

THE CONCERNS OF AGRICULTURAL EDUCATION
PRE-SERVICE STUDENTS AND FIRST YEAR TEACHERS

John Hillison
Associate Professor

Agricultural Education Program
Virginia Polytechnic Institute and
State University

One of the generally accepted principles of teaching and learning is that students learn best when they are ready to learn. Teacher educators can greatly enhance the stage of readiness of their students by using appropriate motivational techniques. However, the individual with whom the teacher educator is working also has a number of concerns which may either enhance or interfere with readiness.

One of the most difficult problems faced by teacher educators in agricultural education is the determination of clientele concerns. If an accurate method for determining and interpreting such concerns could be found, teacher educators could use this information to enhance work with both pre-service and in-service teachers.

The monitoring of concerns could greatly enhance instructional content selection and sequencing in teacher preparation. For example, if a teacher educator could identify concerns about handling discipline problems, then it would appear that handling discipline problems would be a most appropriate topic to discuss.

Purpose and Objectives

The purpose of this study was to determine and interpret the concerns of pre-service students in agricultural education at Virginia Polytechnic Institute and State University and first year agricultural education teachers in the State of Virginia.

Specific objectives to be accomplished were:

1. To determine the concerns of pre-service students and first year teachers of agricultural education.
2. To categorize the expressed concerns.
3. To determine if a difference existed between the concerns of male and female agricultural education students and teachers

4. To determine the concern level changes at various stages in the program for agricultural education students and teachers.

Methodology

A concerns instrument developed at the Research and Development Center of the University of Texas was used to collect data. The instrument solicited open ended comments by asking the question, "When you think about your teaching, what are you concerned about?" The concerns expressed were categorized into four different levels: (0) non-teaching, (1) self concerns, (2) task concerns, and (3) impact concerns. An example of a non-teaching concern is, "I am concerned about getting married." An example of a self concern is, "Maintaining order or discipline among my students." An example of a task concern is, "I am concerned about writing lesson plans." An example of an impact concern is, "Are the students learning what they should learn?"

Observations were made on students in five different agricultural education classes at Virginia Polytechnic Institute and State University. The classes were at the freshmen level, the junior level, the senior-level methods, the senior-level student teaching, and the first-year teachers class.

Data were collected on pre-observation and post-observation bases during the 1976-77 school year. Pre-observations were made during the first week of the quarter in which the classes were taught. Post-observations were made during the last week of the quarter. Observations were made of the first year teachers at the fall, winter, and spring seminars held in conjunction with the class. The data were analyzed by use of frequency counts, proportions, medians, and chi-square.

Findings

The students in the freshman-level class had a median rating which expressed both the highest level and the lowest level of concern for all classes. The median expressed for level of concern at the time of the pre-observation was 2.68. The median expressed for level of concern at the post-observation was 1.43. Even though the data reported in Table 1 show a large change in median value from pre- to post-observation, it did not prove to be significant when chi-square was computed. At the beginning of the freshman class, the students were relatively impact oriented. They were

expressing concerns about teaching the correct things to their students.

Table 1

OBSERVATION OF AGRICULTURAL EDUCATION
FRESHMEN STUDENTS' LEVEL OF CONCERN

Level of Concern ^a	Pre-Observation (N = 18)		Post-Observation (N = 15)	
	Number of Concerns Expressed	Per Cent of Total	Number of Concerns Expressed	Per Cent of Total
0	1	3.2	7	8.6
1	8	25.8	36	44.4
2	3	9.7	4	4.9
3	19	61.3	34	42.0
Total	31	100.0	81	99.9
Median	2.68		1.43	

^a0 = Non-teaching concern, 1 = Self concern, 2 = Task concern, 3 = Impact concern

When concerns of male students in the agricultural education classes were compared to the concerns of the female students, a significant difference was found (chi-square = 16.93, d.f. = 3, p .001). The females had a higher median level of concern (1.78) as compared to the male median level of concern (1.61). The females had a slightly higher percentage of impact concerns than did the males (25.6 percent to 24.4 percent). Females had a slightly higher percentage of task concerns than did males (33.4 percent to 28.8 percent). The largest difference between female and male concerns was at the non-teaching level. Females had .03 percent non-teaching concerns while males had 5.0 percent non-teaching concerns. The males expressed much more concern about the community in which they would be teaching and the problems associated with supporting a family on a teacher's salary. When the data displayed in Table 2 had the non-teaching concerns deleted, a significant difference no longer existed between males and females.

Table 2

TOTAL LEVEL OF CONCERN FOR AGRICULTURAL
EDUCATION STUDENTS BY SEX

Level of Concern ^a	Male (N = 93)		Female (N = 29)	
	Number of Concerns Expressed	Per Cent of Total	Number of Concerns Expressed	Per Cent of Total
0	45	5.0	1	0.3
1	372	41.7	130	40.6
2	257	28.8	107	33.4
3	218	24.4	82	25.6
Total	892	99.9	320	99.9
Median	1.61		1.77	

^a0 = Non-teaching concern, 1 = Self concern, 2 = Task concern, 3 = Impact concern

Chi-square = 16.93, d.f. = 3, p < .001

Table 3

TOTAL LEVEL OF CONCERN FOR AGRICULTURAL
EDUCATION STUDENTS BY CLASS

Level of Concern ^a	Freshmen & Junior (N = 58)		Senior (N = 21) ^b		First year Teachers (N = 12)	
	Number of Concerns Expressed	Per Cent of Total	Number of Concerns Expressed	Per Cent of Total	Number of Concerns Expressed	Per Cent of Total
0	21	4.6	10	2.1	15	5.4
1	207	45.2	214	44.8	81	29.1
2	81	17.7	172	36.0	111	39.9
3	149	32.5	82	17.1	71	25.5
Total	458	100.0	478	100.0	278	99.9
Median	1.51		1.59		1.89	

^a0 = Non-teaching concern, 1 = Self concern, 2 = Task concern, 3 = Impact concern

^bObservations were made on 31 students in methods and 21 student teachers.

Chi-square = 79.64, d.f. = 6, p < .001

Table 3 shows a comparison of the three broad categories of students observed for the study. The concerns of students in the freshman level and junior level classes were combined and added together to facilitate analysis. The senior year consisted of the methods class and student teaching, which were also combined and added together. The observations of the concerns of first year teachers were added together.

A significant chi-square value was found for the three groups (chi-square = 79.64, d.f. = 6, $p < .001$). The group with the highest median value was first year teachers with a value of 1.89. The data in Table 3 has two limitations. One is that eight of the students enrolled in the junior level class were concurrently enrolled in the methods class. The other limitation is the dropout rate, which occurred with the first year teachers. Twenty-five first year teachers were observed at the fall seminar, while only 12 were observed at the spring seminar. A chi-square comparison was also made between each of the two group combinations. All combinations were found to have significant chi-square values at the $p < .001$ level.

Figure 1 consists of a bar graph which shows the changes occurring in concerns at the various course levels of students as observed in the project. The participants prior to the senior or professional year displayed a drop in concerns from the pre-observation to the post-observation. The participants in the senior year and the first year teachers' classes all had increases in median level of concern from the pre-observation to the post-observation.

Summary and Conclusions

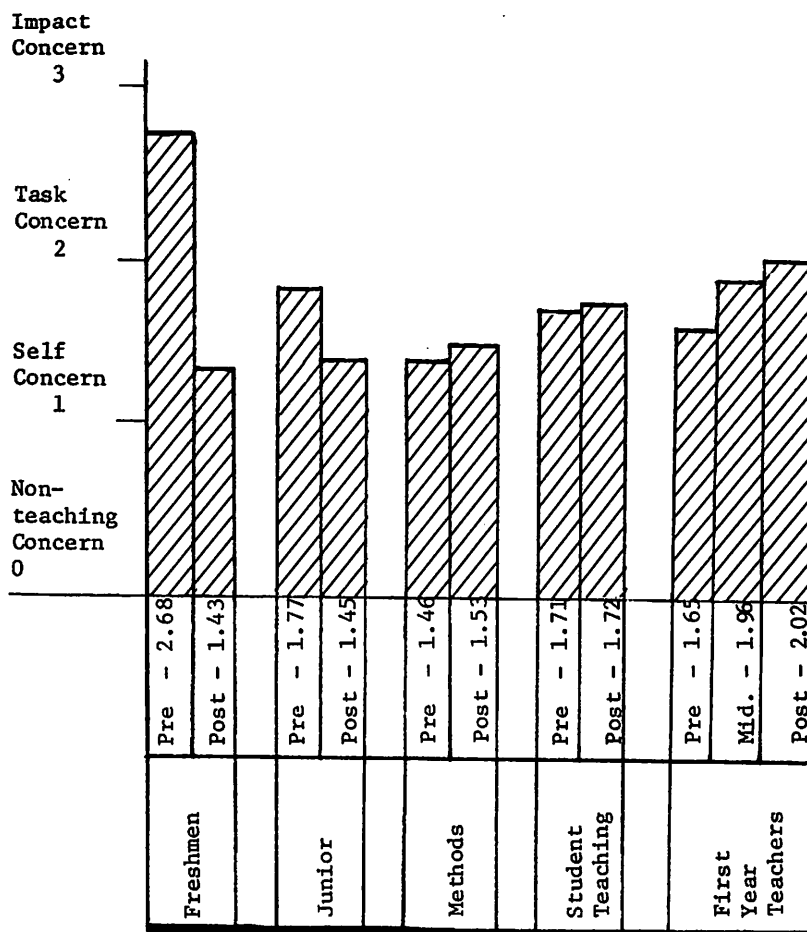
It is possible to monitor and categorize the concerns expressed by agricultural education students at both the pre-service student and first year teacher level. These concerns have definite implications for teacher educators to help in determining the content and sequencing of courses in the teacher education programs.

In this study, a great deal of variation occurred from one class to another. Some classes had relatively large changes from the pre-observation to the post-observation; while other classes had relatively small changes. The freshmen students had the largest decrease. The first year teachers had the largest increase.

Freshmen students had the largest median change in level of concerns, declining from 2.68 to 1.43. Part of the justification which can be given for such a change is that these students have recently completed high school. Thus they tended to be more stu-

Figure 1

THE CHANGES OF AGRICULTURAL EDUCATION
STUDENTS' LEVEL OF CONCERN BY
CLASS ENROLLMENT



dent-oriented than teacher-oriented. Since freshmen students have relatively recently decided to be teachers, they may be looking at teaching as a global "earth saving" type of profession. By the end of the quarter (post-observation), the realities of the life of a college student have set in. Also, course content included many of the realities of being a teacher. By the time of the post-observation, the freshmen students were much more concerned about self.

The first year teachers started the year primarily concerned about self. However, by the end of the year, they were primarily task concerned. The first year teachers expressed concerns about such time demanding aspects as completing state department reports, planning lessons, and ordering materials for their departments.

It was found that female agricultural education students had a higher level of concern than male students. The significant difference was found in the non-teaching concerns level. This difference may be partially explained by the fact that females are relatively new to the agricultural education teaching profession. It is felt that when members of one sex first enter a field traditionally dominated by the opposite sex the new members frequently view the program differently from the dominant group.

Additional research into student concerns about teaching needs to be conducted in agricultural education and other areas of vocational education. It is also desirable to use a longitudinal study to determine the influence of individual teacher educators upon both pre-service and in-service clientele.

* * * * *

PROCEDURES FOR ARTICLE SUBMISSION

Philosophy and Content

A statement of the philosophy underlying the publication of *The Journal of The American Association of Teacher Educators in Agriculture* was developed by the Editing-Managing Board in New Orleans, Louisiana, in December, 1974. The philosophy is:

The Journal is to promote the profession of teacher education in agriculture by facilitating and expediting communication among members of the profession to the end that results of research, trends, developments, and innovations in teacher education in agriculture are widely shared.

The content of *The Journal* shall be directed primarily to the audience of teacher educators in agriculture and not to the audi-