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Illinois Guidance Counselors' Knowledge and Perceptions of Career and Technical Education (CTE) Fields and Implications for Higher Education and Employers In the Agricultural Field

Aslihan D. Spaulding & Richard Steffen

*Illinois State University
Campus Box 5020, Normal, IL 61790-5020*

adspaul@ilstu.edu & rwsteff@ilstu.edu

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INTRODUCTION

In an attempt to understand more clearly the role of Illinois school counselors (SC) in the guidance process and to identify support the Career and Technical Education (CTE) fields might provide school counselors to assist with their professional duties, a series of research projects were conducted. The initial two studies in this series sought to identify the knowledge levels and perceptions of school counselors about the career and higher education opportunities in agriculture. This was followed by a two part study, first to assess knowledge levels and perceptions of school counselors about the career and higher education opportunities in CTE fields, and in the second phase, to use a consensus process to identify tools and methods to help educate the school counselors about opportunities in CTE.

METHODOLOGY

To determine perceptions of guidance counselors, a paper survey was sent to stratified random sample of school counselors obtained from the Illinois State Board of Education (ISBE). The three components of this survey sought to examine the knowledge level of counselors on the types of jobs available in agriculture, as well as the universities and community colleges that offered agriculture programs, examine the perceptions of the counselors of career and job outlook, and demographic information.

In the later project, this survey was converted into an electronic format and modified to include all CTE areas. A mailing list of school counselors was again obtained from ISBE, and several public sources were used to locate e-mail address for the participants.

The Delphi technique was chosen for the next phase of the project. A method of developing consensus, this technique was developed by Dalkey at the Rand Corporation in the 1960s (Dalkey, 1969).

The first round questionnaire consisted of seven open-ended questions. In subsequent rounds, participants were asked to rate individual items identified on a Likert-type scale. Six parallel surveys, one for each CTE field (Agriculture, Business and Marketing, Family and Consumer Sciences, Health Occupations, Public Safety and Security, and Technology) were developed and the participants were randomly assigned to a CTE field.

RESULTS & DISCUSSION

The Round 1 questionnaire asked seven open-ended questions. Round 1 generated eleven items for question 1, ten items for question 2, four for question 3, four for question 4, four for question 5, four for question 6 and three for question 7. These were used to generate the second round questionnaire which consisted of the seven questions, the items for each question, a five point rating scale (not important, slightly important, moderately important, very important, and extremely important) and a place for comments for each item.

Table 1. Types of jobs available in each CTE field as identified by High School Guidance Counselors.

CTE field	First Blank	%	Second Blank	%	Third Blank	%
Agriculture						
Most identified	Farm/Production	25	Ag Science/ Research	23	Farm/Production	16
2 nd	Ag Business / Mgt	23	Farm/Production	13	Ag Bus/ Mgt	13
3 rd	Ag Science	6.5	Government/Regulations	13	Horticulture / landscape	13
Business						
Most identified	Accounting	48	Marketing	33	Marketing	22
2 nd	Management	17	Accounting	20	Finance	20
3 rd	Marketing/Sales	17	Finance	20	Management	20
FCS						
Most identified	Chef/Culinary Arts	32	Chef/Culinary Arts	23	Teacher/Child care	29
2 nd	FCS Teacher/teach	32	Dietician	20	Fashion design	23
3 rd	Dietician	13	Ed/daycare	17	Interior design	16
Health						
Most identified	Nurse	64	Nurse	26	Rad/Med Tech	28
2 nd	Doctor	10	Physical Therapist	26	Physical Therapist	15
3 rd	Physical Therapist	10	Rad /Med Tech.	18	Doctor	10
Technology						
Most identified	Computer Prog.	19	Graphic design/CAD	19	Gr. Design/CAD	17
2 nd	Net sys. analyst	12	Manufacturing	7.1	Engineering	9.5
3 rd	Computer engr.	12	Automotive tech	7.1	Comp. tech	9.5

¹ Participants interpreted technology to mean information technology, and many of the answers related to those careers. Attempts to segregate data based on industrial vs. information technology yielded an n too small to be reliable.

School Counselors were generally aware of which Illinois Universities offered programming in Business, Health, and Technology. They were less aware of those offering Agriculture and quite a few were unsure of those offering FCS. This may be a function of the fragmentation of FCS program in Illinois universities.

Table 2: Perceptions of School Counselors of career outlook, pay, and value of student organization participation.

Question	Agriculture	Business	FCS	Health	Tech.
The number of openings in [FIELD] jobs is increasing.	3.04	2.54	2.86	3.5	3.33
The prospect for job growth in [FIELD] is very low.	1.83	2.16	2.05	1.44	1.6
There is no future for students in [FIELD] .	1.43	1.51	1.77	1.18	1.23
There are few jobs in [FIELD] for students.	1.62	1.91	1.92	1.41	1.33
Students in [FIELD] will not be competitive.	1.64	1.53	1.79	1.45	1.32
Most jobs in [FIELD] do not require education beyond high school.	1.77	1.38	1.8	1.38	1.41
I would discourage a higher achieving student from pursuing a career in [FIELD]	1.33	1.28	1.56	1.45	1.52
Jobs in [FIELD] are low paying.	1.68	1.48	2.08	1.48	1.43
Participation in [FIELD ASSOCIATION] is of great benefit to students.	3.67	3.18	3.33	3.33	3.44

Scale: 1 = Strongly disagree, 2 = Disagree, 3 = Agree, 4 = Strongly agree

Results of the Delphi study for Agriculture are included below. Nearly identical results were obtained in the other CTE fields. Slight differences in the strength of agreement was the primary difference.

Table 3. The best methods to train counselors about higher education in Agriculture.

Question: Best methods to train counselors	Percentage of Respondents**				
	NE	SE	ME	VE	EE
Workshops / in-services with Continuing Professional Development Units (CPDUs)*	0.0	7.1	35.7	42.9	14.3
Workshops / in-services without CPDUs	15.4	46.2	23.1	15.4	0.0
Webinars	9.1	18.2	45.5	18.2	9.1
Guest speakers*	0.0	0.0	53.8	38.5	7.7
Career/Job fair for students*	0.0	14.3	35.7	21.4	28.6
Career/Job fair for counselors*	0.0	0.0	30.8	53.8	15.4
Printed literature (brochures/ handouts...)	0.0	35.7	28.6	35.7	0.0
E-mail or mail with regular updates*	0.0	15.4	46.2	38.5	0.0
PowerPoint presentation/ CD/DVD	0.0	23.1	38.5	30.8	7.7
Campus visits for students*	0.0	7.7	23.1	30.8	38.5
Campus visits for counselors*	0.0	0.0	30.8	30.8	38.5

* a-priori consensus level reached.

** NE = not effective, SE = slightly effective, ME = Moderately effective, VE = Very effective and EE = Extremely effective.

Table 4: Ratings of the best tools to educate SC about opportunities in Agriculture.

Question: Best tools to create	Percentage of Respondents*				
	NE	SE	ME	VE	EE
Website*	0.0	0.0	50.0	28.6	21.4
Printed literature (brochures/ handouts, posters, pamphlets...)	0.0	21.4	35.7	42.9	0.0
PowerPoint presentations/ CD/DVD*	0.0	15.4	23.1	53.8	7.7
Guest speakers*	0.0	0.0	18.2	63.6	18.2

* a-priori consensus level reached.

Table 5. Ratings of the best methods to provide information to School Counselors.

Question: Methods we can help to provide information	Percentage of Respondents*				
	NE	SE	ME	VE	EE
Keep an updated website*	0.0	8.3	25.0	41.7	25.0
Send guest speakers*	0.0	8.3	58.3	33.3	0.0
Give printed literature (brochures, handouts, pamphlets, related to local activities)*	0.0	16.7	58.3	8.3	16.7

* a-priori consensus level reached.

Table 6: Ratings of the biggest obstacles for the guidance process.

Question: Biggest obstacles for the guidance process	Percentage of Respondents*				
	NI	SI	MI	VI	EI
Not enough time*	0.0	0.0	15.4	30.8	53.8
Too much paperwork*	0.0	0.0	23.1	30.8	46.2
Low interest in agriculture	6.7	20.0	26.7	26.7	20.0

* a-priori consensus level reached.

CONCLUSIONS

1. SC often have stereo-typical perceptions of jobs available.
2. SC in some cases are unsure of where higher ed opportunities are in CTE fields in Illinois.
3. SC struggle with time issues and lack of resources.
4. SC prefer workshops and seminars as their primary source of career and higher education information and training. Guest speakers, campus visits by counselors, and Career shows/fairs for both students and counselors are felt to be effective. Availability of CPDUs appears to be critical to future success of these efforts.
5. Websites, brochures, guest speakers, and reference people are all important.

RECOMMENDATIONS

Based on the results of this study, previous work and the literature, the following recommendations are offered:

1. Efforts should be made to provide workshops and seminars for CPDU credit at convenient times and locations.
2. Websites that bring together information about multiple programs would be welcomed. A clearinghouse of Agriculture program information from the universities and Community Colleges would be considered a welcome addition and many indicated they would utilize it.
3. Research should be undertaken to examine the high school students' perceptions on careers in Agriculture.

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