisions after considering alternatives.	1	2	3	4	5
I have achieved goals in the face of setbacks.	1	2	3	4	5
I developed skills to express my feelings in a healthy way.	1	2	3	4	5
I have developed a respectful attitude toward those who are different from me.	1	2	3	4	5
I am a good role model.	1	2	3	4	5
I had a caring relationship with my 4-H leader.	1	2	3	4	5

Please complete the following questions:

Age:

Race (circle)

African American

White (not of Hispanic Origin/ Caucasian)

Gender (circle) Male

Asian American or Pacific Islander

Multiracial

Female

Hispanic/ Latino

Other

of years in 4-H:

Appendix B

Parent/Guardian Survey

Completion of this questionnaire is voluntary and information will be kept anonymous. Please take a moment to complete this questionnaire. Thank you for your time!

We know your child has had experiences outside of the 4-H program that have influenced his/her life. Please base your answers to the following survey questions only on your child's experiences in 4-H. Please circle the number that indicates how well you agree with each of the following statements:

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
My child knows that he/she can reach his/her goals if he/she works hard enough for them.	1	2	3	4	5
My child appreciates himself/herself because of who he/she is.	1	2	3	4	5
My child has the ability to solve problems.	1	2	3	4	5
My child knows how to achieve the goals needed for the career he/she wants.	1	2	3	4	5
My child worked with his/her club in community activities.	1	2	3	4	5
My child can effectively express his/her ideas.	1	2	3	4	5
My child has had the opportunity to plan for his/her future goals.	1	2	3	4	5
I believe my child felt like he/she could turn to a 4-H adult volunteer when he/she needed help.	1	2	3	4	5
My child has learned to respect people of different cultures other than his/her own.	1	2	3	4	5
I believe my child feels that he/she can influence others because of his/her ability to express himself/herself.	1	2	3	4	5
My child was encouraged to learn new things that were interesting to him/her	1	2	3	4	5
My child had a caring relationship with adults involved in the 4-H program.	1	2	3	4	5
My child has been involved in activities that required teamwork.	1	2	3	4	5
My child is a more responsible person.	1	2	3	4	5
My child is able to reflect back on the reasons for the feelings he/she has experienced.	1	2	3	4	5
My child is motivated to pursue challenging goals.	1	2	3	4	5

We know your child has had experiences outside of the 4-H program that have influenced his/her life. Please base your answers to the following survey questions only on your child's experiences in 4-H. Please circle the number that indicates how well you agree with each of the following statements:

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
My child developed a caring relationship with the 4-H Youth Educator.	1	2	3	4	5
My child has learned how to give back to our community.	1	2	3	4	5
My child has developed positive relationships with other youth.	1	2	3	4	5
My child is able to think independently	1	2	3	4	5
My child knows he/she has control over his/her actions.	1	2	3	4	5
My child is able to make decisions in his/her daily life	1	2	3	4	5
My child has an appreciation for creative expression.	1	2	3	4	5
My child is able to make decisions about the person he/she wants to become.	1	2	3	4	5
My child has helped teach others the skills that he/she has learned through 4-H.	1	2	3	4	5
My child was encouraged to contribute to our community.	1	2	3	4	5
My child has developed a broad base of knowledge through the activities in which he/she has participated.	1	2	3	4	5
My child received support to help make healthy choices.	1	2	3	4	5
My child has had the opportunity to work towards his/her future goals.	1	2	3	4	5
My child received positive feedback.	1	2	3	4	5
My child takes part in leadership opportunities.	1	2	3	4	5
My child can make informed decisions after considering alternatives.	1	2	3	4	5
My child has achieved goals in the face of setbacks.	1	2	3	4	5
My child developed skills to express his/her feelings in a healthy way.	1	2	3	4	5
My child has developed a respectful attitude toward those who are different from himself/herself.	1	2	3	4	5
My child is a good role model.	1	2	3	4	5
My child had a caring relationship with his/her 4-H leader.	1	2	3	4	5

Appendix C
Missing Data Tables

Table C1

Descriptive information about missing data from 4-H member survey

Statement	Element	# of times data was missing
I have been involved in activities that require teamwork.	Generosity	1
I have the ability to solve problems.	Mastery	1
I have had the opportunity to plan for my future goals.	Independence	1
I have learned to respect people of different cultures other than my own.	Generosity	1
I was encouraged to learn new things that were interesting to me.	Mastery	1
I am a responsible person.	Independence	1
I have an appreciation for creative expression.	Mastery	2
I have had the opportunity to work towards my future goals.	Independence	1
I received positive feedback.	Mastery	1
I take part in leadership opportunities.	Independence	1
I can make informed decisions after considering alternatives.	Mastery	1
I have achieved goals in the face of setbacks.	Independence	1
I developed skills to express my feelings in a healthy way	Belonging	3
I had a caring relationship with my 4-H leader.	Belonging	1

Table C2

Descriptive information about missing data from parent/guardian survey		
Statement	Element	# of times data was missing
My child knows how to achieve the goals needed for the career he/she wants.	Independence	2
My child worked with his/her club in community activities.	Generosity	2
My child can effectively express his/her ideas.	Mastery	1
My child developed a caring relationship with the 4-H Youth Educator.	Belonging	1
My child is able to make decisions about the person he/she wants to become.	Belonging	1
My child was encouraged as a 4-H member to contribute to his/her community.	Generosity	2
My child has developed a broad base of knowledge through the 4-H activities he/she has participated in.	Mastery	1
My child has had the opportunity to work towards his/her future goals.	Independence	1
My child appreciates him/herself because of who he/she is.	Belonging	1
My child has the ability to solve problems.	Mastery	1

Appendix D

Cover Letter

March 21, 2007

Dear (4-H member's name) and parent/guardian,

As a 4-H member who has been involved with the program for several years, you have undoubtedly participated in a variety of activities and learned many new skills. We feel certain that you have had several experiences that will prepare you for future endeavors.

As a graduate student in the Department of Youth Development and Agricultural Education, I would like to request assistance from both you and your parent/guardian in gathering data for my thesis. I am surveying 4-H members like you to determine what you have gained or learned from participating in the 4-H program, and the types of activities with which you have been involved. I am also interested in your parent/guardian's perception of your 4-H experience.

The goal of this survey is to determine you and your parent/ guardian's feelings regarding the contributions of the 4-H program to your development into a young adult. The information that is collected will assist the Purdue University Cooperative Extension Service and County Extension Educators in determining the effectiveness of the Indiana 4-H program. This research will also contribute to future program development to better serve 4-H members throughout the state.

The answers that you and your parent/guardian provide in this survey will be confidential. Only the researchers at Purdue University who will be entering the data will see your completed survey. Your name will not be linked to any of your answers in the printed report of the research findings. All you need to do is complete the enclosed 4-H Member Survey and return it to Purdue University in the enclosed self addressed, stamped envelope along with a completed Parent/Guardian Survey. **The parent/ guardian who completes the Parent/ Guardian Survey will need to base his/her answers on only your experience as a 4-H member.**

Please take a few minutes to answer the following survey and **return it as soon as possible**. I anticipate that completion of the survey should only take approximately 15 minutes. Thank you in advance for your time.

Sincerely,



Kathryn Orvis
State 4-H Specialist
Department of YDAE
Purdue University



Pandora Woodward
Graduate Student
Department of YDAE
Purdue University

Enclosed: Survey (2)
Self addressed stamped envelope

Appendix E

Assent Form

Project Title: Indiana 4-H Members' Perceptions of Life Skills Development in Correlation to the Eight Essential Elements

Investigator(s): Dr. Kathryn Orvis, Associate Professor; Dr. Renee McKee, Cooperative Extension Service Assistant Director and 4-H Youth Program Leader; and Pandora Woodward, Youth Development and Ag Administration Graduate student

We are doing a research study. A research study is a special way to find out about something. We want to find out which areas of the Eight Essential Elements of 4-H are being reinforced in Indiana 4-H Youth Development programs.

You can be in this study if you want to. If you want to be in this study, you will be asked to be part of a focus group. A focus group is a group of people with a similar interest who will be asked questions as a group and participants can respond as much as they want. In this particular focus group you will be asked questions about your 4-H experience and the life skills you have developed from participating in 4-H.

We want to tell you about some things that might happen to you if you are in this study. The risks are no more than you will encounter in everyday life. All focus group participants will be instructed at the start of the focus group not to discuss information given during the focus group after it is completed. Researchers can not guarantee that all focus group participants will respect everyone's confidentiality.

If you decide to be in this study, some good things might happen to you. The information you provide may help Indiana 4-H Youth Educators provide new programs that develop the life skills of 4-H members. But we don't know for sure that these things will happen. We might also find out things that will help other children some day.

When we are done with the study, we will write a report about what we found out. We won't use your name in the report.

You don't have to be in this study. You can say "no" and nothing bad will happen. If you say "yes" now, but you want to stop later, that's okay too. No one will hurt you, or punish you if you want to stop. All you have to do is tell us you want to stop.

If you want to be in this study, please sign your name.

I, _____, want to be in this research study.
(write your name here)

Investigator signature

(Date)

Appendix F

Parental Consent Form

Indiana 4-H Members' Perceptions of Life Skills
Development in Correlation to the
Eight Essential Elements

Investigators: Kathryn Orvis, Renee McKee
and Pandora Woodward

Purdue University

Department of Youth Development and Agricultural Education

The purpose of this research is to see which areas of the Eight Essential Elements of 4-H are being reinforced in Indiana 4-H Youth Development programs. The Eight Essential Elements is the theoretical framework developed for the Cooperative State Research, Education and Extension Service (CSREES). Based on the Research conducted in 1999 the Cooperative State Research, Education and Extension Service (CSREES) developed the concept of Eight Essential Elements as a framework to consider when planning 4-H events, activities and programs.

The focus group which your child has been asked to participate in will be discussing the 4-H experiences that he/she has taken part in throughout his/her 4-H career. Questions will be asked to all participants of the focus group and all participants will be given the opportunity to respond if he/she chooses to. The focus group will be tape recorded. The tape recording will then be used for data analysis after all the focus groups are completed. At any time you can request the opportunity to review questions being used to guide the focus group.

The focus group will be conducted on March 17, 2007 in Stewart Center, Room 107 at the designated time given to your child over the phone. The focus group should last approximately 1 hour. Agreeing to allow your child to participate in this focus group in no way affects the outcome of 4-H scholarship winners. The information your child provides in the focus group will only be used by researchers for this study. For your child's participation in this research he/she will receive a free 4-H promotional item.

With your consent, the answers your child provides will be used to help Purdue University Cooperative Extension staff and Youth Development Educators in the state of Indiana to determine what area of the Eight Essential Elements needs to be further developed. The information will also help in deciding what types of programs, activities and events conducted at the state and county level are most beneficial for 4-H members.

The risks to your child for participation in this focus group are no more than your child will encounter in everyday life. All focus group participants will be instructed at the start of the focus group not to discuss information given during the focus group after it is completed. Researchers can not guarantee that all focus group participants will respect everyone's confidentiality. All transcripts and data collected during this focus group will be kept in a locked file in the office of Kathryn Orvis at Purdue University, for a period of 3 years after the research is concluded. Information that identifies your son or daughter directly will be stored in a separate location, and destroyed after 3 years.

If you have any questions about this research project, you can contact Kathryn Orvis by phone at 765-494-8439 or Pandora Woodward at 765-496-3266. If you have concerns about the treatment of research participants, you can contact the Committee on the Use of Human Research Subjects at Purdue University, 610 Purdue Mall, Hovde Hall Room 307, West Lafayette, IN 47907-2040. The phone number for the Committee's secretary is (765) 494-5942. The email address is irb@purdue.edu.

Your signature below indicates that you agree to allow your child's responses during the focus group to be used in this study. Your child may withdraw from this study at anytime, without penalty.

I HAVE HAD THE OPPORTUNITY TO READ THIS CONSENT FORM, ASK QUESTIONS ABOUT THE RESEARCH PROJECT AND AM PREPARED TO ALLOW MY CHILD TO PARTICIPATE IN THIS PROJECT.

Parent's Signature

Date

Parent's Name

Researcher's Signature

Date

Appendix G

Focus Group Transcriptions

Mastery

D: Life skills from your projects. Like you learn how to do crafts and that's something that you'll always have like with you. Ya know like you do sports in high school but like I play ton of sports but you're not going to be able to play sports when you're 80. But you will be able to make clothes and make baskets and stuff like that. And you always enjoy those. I know like I make my own purses and like sew and make baskets and still cook...

F: I would probably say that sewing taught me the most because it was the project that did not come just naturally to me. Like some of my other projects. Like foods, or gift wrapping or that's kind of some thing that I did on my own before I was in 4-H so I really had to like to stick with and be motivated to do it. Um it was also a project that was out of my mom's league. So I had to have the motivation to learn my things on my own and finish it on my own.

B: I think also too just being able to start something and finish some thing and doing that for the best of your abilities. It's definitely taught me that even though it's not the project that I thought it was going to be, I'm going to finish it.

B: I think for me is uh it's the Llama project. I live in town and my mom and dad and the whole family were in 4-H and they lived on a farm and so for me to have the animal experience and also do horses and sheep, um but Llamas I just stuck with and I think it not the most popular um 4-H project that you can choose. There's been some difficulty in keeping the project going and I think it has taught me a lot of leadership because I'm one of the older kids in that group and it's taught me a lot about leadership and it's taught me a lot about voicing my opinions and a lot of things are very important. Plus the fact that I learned everything about Llamas obviously I didn't know anything about it before...

A: I think flowers taught me the most because now days you don't, well people don't work with flowers they pay somebody else to do it so that taught me a lot.

D: Ok so for like if I hadn't been in like horse in pony in 4-H I wouldn't have started doing it in college. Now I am in CHAPS and I get to help with like therapy riding and I'm on a polo team and that's uh I wouldn't have been able to do that if I hadn't already had those experiences to build upon.

B: I think for me because I've also done some photography for a long time. I've had to do a lot of power point presentations and posters and I also do Llama posters and so I can definitely say in schools projects and any presentations that I do for organizations, I'm president of sunshine society and so one of the things that I'm working on right now is a brochure and I feel that I have a better layout of things just because I've worked with pictures and posters and I've gotten a lot of comments and feedback saying that those are really nice. So I feel 4-H has definitely prepared me to do those presentations and for example I just did a presentation at the governor's house in Indianapolis last week and my power presentation was one of the things that we showed. I definitely tried the presentation skills and the actual presentation.

F: I have to say like from projects where we are suppose to put together a notebook or a written report of what we've done on our project, that has really helped me. For example in home environment we're suppose to have a notebook and that has helped me like now I am in college I put together for a writing class I put together my portfolio of everything that I've written and things like that. Just it similarities to me uh 4-H really prepared me for what it would be like to keep all the records of what I have done and what I've written and things like that for my college writing project.

M: For me it's been a great place to develop skills that you taught about, you heard from everybody but it's a great practical place to put them in action and actually learn about them.

L: I will say definitely the poster making, in school it helps a lot. I had the best poster ever.

J: Actually just a demonstration. A couple of weeks ago for a FFA contest and thru 4-H I learned how to put a demonstration together and make my posters and the different visual things you need in your presentation

V: I personally think that you can apply almost anything you learn in 4-H like to your school or education. I particularly remember in 3rd grade taking the electric project and doing the...what it is the single circuit I guess and I remember in 4th grade we learned about it the next year and I already knew it.

K: In public speaking and demonstration contest like I got more comfortable talking in front of people and I'm in the drama club and the local community theatre.

M: For me it's probably communication skills and public speaking and interpersonal. I helped with the food co-op that there's people from all different backgrounds in 4-H and I used my communication skills in order to write letters and e-mails about this and also help the people.

N: I would say my writing skills for research papers and stuff. For some of my projects I have to do research papers and it really helps me in my high school.

I: I would say leadership skills from what I learned thru 4-H and I have hold multiple offices and that club so I use to take what I have learned thru 4-H, which is like being younger watching how the older members use to do the clubs and now that's me so I am applying what I learned.

X: I would use the leadership skills you can I take it to clubs here at Purdue and um we can bring it to any club and ya know the parliamentary procedures and ya know how to go about doing things and in an orderly fashion and that really helps.

R: I'm going to stay on the same line. The judging, the livestock judging. I started as early as I could and it just enabled me, I use to not want to talk in front of people but after so many sets of reasons it's no big deal. I can memorize stuff pretty easy now. Just the decision making, the decisions that you have to make on a quick basis. Also now that I'm an older member just helping out and coaching the younger members is a thrill for me, to see them improve.

T: I would say the (rabbit) ambassador program. Probably the best experience I've had. It taught me how to study for test. How to write a resume and how to interact with people. It also wanted me to be more knowledge in other projects as well. Um and it's also allowed me to go to Washington DC and meet other people and interact with them and see the country.

Q: Mine would probably have to be the leadership um 4-H taught me tons of leadership skills. I am able to go to school and then go on to sports team and stuff and able to control everyone and get everyone psyched up and ready to play their hardest.

U: I would definitely have to agree with leadership because I have been my club president for the past 3 years and so when I went into school and was doing various activities, extra curricular activities, it pushed me to want to go for the office position and ya know run things the best that I knew. And I really started learning how to do that thru 4-H.

S: I agree also. The leadership helps you on sports teams, it helps you in school, being a member of student council, being president of class and stuff like that, it helps out.

R: I will agree with the leadership but throw some teamwork into that too. It just allows you with sports to take control and just to lead others as well as work together with others but not only in sports but like "S" said student council, FCA, FFA and just other leadership organizations where you can stand above others because of the stuff that you learned thru 4-H.

S: I agree if you have seen me probably 10 years ago that I would know how to show a cow or a sheep or a goat. I would thought you were crazy but thru 4-H it has given me the opportunity to further branch out and learn different things I would never known 10 years ago.

Belonging

A: One thing I've noticed um different 4-H activities during the summer like camps or what not that I have been to, seem to be a lot friendlier than at school because people don't really want to label you or put you into categories. They're all equal.

J: I think a lot of it is in other organizations you might not have the volunteer that you have in 4-H that are so willing to help with whatever you want them to.

M: I think 4-H says a lot about the older 4-Hers helping younger ones. That you just, in other organizations and stuff it just isn't there. And for me it's when I'm younger helping so much to have an older club member help me out rather than having an adult

X: I think the difference is the openness too. I mean we're all 4-Hers and we have that common but we all have different backgrounds and it's really cool because there is a huge difference between each 4-Her but we're all coming for the common goals and that's really cool to see.

H: 4-H has taught me to interact better with other adults. In school and stuff you just don't get that quite as much. And your 4-H leaders you become really close and doing other community service and stuff like that. You get really interactive with other adults and hopefully your going to use it for the rest of your life.

R: I would say with one of school activities, there are so many cliques and it's just sports wise and band and everything. When you go to school kids don't seem to work together as well. But when you got o 4-H events, no matter if they're show horses or they do electricity, they get along together just well. Just totally different from school.

S: I agree. I mean if you go to county fair and you see pig people hanging out with sheep people and rabbit people and if you go to school you see smarter kids and athletic kids and ya know other clique like that. I just think that county fair or at a 4-H event everybody is together unlike school

U: I think also the 4-H program does a really good job of creating a network of adults that you can turn to if you have any questions. There is always somebody there to help you with your projects. And ya know they don't' hesitate in doing that. they don't' find it any trouble at all and you really have a support system that increases your knowledge and makes you feel more comfortable in doing your project.

Generosity

A: When I've done community service or something, it gives me a sense of fulfillment and it just makes me feel really good. Usually I wouldn't do stuff like that.

B: With our club it teaches you a lot about who is in your community and recognition because you always have ya know people probably adults saying oh good job on this project. I saw it in the newspaper or um for instance, we paint clovers downtown on windows like two weeks before and it's always really nice to have the community support and recognition with that so I've learned to kind of community and togetherness I think because we have a support system.

B: And you can help younger members.

M: For me it's probably communication skills and public speaking and interpersonal. I helped with the food co-op that there's people from all different backgrounds in 4-H and I used my communication skills in order to write letters and e-mails about this and also help the people.

M: I think 4-H says a lot about the older 4-Hers helping younger ones. That you just, in other organizations and stuff it just isn't there. And for me it's when I'm younger helping so much to have an older club member help me out rather than having an adult

V: I personally learned that it's just better to like you just better the community. Like anything you do it's just going to make anything better. It's always a positive and you always feel like you're doing things once again better for the community. So

X: A lot of people in our society now days feel are what can I get from this? What can I take? And for community service we are able to give back to the community who has given us so much.

T: It's not always about the trophies um I found more enjoyment in teaching others especially in showmanship and watching them win it's more rewarding to me. I feel like I've won so many things and I have so many trophies and there's been that it doesn't really matter any more. it's more what I've achieved without the ribbons and trophies.

S: I think he said it earlier. There's always something that you can do to help out the community. If that's just picking up trash, that helps out the community. And just learn, knowing that telling everybody that you can always do some thing to help out. Just in other clubs like FFA um

T: I think it's kind of a humbling experience. Maybe you really don't want to get messy and pick up trash but I know we planted flowers at the Indiana veteran's home and its kinda neat to watch people come out and see you work and they enjoyed it.

R: I think when you start to do community service maybe at a younger age you think of it as why am I doing this for that person and then as you get older you realized you're not just doing it for them but you're doing it for yourself too. It's some thing that you can take away and it's just kind of heart warming when you help someone else out.

X: I think getting to see other people experiences I mean everybody takes some thing different out of 4-H um but when it comes full circle and you get to help someone else out. I think that, that's the greatest experience that 4-H can give.

U: I think also the 4-H programs does a really good job of creating a network of adults that you can turn to if you have any questions. There is always somebody there to help you with your projects. And ya know they don't hesitate in doing that. they don't find it any trouble at all and you really have a support system that increases your knowledge and makes you feel more comfortable in doing your project.

Independence

D: Probably leadership like running things, learning how to interact with other people and ways that for them that are learned how to do things for other people not just yourselves. Like what benefits the team and not just you.

C: I think team work is one of the things that I've learned. Ya know just to interact with your club members and do things as a club.

A: One thing 4-H has helped me learn is how to talk in front of people for example in meetings. We don't do that a lot in school.

E: I think like learning leadership in 4-H helped me a lot too. Because in school I was captain of the swim team and sports and what not. It helped out a lot and in encouraging kids and stuff.

C: And the projects aren't just like teaching one skill. They're teaching me like life skills like communication and that kind of stuff. You can use that in college and the rest of your lives.

V: Also I think another great thing about 4-H is everything that we're talking about, like we're learning it before like, what it feels like for me, going on these different trips, you like learn like the personal skills like how to meet new people before you go to college. So when all your friends are just learning college you know before that and also just like the different learning aspects to like you're exposed to so much before like a lot of your other friends are. So even with the arts like working with different medias you're exposed to them before like your other friends are so

U: I would say that anything is worthwhile requires a lot of hard work. And I've always enjoyed showing but ya know if you're going out there and you're going to do it right and you want your animal to go out there calm in the show ring then you need to be prepared and you need to spend that time ya know over the summer working with your animals more than just the week before.

R: One thing was just kind of open up and work with, work as a team. Not only being able to work with peers but kind of grow and be more mature and work with adults at your county level and state level and sometimes even national level. so just be able to work with a different variety of people.

Q: Mine would probably have to be the leadership um 4-H taught me tons of leadership skills. I am able to go to school and then go on to sports team and stuff and able to control everyone and get everyone psyched up and ready to play their hardest.

U: I would definitely have to agree with leadership because I have been my club president for the past 3 years and so when I went into school and was doing various

activities, extra curricular activities, it pushed me to want to go for the office position and ya know run things the best that I knew. And I really started learning how to do that thru 4-H.

S: I agree also. The leadership helps you on sports teams, it helps you in school, being a member of student council, being president of class and stuff like that, it helps out.

R: I will agree with the leadership but throw some teamwork into that too. It just allows you with sports to take control and just to lead others as well as work together with others but not only in sports but like "S" said student council, FCA, FFA and just other leadership organizations where you can stand above others because of the stuff that you learned thru 4-H.

H: For me I've really learned life skills that I needed organizing. And in college that is very vital and ya know there is so much to do and you just have to plan your time and organize it. You have to know when your papers are due and when to study for your test and to make time for things like that so. I think organizing.

I: I would say leadership skills from what I learned thru 4-H and I have hold multiple offices and that club so I use to take what I have learned thru 4-H, which is like being younger watching how the older members use to do the clubs and now that's me so I am applying what I learned.

X: I would use the leadership skills you can I take it to clubs here at Purdue and um we can bring it to any club and ya know the parliamentary procedures and ya know how to go about doing things and in an orderly fashion and that really helps.

M: I think 4-H says a lot about the older 4-Hers helping younger ones. That you just, in other organizations and stuff it just isn't there. And for me it's when I'm younger helping so much to have an older club member help me out rather than having an adult

M: It's opened up a lot more paths and connected with people that I wouldn't normally meet in every day life but it helps me rather than just meet the people who live around my area I can meet people who live in different states and come from different backgrounds. We have common connections to share.

J: I think one thing I've learned a lot is even signing up as a third grade I participated in demonstration contest and all these public speaking opportunities and that's really given me the opportunity to step out of my shell and not be quite as shy as I use to be.

I: I think it's like people, I was never like the shy kid but there's a lot of people that I've seen that use to be really shy and they hold offices or speak up during club meetings and give them more confidence

R: I would say uh I don't necessarily know that everyone gains it but 4-H directs you a lot of time in the way that you want to go. I know with school you probably don't have the opportunity to work with animals or you may not have the opportunity to do electricity projects but with 4-H there is so many diverse projects that you can take that you wouldn't have the opportunity any where else that maybe could lead you down the road to what you want to be doing the rest of your life.

Q: I think it helps with the development of people's futures and also gives them a sense of what they want to do for the rest of their lives.