Special Needs Students and Competitive Livestock Exhibition: A Case Study of Perceived Benefits with an Autistic Child

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Abstract

For many years, special needs students have been placed in mainstream, agricultural science programs. Agricultural sciences teachers must continue to find ways to support individual education plans for mainstream special needs students. Although new and innovative ideas for satisfying these plans are preferred, agricultural science teachers with limited resources must understand the relationship between existing programs and individual education plans. Today, many special needs students participate in competitive livestock exhibition, a co-curricular activity supported by agricultural sciences, the FFA, and 4-H. Therefore, the researchers analyzed the perceived benefits of competitive livestock exhibition with an autistic child.

A specific case study of an autistic child involved in competitive livestock exhibition was analyzed as a function of perceived benefits associated with the phenomenon. The theoretical basis was derived through previous studies involving qualitative analysis of agricultural science and 4-H students with livestock exhibition. As a result of this specific case study, similarities with a special needs student in relation to previous studies containing mainstream students were observed. The three broad themes to emerge were social relations, family, and responsibility/knowledge and care of animals. This study lists the themes in order of pervasiveness. Social relations was the strongest theme in the previous study as well; however, the only true “vocational” theme, responsibility/knowledge and care of animals, emerged stronger as related to the special needs student. The other themes considered in the theoretical framework yielded little to no significance in their relationships with special needs students. Furthermore, few differences can be associated with the comparisons of the various data collection methods.

The authors suggest competitive livestock exhibition as a vocational outlet for life skill development to special needs students lacking in an area of social development. In addition, families of special needs students should consider competitive livestock exhibition as a means to involve all family members in an activity. Replications of the study are suggested.
Introduction/Theoretical Framework

Vocational education programs, such as agricultural sciences, have opened many doors to special populations of secondary students. Most individual education plans submitted for special education requirements suggest vocational training for the handicapped in public schools. An agricultural science program is included under the umbrella for mainstream submission by special education coordinators, and often in rural settings, agricultural sciences is the sole vocational curriculum (Randolph, 1988).

One predominant aspect of FFA and 4-H programs is the livestock program, which is a competitive educational activity satisfying the mission of agricultural sciences and cooperative extension by teaching youth the responsibility of caring, feeding, managing and showing through exhibiting livestock projects (Baker, 1991).

It is unclear as to the specific benefits obtained by special education students involved in agricultural science, FFA, and 4-H programs such as competitive livestock exhibition. Perceptions of stakeholders to these individuals are equally vague. Parental perception of students with disabilities, specifically autism, in vocational programs are rarely investigated and accurately questioned.

The need for vocational training is apparent for children with special needs. Becoming a productive, partially self-sufficient member of society is the ultimate goal we have set for special needs students. Special attention, such as vocational activities, must be implemented in order for any individual to acquire skills needed in the work place. Specific and general vocational programs can be used in order to achieve this goal for special education students (Sarkes & Scott, 1986). Randolph (1988) suggests vocational activities, such as the care for animals, offer tremendous help in fulfilling the need for job related training.

The scholarly literature on autism has grown remarkably during the past two decades, and the result has been a much better understanding of the disorder and its characteristics. The recent abundance of literature and data on autism has caused a confusing state of information and misinformation in education. Although the general agreement about the importance of education is apparent, controversy continues in many areas, including value of early instruction, and value of methods used in instruction (Olley, 1999).

Autism, a pervasive developmental disorder, can be distinguished by several characteristics with various combinations. Characteristics include impairment of social interaction, impairment of communication, and abnormal development prior to age three. Using clinical criteria, 10 of every 10,000 people have some form of autism. Although autism is considered a disability, its characteristics qualify as a pervasive developmental order, not mental retardation or specific developmental disorders (Peeters, 1997).

Although the literature relating to autism is abundant, specifics relating to educational training are limited. Furthermore, literature regarding special needs students in agricultural sciences and its programs is limited. It can be concluded that vocational programs, such as agricultural sciences, can be considered for study in relation to vocational options and life skill development with disabled students.

A study using symbolic interactionism indicated benefits for mainstream agricultural science and 4-H students involved in competitive livestock expedition. This study associated the previously developed themes with a special needs student. These themes include: (1) social relationships, (2) character, (3) family, (4) exposure to competition, (5) knowledge and care of
animals, (6) exposure to cultures (Davis, Kieth, Williams & Fraze, 2000). The emergent themes found by Davis, et al. (2000) served as a theoretical foundation for this study.

**Purpose and Objectives**

The purpose of this study was to understand the perceived benefits of competitive livestock exhibition as associated with a special needs student. In order to evaluate the specific phenomenon in the particular case, the following questions were generated:

1. Is a competitive livestock exhibition program beneficial to a special needs student in becoming a productive member of society?
2. Do special needs students, specifically autistic children, benefit from competitive livestock exhibition?
3. What benefits are associated with special needs students and competitive livestock exhibition, and what is the order of pervasiveness of these benefits?

**Methodology**

This study used a single case to derive thematic meaning from parental perceptions and participant observation with competitive livestock exhibition. The parents and agricultural science teacher of a black autistic child involved in competitive livestock exhibition served as participants in the qualitative context for the study.

In order to better evaluate phenomenon in its natural setting, qualitative and case study research have become common in the field of education. Intentions of case study research are not to explain phenomenon, but to evaluate the situation and generate meaning from its context (Gall, Borg, Gall, 1996, p. 549).

**Context for the Study**

This case study reflected the perceptions of parents with a black autistic child participating in a competitive livestock show program. Due to confidentiality, the student or site was not revealed. The setting for the case involved a rural program in West Texas, located in the Area I FFA alignment. This child participated for three years in all aspects of a diverse agricultural science and FFA program. This included participation in a competitive livestock show program. Currently, he has been placed in a special program to assist with behavioral transitions into post-secondary educational and vocational programs.

**Methods of Data Collection**

Denzin and Lincoln (1995) explained that in order to be a bricoleur researcher, various methods must be used that develops an intertwined set of methodological practices allowing for a better perception of the subject matter at hand. Due to the need of various methods in interpretive research, triangulation was established in order to analyze the data more effectively. Three methods of data collection were used in this case study to establish triangulation (Denzin & Lincoln, 1995). These three methods of data collection were interviews, archival, and personal recollection.

Marshall and Rossman (1995) state that participant’s perspectives must unfold, not the perspectives of the researcher; therefore a semi-structured interview was used. This also allowed for vast amounts of information to be gathered. Interviewing took place in the participant’s home. The interviews were video and audio taped for transcription.
Gall, Borg, and Gall (1996) state that archived text offer accurate perspectives of participants at a specific time, eliminating any change of perspective due to post phenomenon experiences. The daily journal of the autistic child’s mother was accessed, transcribed, and analyzed for any themes related to the sought objectives.

Further, personal experience, especially of professionals in the researched field, may identify biases when triangulated with other methodologies (Glesne, 1999). A behavioral journal of the author’s, also the former agricultural science teacher in this case, describing the daily experiences with the autistic child, was transcribed and analyzed.

Limitations

In order to understand the nature of this study, several limitations were observed. First, sampling techniques used in qualitative studies do not allow application of findings outside of the participants. Furthermore, verbatim transcripts of audio and video taped interviews for later analysis are unable to replicate non-verbal communications such as body language. Participants of the study may not portray their true feelings when being interviewed.

Data Analysis

In qualitative studies, data analysis refers to the categorizing and ordering of information in such a way as to make sense, and to communicate a true and accurate report of the findings (Brink, 1991).

According to Benner (1985), the coding of data by means of open, axial, and selective coding can be used to conduct thematic analysis. Open coding is the process of breaking down, examining, comparing, conceptualizing, and categorizing data. After open coding, data can be put together by category. This is called axial coding. After the data is axially coded, it can be put into core categories, or selectively coded, to develop themes that relate to the research at hand (Strauss & Corbin, 1990). This study used such coding, resulting in the development of themes. Once the data was openly coded, axially coded, and selectively coded, themes emerged.

Control Methods

Control measures are necessary to assure the truthfulness of the results presented. The usual measures of validity and reliability generally accepted in quantitative research are not appropriate for use in phenomenological studies. Nevertheless, steps to minimize errors of interpretation and to control interpretive bias remain important. Qualitative research methods have controls of reliability and validity built into the study design.

Triangulation was used in the design of this study. Emergent themes from the interviews, parental journal, and personal journal were constantly compared. This eliminated weak themes from being used as emergent themes in the findings. The use of an audio/video tape and transcriptions were used in the interview process. This eliminated interviewer bias by putting the entire conversation into text that was consistent when analyzed.

A professional educator, outside of the authors, also analyzed the data to ensure consistency. The two analyses proved consistent.

Results

Three broad themes emerged during the axial phase of coding the data. The three themes are social relations, family, and responsibility/knowledge and care of animals. The themes are listed in order of pervasiveness. The other themes considered in the theoretical framework
yielded little to no significance in their relationships with special needs students. Little differences can be associated with the comparison of the different means of data collection. The themes will be discussed as appropriate categories. In order to capture the voice of the participants in the research study, actual transcriptions of interview questions and journal recordings were reported.

**Social Relations**

The most pervasive theme that emerged from the study was the development of social relations through livestock showing. These social relations participants developed are with peers, advisors, sponsors, stock show officials, and other subjects related to the environment of stock showing. The question responses and archival recordings revealed a strong response when associating social relationships with special needs students and competitive livestock exhibition.

*He simple likes to do what the other kids do. You see him wandering what’s going on in the next pen. Sometimes I think he don’t have a care in the world about the animal. He just wants to be like everybody else and we want him to be like everybody else. We know that’s not possible, but we can sure hope. He’s making friends and he belongs—that’s all that matters. We can see people going out of the way to help him fit in. That’s not done everywhere. Stock shows is good for kids like this. People try to help them fit in and trust them. It’s important that (Sam) knows to trust people. That’s how he makes friends and that’s how you to make it in life.* (Interview-Father)

*It seems (Sam’s) main concern is to meet the guys at the pen. I wonder if he cares enough for the pig?* (Journal-Mother)

*(Sam’s) doesn’t do as well with his chores at the farm unless one of the other students is with him. He mocks perfectly what the other student does. This works exceptional when working on sequencing tasks with (Sam). It works better than me showing or telling him. You must make sure he has the appropriate role model to avoid bad habits.* (Journal-Teacher)

The participants found meaning in social relations that is acquired and developed through activities associated with competitive livestock exhibition.

**Family**

The second theme to emerge was that of family. Family togetherness and family values give meaning to what is desired as a life skill which will be of value in the development of special needs youth. It is apparent that participants in this study put emphasis on the importance of the family participating in activities together such as stock showing. The responses and archival material consistently provided evidence for this emergent theme.

*It gives them something to do together. (Sam) can’t play sports, and his dad was an All-American. This gives them something other than chores they can do together. That’s really important since (Sam) will be working with someone like his dad in a job some day. He’s got to follow a lead and learn to take orders and directions. He needs to know his family loves him and is behind him. He sees this in stock showing with us helping.* (Interview-Mother)
Some times I think it’s me that likes it the most. (Sam) likes it too, but it’s neat that we get to do it together. Many activities don’t allow moms and dads to get involved with what they do. This is important for special ed. kids because we need to know what’s going on. (Interview-Father)

After school (Sam’s) father usually helps him with the animals. They seem to have a good relationship. (Journal-Teacher)

The participants found meaning in family that is acquired and developed through activities associated with competitive livestock exhibition.

Responsibility/Knowledge and Care of Animals

The third and final theme to emerge was that of responsibility/knowledge and care of animals gained through competitive livestock exhibition. Although this theme emerged first in the identification process, it ranked last in pervasiveness after attributed detail supported the previous emergent themes. These findings were consistent throughout the triangulation of sources.

(Sam) has learned how to care for something. He knows he’s got to take care of something rather than himself. This is hard for a special kid to get. You doing good just to get them to take care of himself. (Interview-Father)

I see him taking better care of the dogs. Today, I saw him give the dogs fresh water. He did this without be asked to. (Journal-Mother)

(Sam) has been doing a great job with his daily tasks is class. I believe taking care of his pigs have become part of his routine. (Teacher-Journal)

The participants found meaning in animal knowledge and responsibility that is acquired and developed through competitive livestock exhibition.

In summary, the three themes to emerge in relation to competitive livestock exhibition and special needs students were social relations, family, and responsibility/knowledge and care of animals. These themes consistently emerged in all sources of data used in the triangulation control method.

Conclusions

This study indicated specific themes that emerged from the data collection of parental interviews, parental journal, and teacher journal, as to their relation to perceived benefits of competitive livestock exhibition with normal populations. The theme of social relations consistently emerged as the most pervasive with the special needs student in this study. The themes of family and responsibility/knowledge and care of animals are consistent as far as identification is concerned; however, these themes differ in terms of pervasiveness with the literature of mainstream populations and competitive livestock exhibition.

The finding of social relations as the most pervasive theme is consistent with the theoretical framework which identifies social relations in the context of perceived benefits. This finding is consistent with the literature of normal populations in related events. It can be
concluded that social relationships generated through competitive livestock exhibition is an important aspect with the participants.

It can be further concluded that family is an important factor with this participants as well. This theme surpassed the order of pervasiveness found in literature associated with normal populations, which is listed as third.

The finding of responsibility/knowledge and care of animals is a combination and separation of themes when compared with the literature used as a theoretical background. Davis et al. (2000) associate responsibility with character, and knowledge and care of animals as an individual theme. Because these phenomena consistently emerged together in this case, they were associated together as a theme.

Due to limitations associated with case study and qualitative methodologies, these conclusions cannot be accurately generalized to all special populations that compete in competitive livestock showing.

**Discussion**

As more special needs students enter mainstream curriculum, educators are faced with the task of providing these students with a quality education. Special needs students can gain life skills from various educational components, including vocational curriculum (Randolph, 1988). This study serves as a basis for questions and research concerning special needs students and competitive livestock exhibition, an extension of vocational, agricultural sciences, and 4-H programs.

Although special populations have not been examined, the results and conclusions indicate a consistency with literature concerning the development of life skills for mainstream populations through competitive livestock exhibition. Some differences were observed in theme associations and emergent pervasiveness. The theme of social relations appears to be the most important phenomena associated with competitive livestock exhibition and all participants. Life skills of family involvement and responsibility/knowledge and care of animals are consistent among special and normal populations; however, these themes as more pervasive in a special needs student context.

As school officials, teachers, parents, and extension personnel begin to evaluate the worth of competitive livestock exhibition and its association with special needs students, they should consider the following:
- More special needs students who are lacking in an area of social development should consider competitive livestock exhibition as a vocational outlet for life skill development.
- Families of special needs students should consider competitive livestock exhibition as a means to involve all family members in an activity that is accessible for everyone.
- Parents of guardians should consider competitive livestock exhibition as a means to teach special needs students responsibilities and animal care techniques.
- Livestock show officials, teachers, and administrators should consider specialized curriculum and activities to enhance experiences gained by special needs students who stock show competitively.

Research replications are recommended to include other cases of special needs students and competitive livestock exhibition. A need can also be acknowledged for descriptive and empirical data as associated with special needs students and livestock showing, as well as other competitive areas of agricultural sciences, FFA, and 4-H programs.
References


