

## **An Assessment of Recruitment and Training Practices Used in a National FFA Career Development Event**

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### **Abstract**

*This study examined recruitment and training practices utilized by teams participating in the 2005 National FFA Livestock Career Development Event. Participants responded to Likert type items related to recruitment and trainings practices used in preparing for the competition. Recruitment factors that were more highly correlated with team emblem based on total team score were: 1) competitiveness, 2) coachable, and 3) consistency. The training practices that were more highly correlated with team success were: 1) workout with college teams, 2) attend livestock judging camps, and 3) attend practice contests. When using recruitment factors to predict team success at the 2005 National FFA Livestock Career Development Event, it appears that competitiveness and good study skills are significant predictors of team emblem. Looking at training practices which can predict team emblem, working out with college teams and video judging practice both yield significant results. Examining these recruitment and training practices can provide valuable information to teachers who struggle with recruitment and retention of career development team members. These factors will also be useful to beginning and pre-service teachers who have responsibilities to train these teams.*

## Introduction

The mission of the National FFA Organization (FFA) is to develop youth through premier leadership, personal growth and career success (National FFA, 2006). One way FFA achieves this goal is by providing opportunities for students to showcase the knowledge and skills they have acquired in agricultural classes through a competitive venue. Career Development Events (CDE's) add a real world experience for students involved in agricultural education. Since 1928, FFA has worked to create CDE's that demonstrate the meaningful connections between classroom instruction and real-life scenarios (National FFA, 2006). Career development events build on what is learned through agricultural education classes and FFA activities.

These events are designed to help prepare students for careers in agriculture. Classroom instruction is reinforced as students demonstrate their content knowledge and skills in a competitive setting. Career development events test the abilities of individuals and teams in 23 major areas of agricultural instruction ranging from livestock evaluation to floriculture (National FFA, 2006). In 2006, National FFA offers 23 different career development events and one career development activity. Regardless of the event or activity an FFA member participates in, the student will be challenged and motivated from the experience of competing as an individual and as a team member.

By examining the recruitment and training practices used by teachers to prepare for career development events, many useful practices can be adopted by beginning and pre-service teachers. Recruitment of students can be a challenging task even for experienced teachers. Dyer and Breja (2003) identified several challenges in recruitment of students into agriculture programs. Scheduling conflicts, finding time to recruit, student involvement in other activities, and competition from other programs were a few of the challenges identified.

FFA activities seem to be a viable recruitment tool for teachers. Scanlon, Yoder, Hoover, and Johnson (1989) found that the top recruitment practices perceived to be most effective by teachers were participation in career development events, FFA activities, and awards programs. Myers, Dyer, and Breja (2003) noted that FFA was an effective strategy in recruiting students. Career development events were recognized as one of the more valuable recruitment techniques. Especially when agricultural education programs have a tradition of success in certain career development events, recruiting students to be a part of a winning tradition is much easier than trying to recruit students to participate in a brand new event.

Training FFA members for competitions or career development events as we refer to them today is one of the major responsibilities of all agricultural education teachers. A study conducted by Flanagan, Kieth, and Lockaby (2000) addressed problems faced by beginning agricultural education teachers in preparing for career development events. Beginning teachers in this study were asked to rate their perceived level of importance of career development events. This group of beginning teachers rated livestock judging as the most popular CDE in their state. By examining training practices used by teachers who have qualified for a national CDE, hopefully sharing this information can relieve some of the pressures felt by our new and beginning colleagues.

## Theoretical Framework

Agricultural judging competitions for high school students can be traced back in history before FFA was formed. According to Tenney (1977), agriculture teachers started holding judging contests soon after the Smith-Hughes Act of 1917 brought the subject of agriculture into public schools. The first state-wide contests were held in 1919 in the states of Alabama and Virginia. The first national judging competition designed specifically for secondary agriculture students was held at the 1925 National Dairy Show in Indianapolis, Indiana.

In May 1926, C. H. Lane, former Chief of the U.S. Agricultural Education Service, went to Kansas City, Missouri to meet with officials of the American Royal Livestock and Horse Show about establishing national livestock judging contests for secondary agriculture students. In November of 1926, the National Congress of Vocational Agriculture Students held judging contests at its first convention (Tenney, 1977). Only two years later, the National FFA Organization met for the first time in 1928. The judging contests continued to be sponsored by the National Congress of Vocational Agriculture Students until 1936 (Tenney, 1977).

Judging contests continued to be a part of the National FFA Convention, but were not officially recognized as a part of the FFA program until they were renewed in 1947, after being discontinued because of World War II. Prior to 1946, contestants and teams were rated on a numerical scale and awards were given to the winners (England, 1996). After 1946, the Danish system of awards was adopted for National FFA Contests. The Danish system of awards recognizes contestants and teams with rankings of gold, silver, or bronze emblem.

The National FFA Organization has conducted judging contests at the National Convention since 1947. From 1928 until 1998, the National FFA Convention and competitions were held in Kansas City, Missouri. From 1999 to 2005, the national convention and CDE's were held in Louisville, Kentucky and were move to Indianapolis, Indiana beginning in 2006. According to White and Christiansen (1978), the contest program has been worthwhile in regard to educational benefits received by participants. White and Christiansen (1978) also state that educational values learned in FFA contests carried over to future endeavors of contest participants.

More contemporary literature confirms the benefits of participation in FFA contests. Vaughn, Kieth, and Lockaby (1999) found that competing in FFA provides students with a place for recognition and helps motivate students to set goals and complete tasks. Rutherford, Townsend, Briers, Cummins and Conrad (2002) found members of the FFA typically possess more leadership skills than non-FFA members. Agricultural education and FFA hold strong to the "learn by doing" method of instruction. Not only is this type of instruction practiced in the classroom and laboratory of agricultural science programs, it is supported and reinforced by activities such as Career Development Events (CDE's) and Supervised Agricultural Experience (SAE's) (Cepica, Dillingham, Eggenberger, and Stockton, 1988). Career Development Events (CDE's), formerly known as judging events are competitive FFA events that develop technical knowledge, judgment, reasoning, and sportsmanship (Cepica et al., 1988).

Career Development Events are a classic example of experiential learning. Conrad and Hedin (1981) defined experiential education as “educational programs taking place outside of the traditional classroom where students are in new roles featuring significant tasks with real consequences, and where the emphasis is on learning by doing with associated reflection” (p.11). The benefits of experiential education were realized in the late nineteenth century. The movement gained support from such prominent men as Johan Pestalozzi and Frederick Froebel who argued that the most effective learning could only be achieved through doing (Weatherford and Weatherford, 1987).

Weatherford and Weatherford (1987) noted several reasons why experiential programs such as FFA and 4-H can help adolescents develop life skills. Experiential education incorporates key elements of life skills such as problem solving, critical thinking, inter- and intra- personal skills, and connecting youth with adults and the community. An effective feature of experiential education is that it incorporates the cognitive, affective, and psychomotor spheres of learning (learning by doing). The model of learning provided by experiential education is consistent with the stage of human growth, because it allows for learning to occur appropriately for the learning style and developmental level of the individual.

The benefits of participation in livestock judging have been documented for years. Livestock judging has been associated with developing a variety of employer-preferred life skills such as communication, problem solving, and decision making (Boyd, Herring, & Briers, 1992). McCann and McCann (1992) reported that the livestock judging activity provides youth with an opportunity to develop necessary life skills. Participation on livestock judging teams is credited with improved critical thinking skills, enhanced self-confidence, and development of better team skills (Smith, 1989). According to Rusk (2002), when youths learn the process of evaluation through livestock judging, these same skills can be integrated into other real life situations.

As of 2006, existing literature on the National FFA Livestock CDE is limited. Holt (1929) conducted a study of the training of vocational agriculture judging teams. He looked at the training of livestock and dairy judging teams in Illinois and Pennsylvania. Holt found that experience in teaching vocational agriculture was not of major importance; however, he also found that a successful judging team usually required a training period of two or more years. Holt concluded that even though a small percentage of judging coaches participated in judging contests in college, a high number of those who did participate in college judging events trained successful judging teams. Holt found that many judging coaches used pictures, charts and lantern slides to train their judging teams. The coaches in Holt’s study indicated that practice and drill was the most significant factor in training their judging teams (England, 1996).

Herren (1982) conducted a national study on the factors associated with success of participants in the National FFA Livestock Judging Contest. His study revealed that teams who spent more time preparing for the contest tended to score higher. Advisors who had fewer years of teaching experience tended to have higher scoring teams. Teams from states with higher populations of cattle, swine and sheep tended to score higher in the contest. Teams that participated in more contests prior to the national event tended to score higher and teams whose advisors had previous experience in the contest area performed at a higher level. Herren also concluded that teams consisting of members selected by the advisors tended to score higher.

England (1996) investigated training methods of National FFA judging teams. It was determined that 77.5% of the advisors who trained livestock judging teams had previous experience in the livestock CDE. Experience was also a large success factor in England's study. Over 48% of students who were on a national FFA judging team were seniors in high school and reported having previous experience. Additionally, most successful judging teams competed in two or more practice contests prior to the national judging contest. Some livestock judging teams reported participating in six to eight practice contests prior to the national event. England also reported that actual specimens, individual instruction, and books were the most popular training methods utilized by successful judging teams. Livestock judging team advisors placed more emphasis on video training than books or resource people.

### **Purpose and Objectives**

The purpose of this study was to determine the recruitment and training practices used in preparing the participants of the 2005 National FFA Livestock CDE and how these recruitment and training practices influenced team emblem based on total team score. The following research questions were addressed:

- What recruitment factors have the strongest relationship with team emblem?
- What training practices have the strongest relationship with team emblem?
- Which recruitment and training practices are the best predictors of team emblem?

### **Methods and Procedures**

A descriptive-correlational survey design using a researcher-designed questionnaire was used to collect data for this study. The researcher used the 16 recruitment and selection factors along with the 15 training procedures generated from a Delphi study to develop the survey instrument that was distributed to the participants on the 2005 National FFA Livestock CDE. The Delphi technique is a group process designed to solicit expert responses toward reaching consensus on a particular problem, topic, or issue (Delp, Thesen, Motiwalla, & Seshadri, 1977). The panel of experts consisted of agricultural education teachers who were the FFA advisors of teams that finished in the top five places of the National FFA Livestock CDE over a six year period (1999-2004) while the National FFA Convention was held in Louisville, KY.

The instrument was reviewed for content and face validity by four agricultural education faculty members. A pilot test was conducted to determine the reliability of the instrument. Seventeen undergraduate students in agricultural education and communications who had participated in livestock judging competitions participated in the pilot study. Reliability was determined on the Likert-type scales for recruitment and training practices resulting in a Cronbach's alpha of .89 and .77, respectively. No changes were made to the instrument as a result of the pilot test.

The questionnaire asked the students to rate the characteristics that led to them being selected as a member of the livestock judging team. The participants were given a four point Likert-type scale with responses of: not important =1, slightly important = 2, important = 3, very

important = 4. Participants rated the importance of: 1) academic ability, 2) grade point average, 3) desire to learn, 4) speaking ability, 5) competitiveness, 6) confidence, 7) listening skills, 8) consistency, 9) time to devote, 10) hard working, 11) commitment, 12) team player, 13) coachable, 14) good study skills, 15) positive attitude, and 16) goal oriented.

The questionnaire also asked participants to rate the training practices utilized in their preparation for the 2005 National FFA Livestock CDE. The participants were given a four point Likert-type scale with responses of: not beneficial = 1, slightly beneficial = 2, beneficial = 3, most beneficial = 4. The subjects rated the benefit of: 1) learning livestock anatomy, 2) video judging practice, 3) taking notes for oral reasons, 4) live animal practice, 5) attend practice contests, 6) viewing videos of prior contests, 7) study handouts, 8) workout with college livestock teams, 9) give oral reasons, 10) livestock terminology review, 11) attend livestock shows, 12) learn the breeds of livestock, 13) judge pictures of livestock, 14) attend livestock judging camps, and 15) visit farms and ranches.

The population for this study was the participants of the 2005 National FFA Livestock CDE. In order to qualify for the National FFA Livestock CDE, teams must win their state FFA Livestock CDE which usually requires qualifying through a district or area contest format. This census study encompassed teams from 43 states with a total of 170 participants. Using the census method to collect data eliminated the threat of sampling error. Forty states consisting of 155 individuals responded to the survey yielding a 93% response rate.

Information packets regarding the study were mailed to the agricultural education teachers of the teams that registered to participate in the 2005 National FFA Livestock CDE. Each packet contained a letter explaining the purpose of the study and directions for administering the survey. The agricultural education teachers were asked to administer the survey to their students. This standard administration technique helped to control the threat of variation among testing conditions. The packets also contained four blank surveys with a postage paid envelope. Nineteen teams responded by mail to the initial request. The researcher followed up with the non-responders at the National FFA Livestock CDE and secured the surveys from 21 additional teams.

Descriptive statistics were run to determine means and standard deviations on all interval scale variables. Correlations were used to determine the relationship between recruitment and training practices and team emblem earned at the 2005 National FFA Livestock CDE. Hinkle (2003) defines correlation as the nature, or extent, of the relationship between two variables. Pearson product-moment correlation =  $r$  was used because it is the most commonly used correlation coefficient in behavioral sciences (Hinkle, 2003). The researchers used the Davis Convention (1971) to describe the magnitude of the correlations. Stepwise linear regression was used to describe associations among gold, silver, and bronze emblem teams in recruitment and training practices. According to Hinkle (2003), the stepwise solution is a variation of the forward solution. Predictor variables are entered one at a time but can be deleted if they do not contribute significantly to the regression when considered in combination with newly entered predictors. An alpha level of .05 was set *a priori* in order to determine statistical significance.

## Findings

This study sought to determine the relationship between recruitment and training practices used in preparing for the 2005 National FFA Livestock CDE and team emblem earned at the competition. Means and standard deviations were used to describe recruitment factors that led to participants being members of their FFA livestock judging team. Recruitment factors receiving the highest mean scores were: hard working,  $M = 3.65$ ;  $SD = .57$ , commitment  $M = 3.57$ ;  $SD = .61$ , and goal oriented at  $M = 3.50$ ,  $SD = .66$ . Factors receiving the lowest mean scores were: time to devote,  $M = 3.26$ ;  $SD = .79$ , academic ability,  $M = 2.89$ ;  $SD = .79$ , and grade point average,  $M = 2.70$ ;  $SD = .84$ . Recruitment factors were rated as: 1 = not important, 2 = slightly important, 3 = important, 4 = very important.

When looking at techniques used to train individuals for the National FFA Livestock CDE, means and standard deviations were used to summarize survey results. The highest means for training practices used were: live animal practice,  $M = 3.89$ ;  $SD = .36$ , giving oral reasons,  $M = 3.73$ ;  $SD = .59$  and attending practice contests,  $M = 3.61$ ;  $SD = .64$ . Training practices receiving the lowest mean scores from survey participants were: video judging practice,  $M = 2.54$ ;  $SD = .85$ , attending livestock judging summer camps,  $M = 2.51$ ;  $SD = .98$ , and judging pictures of livestock,  $M = 2.41$ ;  $SD = .82$ . Training practices were rated as: 1 = not beneficial, 2 = slightly beneficial, 3 = beneficial, 4 = very beneficial.

The first research question looked at the recruitment factors that had the most impact on team emblem. The recruitment factors posting the highest correlations were: competitiveness,  $r = .342$ , coachable,  $r = .251$  and consistency,  $r = .246$ . According to Davis (1971), competitiveness would be a moderate correlation with coachable and consistency being categorized as low correlations. The lowest correlation was desire to learn =  $.064$  which would be described as negligible. Table 1 shows the correlations between recruitment factors and team emblem earned at the National FFA Livestock CDE.

Table 1

*Correlations between recruitment factors and team emblem*

Recruitment factors	Pearson's <i>r</i>
Competitiveness	.342
Coachable	.251
Consistency	.246
Confidence	.211
Positive attitude	.201
Team player	.200
Good study skills	.199
Time to devote	.198
Commitment	.196
Speaking ability	.178
Listening skills	.143
Hard working	.136
GPA	.130
Academic ability	.121
Goal oriented	.120
Desire to learn	.064

The second research question examined the relationship between training practices and team emblem earned at the 2005 National FFA Livestock CDE. Working out with college livestock judging teams posted a moderate correlation of  $r = .324$ . Attending summer camps, practice contests, and live animal practice produced low correlations related to team emblem. Several negative correlations existed including: livestock anatomy, video judging practice, taking notes for oral reasons, terminology review, judging pictures and visiting farms and ranches. Table 2 displays the correlations between training practices and emblem.

Table 2

*Correlations between training practices and team emblem*

Training practices	Pearson's <i>r</i>
Workout with college teams	.324
Attend summer camps	.185
Practice contests	.132
Live animal practice	.125
Attend livestock shows	.098
Give oral reasons	.083
Videos of prior contest	.059
Handouts	.035
Learn the breeds of livestock	.001
Taking notes for reasons	-.003
Visit farms and ranches	-.007
Livestock anatomy	-.024
Judge pictures	-.073
Video judging practice	-.093
Terminology review	-.100

The final research question addresses which recruitment and training practices are the best predictors of team emblem at the 2005 National FFA Livestock CDE. Stepwise linear regression was used to predict recruitment and training practices that would lead to a gold emblem finish. The regression model shows a significant  $\beta$  level for competitiveness and good study skills. Participants who reported competitiveness as being an important recruitment factor posted a *B* value of 57.26. Those students who reported good study skills as being important as far as their recruitment to the team had a *B* value of 34.39. Table 3 shows the regression model.

Table 3

*Regression analysis for recruitment factors predicting team emblem*

Variable	<i>B</i>	SE <i>B</i>	$\beta$	<i>t</i>	Sig.
Competitiveness	57.26	13.97	.317	4.10	.000
Good study skills	34.39	14.13	.188	2.43	.016

Note.  $R^2 = .164$ . Adjusted  $R^2 = .152$ .  $F = 14.48$

The same process was used to analyze training practices that would predict team success. The regression model pinpoints two training practices that can significantly impact a team's total score at the 2005 National FFA Livestock CDE. Working out with college livestock judging teams appears to have a positive impact while using video judging practice shows a negative impact. According to the model, teams that reported working out with college livestock judging teams as being a beneficial training practice had a  $B = 45.41$ . On the other hand, teams that stated video judging practice was beneficial in terms of training their team had a  $B$  value of  $-32.09$ . Table 4 shows the regression analysis for training practices.

Table 4

*Regression analysis for training practices predicting team emblem*

Variable	<i>B</i>	SE <i>B</i>	$\beta$	<i>t</i>	Sig.
Workout with college teams	45.41	11.07	.314	4.10	.000
Video judging practice	-32.09	11.79	-.208	-2.72	.007

Note.  $R^2 = .149$ . Adjusted  $R^2 = .137$ .  $F = 12.78$

Working out with college livestock judging teams was the most beneficial training practice according to the regression analysis. Video livestock judging practice although significant posted a negative  $B$  value which would place those participants who used this as their major source of training at a disadvantage in the 2005 National FFA Livestock CDE.

### Conclusions

Participants of the 2005 National FFA Livestock CDE believed they were recruited to participate on their chapter's livestock CDE team because they were: hard working, committed, and goal oriented. When correlating the relationship between recruitment factors and team emblem earned at the competition, competitiveness, coachable, and consistency are the three recruitment factors that are the most highly correlated with team success. These same participants viewed live animal practice, giving oral reasons, and attending practice contests as the most valuable training experiences for their team. When evaluating the benefits of training

practices, working out with college livestock judging teams, attending summer livestock judging camps, and attending practice contests were more highly correlated than any other training practices.

When making a connection to existing literature, Herren's study from 1982 examined factors associated with success of participants in the National FFA Livestock Judging Contest. Herren found that teams who practiced more for the contest tended to score higher. This study adds support to Herren's claim by posting a 3.89 mean score for live animal practice being very beneficial as well as a 3.73 for giving oral reasons and a 3.61 mean score for attending practice contests.

England's study (1996) reinforces live animal practice as a viable training method. She concluded that actual specimens, individual instruction, and books were the most popular training methods for most successful judging teams. The advisors in England's study also stated they would like more videotapes and contest materials to help train their judging teams. In the beginning stages of CDE training, video practice is essential for developing basic knowledge and skills. We see in this study, at the national level, video judging practice had a negative correlation with team emblem based on total team score.

When using regression analysis to predict team emblem, two recruitment factors yield statistically significant results. Competitiveness and good study skills were the best predictors of team emblem. Agriculture education teachers could utilize a personality assessment instrument such as Clifton StrengthFinders to assess competitiveness among potential judging team members. Teachers could use a variety of methods to determine students study skills, from examining grades to contacting former teachers of the students trying out for their livestock CDE team. Implementing these two simple analyses of competitiveness and good study skills could be very beneficial to all agricultural education teachers involved in training career development event teams.

Two training practices yielded significant results in the regression analysis. Working out with college livestock judging teams is a good predictor of team emblem. This training practice gives students the opportunity to interact with students who have been in their shoes. Most college livestock judging teams are made up of former FFA members who have participated in a national livestock evaluation competition. Video livestock judging practice is on the other end of the spectrum actually having a negative impact on team emblem. Further research is needed to investigate the various methods used in training career development teams. Some training practices work well for some teachers and others are not as successful. This could be a geographic factor with some states having an advantage with more readily available classes of livestock to evaluate. In some cases video practice may be the only way to gain experience for some teams in certain areas of the event.

### **Implications and Recommendations**

The findings from this study have implications for all agricultural education who train career development event teams. Any insight provided to teachers related to recruitment and training of students will surely relieve some of the day to day stress agricultural education

teacher's face. Career development events are an excellent way to showcase knowledge and skills gained from agricultural education classes. Continued research is needed to explore all facets of the career development event system. By researching this important topic, our colleagues in the field will benefit from knowing the techniques used by successful programs and hopefully continue to build this important component of their total FFA program.

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