

Empowering Freshmen to Design Their Own Learning Experiences

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Abstract

At Michigan State University, an internship seminar course has been developed to prepare two-year Horse Management Program freshmen to maximize their learning while on the job. Students develop individualized learning plans and are introduced to other aspects of the internship experience, such as evaluation, jobmanship and the sophomores' own experiences. As a result of taking this class, students are able to secure more appropriate placements, are proactive learners while on the job, and their performance is more fairly and consistently evaluated by their placement coordinator.

Introduction

In many colleges and universities, internships are a vital, if not required, component of the well-educated student's curriculum. In fact, of the 91 schools listed in the Harness

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similar course could occur in any discipline. Examples of other College of Agriculture courses which could be successfully developed are: "Man and Food", "Man and His Animals", or "Introduction to Biotechnology".

There is a current and future need for quality courses that complement the strong, general education base being promoted in today's universities. Use of the strategies discussed above can assist in developing high interest service courses that generate increased enrollment figures. Within this effort resides the potential to attract students into the rapidly changing field of agriculture.

Literature Cited

1. Braskamp, L.A., D.C. Brandenburg, E. Kohen, J.C. Ory, and P.W. Mayberry 1984. Guidebook for evaluating teaching, Part II: Collecting evaluative information about teaching (student ratings). *NACTA Journal*, 28:19-25.
2. Daluge, R.H. and J.F. Thompson 1981. The impact of women and urban students on agricultural college enrollments. *NACTA Journal*, 25:19-24.
3. Keller, G. 1983. *Academic Strategy*. Baltimore: The Johns Hopkins University Press. p. 12.
4. Pescatore, A.J., and J.M. Harter-Dennis 1987. An assessment of student recruitment activities by departments of poultry and/or animal sciences. *NACTA Journal*, 31:22-25.
5. Reisch, K.W. 1984. Recruiting and retention. *NACTA Journal*, 28:27-31.
6. Reisch, K.W. 1988. Personal communication. Ohio State University, College of Agriculture.
7. Zadik, M. 1986. Teaching horticulture with a human perspective. *NACTA Journal*, 30:59-61.

Horse Youth Foundation's 1988 *Equine School and College Directory*, 52 offered internships and 19 required them. At Michigan State University, a six-month internship (placement training) is the very heart of the two-year Horse Management Program. This technical program prepares students to assume managerial positions in horse businesses, working with equines on a day-to-day basis. Students begin by spending two 10-week terms on campus in hands-on type classes that emphasize attainment of skills necessary while on placement. After placement, students return to campus for two terms of business and management-type classes before graduation.

Since the internship experience is a key component of the education of so many students, educators must ask themselves: Are college students really being well prepared for their internships? Not just to *survive*, but to *maximize learning*? Too often, prefield preparation is neglected, resulting in simply a work experience, rather than a learning experience that should be, and often is, the high point of a student's college education. I sought to ensure that our students derived maximum benefit from their placement by developing the course ANS 042, Animal Science Placement Seminar. The rationale for such a course is justified by research findings in experiential learning and adult education.

Rationale for the Course

One compelling reason for teaching a course such as this is to help students become self-directed learners--in other words, to teach "andragogically." In adult education, the concept of andragogy has come to the forefront of discussion. While not grounded in the empirical research as has the theory of pedagogy, it nevertheless seems to have acquired the status of an established doctrine (Jarvis, 1984). Knowles (1980) summarizes the basic assumptions of andragogy: that adults want to become more self-directed as they mature; their experiences are a rich resource for learning; they are aware of specific learning needs generated by real-life problems; and they wish to apply newly acquired skills to present circumstances. He also states that "self-directed learning is the best way to learn" (Knowles, 1975).

Brookfield (1986) summarizes concepts of andragogical practice from Knowles' work, stating that facilitators must help students: diagnose their own learning needs, formulate objectives, identify learning resources, carry out their own learning plans, and help evaluate their own learning.

To espouse and practice these andragogical principles is not the only reason for developing a prefield preparation course. This kind of course also increases the likelihood of students maximizing their learning while on internship. In

Figure 1: A comparison of assumptions and processes of teacher-directed (pedagogical) learning and self-directed (andragogical) learning. (Please read as poles on a spectrum, not as black-and-white differences.)

ASSUMPTIONS		
About	Teacher-directed learning	Self-directed learning
Concept of the learner	Dependent personality	Increasingly self-directed organism
Role of learner's experience	To be built on more than used	A rich resource for learning
Readiness to learn	Varies with levels of maturation	Develops from life tasks and problems
Orientation to learning	Subject-centered	Task- or problem-centered
Motivation	External rewards and punishments	Internal incentives, curiosity

the classroom, students articulate past experiences and existing skills, thus bridging the gap between what they know now and what they want to learn. They can then prioritize learning activities and seek employment that will achieve them. And they are proactive learners while on the job, since they have already decided what they want to learn. Anxiety and stress are thus reduced, and students make an easier transition from the passive orientation of the college classroom to the action-oriented style of the internship setting (Whitham and Stanton, 1979).

Third, a preparation course allows for more fair and accurate assessment of learning, as achievement of learning objectives and completion of internship projects chosen in class are compared to standards for awarding credit.

Last, awarding credit for the students' work is justified when they can present evidence of learning (Willingham, 1977; Knapp and Jacobs, 1981).

Figure 2: Sample Value Grid.

SAMPLE VALUES GRID										Ranking of Values by Degree of Dependence on Further Education
Ranking of Values by Importance										
	1	2	3	4	5	6	7	8	9	10
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										

SAMPLE LIST OF CAREER AND PERSONAL VALUES	
A.	Making money
B.	Close Friendships
C.	Travel
D.	Making Decisions
E.	Helping others/public service
F.	Marriage/family
G.	Honesty/integrity
H.	Leisure/comfort
I.	Health/physical activity
J.	Independence/work alone

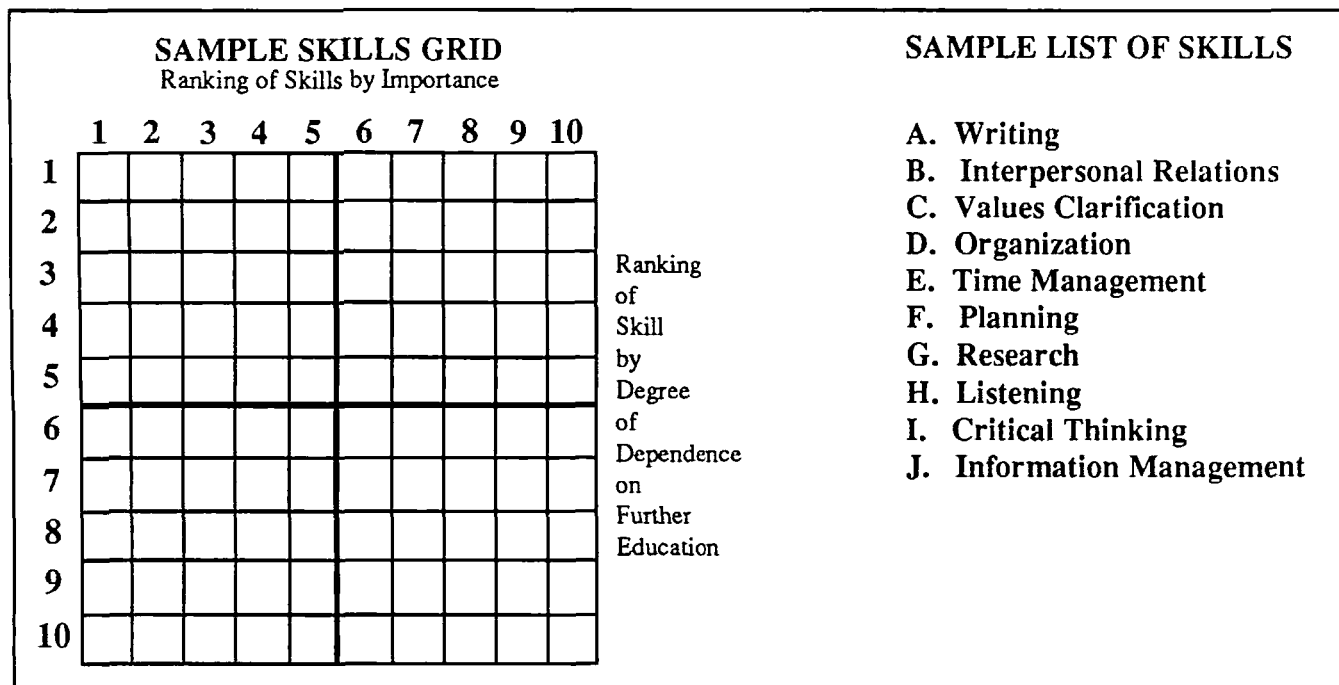
PROCESS ELEMENTS		
Elements	Teacher-directed learning	Self-directed learning
Climate	Formal; Authority-oriented; Competitive; Judgemental	Informal; Mutually respectful; Consensual; Collaborative
Planning	Primarily by teacher	By participative decision-making
Diagnosis	Primarily by teacher	By mutual assessment
Setting	Primarily by teacher	By mutual negotiation
Designing a learning plan	Content units Course syllabus Logical sequence	Learning projects Learning contracts Sequenced in terms
Learning activities	Transmittal techniques; Assigned readings	Inquiry projects; Independent study; Experiential techniques
Evaluation	Primarily by teacher	By mutual assessment of self-collected evidence

Course Description

In Animal Science Placement Seminar, students are introduced to the philosophy of the internship experience. They are then asked to articulate their values, present skills and career goals, after which they develop their individual learning plans to clarify values and acquire additional skills. Credit and jobmanship are discussed. Sophomores return to share their placement experiences. Students work from a set of class notes, containing all readings and homeworks. The class meets once a week for an hour. The course outline is given below.

UNIT	TOPIC
1	Placement Training Philosophy
2	Values Clarification
3	Transferable Skills Assessment
4	Horse Skills Assessment
5	Developing a Learning Plan
6	Placement Training Evaluation
7	Jobmanship and Coping
8	Sophomores' Seminars

Figure 3: Sample Skills Grid.



In Unit 1, students are introduced to the concept of field experience. A comparison/contrast handout on learning "in the classroom" versus "on your own" often generates a good discussion. Knowles' (1975) chart (Figure 1) on the differences between teacher-directed learning and self-directed learning is a valuable aid for helping students understand that they must now take responsibility for their own learning.

In Unit 2, students complete a temperament assessment and several values clarification exercises (Simon, et al., 1972). They then list and grid their values, ranking them by importance and degree of dependence upon further education (Breen and Whitaker, 1983; Figure 2). They also discuss what values they believe horse farm employers would want them to have.

In Unit 3, students complete an inventory of their transferable skills. Transferable skills such as communication, critical thinking and information management have been identified repeatedly by employers as those competencies necessary for success in many different careers. Students then grid, as in Unit 2, their most essential areas of skill needs for personal and professional satisfaction (Figure 3).

Next (Unit 4), students complete a horse skills inventory, noting competencies or deficiencies in the following areas: nutrition, breeding/genetics, mare/foal management, weaning/yearling management, health care, hoof care, marketing, condition/training, farm business, and miscellaneous.

Skill deficiencies from units 3 and 4 are cast as learning objectives in the students' learning plans, the focus of Unit 5. The learning plan is completed in table form (Figure 4). From class discussion and their own backgrounds, students decide which learning resources to tap (Learning Resources and Strategies), what they will do or produce to prove that they indeed accomplished each objective (Evidence of Accomplishment), and how they want each accomplishment to be evaluated (Means of Evaluation). Some sample learning objectives are given below.

Besides completing learning objectives, students also identify two generic (non horse-oriented) projects they want to complete while on placement (Stanton, 1981). These projects are designed to help them discover the ecology of their placement organization. Students choose two projects from the following: Organizational People/Organizational Structure, Organizational Goals, Information Processing, Funding and Budgeting, Environment/Organization Relationships, and Organizational Decision-Making. Students are then ready to use their plans to secure appropriate placements.

In Unit 6, students learn that their placement experience will be evaluated using four tools: 1) percentage of learning objectives accomplished, 2) two evaluations by their employer, 3) two evaluations by themselves of their placement, and 4) quality of their two projects. All of the actual documents are in their class notes, so there should be no question in their minds as to what is expected of them or when assignments are due.

In Unit 7 elements of good "jobmanship" and how to cope successfully in a new environment with new people are discussed. Students read about working-learning tips (Stanton and Ali, 1982), and the Horse Management Program Coordinator discusses how to be successful working students in what can many times be intense, high-pressure horse farm working situations.

As a follow-up to this topic, sophomores return in Unit 8 to share their internship experiences; four to six usually attend. I have two of them give short talks on what they feel is most important to tell the freshmen, and afterwards all students freely discuss all aspects of the placement experience.

Benefits of the Course

Students have benefitted in different ways from taking this course. Because they have one-on-one contact with the sophomores, and because the latest placement information is readily available in a job book, students are more aware of

available internships and what they are like. Thus, they interview and secure their placements well in advance of their starting date.

When the students do interview and then start their placement, employers report that they are well-prepared, they know what they want to accomplish, and they are already quite familiar with the farm.

While on placement, students and supervisors interact and students get feedback on how they are doing, since they must get together several times to discuss their learning plan, projects and evaluations. My experience has been that students contact me more often, too, alerting me to potential problems. With this increased discussion, the situations are handled diplomatically and students are often able to complete a placement they previously would have left. For those placements where the problem cannot be resolved, more students leave on a good business relationship with the employer.

The placement coordinator can monitor learning progress more fairly using the three tools mentioned in the above paragraph. A pass or a no-pass is justified to students, based upon evidence of learning they have agreed they would present for evaluation.

Summary

Since, in many universities, internships are an important part of students' course of study, a prefield preparation course such as ANS 042 can help ensure that students maximize learning while on the job. This course prepares freshmen for their placements by helping them assess their values and current skills and then use this information to complete a placement learning plan. They also discuss how they will be evaluated, and learn from the Horse Program Coordinator and sophomores how to best succeed on the job.

Figure 4: Sample Learning Plan.

Students benefit from the course by being better prepared when interviewing and starting their placements. They are proactive learners on the job and are able to handle problems more constructively. The internship coordinator can assess learning progress and outcomes fairly, and can justify giving a pass or no-pass based on presented evidence of learning.

References

- Anon. 1988. *Equine School and College Directory*. Worthington, OH: Harness Horse Youth Foundation, Inc.
- Breen, P. and U. Whitaker. 1983. *Bridging the Gap: A Learner's Guide to Transferable Skills*. San Francisco: The Learning Center.
- Brookfield, S.D. 1986. *Understanding and Facilitating Adult Learning*. San Francisco: Jossey-Bass Publishers.
- Jarvis, P. 1984. "Andragogy: A sign of the times." *Studies in the Education of Adults*. 16:32.
- Knapp, J.E. and P.I. Jacobs. 1981. *Setting Standards for Assessing Experiential Learning*. Columbia, MD: Council for the Advancement of Experiential Learning.
- Knowles, M.S. 1975. *Self-Directed Learning: A Guide for Learners and Teachers*. New York: Cambridge Books.
- Knowles, M.S. 1980. *The Modern Practice of Adult Education: From Pedagogy to Andragogy* (2nd ed.). New York: Cambridge Books.
- Permaul, J.S. 1981. *Monitoring and Supporting Experiential Learning* (PANEL Resource Paper #5). Washington, D.C.: National Society for Internships and Experiential Education.
- Simon, S.B., L.W. Howe and H. Kirschenbaum. 1972. *Values Clarification*. New York: Dodd, Mead and Co.
- Stanton, T.K. 1981. "Discovering the Ecology of Human Organizations: Exercises for Field Study Students". in: *Field Study*. L. Borzak (ed.). Beverly Hills: Sage Publications.
- Stanton, J. and K. Ali. 1982. *The Experienced Hand: A Student Manual for Making the Most of an Internship*. Cranston, RI: The Carroll Press.
- Whitham, M. and T. Stanton. 1979. "Prefield Preparation: What, Why, How." in: *New Directions for Experiential Learning: Enriching the Liberal Arts Through Experiential Learning*, Number 6. M.T. Keeton and P.J. Tate (eds.). San Francisco: Jossey-Bass Publishers.
- Willingham, W.W. 1977. *Principles of Good Practice in Assessing Experiential Learning*. Columbia, MD: Council for the Advancement of Experiential Learning.

LEARNING OBJECTIVES	LEARNING RESOURCES AND STRATEGIES	EVIDENCE OF ACCOMPLISHMENT	MEANS OF EVALUATION
Evaluate semen	breeding manager; veterinarian; books on horse repro; instruction manual for operating semen evaluation equipment	correctly operate equipment and evaluate semen of one stallion	correctly evaluate all semen samples on a given breeding day
Plan a mating based on a stallion's and mare's pedigree & production records	books on breeding/genetics; pedigrees; performance or production records; interview farm's breeding manager	make a decision on a mating	breeding manager says mating would result in type of horse the farm is trying to produce
Train another employee to perform a job	books on personnel management; ag economics books; observe how farm supervisors treat employees; personnel relations instructor at a local college	other employee performs a job I taught him/her without my help	job performed correctly; positive feedback from the employee on my training style