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ABSTRACT
        A study examined the types of academic skills and
workplace competencies that will be needed by persons employed in
marketing occupations in the future. Three rounds of a Delphi
questionnaire were mailed to 23 persons who were recommended by
secondary and postsecondary marketing teachers in Missouri as having
expertise in marketing occupations. In each round, participants were
asked to use a 5-point scale to rank 6 basic academic skills, 7
advanced academic skills, and 40 higher-order workplace competencies
from the standpoint of their degree of relevance to marketing
occupations. A mean response of 4.50 to 5.00 (strong agreement) was
taken as an indication that the given skills/competences are
essential to employment in marketing occupations. The following
academic skills and workplace competencies were so rated in round 3:
listens, solves problems, sets priorities, assumes responsibility for
own decisions and actions, manages time, demonstrates flexibility and
adaptability, resolves problem situations, and communicates
information. The participants also agreed that an additional 5 basic
academic skills, 6 advanced academic skills, and 33 higher-order
workplace competencies are important for employment in marketing
occupations. (Contains 13 references.) (MN)

IDENTIFICATION OF WORKPLACE SKILLS AND COMPETENCIES ESSENTIAL FOR MARKETING OCCUPATIONS

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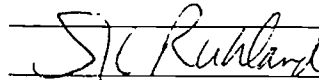University of Missouri-Columbia
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2

IDENTIFICATION OF WORKPLACE SKILLS AND COMPETENCIES ESSENTIAL FOR MARKETING OCCUPATIONS

Introduction

As a new economy emerges, the role of the work force will change. These changes have been driven by intensified international competition, diversification, a faster pace of changes in production technologies, and new competitive standards. As a result, these changes will demand new job designs, new organizational structures, and more skilled workers. Berryman and Bailey (1992) stated "organizational changes in turn lead to shifts in the nature of work and skills and educational needs of that work" (p. 15). As a result new skills will be required, and those skills will be both deeper and broader than the current skills (Carnevale, 1991).

A common theme in the literature related to the changing work force has been the change in the skill requirements of many jobs. Individuals will need to be prepared to enter the work force, and have the skill requirements (Imel, 1989, 1990; Bohlen, 1991). The Secretary's Commission on Achieving Necessary Skills (SCANS) completed a report What Work Requires of Schools (1991), and Learning a Living (1992) that identified the skills young people entering the world of work would need in order to succeed. The Commission outlined a three-part foundation consisting of basic skills (reading, writing, arithmetic, speaking, and listening), thinking skills, and personal qualities. With the foundation skills, high-performance workplace would also require five workplace competencies in the areas of resources, interpersonal skills, information, understanding and using systems, and technology.

"To meet today's need for skilled workers, vocational programs will have to grow dramatically" (Cetron & Gayle, 1991, p. 16). Educators will need to re-evaluate their curriculum to see that the skills identified are being addressed.

Purpose of the Study

The purpose of this research was to explore the perceptions of business and industry representatives employed in marketing occupations concerning the types of skills necessary for tomorrow's work force. Specifically, the study examined the skills and competencies essential for the preparation of marketing occupations. The research objectives guiding this study were:

1. To identify the basic academic skills essential for the preparation of marketing occupations. These skills are needed for entry level employment.

1

3

2. To identify the advanced academic skills essential for the preparation of marketing occupations. These skills are needed to sustain a career.

3. To identify the higher-order workplace competencies essential for the preparation of marketing occupations. These competencies are needed to advance in a career.

4. To evaluate the need for basic and advanced academic skills, and higher-order workplace competencies as they relate to marketing occupations.

Methodology

Population

The modified Delphi technique was used to collect data for this study. The population for this study consisted of knowledgeable individuals with expertise in marketing occupations. Twenty three individuals recommended by secondary and postsecondary marketing education teachers in Missouri agreed to be a participant for this study.

Design and Procedures

In accordance with the recommendations of Delbecq, Van de Ven, and Gustafson (1975), Judd (1972), and Uhl (cited in Judd), this modified Delphi study used a preestablished set of Delphi statements. The initial skills and competency lists were derived from the review of literature of skills essential for today's work force, and input from secondary and postsecondary marketing education teachers in Missouri.

Three rounds of the Delphi questionnaire were mailed to the participants. Participants were asked to rank the 6 basic academic skills, 7 advanced academic skills, and 40 higher-order workplace competencies identified as to the degree of relevancy to marketing occupations. A 5-point Likert type scale (5= Strongly Agree, 4=Agree, 3=Undecided, 2=Disagree, 1=Strongly Disagree) was used to gather the desirability scores for each Delphi statement. Participants were encouraged to provide additional comments related to each Delphi statement. In addition, participants were asked to list additional skills and competencies for each Round.

Results

Six basic academic skills, seven advanced academic skills, and 40 higher-order workplace competencies were identified as essential for the preparation of marketing occupations (see Table 1). The 53 skills and competencies were evaluated and ranked individually using the following scale: (a) Strongly Agree, 4.50

2

4

- 5.00; (b) Agree, 3.50 - 4.49; (c) Undecided, 2.50 - 3.49; (e)
Disagree, 1.50 - 2.49; and (f) Strongly Disagree, 1.00 - 1.49.

Table 2 represents the rankings for each of the skills and
competencies identified based on Round 3 values. Nine (17%)
skills and competencies were ranked as "Strongly Agree" by
participants as to their degree of importance following Round 3.
One (11%) basic academic skill with a mean of 4.67 was
identified. One (11%) advanced academic skill with a mean of
4.57 was identified. Seven (78%) higher-order workplace
competencies were ranked as "Strongly Agree" with a mean range of
4.52 to 4.71.

Forty-four (83%) of the skills and competencies were ranked
as "Agree" by participants as to their degree of importance
following Round 3. Five (83%) basic academic skills were ranked
as "Agree" with a mean range from 3.67 to 4.48. Six (86%)
advanced academic skills were ranked as "Agree" with a mean range
from 3.71 to 4.43. There were 33 (83%) higher-order workplace
competencies ranked as "Agree" with a mean range from 3.81 to
4.48.

The amount of convergence seen between rounds by each of the
Delphi participants were measured using a weighted averaged
standard deviation calculated for each of the 53 skills and
competencies. Four (15%) basic academic skills, four (15%)
advanced academic skills, and 19 (70%) higher-order workplace
competencies had a convergence between Round 1 and Round 2.

Nine (17%) of the skills and competencies had no change in
agreement between Round 2 and Round 3 responses. The basic
academic skill with no change was reading. The advanced academic
skill with no change was problem solving. The seven higher-order
workplace competencies with no change included: demonstrates
flexibility and adaptability, communicates information, evaluates
information, understand organizational systems, uses computers to
process information, applies technology, and solve problems with
appropriate technology.

Conclusions

Based upon the findings of this study, the following
conclusions can be drawn:

1.   The six basic academic skills identified by the SCANS Report
(1992) and Natriello (1989) are supported by business and
industry responses as essential for entry level employment in
marketing occupations. Listening was ranked as the most
important basic academic skill.

3

2.   The seven advanced academic skills identified by the SCANS Report (1992) and Natriello (1989) are supported by business and industry responses as essential to sustain a career in marketing. Problem solving was ranked as the most important advanced academic skill.

3.   The forty higher-order workplace competencies identified and supported by business and industry are categorized under one of the five competency areas supported by the SCANS Report (1992). The five areas included resources, interpersonal skills, information, understanding and using systems, and technology. Setting priorities (resources) and assume responsibility for own decisions and actions (interpersonal skills) were ranked as the most important higher-order workplace competencies.

4.   The seven categories of job skills crucial to success identified from Carnevale, Gaines, and Meltzer (1989), and Carnevale (1991) are supported by this study. These seven categories included: (a) learning to learn, (b) academic basics, (c) communications, (d) adaptability, (e) developmental skills, (f) group effectiveness, and (g) influencing skills.

Discussion

The results of this study clearly indicated the skills needed by individuals entering the work force. This array of skills supports the additional skills that Busse (1992) stated employees need. He commented that employees still need the basic skills of reading, writing, and arithmetic, but those skills alone won't suffice in the 90's. Employers now say workers need self-confidence, fresh ideas, and good manners, plus technical knowledge. They also need to be team players, effective communicators, good listeners, quick thinkers, and willing learners. If students prepare themselves for the new workplace environment while they are in school, they can gain a competitive advantage when entering the work force and possess these skills.

Integrating these skills and competencies supports marketing educations commitment to educational reform. The current emphasis on Tech Prep, outcomes based education (OBE), school-to-work transition, and youth apprenticeship provides excellent opportunities to integrate the skills and competencies. Individuals entering the work force need a solid foundation in the literacy and computational skills, thinking skills, and personal qualities. In addition, they need the high-performance competencies: the ability to manage resources, to work amicably and productively with others, to acquire and use information, to master complex systems, and to work with a variety of technologies.

The skills and competencies identified in this study can be taught as part of the marketing education core curriculum.

4

Schools will need to be convinced that what work requires and what students are taught, will require improving how students are taught.

Staff development and teacher in-service will be essential. Teachers will need assistance in developing the new pedagogical skills to teach in context, and to develop active, collaborative, learning environments. New instructional management skills will be needed by teachers to use the instructional technologies and to find new ways of interacting with students. Finally, teachers will need the knowledge and understanding of the principles of high performance as they are applied to restructuring the work force.

Providing in-service opportunities will be costly, but administrators need to recognize the importance of educating students for the work force. Marketing education students who attain the skills and competencies, will have attained the necessary background to pursue a position in the work force or continue to higher education.

Recommendations

Marketing education teachers should review their curriculum and instructional methodologies to identify if any of the current skills and competencies are being taught. Administrators should provide support for teachers to see that the integration of these skills and competencies are taking place in the curriculum. Integrating what work requires and what students are taught will require changing how instruction is delivered and how students learn.

This study also poses some need for additional research. The list of skills and competencies obtained from this study were evaluated based upon the degree of importance for the preparation of marketing occupations. This list of 53 skills and competencies should be surveyed by business and industry representatives employed in marketing occupations to rank each skill and competency as to the order of importance. Business and industry representatives should be surveyed to identify those skills and competencies that students need more education in prior to entering the work force.

The research format used in this study should be replicated in other states to verify the skills and competencies identified as they relate to marketing occupations.

Further research should be conducted to determine the degree of relevancy for the 53 skills and competencies identified in this study as they relate to the preparation of other vocational occupational areas.

5

Table 1

Skills and Competencies

Basic Academic Skills	Advanced Academic Skills
1. Listening	1. Problem solving
2. Arithmetic	2. Self-directed learning
3. Reading	3. Mathematics
4. Speaking	4. Creative thinking
5. Writing	5. Abstract thinking
6. Cultural awareness	6. Applied science
	7. Cultural diversity

Higher-Order Workplace Competencies

1.	Set priorities	21.	Information processing
2.	Assume responsibility for own decisions and action	22.	Plans resources
3.	Sets realistic goals	23.	Teaches others new skills
4.	Manages time	24.	Resolves conflicts
5.	Demonstrates flexibility and adaptability	25.	Understand organizational systems
6.	Resolves problem situations	26.	Risk taking
7.	Communicates information	27.	Uses computers to process information
8.	Participate as a team member	28.	Suggest modifications to existing systems
9.	Collaborates with others	29.	Applies technology
10.	Demonstrates leadership abilities	30.	Information acquisition
11.	Recognize consequences of inappropriate behavior	31.	Uses technology to monitor performance
12.	Show empathy, respect and support for others	32.	Solve problems with appropriate technology
13.	Identifies alternative system to improve performances	33.	Understand the relationship between two or more systems
14.	Evaluate employee performance and provide feedback	34.	Works effectively with cultural diversity
15.	Recommends appropriate action to be taken	35.	Predicts impacts on system performance
16.	Allocates resources	36.	Uses workplace ethics and honesty
17.	Evaluates information	37.	Diagnose deviations in system performance
18.	Identifies and applies current trends and issues	38.	Understand social systems
19.	Converts information to useable forms	39.	Maintains technology
20.	Identifies resources	40.	Selects technology

6

Table 2

Order of Skills and Competencies According to Round 3 Mean Scores Regarding Agreement of Consensus[a]

Agreement of Consensus with Delphi Skills and Competencies	Round 3			Round 2			Round 1		
	Rank	Mean	sd	Rank	Mean	sd	Rank	Mean	sd
Basic Academic Skills[b]									
Listening	1	4.67	.48[c]	2	4.57	.51	1	4.67	.45
Arithmetic	2	4.48	.68[c]	1	4.67	.58	2	4.48	.58
Reading	3	4.48	.51	3	4.52	.51	3	4.48	.45
Speaking	4	4.33	.58[c]	4	4.33	.48	4	4.39	.58
Writing	5	4.19	.51[c]	5	4.05	.67	5	4.19	.50
Cultural awareness	6	3.67	.86	6	3.67	.73	6	3.67	.55
Advanced Academic Skills[b]									
Problem solving	t	4.57	.51	2	4.43	.51	1	4.57	.45
Self-directed learning	2	4.43	.51	4	4.24	.54	4	4.39	.66
Mathematics	3	4.38	.50[c]	1	4.52	.51	3	4.48	.51
Creative thinking	4	4.33	.66	3	4.43	.60	2	4.52	.59
Abstract thinking	5	4.05	.74	5	3.81	.68	5	3.96	.64
Applied science	6	3.76	.62	6	3.62	.74	6	3.70	.76
Cultural diversity	7	3.71	.56[c]	7	3.62	.74	7	3.61	.72
Higher-Order Workplace Competencies[b]									
Set priorities	1	4.71	.46[c]	1	4.67	.48	1	4.83	.38
Assume responsibility for own decisions and action	2	4.71	.46	2	4.62	.50	3	4.70	.70
Sets realistic goals[d]	3	4.67	.48	6	4.38	.50			

[a]Rankings established by a weighted mean with a rank of 1 determined by the mean closest to 5.00.

[b]Importance of skills and competencies is based on Round 3 values. [c]Note divergence. [d]Competencies added after Round 1.

(table continues)

7

9

Agreement of Consensus with Delphi Skills and Competencies	Round 3			Round 2			Round 1		
	Rank	Mean	sd	Rank	Mean	sd	Rank	Mean	sd
Higher-Order Workplace Competencies[b]									
Manages time	4	4.62	.50[c]	3	4.57	.51	4	4.70	.47
Demonstrates flexibility and adaptability	5	4.57	.51	5	4.43	.51	6	4.61	.50
Resolves problem situations	6	4.57	.51[c]	9	4.29	.56	7	4.43	.51
Communicates information	7	4.52	.51	4	4.57	.51	2	4.78	.42
Participates as a team member	8	4.48	.51[c]	8	4.33	.58	5	4.70	.47
Collaborates with others	9	4.48	.51[c]	7	4.38	.59	8	4.39	.58
Demonstrates leadership abilities	10	4.48	.60	13	4.14	.57	9	4.39	.50
Recognize consequences of inappropriate behavior	11	4.38	.50[c]	10	4.29	.46	10	4.35	.57
Show empathy, respect and support for others	12	4.33	.48	18	4.10	.54	11	4.35	.57
Identifies alternative system to improve performances	13	4.33	.48[c]	14	4.14	.36	15	4.26	.75
Evaluate employee performance and provide feedback	14	4.29	.46[c]	19	4.10	.44	12	4.30	.76
Recommends appropriate action to be taken	15	4.29	.56[c]	15	4.14	.48	16	4.22	.60
Allocates resources	16	4.29	.46[c]	11	4.19	.51	18	4.17	.49
Evaluates information	17	4.24	.44	20	4.10	.44	13	4.30	.47
Identifies and applies current trends and issues	18	4.24	.44	16	4.14	.57	19	4.13	.63
Converts information to useable forms	19	4.24	.70[c]	22	4.05	.67	21	4.09	.73
Identifies resources	20	4.24	.54[c]	25	4.00	.77	25	4.04	.64
Information processing	21	4.19	.60[c]	26	4.00	.45	22	4.09	.67

[a]Rankings established by a weighted mean with a rank of 1 determined by the mean closest to 5.00.

[b]Importance of skills and competencies is based on Round 3 values. [c]Note divergence. [d]Competencies

added after Round 1. (table continues)

Agreement of Consensus with Delphi Skills and Competencies	Round 3			Round 2			Round 1		
	Rank	Mean	sd	Rank	Mean	sd	Rank	Mean	sd
Higher-Order Workplace Competencies[b]									
Plans resources	22	4.19	.68	23	4.05	.67	29	4.00	.43
Teaches others new skills	23	4.14	.57[c]	12	4.19	.81	17	4.22	.67
Resolves conflicts	24	4.14	.36	17	4.14	.48	14	4.30	.63
Understand organizational systems	25	4.10	.54	21	4.10	.54	23	4.09	.51
Risk taking[d]	26	4.10	.70	27	4.00	.77			
Uses computers to process information	27	4.10	.62	32	3.90	.62	26	4.04	.82
Suggest modifications to existing systems	28	4.05	.38[c]	33	3.90	.70	20	4.13	.46
Applies technology	29	4.05	.50	24	4.05	.50	24	4.09	.67
Information acquisition	30	4.05	.67	28	4.00	.63	27	4.04	.56
Uses technology to monitor performance	31	4.05	.50	29	3.96	.58	34	3.78	.74
Solve problems with appropriate technology	32	4.05	.59	30	3.95	.59	28	4.04	.47
Understand the relationship between two or more systems	33	4.00	.55[c]	36	3.81	.81	30	4.00	.52
Works effectively with cultural diversity	34	4.00	.55[c]	35	3.86	.48	32	3.91	.67
Predicts impacts on system performance	35	4.00	.55	38	3.67	.73	35	3.78	.74
Uses workplace ethics and honesty[d]	36	3.95	.50	34	3.90	.54			
Diagnose deviations in system performance	37	3.90	.70[c]	37	3.71	.85	36	3.65	.78
Understand social systems	38	3.86	.48[c]	39	3.62	.80	33	3.91	.67
Maintains technology	39	3.81	.68[c]	31	3.95	.59	31	3.96	.64
Selects technology	40	3.81	.75[c]	40	3.57	.75	37	3.61	.99

[a]Rankings established by a weighted mean with a rank of 1 determined by the mean closest to 5.00.

[b]Importance of skills and competencies is based on Round 3 values. [c]Note divergence. [d]Competencies added after Round 1.

11

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