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Sandiford: Health Occupations Students of America: A Profile

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HEALTH OCCUPATIONS STUDENTS OF AMERICA: A PROFILE

Janice R. Sandiford¹

Abstract: The purpose of this study was to field test an instrument designed to identify the characteristics and attitudes of Health Occupations Education Students attending the 1990 Health Occupations Students of American (HOSA) National Leadership conference. Specific questions about their program of studies and about HOSA were asked, providing a profile of these students. While HOSA is approaching its 20th year as a vocational student organization, little is presented in the literature about the HOSA student in general. While only a 4% convenience sample is represented, the respondents represent several states, a wide range of students, and several first time attendees. Both officers and competitive event participants are included in the sample. Students who responded indicated that they were prepared for their competitive event by their teacher. Most attended the conference on funds provided through fund raising and/or by parents. Contrary to popular thought, most students did not know about HOSA prior to entering their health occupations program. Students responded that they benefitted from both their health occupations education course and from their participation in HOSA. Their experiences and participation helped them make their career decision and helped to reaffirm it.

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Students in vocational education programs are provided an opportunity to participate in a student organization as an integral part of their studies. There are currently eight such organizations. These include Distributive Education Clubs of America (DECA), Future Business Leaders of America (FBLA), Future Farmers of America (FFA), Future Homemakers of America/Home Economics Related Organization (FHA/HERO), Health Occupations Students of America (HOSA), Office Education Association (OEA), Technical Students of America (TSA), and Vocational Industrial Clubs of America (VICA). While vocational student organizations may serve as an integral part of the vocational curriculum, the opportunity to participate in a "club" is a high priority for many students when selecting a specific vocational course or program track. For the most part, vocational student organizations are designed to develop leadership skills, increase student involvement, and serve to increase student retention. While many of the older VSO's have been researched over the years, data on HOSA students have been limited due to the immaturity of the organization. This year, 1992, is the 17th year of operation since the constitutional convention was held.

HOSA is an organization which has evolved over a period of several years because of significant efforts and activities to establish a separate national vocational student organization for students enrolled in health occupations education programs. Two significant events include the endorsement by the Health Occupations Education (HOE) Division of the American Vocational Association (AVA) in 1973 and the Constitutional Convention in 1976. The Constitutional Convention of the National Association, Health Occupations Students of America was held in Arlington, Texas with participating states of Alabama, New Jersey, New Mexico, Oklahoma, Texas and North Carolina. Since that time the organization has grown to include 42,000 members from 35 states.

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Literature Review

A review of the literature revealed that little has been written about Health Occupations Students of America (HOSA) . while there are references to materials available to teach students, (Gillespie, 1981; Oklahoma State Department of Vocational and Technical Education, 1989) few studies have been reported which would provide information about the HOSA student. Walters and Wilmoth (1988) reported on leadership opinion measures of student officers in HOSA and in 1989 reported on leadership attributes and personality preferences of high school student leaders in HOSA. In these studies, there was a strong relationship between the adapted Leadership Opinion Questionnaire and the Myers-Briggs Type Indicator used to measure relationships of HOSA students. In a different study, Walters, Wilmoth and Pitts (1988) identified personality traits of High School HOSA officers. These studies focused on the officers and not the general membership.

HOSA students were included in the study done by Jeffrey and Camp (1988) who analyzed variables related to high school students' level of participation in vocational student organizations. Information about HOSA students specifically, was not reported.

Papers and research have been presented indicating that student organizations and related student activities can make significant contributions to students' personal and skill development (Abrahamowicz, 1988) ; vocational student organizations provide an important bridge between the adult world of work and the world inside the classroom (Miller, 1983) . Kantner (1985) assessed the value of vocational student organizations focusing on the development of a sense of civic responsibility and entry employment skills. Unfortunately, these references do not cite HOSA students

specifically but support the concept that student organizations are valuable to the overall growth and development of students.

Purpose of the Study

The purpose of the study was to solicit information about health occupations education students who were attending a National Leadership Conference (NLC) and to field test an instrument that could be used to gather information about future generations of health occupations education students. Three areas of information were reflected in the research questions: Who are the health occupations education students attending the Leadership Conference, (b) What factors are related to entering health occupations education programs, and (c) What factors did students believe benefitted them because of participation in Health Occupations Students of America (HOSA). This information, when reported, would attempt to provide a profile of students enrolled in health occupations education programs who were members of the vocational student organization (VSO) specific for health occupations education students and who were first, second, and third place winners in state-wide competitive events. Since little information about the HOSA student is reported in the literature, this information will be used to add to the data base of students.

Methodology

Population

The population of students surveyed in this study were those students attending the 1990 HOSA leadership conference held in Kissimmee, Florida. Because this was an initial study and the survey instrument was only to be field tested, a convenience sample of students attending the convention were invited to complete the instrument. There were 2,433 participants at the 1990 conference of which 95 completed the questionnaire, representing a 4% sample.

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Instrumentation

The instrument was designed to solicit information about health occupations education students based upon the three research questions; (a) who are the health occupations education students attending the 1990 Leadership Conference, (b) what factors are related to entering the health occupations education programs, and (c) what factors did the students believe benefitted them because of participation in HOSA. The instrument consisted of three sections designed to gather information about the student (demographic), knowledge about HOSA before entering the program, and perceptions of benefit of HOSA to their education.

To facilitate the student's response to the questions, only yes-no questions, item check lists, and short answers were used. Space was allocated for a written explanation to questions should the student desire to respond. No attempt was made to force a response beyond a simple answer. A 20 item questionnaire was developed and reviewed for clarity and relationship to the initial research questions and face validity by five health occupations education teachers, who were HOSA advisors. From the review, two questions were eliminated. A total of 18 questions remained: 8 were demographic, 3 were related to knowledge about HOSA before enrollment, and 7 were related to factors about benefits from participating in the health occupations education program and HOSA.

Data Collection

Data are reported on all students attending the 1990 HOSA National Leadership Conference who agreed to complete a short questionnaire. A total of 95 students actually completed the questionnaire, representing 4% of those in attendance.

Data Analysis

Observations were made to determine the length of time needed to answer the questions. No student took more than 10 minutes to complete the questionnaire, with the average time being 5 minutes.

Findings and Discussion

Demographic data

Seventeen of the 35 HOSA states were represented in the population of 95 students. States with the highest number of respondents were Florida (9) and Oklahoma (9). Table 1 lists the responses from high to low for all states represented. No responses were obtained from students from Alaska, Arizona, Arkansas, California, Connecticut, Delaware, District of Columbia, Georgia, Hawaii, Indiana, Massachusetts, Minnesota, Missouri, Montana, Nebraska,

Table 1

Rank and Frequency of Responses by State *

State	Frequency	Rank
Florida	9	1
Oklahoma	9	1
Louisiana	8	2
New Jersey	7	3
North Carolina	6	4
Tennessee	6	4
Alabama	5	5
Maryland	5	5
Utah	5	5
Kentucky	4	6
Michigan	4	6
Colorado	3	7
Kansas	3	7
Pennsylvania	3	7
Texas	3	7
Iowa	2	8
Maine	2	8

* non responses 4

Nevada, New Hampshire, New Mexico, New York, North Carolina, Ohio, Oregon, Rhode Island, South Carolina, Vermont, Washington, West Virginia, Wisconsin, and Wyoming.

Respondents ranged in age from 15 to 55, with the majority of respondents (78%) being under age 20. Table 2 shows frequency of age of respondents.

Table 2

Age and Frequency of Responses *

Age	Frequency
17	28
18	25
16	18
28	4
26	3
15	3
55	1
48	1
41	1
38	1
37	1
32	1
30	1
23	1
22	1
20	1

* non responses 4

Forty percent of the respondents listed their grade level as grade 12 and 15% indicated they were in the 11th grade or had just graduated. Table 3 shows frequency of age distribution. For 82% of the respondents, the 1990 HOSA convention was their first conference, 13.7% were attending for the second time.

Of those respondents, 46 were local officers, 5 were regional officers, 9 were state officers and 2 were national officers. The remainder (42)

Frequency of Responses by Grade Level *

Grade Level	Frequency	Percent
12	38	40%
11	14	15%
Just Graduated	14	15%
Post Secondary	9	9%
College Freshman	6	6%
10th grade	4	4%
College Junior	3	3%
Student Practical	3	3%
Undergraduate	1	1%
Vocational	1	1%

* non responses 2

indicated no HOSA office held. Table 4 shows responses by office held. While respondents were not asked the office held, some responded with a specific office. Nine respondents indicated they held more than one office, such as regional and state.

A major portion of the National Leadership Conference is devoted to participation in knowledge and skill competitive events. Those events are divided into four categories plus Pilot Events: Category I - Health Related Events include Dental Spelling, Dental Terminology, Medical Spelling, Extemporaneous Health Display, Medical Terminology, Standard First Aid/CPR; Category II - Health Occupations Skills Events include Dental Assisting, Medical Assisting - Clerical, Medical Assisting - Clinical, Medical Laboratory

Table 4

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Frequency of Responses by Office Held *

Office Held	Frequency
Local Officer	46
President	6
Vice President	3
Historian	1
Class representative	1
State Officer	9
President	1
Vice President	1
Historian	1
Regional Officer	5
Vice President	1
National Officer	2

* 4 non responses

Assisting, Nursing Assisting, Practical Nursing, Advance Nursing, Dental Laboratory Technology, Respiratory Care, Surgical Technology, Veterinary Assisting, Opticianry Assisting; Category III - Individual Leadership Events include Extemporaneous Speaking, Job Seeking Skills, Prepared Speaking, Extemporaneous Writing; and Category IV - Team Leadership includes Community Awareness Project, HOSA Bowl, Parliamentary Procedure and Outstanding HOSA Chapter.

Respondents were asked to indicate in which event they were competing. Frequency of responses for each event is presented in Table 5. Participants from all of the HOSA competitive events were represented by the respondents with the greatest number (25) being in the HOSA Bowl event. Several students indicated more than one event. Two students indicated they were attending as Outstanding HOSA Students.

Frequency of Responses by Competitive Event *

Competitive Event	Frequency
HOSA Bowl	25
First Aid/CPR	9
Job Seeking Skills	9
Medical Spelling	7
Medical Terminology	7
Prepared Speaking	7
Community Awareness Project	6
Nursing Assistant	4
Extemporaneous Speaking	4
Parliamentary Procedure	3
Advanced Nursing	3
Outstanding HOSA Student	2
Medical Nursing	2
Dental Assistant	2
Dental Spelling	2
Medical Assisting Clerical	2
PN Skills	2
Scrap Book	1
Health Display	1
Clerical	1
Dental Lab Technology	1
Dental Terminology	1
Surgical Technician	1
Opticianry	1
Physical Therapy Assisting	1

* Some students competed in more than one event

To participate in events at the NLC, students first compete at the regional level in their state, followed by the state level. Each state generally sends first, second, and third place state winners to national competition where students compete against the best from each state. Preparation for national competition involves many practice hours with classmates, teachers, parents or local health care personnel. Respondents were asked to identify from whom they learned the most in preparing for their event. Many of the respondents (N = 32) indicated that they learned the most in preparing for their competitive event from their teacher, eight identified

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a teacher's name. Table 6 indicates the frequency of responses of those who provided preparation for competition.

Table 6

Frequency of Responses of Event Preparation Assistance *

Assistance	Frequency
Teacher	32
Individual by name	28
Counselor	27
Myself	12
Classmates	2
Toast Masters	2
Parents	1
Friends	1
Mentor	1
Local Paramedic	1
Vocational Leadership Training	1
Tabers Encyclopedia	1
HOSA History	1
Anatomy	1
Parliamentary Procedure	1

* Multiple entries (N > 95)

Attending the NLC involves cost of travel and per diem as well as monies for personal items and souvenirs. Respondents identified the following sources of money for fund raising (59), Parents (47), schools (37), school districts (32), business partners (18), and other (28). Table 7 displays source of funding and frequency.

Using a ranking-type scale, participants responded to the following question: from which source did you obtain the most money? Table 8 displays priority of funding sources. Twenty one of the students indicated fund raising for the highest amount, and 13 indicated parents contributed the highest amount.

Frequency of Responses for Sources of Funding

Sources	Frequency
Fund Raising	59
Parents	47
School	37
School District	32
Business Partner"ship	18
Other	28

Table 8

Priority of Ranking of Monetary Support

Sources	Priority Rsnk				
	1	2	3	4	5
Fund Raising	10	11	2	1	2
Parents	6	7	4	4	3
School	7	5	5	0	3
School District	7	7	1	3	2
Business Partnership	5	3	6	1	0
Other	2	6	2	2	2

Knowledge about HOSA before enrollment

The second part of the study dealt with the knowledge of students before their enrollment in their health occupations program. Students were asked if they knew about HOSA before enrollment in the health occupations education programs. Seventy one percent indicated they did not (Table 9).

Table 9

Knowledge of HOSA before Class Enrollment

Response	Frequency	Percent
No	67	71%
Yes	27	28%
No answer	1	1%

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Respondents were asked to indicate from whom they learned about HOSA. For 69% of the respondents, teachers were the source of information about HOSA. Many students indicated more than one source of information which included classmates (19%), and guidance counselors (8%) (Table 10).

Table 10

Sources of Information about HOSA*

Source	Frequency	Percent**
Teacher	66	69%
Classmate	18	19%
Guidance Counselor	8	8%
Parent	2	2%
Sibling	1	1%
Friend	1	1%
Advisor	1	1%
Instructor	1	1%

*non responses 12

** Multiple responses account for > 100%

Respondents were asked to indicate their reasons for enrolling in the health occupations education program. The majority of students (63%) enrolled in the health occupations education program because they were interested in the health field, a medical career, a nurse, a doctor, an obstetrician/gynecologist, a surgeon, or a physical therapist. Other reasons given for enrolling in the program were like to work with people (8%), it seemed interesting (5%), to further my career (3%), and enjoy being competitive (3%). Table 11 indicates the frequency of distribution of responses.

Benefit of health occupation education program and HOSA.

In the third part of the questionnaire, respondents were asked how they believed they benefitted from the health occupations education program and

Table 11

Frequency of Reason for Entering Health Career *

Reason	Frequency	Percent
Interested in Health Field	21	22%
Interested in Medical Career	17	18%
Interested in Becoming a Nurse	14	15%
Like to work with people	8	8%
It seemed interesting	5	5%
Interested in becoming a doctor	5	5%
It was required	3	3%
To further my career in Health Industry	3	3%
Enjoy being competitive	3	3%
Interested in becoming a Physical Therapist	2	2%
Preparation for college	2	2%
My employer	1	1%
My instructor & peers	1	1%
I knew the teacher	1	1%
Interested in science	1	1%
Interested in health education	1	1%
Worked in area last 10 years	1	1%
Worked at an adult foster care home	1	1%
Work as Candy Striper	1	1%
Looking for a career change	1	1%

* non responses 3

HOSA . While type of credit should be of interest to students, particularly high school students meeting graduation requirements, students were not really clear about the type of credit they were receiving from their participation in a health occupations education program. Fifty-two % indicated they received vocational credit from one-half to twenty credits. Twenty percent % they received science credit from one to four hours. The remainder indicated math, health, elective, fundamentals, leadership, science elective and LPN. (See Tables 12 & 13).

When asked about their opinion of the HOE program, the respondents were overwhelmingly positive that their class helped them make a decision about their health career (93%) . In addition, 84% indicated the program helped to

Frequency of Type of Credit Awarded *

Type of Credit	Frequency	Percent
Vocational	65	52.0%
Science	26	20.0%
Math	6	5.0%
Health	6	5.0%
Other not identified	4	3.0%
Elective	3	3.0%
LPN	2	1.5%
Fundamentals	1	.7%
Leadership	1	.7%
Science Elective	1	.7%
High School	1	.7%

* non responses 10

reconfirm their decision to enter a health career. Table 14 displays the frequency of responses to the following questions: Has this class helped you make a decision about a health career and Has this class helped you reconfirm your decision about a health career.

Students were enthusiastic about the benefits of HOSA. A total of 119 responses were received to the question, "What is the most beneficial thing you learned from HOSA?" Multiple responses account for more instances than participants. Nineteen % felt that team work was the most beneficial thing they learned through their HOSA activities, followed closely by how to help and care for other people (18%) . For 14% of the students, the most beneficial thing about HOSA was leadership skills and, for another 14%, self-confidence and accepting challenges were the greatest benefits. Table 15 presents the benefits of HOSA.

Table 13

Number of Credits by Type Awarded for HOE

Type of Credit	Number	Frequency
Vocational	$\frac{1}{2}$	1
	1	10
	2	15
	$2\frac{1}{2}$	1
	3	12
	4	4
	6	1
	9	4
	15	3
	20	3
not listed	11	
Science	1	15
	2	4
	3	1
	4	3
	not listed	3
Math	1	3
	4	2
	not listed	1
Health	1	3
	2	2
	not listed	1
Other not identified	1	1
	$1\frac{1}{2}$	1
	4	1
Elective	1	2
	2	1
LPN	6	1
Fundamentals	6	1
Leadership	not listed	1
Science Elective	1	1
High School	1	3

Table 14

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Responses to Opinions about HOE Program

Question	Response		
	Yes	No	No answer
Make Decision	88 93%	5 5%	2 2%
Re-confirm Decision	80 84%	12 13%	3 3%

Table 15

Benefits of HOSA *

Statement	Frequency	Percentage
Team work	23	19%
How to help & care for others	21	18%
Leadership skills	17	14%
Self confidence & accepting challenges	17	14%
How to be competitive	6	5%
Nothing is impossible	5	4%
How to COMMUNICATE with others	4	3%
Responsibility and importance of health care professionals	4	3%
First aid and Life Saving Techniques	3	2%
Making new friends	2	1.7%
Parliamentary procedure	2	1.7%
How to practice my skills	2	1.7%
Not sure	1	.8%
How big this club is	1	.8%
Not everyone is a winner	1	.8%
Scholarship	1	.8%
Medical Terminology	1	.8%
YOU can have fun by working hard	1	.8%
Public Speaking	1	.8%
How to conduct myself around the health community	1	.8%
The need for dedicated people	1	.8%

Non-responses 4

Seventy-seven % of the students could not identify any thing non-beneficial about HOSA. Table 16 presents those statements of non-benefit items relating to HOSA activities. The last two questions dealt with the respondents' opinions about the HOE class. There were a variety of responses to a question about the most beneficial thing learned from their HOE class. Table 17 depicts the benefit statements and their frequency: teamwork (15%), anatomy of the human body (12%), the different fields of medicine and career goals (12%), First Aid/CPR (9%) . The majority of students (91%) were not sble to list any thing not beneficial shout their HOE program (Table 18) .

Table 16

Non-Benefits of HOSA

Statement	Frequency	Percentage
No answer	32	34%
Nothing	22	23%
Everything was beneficial	11	12%
N/A	8	8%
?	4	4%
not sure	2	2%
Sometimes people are elected on popularity and not by their abilities	2	2%
Magic tricks and singing	2	2%
Parliamentary procedures	2	2%
The wide gap between the way secondary and post secondary students are treated different	1	1%
How students do not take HOSA seriously	1	1%
How some nurses do not take their careers seriously	1	1%
That winning is everything	1	1%
The time it takes	1	1%
How to make beds	1	1%
How to get to Springfield	1	1%
How to sell hot dogs	1	1%
Our local chapter did not really do anything	1	1%

Benefits of HOE Course *

Statement	Frequency	Percentage
Team work	14	15%
The anatomy of the human body	11	12%
The different field of medicine and career goals	11	12%
First aid and CPR	9	9%
Basic bedside care	6	6%
How to communicate with others	4	4%
Everything was beneficial	4	4%
Responsibility	3	3%
Medical terminology	3	3%
The skills of medical and dental procedure	3	3%
Preparation for College	3	3%
How important health is	2	2%
Leadership	2	2%
?	1	1%
You can learn a lot in 2 hours	1	1%
How to better take care of my family	1	1%
You have to have an attitude	1	1%
You can help others by helping the students who need help	1	1%
How it works	1	1%
How to work with problems	1	1%
EMT course	1	1%
Parliamentary procedure	1	1%
Commitment	1	1%
Organization	1	1%

Non-responses 9

Conclusion

The purpose of the study was to solicit information about health occupations education students who were attending a National Leadership Conference and to field test an instrument that could be used to gather information about future generations of health occupations education students. The instrument addressed questions to three specific areas: who are the health occupations education students attending the Leadership Conference,

Table 18

Non-Benefits of HOE Course *

Statement	Frequency	Percentage
No answer	47	49%
Nothing	14	15%
Everything was beneficial	11	11%
N/A	8	8%
?	2	2%
no comment	2	2%
Color plates	2	2%
How to make a bed with two straight sheets	1	1%
That winning is everything	1	1%
Attitudes toward learning new challenges	1	1%
Bad sportsmanship	1	1%
Don't be stuck up	1	1%
Economics	1	1%
Radiology	1	1%
Clinicals	1	1%
Cancer treatment	1	1%

What factors are related to entering the health occupations education program, and What factors did students believe benefitted them because of participation in HOSA. These questions provided a profile of students enrolled in a health occupations education program.

The questionnaires were completed in an average of 5 minutes. A number of students responded to the questions including first time attendees as well as officers. Both secondary level and post-secondary level students responded. Because only a 4% convenience sample responded to the questionnaire, no generalizations can be made about HOSA students. Students who responded to the questionnaire did not know about HOSA before their enrollment in the health occupations education program. This suggests that students are not signing up for the course solely for the HOSA organization activities. The teacher is the most common source of

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information about HOSA so it is important that teachers are informed about the organization and its benefits to encourage student participation.

While participants at the national leadership conference are more involved students and the responses may be skewed, it did not seem that there were participants who were in the course for other than legitimate reasons, i.e., most indicated an interest in the health field. The type of credit is either not a concern to students enrolled in health occupations education or they did not understand the significance of the credit.

Students are overwhelmingly positive about the benefits of their health occupations program and about HOSA. Without question, the majority feel they have benefitted from their participation and had difficulty pointing out any experiences that were not beneficial. The programs have helped students make and reaffirm career decisions to enter the health field.

Recommendations

Because the literature does not include an abundant amount of information about the HOSA student, the major recommendation of this study must be to encourage more research. The HOSA student can provide a wealth of information about how well programs are progressing and how successful the student organization is in the development of health occupations education students. Information about preparation for competitive events can help to evaluate our industry partnerships as well as the HOE-HOSA partnership.

A second recommendation would be to refine and expand the questionnaire so that it could be administered to all participants of the National Leadership Conference to yield a greater amount of data that can be generalizable to the population as a whole. This would require permission of the HOSA Board and support of the Board to encourage completion of the questionnaire.

A third recommendation would be to distribute the questionnaire to all HOSA students nationwide through the HOSA, Inc network to obtain information on the entire HOSA population, not just officers and state competitive event winners.

Information about health occupations education in general is lacking in the literature. It is recommended that the professionals in the field study and disseminate research findings about health occupations education programs and their participants so that generations to come will have a legacy from which to expand the knowledge base.

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