Determining the Impact of Block Scheduling on Leadership Involvement in the FFA

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ABSTRACT

Block scheduling was established in response to educational reform measures and is the restructuring of the school day in longer class increments with fewer number of classes per day. The FFA, an intra-curricular component of the agricultural education, provides leadership opportunities and involvement within the classroom setting. This study assessed the impact block scheduling had on members' leadership involvement in the FFA. Twelve schools, six on block and six on traditional scheduling, were randomly selected and 288 FFA members participated in the study. Members' leadership involvement was measured by attainment of FFA degrees; attendance at meetings; participation in contests, conferences, conventions; and application for awards and scholarships. Few significant differences were found in members' involvement and schedule type. Advisors of FFA chapter were interviewed to consider their influence of members' leadership involvement. Comments made by advisors supported the literature and offered solutions to previous concerns.

Literature Review and Theoretical Framework

In the past two decades various changes have impacted the public school educational system. In 1983, the National Commission on Excellence in Education addressed a report to the American people regarding the risks that education in the United States would be facing in the years ahead. This report, *A Nation at Risk*, generated reactions that ultimately led to action on educational reform issues. Years later in 1994, the National Education Commission on Time and Learning concluded, in *Prisoners of Time (*1994), that student time could be better spent, and the teaching and learning process would be better fulfilled, if schools were to move to a block scheduling format, "moving from a focus on time to a focus on learning" (p. 4). The result was the proposal to restructure the school day to longer class periods and fewer classes and ultimately became known as block scheduling.

Block scheduling reorganizes the curriculum into a different format that breaks up the daily contact teachers have with the same group of students over the course of an entire school year. Nationally schools are using multiple forms of block scheduling, including alternate day block, 4 X 4 semester block, quarter-on/quarter-off block,

trimester block, and single course block (Canady & Rettig, 1995). However, studies found that the 4 X 4 semester block was the most successful at the high school level (Carroll, 1994; Sessoms, 1995). The 4 X 4 semester block combines two traditional school periods into one 90-minute period. Students attend four classes of 90 minutes each for two 90-day periods (2 semesters over the 180-day school year). Periods are nearly twice as long as traditional scheduling periods.

Preliminary research by Dunigan (2002) indicated that the majority of traditional public schools offering agricultural education (excluding magnet, technical, and private schools) in the target state of Pennsylvania on block scheduling were using the 4 X 4 semester block. Henceforth, when the term block scheduling is used it will refer to the 4 X 4 semester block.

The three components of the agricultural education curriculum (FFA, Supervised Agricultural Experience (SAE), and classroom/laboratory instruction) are to be considered equal, inseparable, and intra-curricular components of the agricultural education program (National FFA, 2007). It should be noted that similar career and technical education organizations such as the Future Business Leaders of America (FBLA) or Family Career and Community Leaders of America (FCCLA) also provide educational programming in leadership development within the classroom.

As an intra-curricular component of the agricultural education model, the FFA serves as an organization to develop student interest and participation in agricultural education "through premier leadership, personal growth, and career success" (National FFA Organization, 2002, p. 4). In order to instill these qualities in its members, the FFA provides students with various leadership opportunities and therefore is considered a youth leadership organization. As a youth leadership organization, the FFA provides its members opportunities to attend leadership workshops; participate in leadership events; attend local, state, and national conferences; develop public speaking skills and sense of democracy; serve as a representative or chapter leader; earn degrees representing personal accomplishments; develop team building skills, in addition to many others. The FFA organization works to promote personal, team, and chapter leadership and leadership skills. Many of these opportunities are taught or made available to the FFA members during their time in an agricultural education class. The classroom is the catalyst for the dissemination of information. Therefore, any changes to the daily scheduling format could directly impact student participation and involvement in the FFA.

Leadership and personal development serve as an important component of the FFA. The FFA organization encourages members to develop essential leadership life skills such as citizenship and cooperation (Bender, Taylor, Hansen, & Newcomb, 1979). Students' leadership development through FFA is influenced in part by their presence in the classroom. While many leadership opportunities are available for FFA members outside of the classroom setting, teachers use the classroom setting to communicate opportunities to members. Moore, Kirby, and Becton (1997) found that block scheduling in North Carolina directly affected student participation in the FFA and related leadership

opportunities as the authors noted an increase in student enrollment in ag education programs without a corresponding increase in FFA membership. Agriculture teachers in Texas, Kentucky, and North Carolina all reported that block scheduling created communication barriers with FFA members not currently enrolled in agricultural education classes (Baker & Bowman, 2000; Conner, 1997; Lindsey, 1997; Moore et al., 1997).

Under block scheduling students enrolled in an agricultural education class in the fall semester could, in theory, not take another agricultural education class until the spring of the following school year; hence, a year and half would pass before the agriculture teacher would see the student again. Maintaining an FFA chapter requires staying in contact with those students not enrolled in an agriculture class in the spring or fall semesters (Agnew & Masters, 1998). Communication with students was the issue most frequently mentioned by teachers as the greatest difficulty encountered with block scheduling (Baker & Bowman, 2000).

Changes in school scheduling, such as the implementation of block scheduling, inhibit the opportunity for advisor/member interaction. As an intra-curricular component of agricultural education, the FFA was designed to be taught during classroom time. The classroom serves as a primary source of information regarding FFA activities and furthermore, leadership development.

Purpose and Objectives

The purpose of this study was to determine the impact of block scheduling on members' participation in leadership opportunities in the FFA organization. Specific objectives include:

1. Describe demographic differences in block and traditional scheduled FFA members;
2. Compare differences existing between FFA members enrolled in traditional and block scheduling formats and their respective leadership involvement in the FFA;
3. Determine advisors' influences on leadership involvement of FFA members in relationship to scheduling format.

Methodology

The study included a purposive sample of 288 high school students enrolled in Pennsylvania high schools that offer agricultural education courses and were members of the FFA organization. Only 10^{th}, 11^{th}, and 12^{th} grade FFA members were surveyed in the selected high schools. It was assumed that freshmen had not been provided enough opportunities for involvement in the FFA at the time of data collection.

At the time of the study there was a total population of 173 agricultural education programs in the selected state. A preliminary survey of these agricultural education programs was developed to determine if schools were on a traditional or block scheduling format. This survey was used only to determine the initial total population. Schools that did not complete the survey were contacted by phone to determine their school

scheduling format. In addition, schools that were considered career technical centers, magnet schools, or private institution were eliminated from the population because they were considered outside of the norm of the traditional public high school. The frame of the study included three requirements: block or traditional scheduling, an agricultural education program, and an active FFA chapter. Results indicated 106 schools with the three qualifiers. The 106 schools were placed in one of two categories, block or traditional scheduling, resulting in 79 schools under traditional scheduling and 26 schools under block scheduling. For the purpose of convenience, six schools were randomly selected from each group (block and traditional). In each of the twelve chapters, all FFA members in grades 10-12 were identified (n=288).

Initial contact was made by telephone and letters, which included a brief description of the study, its relevance, and requirements for participation. Once the FFA advisor and principal granted permission, a packet containing the following was mailed to the advisor: the student/ parent consent forms with cover letters, advisor's consent form, principal's consent form, sample of the FFA members' survey, and the advisor's schedule and directions regarding distribution of consent forms. The FFA advisors were instructed to give the package containing two student/parent consent forms and one cover letter to each FFA member in 10^{th} through 12^{th} grades. The FFA advisors were contacted one week later to confirm that they had received the materials. One week prior to visiting each school, the researcher sent additional consent forms and cover letters to provide each member a second opportunity to return a signed consent form. Advisors were contacted the day before the researcher's scheduled visit so that any additional questions might be answered.

A 31-item instrument was developed to quantitatively assess FFA member leadership involvement in the FFA organization. Faculty members in the College of Agricultural Sciences and College of Education reviewed the instrument for content and face validity. The questionnaire was revised based on comments and suggestions from the panel. A pilot test was conducted with two schools randomly selected from the remaining population and the questionnaire was determined to consistently measure members' leadership involvement in the FFA organization. A Spearman-Brown Split-half reliability analysis was performed resulting in a reliability of .93 (coefficient alpha).

The researcher self-administered the instrument. Only those members who returned a completed consent form were given a questionnaire. Individual interviews were conducted with one advisor from each school to determine the impact of scheduling format on the agricultural education program and the FFA during the site visit.

Results

Objective 1: Describe differences in block and traditional schedule FFA members.

A total of 288 FFA members provided information regarding their grade level, gender, and length of membership. Similarities were found in members' scheduling format and gender. Responses indicated that nearly half (n=139) of the respondents were in block scheduling and half (n=149) in traditional scheduling and 133 members were

female and 153 male members of the FFA. Furthermore, members' responses to grade level produced similar results when compared with type of scheduling: sophomore members comprised 36.7% of the sample (18.9% traditional, 17.8% block), junior members 29.4% (traditional and block, 14.7%) and senior members 31.8% (17.1% traditional, 14.7% block).

Members' responses to length of membership were compared to type of scheduling format. Findings produced similar results for all lengths (one year, two years, three years, four years, and four or more years) of membership (51.8% traditional, 48.2% block). Member's gender, grade level and length of membership did not show relationships with schedule format.

Objective 2: Compare differences existing between FFA members enrolled in traditional and block scheduling formats and their respective leadership involvement in the FFA.

For the purpose of this study, leadership involvement is considered member attendance of FFA meetings and participation in leadership related activities, including contests, conferences, conventions and events, in addition to application of proficiency awards and scholarships.

Where member's gender, grade level and degrees earned did not show relationships with schedule format in Objective 1, significant differences were found in member's attendance at FFA meetings and type of scheduling format. Traditional scheduled members were more likely to attend one meeting (Φ=.161; $p<.05$) or not attend any meetings (Φ=.372; $p<.001$) for the current school year, while block scheduled members indicated attending three meetings (Φ=.238; $p<.001$), 4 meetings (Φ=.228; $p<.001$), and more than four meetings (Φ=.234; $p<.001$). A significant relationship was found in members' attendance at FFA meetings for the two previous school years. Traditional scheduled members indicated a greater percentage attending 1-2 meetings (Φ=.158; $p<.05$) and not have attended meetings, while block schedule members reported attending nine or more meetings (Φ=.291; $p<.001$).

Additionally, leadership involvement was determined by members' participation in leadership related activities, including judging contests (animal, horticulture, related food and natural resources, agricultural mechanics, agricultural business, and speaking), attendance at conferences and conventions (see Table 1), and working towards proficiency awards and scholarships.

The only significant differences found between scheduling format and members' involvement in leadership activities was in the area of judging contests. In the area of animal judging, traditional scheduled members participated in a greater number of horse judging contests (Φ= .172; p=.004). Additionally, traditional scheduled members were significantly more likely to participate in the scrapbook contests (Φ= .174; p=.003). However in the area of horticulture and related food and natural resources, block scheduled members were more likely to participate in agronomy judging contests (Φ=.120; p=.042).

Table **1**: Members' Participation in Contest, Conventions, and Conferences

	Traditional		Block		Total			
	n	%	n	%	n	%	X^2	Φ
Contests								
Animal Judging								
Participation	68	23.7	61	21.3	129	44.9		
No Participation	80	27.9	78	27.2	158	55.1	.123	.021
Horticulture Judging								
Participation	45	15.7	53	18.5	98	34.1		
No Participation	103	35.9	86	30.0	189	65.9	1.902	.081
Agricultural Mechanics								
Participation	28	9.8	23	8.0	51	17.8		
No Participation	120	1.8	116	8.0	236	82.2	.276	.031
Agricultural Business								
Participation	33	11.5	33	11.5	66	23.0		
No Participation	115	40.1	106	36.9	221	77.0	.084	.017
Speaking								
Participation	58	20.2	55	19.2	113	39.4		
No Participation	90	31.4	84	29.3	174	60.6	.004	.004
Conventions								
Participation	61	21.3	74	25.8	135	47.0		
No Participation	87	30.3	65	22.6	152	25.0	4.158	.120*
Conferences								
Participation	57	19.9	45	15.7	102	35.5		
No Participation	91	31.7	94	32.8	185	64.5	1.179	.064

*p<.05

In regards to awards and scholarships block scheduled members were significantly more likely to receive proficiency awards (Φ=.171; p<.05), whereas traditional scheduled members reported a greater desire to apply for FFA scholarships

(Φ=.144; $p<.05$). Significant differences were not found in members' attendance at conferences and conventions and scheduling format.

Objective 3: Determine advisors' influences on leadership involvement of FFA members in relationship to scheduling format.

Teachers were asked to specify what recruitment strategies they used to influence a member to participate in leadership opportunities. Responses indicated that eight of the eleven teachers who were interviewed recruited members at the junior high school level. Additionally, one teacher indicated they began the recruitment process as early as the third grade through the FFA's Food for America Program. Some examples of recruitment practices used by teachers include are: *"All eighth graders tour the agriculture facilities and hear information about the FFA and agriculture program." (School #10, traditional schedule); "I take groups of current FFA members to the junior high school to recruit new members. We also have a display at the open house night in the beginning of the school year." (School #5, block schedule);* and
"Third grade Food for America program and giant pumpkin growing contests." (School #9, traditional schedule)

The teachers' communication method is important in the success of disseminating leadership opportunities to members. Personal communication with the advisors resulted in a range of methodology including word of mouth, posters, flyers, display boards, classroom boards, personal contact, school bulletins, school newspaper, radio, school intercom, letters, and email. Coding of similar themes indicated that advisors utilizing a block scheduling format used more progressive forms of communication such as the school intercom (School #6 and School #9, block schedule) and email (School #11, block schedule), in addition personal communication with members (School #4, block schedule). Traditional scheduled advisors tended to utilize more conventional forms of communication such as flyers (School #2, traditional) and announcements (School #3 and School #7, traditional schedule).

Members are provided with opportunities to build their leadership skills through participation in contests and conventions. Advisors were asked to identify the process used to select members' attendance to contests and conventions. Selection was similar for both contests and conventions. Members were selected by the advisor, based on interest, classroom behavior, grade level, grade point average, participation in other activities, and financial situations. Two teachers established a point system where members earn points for attending meetings and fundraising for the chapter (School #12, traditional schedule and School #5, block schedule). One advisor shared their system for earning funds to participate in FFA events. *"Almost any student who wants to go is allowed. Students volunteer to go or participate. Some students have problems affording the cost of the trips so we have a system that works with our fruit sale. Students who sell 25 cases of fruit get their dues paid. Anything over 25 cases they earn $4 per case toward their FFA account. Each student has an account they can subtract money from for FFA or SAE activities." (School #5, block schedule)*

Advisors utilizing a block scheduling format were asked to report innovative ideas or methods they had established in response to converting to a block scheduling format. One advisor indicated that the establishment of a flexible period aided students' ability to attend FFA meetings and activities. However, responses also showed that advisors, in general were, not utilizing innovative techniques and were relying on traditional forms of communication such as word of mouth. One advisor noted that he spends time during the fall tracking down members who may be interested in enrolling in the spring semester, while another advisor relies solely on students' efforts to join.

Advisors have a strong influence on a member's decision to participate in the leadership opportunities within the FFA organization. Often these influences are in the form of initially recruiting the members into the FFA organization, how they advertise future opportunities to members and what measures an advisor uses to select members to participate in leadership opportunities such as contests and conventions.

Conclusions/Implications

This study sought to build upon the limited research available related to the impact block scheduling has on FFA members' involvement in leadership activities in a traditional high school. The school setting serves as a vital social context for the development of youth (Brungardt, 1996). Roshani (1996) noted that "youth's participation in youth development projects offers youth the opportunity to develop competencies" (p.5) essential during adolescence and, ultimately, adulthood.

As an intracurricular component of agricultural education many of leadership opportunities are taught or made available to the FFA members during their time in an agricultural education class. Any changes to the daily scheduling format, including block scheduling, impact student participation and involvement in the FFA. Members' involvement in leadership opportunities can be measured by the achievement of FFA degrees and attendance at meetings. It can further be assessed by participation in contests, conferences, conventions and events, as well as the attainment of proficiency awards and scholarships.

By establishing a comparison group, traditional schedule, the researcher was able to determine the impacts that block scheduling has upon a FFA member's involvement. Since no significant differences were found in demographic variables such as gender, grade level, and length of membership in the FFA in both groups (objective 1), block and traditional, it was possible to compare differences in member's leadership involvement. By including a qualitative approach, additional factors were examined, such as the advisors role in communicating information, which could influence a member's ability to participate in leadership activities.

Comparisons made in FFA members' involvement in leadership activities and type of scheduling produced conflicting results. While traditional scheduled members did participate in a greater number of activities in the areas of horse judging and scrapbook contests, supporting literature that traditional scheduled members are more likely to be

involved in leadership opportunities, block scheduled members participated in a greater number of activities in the areas of agronomy judging. Additionally, block scheduled members were more likely to receive proficiency awards than their traditional scheduled counter parts.

These significant relationships in members' leadership involvement and schedule type lead to the possible conclusion that FFA members leadership involvement are not being significantly affected by utilizing a block scheduling format. The lack of literature in recent years concerning block scheduling and the FFA creates a plausible response that FFA advisors have compensated over the past five years. A possible solution could be the flex periods mentioned by one advisor during the interview. Under the flex period, members have a shorten period once a day or week to meet with teachers they would not see otherwise. Further, results from this study have not accounted for chapter effect. Significant relationships found in members school scheduling type and leadership involvement in horse judging, agronomy judging, and scrapbook contest could potentially be based on the chapter's historical involvement in one specific contest. For example, a chapter who has traditionally participated in the horse judging contests, and who was successful in pervious school years, may not be affected by the change to block scheduling based on the assumption that the FFA members from this particular school were committed to involvement in this contests prior to change of school schedule and will remain committed after the change.

One constant found across the type of scheduling format, was the advisor. The advisor is essential in recruiting members, communicating opportunities to members, selecting members to participate in leadership activities, contests, and conventions, and encouraging involvement. While interviews with advisors utilizing a block scheduling format indicated an effort to use more advanced forms of communication, advisors continued to noted difficulty in communicating with spring semester enrollees. These findings support the studies conducted in Texas, Kentucky, and North Carolina where advisors specified that block scheduling created communication barriers with FFA members not currently enrolled in agricultural education classes (Baker & Bowman, 2000; Conner, 1997; Lindsey, 1997; Moore et al., 1997). Based on the findings of this study, one can possible conclude that advisors have not yet established successful forms of communication with the spring semester enrollees that is vital to the involvement of FFA members.

While the researcher sought to include additional factors influencing members' involvement, based on the results found in this study, it is difficult to determine if block scheduling is the main variable that impacts a member's leadership involvement in the FFA organization. However, with few significant differences in members' leadership involvement one can speculate that advisors have compensated for the challenges found in the literature. However, these results must consider that chapters under a block scheduling format encounter additional potentially negative factors, such as the communication barriers found through the advisors interviews.

Recommendations

Based on the study's findings and conclusions, the following recommendations are made:

1. The program of activities was established to outline activities available for FFA members over a school year, based on the interests and needs of the individual chapter. Under a block scheduling format, advisors have longer planning periods and a fewer number of courses. It is essential for advisors and FFA officers under a block scheduling format to generate and distribute the chapter's program of activities in the fall semester to members enrolled in the spring semester. Members will then have a detailed outline of the opportunities available for the school year, including future leadership opportunities, and providing specific dates, times, and requirements for participation.
2. A communication barrier with spring enrollees was mentioned during individual interviews with advisors. It is recommended that advisors utilizing a block scheduling format create a mentoring system, where a fall semester FFA member is matched with a spring semester enrollee. The member enrolled in an agricultural education course during the current semester is required to communicate upcoming activities and opportunities to the opposite semester member.
3.

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