

Farmer Interview Role Play Exercise

Agroecology field work includes use of biological and social science methods. Some of the latter may not be familiar to most students from agronomy, horticulture, ecology, and other biological science majors. Interviews of farmers and other food system actors often are central to the field observation and data collection process, and some practice with interview techniques builds valuable skills before student teams head for the field. A role play exercise using student ideas and creativity has proven to be a valuable and compelling way to teach these skills, and a specific example from a workshop in Sweden is used to illustrate the method.

Learning objectives are to 1) prepare students to conduct stakeholder interviews by practicing in a safe and stimulating learning environment; 2) learn to deal with different types of behavior during interviews by farmers and other clients; and 3) provide opportunity for group feedback and comments on how to improve interview techniques. We have found that a practice session greatly improves student capacities and confidence to conduct interviews, and especially to deal with unusual circumstances that may occur during the process.

Methods we have used include orientation lectures, team design of key questions before going to the field, one-on-one practice in pairs, and what has proved highly useful – role play exercises where students do the planning and follow through with short skits to illustrate what may happen in an interview and how to solve unexpected challenges. When first used, the role play was done by two instructors, after a short briefing about why interviews were important, types of questions to be asked, and which questions might be sensitive such as too much detail about economics of the farmer and family situation. Although the orientation and demonstration were useful, according to students, we soon came up with a better alternative.

In a week-long workshop in Sweden on nutrient cycling, we decided one evening to hand the responsibility of preparing for interviews the next day to several select students. Three pairs of students were asked to prepare mock interviews for the next morning, one to play the role of farmer and the other a student interviewer. Three stereotypical farmer types were chosen: 1) the reticent person who was shy, gave very

short answers, and was apparently unwilling to share much detail; 2) the highly verbal person who expanded on each answer, often diverging from the issue at hand, and rambling off in non-useful directions; and 3) the misleading person who gave contradictory information and appeared to attempt to mislead the interviewer. After a brief role play interview was completed in front of the entire class, other students and instructors were asked to critique the process, asking why certain approaches were used, and suggesting other strategies that might prove useful in each case.

Outcomes of the exercise included a high level of participation, an excitement of providing critique and suggestions of what might have been done, and a reflection on the entire interview process and how it could be improved. In the three examples, specific lessons were learned. In 1) the shy farmer example, the interviewer was forced to ask more than “yes or no” questions, to pursue the farmer’s short answers with requests for more detail and depth, and to explore the “why” of specific responses and their basis in experience. In 2) the talkative farmer example, the interviewer was challenged to steer the conversation back to the topic, to guide the process without showing disrespect for the farmer, and to eventually achieve the stated goals of the interview. In 3) the misleading farmer, the interviewer was most effective when tactfully pointing out inconsistencies with such questions as *“I am a little confused about the amount of leached nitrogen from the field; could you please explain that again so I can take some careful notes?”* In all cases, the interviewers were urged to respect the stakeholders and their individuality, while still striving to achieve the best possible information about that farm or landscape. It proved both entertaining and useful.

This series of role play interviews sought to build an appreciation of overall context, while the specific objectives of interviews were to help understand the farm, landscape, watershed, and regional importance of nutrients from farming that were currently causing pollution of nearby lakes and rivers to the sea. The interviews with stakeholders also revealed a range of opinions about the nature of the nutrient runoff challenge and how serious this was in the present and potentially in the future. One of the most important outcomes was a new familiarity with some of the challenges that could be faced when talking with

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individual farmers. The safe space provided for the role play exercise was reported by students to encourage their creativity and enthusiastic acting of roles in preparation for interviews later in the week with actual farmer and people working at the landscape level.

Student participants further explained that the opportunity for critique after the role play exercise was especially valuable in assessing “how they had done” in adapting to the stakeholder and his/her response and attitudes toward the questions and the interviewer. To be sure, we selected some extreme stereotypes for the three farmer roles, and in practice there could be elements of each in any particular interview. This enhanced the excitement of the interviews, as the larger student group was not advised ahead of time which types of farmer or stakeholder would be included in the interviews. Probably the best dimension of the exercise was that students themselves came up with the individual and creative roles they played, and the reception of the workshop group was highly positive to seeing their peers perform in this educational activity.

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Statement of Graduate Teaching Philosophy

I consider teaching an important part of my academic career and devote an inordinate amount of time, effort, and commitment to teaching because I want to improve the performance of each and every student. To be an effective teacher, I follow the strategies and philosophies listed below.

1) I present well-planned, structured, and organized lectures and courses.

2) At the beginning of the class, I review previous lectures and list the topics to be covered in the current lecture.

3) I assign readings and distribute class notes in advance, giving students ample time to prepare, which significantly improves their grasp of the lecture. Students appreciate advance distribution of the notes, and have told me numerous times that it makes a world of difference if they have read the assignments.

4) I give short quizzes to encourage students to come prepared for the class.

5) I always spend a considerable amount of time preparing before each lecture.

6) I focus heavily on good oral and written communication.

7) I employ the following teaching techniques: clear writing on the board, power point presentations, use of smart board, and software to solve problems.

8) I clearly explain the materials step by step.

9) I divide complex topics into segments and make it easier for students to understand.

10) I use graphical and mathematical analysis to improve students’ understanding of the subject matter.

11) My subject matter coverage is in-depth, rigorous, and challenges students to reach their maximum potential.

12) I emphasize understanding the subject matter rather than rote memorization.

13) I focus on applications of theory by using real world examples.

14) I use journal articles to keep the students at the cutting edge of recent developments in the subject matter.

15) During my lectures, I ask students frequently if they have any questions that need to be clarified.

16) At the end of each class, I summarize material covered in that lecture.

17) I encourage students to participate in the class discussion by allocating 5-10% of total scores to participation. I also give small bonus points (1% of the total grade) for answering a critical question and for asking challenging questions. This approach keeps students excited, motivated, and interested in the lectures.

18) I use “food for thought” coupons from the university and my own money to take top students for lunch.

19) I also give extra credit (5%) if a student gives a lecture on selected topics. This approach not only enhances the understanding of the subject matter but also builds students’ confidence in their public speaking skills.

20) I employ humor in the classroom. Humor not only keeps the class interesting but also can be a powerful communication and teaching tool.

21) I assign problem sets and class projects dealing with real world agricultural problems. For these projects, I work with students very closely and take them through various steps: find topics of mutual interest, aid them with data search and collection, assist with the review of literature by reading numerous articles along with them, teach students about theoretical models, help with empirical analysis, and continuously work with them on the art of writing papers. From these research projects, I help the students to publish journal articles.

22) I avoid assigning too much weight to any particular exam or homework so that students will not lose many points if they did not do well on that exam or homework.

23) I keep students abreast of their progress by giving frequent feedback.

24) Before each exam, I review all the portions covered in the class.

25) I am readily available and easily accessible to students during the office hours and other times. I encourage students to contact me at any time to clarify doubts.

26) I use a website (<http://webpages.uidaho.edu/agecon533/>) to post my syllabus, notes, assignments, and past exams. This helps students to know what to expect on upcoming assignments, quizzes, and exams.

27) My extracurricular activities include: inviting students for dinner during Thanksgiving, Christmas, and other holidays; organizing picnics, camping trips, and ski trips for students.

28) It is important to reward hard-working and deserving students. I always nominate my students for scholarly awards. My students have received awards at the department-level, college-level, university-level, and professional associations.

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Motivation for Class Team Projects in Agroecology: Potentials for Super Teams

Creating high levels of motivation for class team projects involves assurance that individual contributions will be recognized, thoughtful design of ground rules, and convincing students about the long-term value of the exercise for future employment. Various methods have been used to identify individual as well as team contributions, in response to student concerns. The importance of setting up clear norms for teams to follow have been explained (Patterson et al., 2005), and general teamwork challenges thoughtfully summarized in a review by Whatley (2009). We have tested several team project models including imbedding instructors and teaching assistants in the teams [highly time-consuming], providing in-class time for some team meetings [valuable strategy], and grading both individual sections and overall team reports [current

method in Agroecology at UNL]. In this teaching tip we provide record of a highly successful “super team,” composed of the Agroecology course instructor, the seminar’s graduate teaching assistant, and three highly motivated undergraduate students. Together the super team embraced the challenge of exploring systems learning in Agroecology, and the value of an interdisciplinary team perspective to students, faculty, and future employers.

Learning objectives for team projects include preparing students for future positions in industry, government, NGOs, and academia; helping students better appreciate their personal strengths in a team situation; and honing communication skills including the abilities to discuss and compromise when there are differences of opinion on how to proceed with a task. When recruiters from agriculture and food industry companies visit campus interviewing potential new employees, it is noteworthy that they assume a certain level of technical competence and question students about their experience in team building and participation, their communication skills, and their potential to address the public with confidence about environmental and social issues. For this reason many instructors include team project activities as an essential component of courses, especially at the senior level and in capstone experiences.

Methods for introducing and conducting team project activities in this course have evolved through instructor experience and in response to student evaluations. Long-concerned that students were not totally motivated in team projects in the conventional course setting, we have been searching for alternatives. In the 2003 Agroecology course at UNL, four students responded in highly creative ways to a mid-term question about the importance and potential consequences of successful interdisciplinary approaches to education. In response, we invited the students to join a small study group to further explore the topic outside of class, together with the instructor and teaching assistant, and develop a manuscript for publication based on their research findings.

The immediate reward was to submit their team draft in place of the second mid-term exam, while the long-term incentive was the potential for an in-depth team research experience in an area of mutual concern, with the potential for a publication, something recognized as important by the graduate student team member and undergrads who were considering further academic degree programs. We were inspired by the model used by Professor David Pimentel at Cornell University, who convened a select group of undergrad and grad students each year in a seminar designed to

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explore a topic of contemporary and critical interest to society and to create a journal article produced by the team (for example, Pimentel et al., 1994).

Our five-person team met throughout the semester on campus or at the instructor's home, developed an outline of important topics, and decided on a division and distribution of labor. During preliminary discussions and telling our individual stories, it became apparent that each of us had taken different paths to arrive at an awareness of the importance of interdisciplinary research and thinking. An early activity was to each write a short synopsis of this experience to share with the others. We also recognized that one of the prime motivators for our undergraduate students during their final year of study was potential to successfully interview and enter the job market. We needed to know how valuable they considered courses from a range of disciplines, and thus how important team projects would be as motivators for systems studies.

It was also important to learn from faculty who were undergraduate advisors what importance they put on an interdisciplinary undergraduate experience, since they were the people directing students toward specialization or generalization in their course choices. Lastly, we needed to quantify, if possible, the criteria that companies were using in their interviews and review of credentials of our graduates with respect to an interdisciplinary focus of their studies. We designed three questionnaires for the groups – students, faculty advisors, industry personnel specialists and recruiters – to see if their opinions differed on the value of a broad, systems-oriented undergraduate education. The results of the local surveys confirmed much of what we read about interdisciplinary education, and provided some justification to continue to use team projects as an important component of Agroecology courses.

Outcomes of the team research, information evaluation, and synthesis included two manuscripts for potential publication. In one paper, we outlined our different routes to appreciating the importance of a broad perspective in education. One team member studied philosophy for three years, changed to environmental ethics, then to horticulture, and finally studied agronomy with a specialization in ethics of land use and potentials for diversification of peri-urban food production. Another began in chemical engineering, changed to biological systems engineering, and then settled in agronomy to prepare for a future career in farming and the ag industry. A third team member studied agronomy from the start, with a second major in international studies to prepare for development work. Another team member knew during the first two semesters that environmental

studies was not broad enough, thus used an available option to create an individualized program of study that included sociology, political science, and development in addition to environmental specialization. The instructor began in production agronomy, specialized in plant breeding, worked with small farmers in the developing world and finally focused on sustainable agriculture and agroecology. The stories were so diverse and compelling that we summarized them in a manuscript, "Discovering the whole: multiple paths to systems learning", that was accepted and published in a teaching journal (Schneider et al., 2005b).

The results of the survey of students, advisors, and employers revealed a wide range of opinions among those surveyed, with students more enamored with the idea of a broad, interdisciplinary course of study than many of their advisors. The latter expressed interest in interdisciplinary perspectives, and were concerned that the opportunity cost of taking too many courses outside the major field would not help their advisees and eventual graduates to be competitive in a job market that they perceived as seeking mostly specialists in soils, plant protection, plant breeding, or other narrow field. The employers surveyed were highly receptive to the idea of interdisciplinary education for undergraduates. They embraced the concept that graduates needed a broad education and appreciation of the complexity of the real world they would face. One employer stated, "*You should provide the education, and we will provide the training for the specific tasks people are expected to accomplish.*" Thus there appeared to be a disconnect between student interests and faculty advising, and a closer correspondence of what students were seeking and the criteria used by employers in their choice of new recruits. In reflection about the process, we surmised that the survey itself was a potential educational tool with all three groups who may now develop more insight about the importance of interdisciplinary study (Schneider et al., 2005a).

In summary, we explored the motivations, process, and outcomes of interdisciplinary team projects in a course in Agroecology. Accepting that a broad perspective on issues and challenges in the farming and food system would only become more complex and difficult in the future, we were convinced that a systems perspective that embraced multiple disciplines was essential to tackle the uncertainty of sustainable food production with climate change, scarce production resources, changing diets and competition for food, and current inequities of the distribution of costs and benefits within the present system. It was clear that each of us had taken a different route to the

appreciation of a systems approach that required tools and perspectives from multiple disciplines. From the survey results we found that students, advisors, and employers were in some agreement about the value of interdisciplinary studies for undergraduates, but there was concern especially among advisors that the demand was still for specialists in unique aspects of agriculture.

In general, the information we discovered has been useful in providing motivation to students in subsequent agroecology courses about the value of team projects in class, and more broadly the importance of building capacities for team work that will be useful in future job settings. Everyone on our small “super team” decided that this was a valuable personal and professional experience, and that similar opportunities should be afforded to students in the future. We have yet to find viable ways to extend this type of intensive experience in team building and group research to the entire class, in part due to the limited time and energy of instructors. Intrinsic motivation of students continues to be a limitation, and just providing an example of the model along with examples of successful outcomes appear to be inadequate to entice most students to pursue this intensive activity.

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