Graduate Student Education Meets Fed Beef Industry Employer Expectations

Plains Nutrition Council

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Need for Study

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The more is known about the competencies required for industry the more employable graduates there will be in the marketplace.

(Andelt, 1997)

Study Objectives:

1) Describe level of new employee preparation

2) Describe the importance of skills/abilities needed within fed beef industry

3) Determine differences in levels of preparation & importance

4) Determine the value of experiential education

Methodology

Target Population:

  PNC members who make hiring decisions (N=129)

   Private industry employers

   Post-secondary education faculty

  PNC members account for 85-90% of U.S. feed yard capacity

Instrumentation

ﾓ Self-administered questionnaire adapted from Graham 2001

ﾓ Three sections

ﾓ Content & face validity

ﾓ Reliability established at 0.93

ﾓ Online distribution

ﾓ Forty-seven respondents (36.4%)

Item Categories

Interpersonal (16 items)

Communication (8)

Computers (8)

Character (3)

Technical areas of curriculum (6)

5 Point Likert-Type Scale

Student Preparation:

❧ 5 = Thoroughly prepared

❧ 4 = Good preparation

❧ 3 = Prepared

❧ 2 = Somewhat prepared

❧ 1 = Unprepared

Skill Importance:

❧ 5 = Extremely important

❧ 4 = Very important

❧ 3 = Important

❧ 2 = Somewhat important

❧ 1 = Unimportant

Results: Objective 1

Item for Preparation (High)	Rank	*M*	*SD*
Ability to use Internet (Computer)	1	4.52	.63
Word processing (Computer)	2	4.09	.87
Spreadsheets (Computer)	3	3.91	1.02
Biological Sciences (Curriculum)	4	3.59	.97
Integrity (Character)	5	3.56	.99
Understand/follow directions (Comm.)	6*	3.53	.87
Honesty (Character)	6*	3.53	.92
Dependability (Character)	8	3.44	.97
Professional Appearance (Int.)	9	3.41	.98
Presentation Skills (Comm.)	10	3.24	1.15

Results: Objective 1

Item for Preparation (Low)	Rank	*M*	*SD*
Second Language (Comm.)	1	1.43	.66
Accounting Systems (Comp.)	2	1.80	1.73
Management/Business Skills (Int.)	3	1.89	.87
Computer Aided Design (Comp.)	4	2.27	1.12
Humanities/Fine Arts (Curr.)	5	2.32	.71
Computer Control Systems (Comp.)	6	2.33	1.02
Global Awareness (Int.)	7	2.36	.84
Creative Writing (Comm.)	8	2.40	.85
Leadership Skills (Int.)	9	2.47	.89
Social Science (Curr.)	10	2.50	.63

Results: Objective 2

Item for Importance (High)	Rank	M	SD
Integrity (Character)	1	4.96	.30
Honesty (Character)	2	4.84	.42
Dependability (Character)	3	4.82	.44
Initiative (Int.)	4	4.41	.65
Problem-solving (Int.)	5	4.40	.61
Listening (Comm.)	6	4.38	.61
Biological Sciences (Curr.)	7	4.30	.77
Dedication to job (Int.)	8	4.22	.79
Decision-making (Int.)	9*	4.21	.66
Mathematics (Curr.)	9*	4.21	.87

Results: Objective 2

Item for Importance (Low)	Rank	*M*	*SD*
Computer Aided Design (Comp.)	1	2.07	1.00
Humanities/Fine Arts (Curr.)	2	2.11	.87
Computer Graphics (Comp.)	3	2.23	1.01
Computerized Accounting (Comp.)	4	2.43	1.04
Second Language (Comm.)	5	2.50	1.04
Computer Control Systems (Comp.)	6	2.43	1.05
Social Sciences (Curr.)	7	2.65	.92
Global Awareness (Int.)	8	3.14	.77
Physical Sciences (Curr.)	9	3.32	.80
Environmental Science (Curr.)	10	3.36	.97

Results: Objective 2

Value of Coursework for Graduate Students: (11)

    Nutrition (M=4.58, SD=.63)

    Leadership (M=3.88, SD=.85)

    Research Methods (M=3.84, SD=.95)

Results: Objective 3

Individual Items	Rank	Preparation	Importance	MWDS
Problem-solving (Int.)	1	2.81	4.40	7.00
Integrity (Char.)	2	3.56	4.96	6.94
Dependability (Char.)	3	3.44	4.82	6.65
Decision-making (Int.)	4	2.64	4.21	6.60
Management/Business (Int.)	5	1.89	3.66	6.48
Listening (Comm.)	6	2.93	4.38	6.35
Honesty (Char.)	7	3.53	4.84	6.34
Initiative (Int.)	8	3.11	4.41	5.73
Mathematics (Curr.)	9	2.93	4.21	5.39
Dedication to Job (Int.)	10	3.00	4.22	5.15

Results: Objective 3

Mean Weighted Discrepancy Scores by Category

1. Character (MWDS = 6.64)

2. Interpersonal Skills (MWDS = 3.46)

3. Communication Skills (MWDS =3.20)

4. Technical Competency (MWDS = 1.51)

5. Computer (MWDS = 0.04)

Results: Objective 4

Item for Experiential Education	Rank	M	SD
General Work Experience	1	3.86	.88
Career Related Employment	2	3.70	.88
Career Related Internship	3*	3.52	.98
Thesis or Dissertation	3*	3.52	1.27
Bilingual	5	2.65	1.09
Active Student Club Member	6	2.26	.93
Officer of a Student Club	7*	2.16	.94
International Experience	7*	2.16	.97

Conclusions

ꝋ Of 41 individual items, only one item rated as unprepared (Ability to speak a second language)

ꝋ Students were rated as most prepared in three computer skills along with biological sciences, understand & follow directions, and all three skills tied to character

ꝋ Employers rated 36 items higher in importance than preparation (Led by three character items)

ꝋ Most valued coursework was nutrition followed by leadership out of the 11 course options

Discussion

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- ❧ Integrity, Honesty, & Dependability valued above all other items by employers
  - ❧ Understanding /Following Directions, Listening, Initiative , and Problem Solving followed

- ❧ Along with character items…Problem Solving, Decision Making, Management/Business skills, and Initiative showed the most room for growth

Implications

ଔ Overall, the graduate students entering the profession of the fed beef industry are prepared. None the less, room for improved curriculum, education, and training is and always will be valid.

Recommendations

- Character

- General work experience

- Leadership skills

- Benchmark data/ Future research

- On-the-job-awkwardness (Graham, 2001)
  - Training required, initiative important, assessment continued

Questions/Discussion