

**THE DEVELOPMENT, IMPLEMENTATION,  
AND FORMATIVE EVALUATION  
OF A PROGRAMMATIC FRAMEWORK AND CURRICULUM  
FOR A RESIDENTIAL GRADUATE PROGRAM  
IN NATURAL RESOURCES/ENVIRONMENTAL EDUCATION**

By

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## **ABSTRACT**

Training environmental educators is essential in preparing them to teach the multifaceted aspects of human and natural systems. This study consists of the development, implementation, and formative evaluation of a programmatic framework and curriculum for a Graduate Program in Natural Resources/Residential Environmental Education. A formal partnership among University of Wisconsin-Stevens Point College of Natural Resources (UWSP/CNR), Treehaven Environmental Learning Center, and Conserve School proposed to adopt a graduate program in environmental education that consists of students in the program living, working, and pursuing a graduate degree while in residence at the boarding school or an environmental learning center. The study helped assess and establish best practices towards the creation, development, implementation, and evaluation of the graduate program. Literature indicated that the inclusion of formal courses in residential life along with environmental education courses and practicum experience sets the UWSP/CNR program apart from other existing graduate programs in environmental education. Qualitative analysis of interview data from participant interview, meetings, and documents formed the basis for the study's recommendations regarding the graduate student experience and program curriculum. The research indicates that the project is feasible and provides direction for the development and implementation of the graduate program in accordance with existing UWSP/CNR policies and procedures.

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# **CHAPTER ONE: INTRODUCTION OF THE PROBLEM**

## **I. Statement of the Problem**

The purpose of this study was to develop, implement, and formatively evaluate a programmatic framework and curriculum for a Residential Graduate Program in Natural Resources/Environmental Education.

## **II. Subproblems**

1. Assess potential needs/interests of stakeholders to be met by the programmatic framework.
2. Define, develop, and implement the programmatic framework.
3. Facilitate the development of the curriculum as part of the programmatic framework.
4. Facilitate the development of an advising plan for the program.
5. Develop and implement a marketing plan.
6. Complete formative evaluations of each of the above subproblems as they are being developed and implemented.
7. Develop a participant evaluation protocol.

## **III. Significance of the Problem**

Staff from the University of Wisconsin-Stevens Point/College of Natural Resources (UWSP/CNR), Treehaven, and Conserve School began meeting early in 2007 to explore possibilities for partnerships. In discussing their common mission and need, a

shared opportunity arose. All three institutions recognized links through common mission statements, providing programs for young adults, and commitment to providing students with experiential education. Conserve School has a residential intern program, staffed by recent college graduates. Most of the Residential Interns (RIs) leave after a year. To improve the overall quality of the RI program and to retain the RIs for a longer time, Conserve School administrators want to provide formal educational experiences with college credit.

At the same time, Treehaven can offer the Residential Interns experiences in non-formal education and provide a link to UWSP/CNR graduate courses. The CNR has the academic structure, resources, and existing natural resources/environmental education graduate program that can accommodate the development of this program.

Consequently, an academic institution that awards graduate degrees in EE, a residential environmental learning center, and a conservation mission-based boarding school created a partnership. These three key stakeholders have formed a partnership to develop a graduate program in EE that consists of the students in the program living, working, and pursuing a graduate degree while in residence at the boarding school or an environmental learning center.

This study assessed and established best practices in creating, developing, implementing, and evaluating a Residential Graduate Program in Resource Management/Environmental Education. The partners of the program, UWSP, Treehaven, and Conserve School, recognized the necessity of addressing the needs and interests of the stakeholders in developing a programmatic framework and the

curriculum. In addition, the partners were aware that they needed to consider methods for marketing the program and providing graduate advising. In addition, the researcher developed a participant evaluation protocol to create and implement participant-driven evaluation of the program as a measure of its success.

Studies and literature about adult-level programs in residential environmental education (EE) are uncommon. No known research-based model describes best practices for adults in residential environmental education. No existing graduate programs represent the unique partnership and approach that this program proposes.

#### **IV. Significance of the Stakeholder Participation**

The key stakeholders proposed a collaboration to share resources to help meet needs and provide benefits to each of them. These stakeholders anticipate that the partnership will also provide increased opportunities for future students. A student in the program will benefit from strong academic work reinforced by valuable practical experience. Students' potential career options will be enhanced, not only by their skills, but also by connections to networks that might include future employers. Students will have opportunities to develop an array of professional skills as top professionals in their interest areas mentor them.

Benefits to both UWSP and CNR missions include producing environmental leaders of the future, thus ensuring a continuing stream of environmental educators. In addition, the partnership increases enrollment in graduate school and graduate-level courses with highly qualified students. The partnership encourages high school students

to consider environmental and outdoor careers as well as provides links between UWSP and northern Wisconsin.

The partnership will help meet Treehaven's mission, providing motivated, high quality instructors for K-12 education programs and at the same time accomplishing an array of projects, such as developing new community-oriented programs. Further, the collaboration promotes both the profession of Residential Environmental Learning Centers and Treehaven as a recruitment center for UWSP and the natural resources profession. Treehaven's participation will expand breadth and depth of experiences for Master of Science (MS) students and Treehaven staff while generating positive visibility through a potentially prestigious fellowship.

The collaboration will also serve Conserve School's environmental mission. Establishing environmentally minded and motivated high caliber residential-life staff will provide role models for high school students in environmental and outdoor careers. At the same time, the program will impart young and energetic connections with high school boarding students and accomplish an array of projects. Thus, this partnership will expand the breadth and depth of the resident intern program, promote the profession of residential living/boarding school educators, and generate positive visibility. Connections between Conserve School, UWSP-CNR, and the UW system will provide opportunities for continuing education/staff development for other Conserve School staff.

In light of the growing industry of residential environmental education, UWSP-CNR, Treehaven, and Conserve School partnered to co-create a programmatic

framework and curriculum, based on data collected during research for this study that will add a new dimension to the graduate-level training for residential environmental educators.

## **V. Limitations**

1. The programmatic framework looked at the policies and procedures established for residential environmental education centers and a conservation education-based boarding school and did not address camps or other residential settings that were not conservation-education based.
2. This study did not determine eligibility criteria for accepting students into the program.
3. The program was created within existing UWSP/CNR and Conserve School policies and procedures.
4. This study did not attempt to obtain funding for implementation of the program when it was determined that the program will be implemented.

## **VI. Definition of Terms**

Programmatic framework—the total graduate student experience, comprising working with students, resident life, college-credit courses, non-formal workshops, and practical experience.

Residential environmental learning center—a facility that offers nature-based or environmental education in which students stay on site for at least one night.

Boarding school—a residential school, providing meals, lodging, social, and life experiences over a typical school calendar year.

Formative evaluation— formative evaluation is an assessment of efforts prior to their completion for improving the efforts (Nan, 2003)

Partners—the partners in this project consist of UWSP/CNR, Treehaven, and Conserve School.

Residential graduate program—a graduate-level experience conducted in residence at a residential environmental outdoor center.

Stakeholders—individuals or organizations that have interest in or influence toward a particular program or project. For this project, the primary stakeholders included staff and interns from Conserve School, staff from Treehaven and UWSP/CNR, and several students who had completed a residential environmental education Master’s program.

Evaluation protocol—a set of procedures established to create and implement participant-driven evaluation of the program.

Participant—person interviewed in the course of this research.

Residential life—refers to the experiences that maintain a positive living environment while promoting academic, social, emotional, and spiritual growth for students.

Residential life typically refers to the experiences beyond the formal classroom setting within a boarding school or residential environmental learning center.



## **Abbreviations and Acronyms**

UWSP—University of Wisconsin-Stevens Point

CNR—College of Natural Resources at UWSP

TELC—Treehaven Environmental Learning Center

CS—Conserve School

EE—environmental education

RELC—residential environmental learning center

ELC—environmental learning center

RI—residential intern (at Conserve School)

AGP—Alternative Graduate Program (in Environmental Education)

PAC—Project Advisory Committee

PAT—Program Academic Team

PSC—Project Steering Committee

MS—Master of Science

## **VIII. Assumptions**

1. Residential environmental learning centers need qualified staff on a continuing basis.
2. Boarding schools have a continual need for qualified residential-life staff.
3. Traditional EE training does not typically include formal classes in residential life.

## **CHAPTER TWO: LITERATURE REVIEW**

This literature review will provide the background information for the development, implementation, and formative evaluation of a programmatic framework and curriculum for a Residential Graduate Program in Natural Resources/Environmental Education.

The findings of the literature review are presented under the following headings:

- I. Environmental Education Background
- II. Residential Environmental Education
- III. Existing residential and alternative graduate studies programs in environmental education
- IV. Curricula for graduate studies programs in environmental education
- V. Residential-Life Curriculum
- VI. Educating Adult Learners
- VII. Qualitative Research
- VIII. Summary

### **I. Environmental Education Background**

In 1942, before environmental education was defined, renowned conservationist Aldo Leopold articulated the need for an informed and able citizenry when he said, “Acts of conservation without the requisite desires and skill are futile. To create these desires and skills, and the community motive, is the task of education” (Meine & Knight, 1999, p. 266).

A United Nations conference identified EE as a world-wide concern in 1976, when they embraced the Belgrade Charter, which defined the global goal of

environmental education to “work individually and collectively toward solutions of current problems and the prevention of new ones” (UNESCO-UNEP, 1976, p. 2). In 1977, world environmental leaders met in Tbilisi, Georgia. Those leaders further refined the definition of EE, stating “Environmental education is a learning process that increases people’s knowledge and awareness about the environment and associated challenges, develops the necessary skills and expertise to address the challenges, and fosters attitudes, motivations, and commitments to make informed decisions and take responsible action” (UNESCO, 1977, p. 1). Simply put, the Tbilisi report emphasized, “that environmental education should be life-long, active, integrated, and inclusive” (UNESCO, 2007, p. 1).

Over the last 25 years, EE has been a growing industry. Many programs have targeted students in grades pre-kindergarten through seniors in high school, while fewer target adults. EE programs are associated with formal education in schools and government education agencies. Non-formal EE program settings include nature and interpretive centers, and museum and zoos. Youth groups such as 4-H and scouting, residential environmental learning centers, and outdoor education settings are locations for EE. Beyond those more traditional venues, EE is expanding into territories that might not seem obvious. For example, from a deeper perspective of attaining the goals of EE, groups and agencies concerned with social justice or human health issues, consumers who want “green labeling” on their foods, and the ecotourism industry all provide environmental education (McCrea, 1998).

Although the field of EE has experienced tremendous growth in many settings, concerns with the efficacy of EE in producing an environmentally literate society exist. In the state of EE report for the National Environmental Education and Training Foundation, “Environmental Literacy in America” (ELA), Coyle (2005) indicates that while many people are aware of the environment through EE, they lack a deeper understanding of the issues and the ability to apply knowledge that leads to change. Although people are aware of basic topics about the environment, “about 80% of Americans are heavily influenced by incorrect or outdated environmental myths” (Coyle, 2005, p. ix).

As we face the increasingly complex environmental problems ahead, environmental education can help teach the skills we need to protect our environment and health. The tenets of EE put forth at Tbilisi define EE as a learning process that:

- Increases people’s knowledge and awareness of the environment and associated challenges;
- Develops the necessary skills and expertise to address the challenges; and
- Fosters attitudes, motivations, and commitments to make informed decisions and take responsible action (UNESCO, 1977, p. 26).

In-depth professional development of environmental educators is crucial to bring that learning process to practice. In an article in the *Journal of Environmental Education*, Knapp emphasizes “None of the issues facing environmental education today are as important as the lack of quality educator training” (2000, p. 34). According to a

UNESCO report, “By far, the most frequent cause of curriculum failure [in environmental education] is inadequate teacher training” (UNESCO, 1997, p. 28).

Accordingly, the 1995 Inter-Regional Workshop on Environmental Education in Athens suggested three levels of training: training of trainers, pre-service training, and in-service training. Each of these levels calls for comprehensive training that equips educators with the knowledge and skills to implement the Tbilisi goals (Knapp, 2000). Training environmental educators is essential in preparing them to teach the multifaceted aspects of human and natural systems. In addition to knowing the content areas, they must be equipped with best practice skills and methods for teaching EE in both formal and non-formal settings. Several states are developing best practices for training and measuring competencies in partnership with the North American Alliance for Environmental Education (NAAEE; Coyle, 2005).

## **II. Residential Environmental Education**

Competent environmental educators can affect environmental literacy best when teaching in settings that can provide depth and connections to the content areas. Zelezny (1999) asserts that active participation in educational programs improves environmental conduct more effectively than passive involvement. Additionally, he notes that educational interventions (EE programs) lasting 10 hours or more appeared to have significant effects, especially on younger participants.

Experiential learning and longer interventions are intrinsic to residential environmental education experiences. Shepard (1986) studied resident 4-H camps in

Ohio by measuring impacts of outdoor education on 9-14 year old children. The experimental group participated in sensory awareness activities during a 5-day residential camp and learned simple ecological concepts during this outdoor education program. The control group had daylong programs that included only sensory awareness. Statistically, the children in both groups were similar in their positive environmental attitudes, even though the program content was different for each group. However, the program length had a positive effect on the development of positive environmental attitudes overall. His conclusions stated that a 5-day residential camp experience has a favorable effect on attitudinal development (Shepard, 1986).

In 1998, a study of 1-day and 5-day outdoor ecology programs for school-aged students in a national park setting showed positive marks from the participants for the activities as well as significant gains of knowledge in both groups. That study concluded that although both of the programs had the same objectives, only the 5-day program had an effect on behavioral levels (Bolger, 1998).

Residential environmental education centers (RELCs) that provide those longer interventions are increasing in number across the country. According to the Residential Outdoor Schools site, at least 350 residential environmental education programs exist in the United States, as of October 2007. Small programs that a school district might operate have not been part of the organization and are not included in this number (Guide to ROS-Statistics, 2007).

For maximum efficacy in EE as well as to meet the needs of RELCs, training EE instructors in residential environmental education is highly desirable. Scant literature

documents programs that train residential environmental educators. An unpublished dissertation (Haskin, 2003) examined novice teacher development in residential environmental education settings. Haskin observed how novice EE teachers at three different residential environmental outdoor education centers developed their instructional proficiency. He asserts that “The residential setting provides a unique space for learning to teach because a supportive peer community, coupled with the repetition of lessons, can help novice instructors become comfortable and confident” (Haskin, 2003, p. 4).

Haskin’s (2003) observations of the new instructors are specific to a practicum type of experience; however, his theories on the developmental stages of instructor growth can be instructive for developing a best practices model for the programmatic framework for education of residential EE providers. For example, he recommends providing structured time for reflection and peer sharing with specific emphases at different times of the year. The Results section discusses recommendations that pertain to this project.

### **III. Residential and Alternative Graduate Studies Programs in Environmental Education**

Graduate-level programs in environmental education are a part of many institutions of higher learning. One source lists 58 entries for colleges and universities in the United States that offer Master’s programs in environmental education (Grad Schools.com, n.d.). While many of the Master’s programs occur in traditional college classroom settings, a number extend their environmental education curriculum beyond

the physical spaces of campus buildings. The websites of several universities, including the University of Wisconsin-Stevens Point, Florida Atlantic University, the University of Idaho, Penn State University, and Antioch University New England, list a for-credit environmental education practicum in addition to academic coursework as part of their regular curriculum.

In addition, at least seven environmental learning centers (ELCs) are not part of a traditional college or university. Those ELCs have arrangements with an accredited school to offer for-credit learning experiences that are primarily field-based. Five of those, Wolf Ridge ELC (Wolf Ridge Environmental Learning Center, n.d.), North Cascades Institute (North Cascades Institute, n.d.), Gore Range Science School (Gore Range Natural Science School, n.d.), McCall Outdoor Science School (McCall Outdoor Science School, n.d.), and the Delaware Nature Society (Delaware Nature Society, n.d.), offer field experience for credit with a specific university. Two others, Teton Science School (Teton Science School, n.d.) and IslandWood (IslandWood, n.d.), offer credit accepted at select colleges or universities towards graduate degree programs in education and other majors.

Field experiences for graduate students are often a combination of studying ecology or natural and cultural history as well as preparing lessons and teaching the mostly K-12 school students that the organization serves. Teton Science School, North Cascades Institute, Gore Range Natural Science School, McCall Outdoor Science School, and IslandWood are examples of graduate programs at ELCs that offer residential programs for K-12 students. Pine Jog at Florida Atlantic University (Pine Jog



Environmental Education Center, n.d.) and Merry Lea at Goshen College (Merry Lea Environmental Education Center, n.d.) are residential for the graduate students, but not for their education programs offered to K-12 students. In addition, graduate students in most of the programs spend at least one year in traditional academic classroom settings in addition to their field coursework. Only Pine Jog and Merry Lea ELC are residential onsite for the Master's candidates for the entire scope of the program.

The graduate programs use several different methods of integrating academic coursework and practicum or fieldwork. For example, Teton Science School divides approximately 20 graduate students in their program into two cohort groups that rotate in two-week cycles. One cohort works with the school groups that come to Teton, while the other cohort concentrates on coursework. At Pine Jog, the graduate students work with environmental center visitors around their formal course schedules. At Merry Lea, the nature center programs drive the schedule, and the coursework primarily fits around the nature center programs, with a few exceptions.

Commonalities among the residential Master's programs are:

- required hands-on teaching experiences working with school-aged participants day and/or residential programs;
- academic coursework in EE, natural history, and other related topics are part of the curriculum;
- culminating (non-thesis) project and/or portfolio;
- graduate credit for all or part of the experience; and

- a coordinator who acted as a liaison among the students, instructors, and institution(s).

#### **IV. Curricula for Alternative Environmental Education Graduate Programs**

A UNESCO document suggested best practices for general course content for training environmental educators, emphasizing how critical instructor training is for program success. For university-level content, UNESCO advocated this sequence of courses:

First-year content:

- ecological concepts;
- environmental science concepts—energy, land use management, etc.;
- relationship between the environment and the economy; and
- relationship of the environment to all professions.

Second-year content:

- courses taught at this level would be representative of the Tbilisi goals;  
and
- content would reflect skills needed for that particular field of work  
(Knapp, 2000, p. 37).

Among the alternative EE Master's programs investigated, the curricula used in alternative EE graduate programs include a mixture of content areas specific to the particular ELC site, science courses, outdoor skills, and educational theory and methods. For example, Teton Science School begins with a four-week intensive program that

“provides an introduction to local natural history, naturalist tools, backcountry travel skills, field teaching techniques, elementary-level curriculum design, student/group management, and safety” (2007, web page). IslandWood’s courses range from Natural History, Ecology and Environmental Education: History, Issues and Methods, to Science Methods: An Inquiry Approach along with Social and Philosophical Foundations of Education (2007).

Two of the alternative programs offer only university-based courses for their students. At Pine Jog ELC, the courses taken at Florida Atlantic University are part of the regular Master’s program in Education. Merry Lea has courses specifically developed for that program—Goshen College offers no other Master’s coursework other than courses for a Master’s in Nursing.

## **V. Residential Life Curricula**

None of the Master’s programs had curricula developed specifically for times when the school-aged participants were not engaged in formal EE lessons. None of the ELCs investigated had any courses or specific training for the non-program parts of the residential experience, or residential life. This in-between time is ideal for facilitating the important emotional, intellectual, and spiritual growth that takes place outside of the formal education programs as the participants interact with their peers (Hotchkiss & Kowalchick, 2002). Since boarding schools have extended periods of time when the students are not in formal classes, they have developed theories and practice dealing with residential life.

According to Hotchkiss and Kowalchick (2002), a residential-life curriculum provides an intentional path that leads toward emotional and social growth for the students and staff involved in a residential-life setting. Not all of the time outside of formal education is structured, but a residential-life curriculum ensures it is purposeful instead of haphazard. Students in a residential setting can gain developmental skills, such as taking care of physical needs, organizing time, exercising self-control, and learning independence. Under a well-designed residential curriculum, students can have opportunities to develop leadership skills, practice critical and reflective thinking, and apply environmentally responsible behavior to their own lives. All are desirable attributes to carry forward as environmentally literate adults.

## **VI. Educating Adult Learners**

Understanding adult learners is an important factor in developing a framework and curricula for graduate studies. Most adult learners have multiple reasons for enrolling in higher education. Knowing their motivation for learning can help in planning learning experiences for maximum efficacy. For example, goal-oriented learners usually have a specific objective in mind. Goal-oriented learners will use whatever method is necessary to obtain that skill or knowledge: reading books, taking courses, choosing activities that will help them learn. Activity-oriented learners are involved for the sake of the activity and tend to learn best by doing. Other learners value learning for its own sake. They tend to be avid readers, and take courses, join groups, and even choose jobs for potential learning opportunities (Cross, 1981).

Researchers propose differing theories about adult learning. Knowles (1984) theory of andragogy (how to help adults learn) is one of the best known, and one of the most controversial. This theory has become controversial in part because Knowles eventually modified his original theory by clarifying that andragogy and pedagogy (how to help children learn) exist along a continuum; therefore, implying that these are not strictly adult characteristics. One researcher asserts that these are just good learning practices (Merriam & Caffarella, 1991).

Knowles defines these assumptions as adult-learner characteristics:

- A person becomes more self-directed as he gets older;
- an adult has many life experiences to draw on as he learns;
- inclination for an adult to learn is linked to job or social responsibilities;
- adult learners usually want to learn for present, rather than future applications (problem-centered learning rather than subject-centered learning); and
- internal factors are often the prime motivators for adult learning (Knowles, 1984).

Speck (1996) proposes that best practices for adult learning provide:

- real-world applications;
- assumptions of competency;
- support from peers and instructor;
- constructive feedback;
- small-group activities for application, analysis, synthesis, evaluation; and
- accommodation for individual needs and differences.

## **VII. Qualitative Research for this Study**

Since no body of literature that describes best practices in developing and implementing a programmatic framework for graduate studies in residential environmental education exists, the most effective way to gather and analyze the data is qualitative methodology. Data for qualitative analysis can include interviews of groups or individuals, observed behavior, participant observation, media accounts, cultural artifacts, and documents. Auerbach & Silverstein describe qualitative data as “stories rather than numbers” (2003, p. 24).

Qualitative research methods are especially useful to study diversity and differences, which are common when studying peoples’ experiences in organizations. The researcher analyzes descriptive words and sentences about a particular observable situation, studying how participants experience the subject of the research. Participants are the experts in their own situation, rather than the researcher, and the researcher learns from what they say or do. The researcher uses participants’ knowledge bases and develops hypotheses from those (Auerbach & Silverstein, 2003).

In qualitative research, “an awareness of the subtleties of meaning of data” (Strauss & Corbin, 1990, p. 41), or theoretical sensitivity, gives the researcher insights and the ability to recognize and separate pertinent from non-pertinent data. Theoretical sensitivity comes from the literature search as well as the researcher’s professional and personal experiences. As the researcher analyzes the data, theoretical sensitivity increases (Strauss & Corbin, 1990).

A researcher can use non-technical literature, such as letters, handbooks, reports, and videos, to help her understand the makeup and culture of an organization. Because these data are harder to authenticate, Strauss & Corbin (Strauss & Corbin, 1990) advise crosschecking non-technical literature with data gathered from observation and interviews.

Analyzing qualitative data is a methodical process of determining relevant text (in this case from interviews), grouping the repeating ideas, and building understanding of the implications of that data. Differences as well as commonalities can contribute to the researcher's overall understanding of the data. Systematic analysis and careful documentation will help ensure that the interpretation is justifiable and transferable (Auerbach & Silverstein, 2003).

## **VIII. Summary**

The literature provides evidence that environmental leadership and environmental education are critical components in the development of environmental literacy. Residential environmental education is an effective way to achieve that growth. Equally important are well-trained environmental educators.

Although a variety of choices for graduate-level degrees in environmental education exist, none follows the model of training environmental educators in a residential setting with coursework and practical experience in residential life. No body of literature exists from which to derive best practices for the development of a graduate studies program in residential environmental education. Boarding schools

have expertise in residential life. This project proposes the development of a program that will tap into that expertise and meet the specialized training needs of residential environmental educators.

Qualitative methodology provides the most effective manner for gathering and analyzing the data where no body of literature exists, as for this research problem.

Qualitative data analysis, along with information on tested practices for adult education and alternative Master's programs in environmental education, will provide the scaffolding on which to build the framework and curriculum for the UWSP Master's in Residential Environmental Education



## CHAPTER THREE: METHODS

This study consists of the development, implementation, and formative evaluation of a programmatic framework and curriculum for a Residential Graduate Program in Resource Management/Environmental Education. Based on the literature review (Chapter Two), no known graduate programs existed that could be adapted or used as a model. Therefore, the project required developing appropriate methodology for creating this graduate program.

The definition of the programmatic framework is the total experience for a residential Master's program, comprising working with students, resident life, college-credit courses, non-formal workshops, practical experience, and graduate assistantship. The research is to obtain, analyze, and interpret data from a variety of sources and use it to develop the programmatic framework and curriculum. This chapter covers research design, data collection, and data analysis methods used in this study. An outline of the chapter follows:

### Research Design

#### I. Research Methods

- A. Introduction
- B. Participant selection and methods
- C. The long interview
- D. Non-structured interviews
- E. Documents

#### II. Data Collection and Analysis

A. Obtaining background information

B. Subproblem one—obtaining information from the stakeholders

1. Identifying stakeholders
2. Developing the questionnaire
3. Pilot testing the questionnaire
4. Interviewing primary stakeholders
5. Non-structured interviews and document collection

C. Data analysis

1. Long interviews
2. Non-structured interviews and documents

III. Applying Data to Subproblems 2-7

A. Subproblem 2

B. Subproblem 3

C. Subproblem 4

D. Subproblem 5

E. Subproblem 6

F. Subproblem 7

IV. Summary

## **I. Research Methods**

### **A. Introduction**

The goal of this research design was to create a logical approach for collecting and interpreting the data necessary to develop the programmatic framework for a graduate program in residential environmental education. A review of the literature revealed that there is no existing research on this type of program so previous studies were not available to guide the selection of research methods. Auerbach and Silverstein (2003) advocate the use of a qualitative approach as an effective method for generating research hypotheses based on participant perceptions and knowledge. Qualitative methodology, they argue, allows a researcher to develop insights and understandings about a particular phenomenon for which there is not an adequate knowledge base. A review of various research methods along with careful analysis of the research problem and setting suggested that this particular method was well suited to the task.

By using a qualitative approach, one is able to obtain answers to questions specific to a phenomenon with many perspectives. The participants' expertise about their specific experience aids in finding "meaningful patterns" that help explain their situation (Auerbach & Silverstein, 2003). Details are likely to come forward in the participant interviews; the investigator records exact words and analyzes them to "generate understandings rather than the interpretation of numbers" (McReynolds, 1993, p. 56).

Another qualitative research descriptor is “naturalistic;” that is, many of the interactions between investigator and participant occur in an informal way as the investigator attempts to experience reality from the perspective of each participant (Taylor & Bogdan, 1984). All perspectives are valuable, and the results are viewed as a whole as the researcher develops “concepts, insights, and understandings from patterns in the data” (Taylor & Bogdan, 1984, p. 5). The specific qualitative methods used for this thesis follow.

### **B. Participant Selection and Methods**

In qualitative research, the investigator most often selects participants because they have breadth and depth of experience and information about the topic of study (McCracken, 1988). When using some qualitative approaches, sample size is not generally determined in advance. Each new participant therefore represents a potential prospective to add to the data. Interviews continue until new participants are reiterating information that has already been collected. At that point, the sample size is large enough to reach theoretical saturation and no additional data needs to be collected (Auerbach & Silverstein, 2003).

This study identified four populations likely to have breadth and depth of experience and information about graduate programs in environmental education and/or residential life. Those four groups comprised:

- Directors/coordinators of existing alternative graduate environmental education programs that met criteria described under Subproblem 1 below;

- Graduate students in an alternative graduate environmental education program that was under the auspices of a university;
- Residential interns at Conserve School; and
- Staff and administrators at Conserve School involved with residential life.

Each of the alternative graduate programs, Conserve School, UWSP, and the CNR provided background information in the documents referenced in the results and discussion sections of this thesis and listed in Appendix A.

Table 3.1 lists each population and the data collection method. The next section details data collection methods.

**Table 3.1**  
**Populations and Methods Used**

<b>Population/Data source</b>	<b>Method</b>
Directors/coordinators of existing alternative graduate programs	Non-structured interviews
Graduate students at Pine Jog	Long interviews
Conserve School Residential Interns	Long interviews
Conserve School staff	Long interviews
Conserve School	Documents
UWSP/CNR	Documents
Alternative Graduate Programs	Documents

### **C. The Long Interview**

The long interview is one of the most successful means of gathering accurate data in a situation where an outline of day-to-day practices in the context of that situation is important. McCracken (1988) further asserts that the long interview provides an appropriate amount of time to collect significant data without an extensive time commitment from the participants.

Using this approach, it is best to develop a questionnaire to guide the long interviews before the interviews begin. Using a questionnaire helps attentiveness to the respondent, makes sure the interview has a definite track, and helps the investigator ask identical questions in an identical sequence (McCracken, 1988). In addition, the questionnaire should consist of open-ended questions. Merriam (1998) and McCracken (1988) recommend beginning with broad descriptive questions before moving into specific detail-seeking questions. Prompts for eliciting further information help obtain answers when an informant has deviated from the subject or stopped talking before answering the question.

#### **D. Non-structured interviews**

Non-structured interviews are informal and very similar to conversation. The questions are not determined in advance in a non-structured interview. Questions about an observed participant's activities or open-ended questions that begin, "Tell me about . . ." are often effective. Merriam (1998) suggests using this type of interview when exploring and learning background or basic information about a phenomenon. Information from this type of interchange can be very helpful in structuring questions for more formal interviews.

#### **E. Documents**

Documents are another rich source of information. Merriam (1998) defines documents as communication of any type. A document can be an article, manual, memo, diary, letter, or a document created during the course of the study. Documents should be verified as authentic and accurate; in addition, documents

should be used only in conjunction with other data gathered (Merriam, 1998; Auerbach & Silverstein, 2003).

## **II. Data Collection and Analysis**

### **A. Obtaining Background Information**

For a qualitative study, obtaining background information is a way of increasing theoretical sensitivity, insights, or understanding towards the research (Strauss & Corbin, 1990). Theoretical sensitivity helps a researcher understand his own preconceptions to help maintain distance, improves listening and data organization capabilities, and assists as a way to guide and refine the development of long-interview questions (McCracken, 1988).

Before beginning the assessment of stakeholder needs and interests, it was necessary to identify and understand some common practices for graduate level environmental education coursework and experiences, thereby increasing theoretical sensitivity. Investigation of other residential graduate programs in resource management/environmental education that could help guide or lend support for this type of program began in January 2008. Referrals from the Gradschools.com website, queries to professional colleagues in the Association of Nature Center Administrators (ANCA), web searches, and referrals from the centers contacted accomplished this aim.

Identification of those organizations led to their websites, which provided basic information about their respective programs. Selection criteria for further

study of those organizations that had programs most similar in scope to this study followed these criteria:

- credits earned during the program were applicable to a Master's degree in education, environmental education, or environmental studies at a college or university;
- an aspect of the program had a residential component;
- practical experience during the program included teaching environmental education lessons to youth in a non-formal setting; and
- the program was at least two semesters long.

Next, the directors of each of those alternative graduate programs (AGPs) were contacted by email (Appendix B). All program directors/coordinators responded and agreed upon mutually convenient times for telephone interviews. One-on-one, non-structured telephone interviews took place with the graduate-program coordinators of IslandWood, Teton Science School, North Cascades Institute, Gore Range Natural Science School, and Wolf Ridge Environmental Learning Center in March 2008. Merry Lea Environmental Education Center began its graduate program in the summer of 2008. An interview with Merry Lea's director took place in March 2009.

For each of the non-structured interviews, each participant discussed the program at their center, giving clarification when necessary. Notes from each telephone interview were typed immediately following the call. Face-to-face interviews conducted with the Education Director and Program Coordinator at Pine



Jog Environmental Education Center underwent digital recording and then transcription. A list of these AGPs is included as Appendix C. Specific individuals were not identified to maintain confidentiality.

In addition, participants provided information detailing course scope and sequence for each of the alternative graduate programs in environmental education noted above. Appendix D lists the pertinent information related to each program. Discussion of the analysis methods for the non-structured interviews is in Data Analysis below.

**B. Subproblem 1: Assess potential needs/interests of stakeholders to be met by the programmatic framework.**

**1. Identifying Stakeholders**

To concentrate on the unique needs and concerns for a graduate program in environmental education that specifically address the residential life aspect of residential environmental education, the PAC identified the primary stakeholders to be interviewed as the residential interns, administrators, and staff involved with residential life at Conserve School.

**2. Developing the Questionnaire**

Working with the PAC, the researcher developed two questionnaires designed to elicit data for the subproblems: one for residential interns and the other for staff at Conserve School. Following McCracken's (1988) suggestions described under the Long Interview above, the questionnaire began with broad, open-ended questions and ended with more focused questions.

Objectives for information to be gathered helped to ensure that the questions met each objective. The graduate committee reviewed the questions, evaluating each question for its potential in meeting the stated objectives (Appendix E). Revisions to the questionnaire followed, in accordance with committee suggestions. In this manner, the committee validated the questionnaire for content and face validity. Next, an Institutional Review Board (IRB) Protocol for Original Submissions was completed and submitted, along with the questionnaire to the IRB for approval (Appendix F). The IRB granted approval.

### **3. Pilot Testing the Questionnaire**

Subsequent to IRB approval, five graduate students helped pilot-test the questionnaire in long-interview settings. The graduate students were the only students in the environmental education Master's program at Pine Jog Environmental Education Center. They were appropriate pilot-test subjects because Pine Jog's program was the only identified two-year alternative graduate environmental education program run by a university. Proximity to the participants provided an opportunity for face-to-face interviews.

The graduate students learned about the study in general terms, received assurance of confidentiality in their answers, and signed a consent form. Each received a copy of the signed consent form (Appendix G). Digital recording and note taking to assist with recalling emphasis were effective techniques in gathering interview data. A description of transcription and analysis techniques for the long interviews is below in the analysis section. The identities of the participants were

not kept confidential; however, the methods used for data analysis ensured anonymity in their responses.

#### **4. Interviewing Primary Stakeholders**

From mid-January through the end of May 2008, the researcher spent 36 hours (two full days, including evening and overnight hours) each week at Conserve School. Over the course of four months, 11 residential interns and 20 other staff members involved with residential life as administrators and/or house parents participated in face-to-face long interviews (N = 31).

Long interviews with all Conserve School staff and interns took place at Conserve School in February through May of 2008. Before each interview, each participant received a general description of the project. Participants received assurance of response confidentiality. The identities of the participants were not kept confidential; however, the methods used for data analysis ensured anonymity in their responses. Each participant signed and received a copy of an informed consent form. Digital recordings and supplementary notes captured all long interviews.

During the interview, non-directed questions and planned prompts provided structure with each respondent. The use of non-directed questions helped ensure that respondents were able to relate their experiences in their own words. "Floating prompts," such as facial expressions or repetition of a single word from the participant's own words in a questioning tone encouraged an expanded answer.

If a participant got significantly off track, or a question did not provide a responsive answer, planned prompts proved to be effective (McCracken, 1988).

Interviews ranged from 40 minutes to 95 minutes in length, determined by the amount of detail provided by each participant. During the interviews, priorities were to ensure establishing an atmosphere of trust and confidentiality and to ensure that the participants received no guidance in their answers. In addition, there were no evaluative comments about what the participant was saying; instead, attentiveness conveyed through body language, facial expression, and non-leading prompts encouraged complete responses (McCracken, 1988).

Coding the transcriptions of the recorded interviews of the primary stakeholders protected participants' identities and ensured confidentiality. A description of the process of analyzing the responses is in the analysis section below. A list of needs and interests to be considered for subproblems 2, 3, 4, 5, and 7 was developed.

## **5. Non-Structured Interviews and Document Collection**

### **Conserve School**

In addition to the long interviews at Conserve School, the researcher spent over 200 hours meeting and interacting with the Headmaster, Assistant Head of School for Residential Life, Dean of Students, RIs, faculty, and staff. Experiencing the structure and culture of the residential-life program and the culture of the school added to the researcher's theoretical sensitivity (Auerbach & Silverstein,

2003). At the same time, Conserve School staff provided pertinent documents, including handbooks for students, residential-life staff, and staff training.

After obtaining information about the structure of evening house duty and the functions of the RIs within that structure from informal interviews with the Dean of Students, six RIs were shadowed and engaged in non-structured interviews during their evening house-duty assignments. Notes and comments helped to create a document detailing the structure of residential life. Residential-life staff reviewed it for accuracy (Appendix H).

## **UWSP**

The researcher spent 14 months meeting with UWSP-CNR Associate Dean of Outreach and Extension, the Director of Treehaven ELC, and other UWSP faculty and staff, collecting documents and other information pertinent to graduate studies in the human dimensions discipline of the College of Natural Resources. For a list of pertinent documents collected in this study, see Appendix A.

### **C. Data Analysis**

#### **1. Long Interviews**

Qualitative analysis of the long interviews began during the interview process, after transcription of the first five interviews. The process of open coding, or examining and analyzing the data, began by reading through the interviews and selecting one that seemed to have the most responses toward the data needed in most or all of the subproblems. Beginning with that richest interview, relevant text selection involved reading the responses line by line, and selecting text that was

pertinent to the development of the graduate program in residential environmental education (Auerbach & Silverstein, 2003; Strauss & Corbin, 1990). Relevant text was copied to a spreadsheet and assigned a number as a proposition. Each repeating idea received appropriate notation and each new idea became a new proposition. At this lowest level of analysis, it was important not to build categories, but rather to organize the data (McReynolds, 1993).

The next potentially richest interview underwent examination in the same manner, identifying relevant text, and then comparing it with the propositions already identified. Propositions repeating ideas were grouped and coded numerically to indicate the interview identification number and appropriate page number. Each new proposition received a new number. Transcription of each subsequent interview incorporated that interview's relevant text using this same method of open coding.

After coding all of the transcripts, the initial analysis step of looking at commonalities in the relevant text to build subcategories began. The propositions supported each category. As the subcategories emerged from the data, each category received a conceptual name that was more abstract than the propositions (also called concepts) (Strauss & Corbin, 1990). Name selections provided a vivid cue that related logically to the supporting propositions. Sometimes, a participant-provided phrase was an especially apt category name (Auerbach & Silverstein, 2003).

Occasionally, a single proposition did not fit into a category. Auerbach and Silverstein (2003) recommend examining that proposition and determining whether it contributes to understanding the data. If not, that proposition would be superfluous; otherwise, it is retained. Auerbach and Silverstein note that “individual differences have an important place in [the qualitative] paradigm” (2003, p. 59).

Next, data were grouped into subcategories, then into categories, and finally into themes, or core categories, using increasingly abstract ideas to describe how they were related to one another, making comparisons between likenesses and differences. While other researchers might not agree on a chosen theme or category, they should be able to follow the methodology used to arrive at that theme or category (Auerbach & Silverstein, 2003). By going through the data repeatedly and analyzing the phrases and words, the researcher becomes aware of multiple possibilities of meanings for those words. Along with reviewing the literature, this process adds to the theoretical sensitivity and allows methodical choices when categorizing the data. (Strauss & Corbin, 1990).

The ideas and inferences generated from themes in the data form the basis for the recommendations toward each of the subproblems. Whenever possible, triangulation among data from the documents, long interviews, and non-formal interviews added credence to the conclusions and recommendations in Chapter Five.

Two administrators, a faculty member, and an RI who participated in the interviews read and commented on the results narrative. All reviewers noted that the data analysis presented an accurate picture of their ideas. One reviewer commented, “All the information is great and I’m impressed by how carefully and thoughtfully you’ve organized and analyzed it.”

## **2. Non-structured interviews**

Analysis of the information obtained from non-structured interviews with the directors of alternative graduate programs used the qualitative methods described in the long-interview section above. The resulting data were integrated into the appropriate propositions, subcategories, categories, and themes with the long interviews as reported in Chapter Four.

## **3. Documents**

Documents provided secondary resources for this research. The researcher incorporated information from documents, where appropriate, in Chapter Five Conclusions and Recommendations. Using the documents enabled crosschecking the qualitative analysis results.

# **III. Applying the Data to the Subproblems**

## **A. Subproblem 2: Define, develop, and implement the programmatic framework.**

The PAC received summaries of analyzed information and pertinent documents (Table 3.2), followed by framework drafts that they reviewed. The PAC



also participated in researcher-facilitated meetings to develop broad goals and learner outcomes for the program.

Desired goals and outcomes formed the basis for a draft of the programmatic framework. The Project Steering Committee (PSC), comprised of UWSP/CNR and Conserve School personnel, received drafts of the programmatic framework. The PSC reviewed and commented on the information, revisions occurred as appropriate, and the revised drafts again submitted for input. The PAC approved the final programmatic framework.

**Table 3.2**  
**Types of Data and Sources related to Subproblem 2**

Type of data	Source
Analyzed interview data relevant to resident life, academic coursework, practical experience, graduate assistantships	Conserve School stakeholders, Pine Jog Graduate Students,
Documents describing existing practices for students	Existing alternative graduate studies programs, Conserve School, UWSP

**B. Subproblem 3: Facilitate the development of the curriculum as part of the programmatic framework.**

The PAC reviewed the analyzed information and pertinent documents (Table 2) relevant to the development of the curriculum. The PAC and other CNR staff and faculty examined drafts of goal and learner outcomes documents in relation to CNR requirements for graduate program coursework and made suggestions to refine the drafts.

The PAC reviewed information, provided input for the curriculum design, and reviewed the subsequent drafts. Recommendations from the PAC were incorporated and the proposed curriculum was submitted to the Program Academic

Team (PAT), a standing committee comprising UWSP/CNR graduate faculty and the researcher. The researcher facilitated the development of the final curriculum.

**Table 2.3**  
**Types of Data and Sources related to Subproblem 3**

Type of data	Source
Analyzed interview data relevant to goals and objectives of the academic curriculum	Conserve School stakeholders, Pine Jog Graduate Students
Documents describing curriculum	Existing alternative graduate studies programs, Conserve School, UWSP
Documents describing participant interests	Conserve School Residential Interns

**C. Subproblem 4: Facilitate the development of an advising plan for the program.**

Documents describing the parameters of the current UWSP/CNR advising protocol and information gleaned from stakeholder interviews guided the development of the program-advising plan. The PAT considered costs of advising, reviewed advising protocols, and recommended revisions. The PAT approved the final advising plan for the program, in accordance with CNR protocols.

**D. Subproblem 5: Develop and implement a marketing plan.**

Marketing materials from CNR graduate programs, materials and information from the seven alternative graduate EE program directors, and analyzed information from Subproblem 1 provided foundation information for marketing. PAC and PSC members reviewed the marketing plan drafts and made suggestions for subsequent drafts.

Website design and brochure development, with design assistance from UWSP and Conserve School, kicked off the implementation part of the marketing plan. During the development process, PAC and PSC members and Conserve School

staff reviewed information and designs and recommended appropriate revisions. After making necessary changes, the website went live on March 12, 2009, and a brochure followed on March 19. The marketing plan will undergo revision based on information gathered from students who apply to the program in 2009.

**E. Subproblem 6: Complete formative evaluations of each of the above subproblems as they are being developed and implemented.**

Details for this subproblem are specifically addressed in each of the other subproblems.

**F. Subproblem 7: Develop a participant evaluation protocol.**

As a basis for developing evaluation protocol, alternative environmental education programs provided information concerning their evaluation methods, including a program-evaluation report from Teton Science School listed in Appendix A.

Meetings with the PAC and selected stakeholders helped to determine what participant outcomes the evaluation will be measuring. The resulting evaluation protocol outlines the outcomes to be evaluated, recommends possible evaluation instruments to be used, and proposes timelines for evaluation, along with who will do the evaluations. The PAC and PAT reviewed the protocol, made revisions, and the PAC accepted the final protocol.

#### **IV. Summary**

For this project, the qualitative paradigm was an effective methodology to assess the best way to approach development of the Master's program in residential

environmental education. Information obtained in an academically sound and accurate manner facilitated recommendations to decision makers throughout the process.

Two parallel goals occur within this study. The first goal is to determine the feasibility of the program through the methodology in this chapter. The second goal is to apply the research results to a programmatic framework. The collected information provided background for the feasibility and initial development of the project, and given no major red flags, the application of the research results to the next steps of the project proceeded.

## CHAPTER FOUR: RESULTS

This chapter provides the results of the research contributing to the development, implementation, and formative evaluation of a programmatic framework and curriculum for a residential graduate program in environmental education (EE).

Two parallel goals exist within this study. The first goal is to determine the feasibility of the program. The second goal, reported in Chapter Five, is to apply the research results to a programmatic framework.

This chapter reports the results of the research based on the qualitative methods used to gather, store, and interpret the data. The results are in a theme-base format, rather than by subproblems. Chapter Five will report and discuss the application of the results to each of the research subproblems.

An outline of this chapter follows:

### I. Introduction to the Results

#### A. Participant Demographics

1. Primary Stakeholder Interviews
2. Other Long Interviews
3. Non-structured Interviews

#### B. Analysis

#### C. Rationale for Reporting Results as Themes and Categories

### II. Themes and Supporting Categories

#### A. Outline

## B. Narrative

### III. Summary

## I. Introduction to the Results—Data Collection and Analysis

### A. Participant Demographics

#### 1. Primary Stakeholder Interviews

Proposals for this study occurred under circumstances that are very specific to Conserve School and UWSP/CNR. Therefore, the primary stakeholders for the program are narrowly defined as Conserve School, Treehaven, and UWSP/CNR. In addition to these primary stakeholders, secondary stakeholders include current graduate students in a university-based, alternative-graduate EE program (AGPs) and directors, educators, and coordinators from selected graduate EE programs. This section reports the results of interviews with members of both primary and secondary stakeholder groups.

Chapter Five will discuss data from documents in support of the study.

Thirty-one staff members from Conserve School who were involved with residential life participated in long interviews. Eleven of them were Residential Interns (RIs), college graduates hired to provide residential-life experiences for the high school students attending Conserve School. The RIs ranged in age from 22 to 28 (4 men and 7 women). Their undergraduate degrees were in natural resources (4), environmental studies (3), psychology (1), education (1 who is a certified high school teacher), international studies (1), history and Chinese language (1).

The 20 Conserve School staff who participated in long interviews ranged in age from 32 to 58 (7 men and 13 women). They were school administrators (4), student life

staff (2), administrative staff (3), and faculty (10). Of the staff members, 17 functioned as house parents. The remaining three served residential life in administrative functions.

## **2. Other Long Interviews**

Five graduate students at Pine Jog Environmental Education Center pilot tested the long-interview questions. These students participated because the Pine Jog graduate EE program was the only university-based, alternative-graduate program in EE identified at the time of the interviews. The five students ranged in age from 23 to 31 (4 women and 1 man). Their undergraduate degrees were in education (2), environmental education and interpretation (1), and biology (2).

## **3. Non-structured Interviews**

Nine program coordinators, directors or educators on the staff of alternative graduate programs in environmental education participated in non-structured interviews. They were from IslandWood (1—coordinator), Teton Science School (2—director, coordinator), North Cascades Institute (1—coordinator), Gore Range Natural Science School (1—director), Pine Jog Environmental Education Center (2—director/educator, coordinator), Wolf Ridge Environmental Learning Center (1—educator), and Merry Lea Environmental Education Center (1—director). Three were male and six were female.

## **B. Analysis**

Analysis began by selecting relevant text from interview transcripts and notes. Through this process, the researcher identified 273 propositions, or pertinent ideas,

from the relevant text that addressed a research concern (Auerbach & Silverstein, 2003; Strauss & Corbin, 1990). Propositions, labeled P1 through P273, were direct quotes or paraphrases from participants' words.

As each piece of relevant text became a proposition on its own or coupled with an existing proposition, the researcher made a notation for the source of the relevant text at the end of that proposition. The notation referenced the interview number and the page number for the relevant text. For example, a proposition from relevant text in interview number 8, page 4 of the transcript was denoted: (8, 4). A proposition repeated by several interview participants had notations for each applicable interview and page number in the following manner: (8, 4)(23, 3)(16, 2). Interviews numbered 1-36 indicated long interviews. Interviews numbered 37-45 were non-structured interviews.

During the process of selecting relevant text, the researcher did not always realize the importance of a particular statement and left it out. When it became evident that an important idea was emerging from a later interview, the researcher returned attention to previously analyzed transcripts and selected text that supported that idea as suggested by Auerbach and Silverstein (2003). Auerbach and Silverstein further assert that there is not one correct way to interpret the data. As long as the researcher's interpretation is "supported by the data, then it is valid, even if there are other ways to interpret the data" (p. 31).

Next, repeating ideas fell into 107 subcategories, labeled SC1 through SC107. At the subcategory level, a conceptual name, logically related to the data it represented, but more abstract, described the subcategory (Strauss & Corbin, 1990). Following that,



the subcategories comprised 32 categories, labeled A-AF. The researcher analyzed the categories, looking at patterns in the data and developed seven themes (T1—T7) based on those patterns (Auerbach & Silverstein, 2003).

Occasionally during the analysis process, the researcher combined repetitive propositions or subcategories. In that case, the remaining propositions or subcategories retained the original numbering scheme. Thus, some numbers are missing from the sequences of propositions and subcategories.

At each level, the labels were progressively more holistic. That is, the category descriptions were more holistic than those of the subcategories. The theme titles were more abstract than the categories. Data suggested theme titles, rather than using pre-identified categories or themes (Strauss & Corbin, 1990). McReynolds says, “The strength is perhaps not in the titles of the themes, but in fact that the themes dwell in the protocol of the project, which any researcher may follow for further verification, scrutiny, and new insight” (1993, p. 98). Appendix I lists themes, categories, subcategories, and propositions derived from the data, along with coding showing the source(s) for each proposition.

### **C. Rationale for Reporting Results as Themes and Categories**

In qualitative research, results are commonly in thematic form, rather than categorized by subproblems. The narrative description of themes and categories is an effective way to guide the reader of this thesis through the analytic logic for the conclusions (Strauss & Corbin, 1990). This holistic way of reporting creates the theoretical framework, which merges all of the interview data.

## **II. Themes and Supporting Categories**

### **Outline**

A narrative description of each theme and supporting category follows the outline.

#### **1. A positive culture nourishes a learning community.**

- A. Positive culture is apparent in community members.
- B. The culture supports learning opportunities and varied interests.
- C. Learning is valued on multiple levels.
- D. Overall, change is perceived as a positive part of the culture.
- E. An array of resources promotes well being.
- F. Graduate students are valuable community contributors.
- G. Encourage the growth of a positive culture.

#### **2. Selecting the right students increases chances for success.**

- H. Successful graduate students have appropriate personal attributes.
- I. Work and study habits need to be solid.
- J. Successful graduate students have passion, skills, and experiences to fill an available niche.
- K. Good selection practices increase the chances for success.
- L. Informal marketing strategies attract the target audience.

#### **3. Defining the structure and framework for a graduate program is key.**

- M. The program needs a defined structure.
- N. Outcomes for graduate students need definition and follow-through.
- O. Basic frameworks from other graduate programs can provide a model.

**4. Meeting the challenges of residential living requires specific training.**

- P. Residential life can be consuming.
- Q. Achieving balance is complex.
- R. Care of adolescents takes special skills and training.
- S. Training for residential life should be thorough and specific.
- T. Residential-life staff needs professional development time together.

**5. Support is fundamental to a successful experience.**

- U. Mentorship plays an important role.
- V. Resources help provide support.
- W. Peer support is vital.
- X. A dedicated support person is essential.

**6. Effective communication is critical.**

- Y. Communication issues lead to differing perceptions.
- Z. Internal communication issues affect the CS culture.
- AA. Lack of understanding creates tension.
- AB. Communication creates clarity.

**7. Building a community of learners involves multiple elements.**

- AC. Systematic training provides a foundation.
- AD. Academics give structure.
- AE. Meaningful experiences add reinforcement.
- AF. Vision focuses the community towards the future.

## **Themes and Supporting Categories Narrative**

In this narrative portion of the results, support for the themes and categories comes from paraphrases of the interview participants' ideas and, where indicated by quotation marks, the participants' own words. In this way, the reader will gain an awareness of the richness of the collected data and thus more easily follow the logic of the analysis.

### **Theme 1: A positive culture nourishes a learning community.**

#### ***A. Positive culture is apparent in community members.***

Without exception, participants in this study stated that they enjoyed working at Conserve School. First, many felt that working with like-minded people made it a special place. "It's nice being in a community that thinks similarly to the way I do" was a repeated comment. "The focus on being green and environmental . . . is one of the reasons I came [to Conserve School]." The common thread was part of what attracts people and was a reason many people stay.

In addition to connecting with others in common areas, participants perceived the faculty as having a deep passion for their particular discipline, and that faculty manifests passion through their teaching and their lifestyle. In addition, they are highly accomplished. "I think the faculty as a whole are really, really committed, and they're very talented. It's one of the most idealistic and skilled faculties I have ever worked with."

An awareness of a strong sense of commitment exudes from the staff. They strive to make the learning and residential time for the Conserve School students as meaningful and enjoyable as they can. In a boarding school setting such as this, say participants, there is not a way to measure the amounts of time and energy that staff put in to make Conserve School the learning environment that it is.

Although commonalities exist, the staff also identifies itself as being diverse. Backgrounds reflect that diversity—some staff members are from the traditional educational community, some come from professional careers in other fields. Cultural diversity, with staff from China, Mexico, Russia, and India, pervades. Some people mentioned ideological differences. Regardless of their differences, overall they are kind and respectful towards one another. “And that’s the thing that makes me happy to come to work every day.”

***B. The culture supports learning opportunities and varied interests.***

Residential interns now at Conserve School have opportunities to mature, grow, and build their resumes, according to participants. Because the faculty and staff have breadth and depth of experience, the RIs have access to valuable mentors during their tenure here. This type of access has given many of the RIs opportunities to pursue some of their personal as well as professional interests.

***C. Learning is valued on multiple levels.***

The culture at Conserve School is one of learning for students, staff, and teachers. Participants note, “[there is] never a missed opportunity for growth for faculty as well as students.” One of the benefits of having so many talented people

living and working together is that proximity presents many opportunities to learn from one another. Residential interns bring in skills and knowledge, too. Potential exists for RIs to teach each other, the staff, and students inside the classroom in addition to outside.

***D. Overall, change is perceived as a positive part of the culture.***

Participants revealed that when Conserve School first opened its doors as a high school after two years of planning and building, plans were to have each dorm (house) structure resemble a family situation. They planned for faculty to carry a teaching load during the day and act as house parents during non-school hours. Faculty still act as house parents, but RIs support them, performing the majority of the day-to-day residential-life functions, such as night and weekend duties.

In six years, the school has undergone changes in leadership and changes in paradigm. Staff considers Conserve School to be “a young, growing school that is still evolving.” Some of the changes have been difficult. Staff members have left, sometimes because of differing opinions about the best way to proceed. Not everyone who is still at Conserve School agrees on all of the decisions that have brought the school to where it is today. Despite sometimes-contentious decisions, an air of optimism prevails. Several people echoed these sentiments: “There is individual excitement about change and about the school getting its act together” and “we are all in the same boat and we’re pulling the oars at the same time.”

***E. An array of resources promotes well-being.***

Many staff people consider living and working at Conserve School to be a privilege. “The campus is beautiful—it’s magical. People choose these kinds of locations for vacation and we get to live here all of the time.” Indoors and out, there are many resources available.

The apartments are well appointed and comfortable. Many staff members look on their living quarters as the “best, most well taken care of apartment I’ve ever lived in.” They feel at home and comfortable, and are able to take advantage of an “amazing library,” personal laptop computers and software. The school provides cultural events, music, and the use of a variety of facilities for residents.

Fully equipped fitness facilities and recreational gear such as kayaks, bicycles, skis, and snowshoes are available for residents, and there are trail systems and lakes in the forest on which to use them. “It’s an amazing place to live and work. You can take the kids out [into the woods] and show them what they’ve just learned.”

***F. Graduate students/interns are valuable community contributors.***

The current RIs contribute activities and programs to residential life at Conserve School. “They have brought talents and the time to do things that no one else has,” including a variety of outdoor activities such as orienteering and adventure racing, and additions to weekend activities. They have launched new programs, such as the Green Bike Program, recycling initiatives, and community-service activities that will continue after they leave.

Staff members see the RIs as bringing vital energy and creativity to the residential life program. RIs suggest new ways of doing things, new ways of thinking, and carry ideas out with a sense of fun and excitement. They provide fresh perspectives, and new knowledge. “The work they do is essential work . . . they improve the overall quality of the effort here at the school.”

Since they are younger people in the community, the high school students can often relate better to the RIs and tend to have good rapport with them. The RIs are positioned to act as role models and mentors for the high school students.

These teenagers [students at Conserve School]—their next step is to become college students. It’s useful for them to be interacting with younger staff that are very close to that college student character. [They see that] this is where I’m going next; this is how I get there. RIs are good role models in that respect. (25,5)

***G. Encourage the growth of a positive culture.***

Environmental learning centers with alternative graduate programs (AGP) encourage inclusion and frequent communication: “Graduate staff is seen as full staff members. They have equal input in decisions; their ideas and opinions are valued and shared.” The AGP participants say that graduate students are involved in the culture from the beginning of their experience with a thorough orientation. They participate in staff meetings and staff planning days. They serve on teams and take on responsibilities.

To sustain the culture of a positive learning environment, directors of the graduate programs offer planned outings to canoe, hike, or go birding. They schedule social activities early in the program. They promote participation. “I try to empower



the graduate students. I tell them, you are in charge of what you want to get out [of this program].” One participant encourages, “Create a culture of learners, and then let the culture do the teaching.”

## **Theme 2. Selecting the right students increases chances for success.**

### ***H. Successful graduate students will have appropriate personal characteristics.***

One of most uniformly expressed concerns of staff members at Conserve School is that the people who work there, from administrators to support staff, need to like teenagers, “even if they drive you nuts, you still need to enjoy them.” In addition to liking them, many people emphasized the importance of having experience working with youth, and feeling comfortable around them. They stressed the value of relationships with the students: “You’re like their aunt or their uncle in a lot of ways.”

Other participants indicated that if a person is going into EE as a career, one needs to be “good with children, but also you really need to be good with every age. You interact with a lot of people.”

Self-confidence is another trait mentioned by several participants, both for working with the students and for personal success.

Having confidence in who you are and what you think is right is really important for working with these teenagers. I found out right away that if you're hesitant or reluctant, no one's going to read your mind, no one's going to know what you need. (4,4)

Beyond the foundation of enjoying working with youth and self-confidence, participants listed a number of personal characteristics that would help a graduate student be successful. For example, they need to have a sense of direction, to know

what they want to attain from graduate school, “they have explored options and decided EE is what they want to do.” They need to be self-starters, able to “discern a need and run with it.” Participants identified self-motivation as an essential characteristic.

Graduate students should be patient and flexible to be able to deal with working and living in a community setting. They need to be outgoing and have high energy and enthusiasm for leading activities and residential-life duties. “I would like to see people with hard work ethics” was a repeated sentiment. Participants mentioned teamwork and cooperation as being vital, too.

***1. Work and study habits need to be solid.***

Even though many participants recognized work ethic as being important, many of them also recognized inconsistencies in work habits among the current RIs. “I think there are some who really have the spirit. They have the commitment. Then you’ve got some that I think are just kind of going along.”

Some participants were concerned about poor attitudes they have observed in some of current RIs when asked to do certain tasks. Those participants expressed the importance of “being a team player” and “doing all it takes,” even when a task is a part of the job that an individual might not like.

Participants from existing graduate programs stated that successful students are fully involved in their graduate endeavors. They demonstrate a willingness to do what people ask and are consistent, hard workers. Successful students are also active and willing learners.

***J. Successful graduate students have passion, skills, and experiences to fit an available niche.***

For an environmental education graduate program, participants felt strongly that graduate students need to “live and breathe” environmental philosophy and have an enjoyment of the outdoors. Their unique skills and talents should match niches that exist in the graduate program. Participants stressed, “It is important that they [graduate students] are a good match for both academic and hands-on learning.”

Graduate students who have a wide range of skills and experiences, good oral and written communication skills, and are multi-dimensional will likely fill an appropriate niche, or perhaps they will create a new niche that adds to the learning community.

Participants believed that successful students have a passion for EE; “that’s what has set the program apart.” The graduate assistants wanted to be in that setting and they recognized the possibilities the graduate studies program offered. They took advantage of opportunities presented.

Although a strong environmental focus exists at Conserve School, many participants felt that some of the best people for the program might have different areas of interest. Since the school has multi-dimensional and diverse niches, a successful student could come in with very different interests and still be successful. “Bringing in people with an environmental background is also good, but also [introduce] people with other kinds of backgrounds because there's a lot of other things going on in places that need attention.”

***K. Good selection practices increase the chances for success.***

Graduate students should be selected based on their skills and interests, personal characteristics, and their fit with the program. “[Select] the best people you can and make sure it’s the right people . . . define their responsibilities, duties, and how the program works.” Asking probing interview questions about experience, career goals, and suitability for the position helps in selecting someone who will be a good fit.

Participants emphasized that potential students need to understand the requirements and parameters of the program before they are accepted. They need to be aware of work expectations, coursework requirements, organizational policies, and living accommodations. They need to understand and be comfortable with the philosophy of EE.

***L. Informal marketing strategies attract the target audience.***

All of the RIs at Conserve School and the graduate students at Pine Jog learned about openings in the program through the Internet or by word of mouth. Some had family in the area who told them about the position, others had friends who were already in the program, and others heard about it from friends who had heard about it from someone else. Graduate students specifically mentioned the GradSchools.com website.

Participants in charge of alternative graduate programs also stated that their marketing efforts on the Internet and word of mouth about the program seem to be the most effective at recruiting students to their program. Participants noted the importance of ensuring that the marketing materials reflect all parts of the program.

**Theme 3: Defining the structure and framework for a graduate program is key.**

***M. The current RI program lacks a strong framework and structure.***

The RI program at Conserve School was in its second year under the current paradigm when the interviews took place. Both RIs and other staff members expressed frustration that the program lacked structure and that the RIs sometimes did not seem to know what their role was. “I feel like it would have helped if I had had a more definite plan of what I was going to be doing while I was here instead of having this feeling of sort of vaguely floating around until I found something to do.”

For some, the lack of structure is a mixed blessing. Several participants reflected, “It's one of the great blessings and one of the great curses as an intern that you don't have a lot of structure to your day.” Others think that having a Master’s program would help define roles and provide structure, and would provide a consistent framework.

Participants identified the lack of a framework as contributing to an absence of accountability. Across the spectrum, staff members think there should be some sort of quality control so that the interns are all accountable for a minimum amount of work. A widespread perception of inconsistency in the workload among RIs exists. One RI commented, “I had so many things I had to do every day. It was very hard, the first couple months.” Another one noted, “I mean, honestly I have days that I could sleep. I could stay in my room until 3 p.m. and no one would notice.”

Two members of the administrative staff divide supervision of the RIs and some of the RIs feel disconnected in this system because there is not just one “go-to person,” Many of the RIs related well to one of their supervisors, but said that they do not get enough feedback on job performance. Other staff expressed concern that the RIs need more support so that they will be re-energized and have a quality experience.

Another needed structural component is a detailed description of responsibilities for each RI position. A clear description of what the job is should exist, including whether something is part of a job or is a voluntary activity, and what might be part of residential life. Participants remarked that RI job duties are hard to define or quantify because some of those duties occur irregularly or very occasionally.

Participants expressed a necessity to “have a clear understanding of the expectations” and identification of final goals for graduate students. Graduate students should understand “the balance between what the student will give to [the program] and what [the program] will give to the student. “

***N. Outcomes for graduate students need definition and follow-through.***

Participants felt a lack of professional development across the current RI program. “The one severe weakness of [the current RI program] is the education we are getting out of it.” They saw the intern seminar as inconsistent. Assigned reading and other tasks had no follow-through in some cases, or a lack of substance persisted in some of the intern seminars, “a complete waste of time some weeks.” RIs saw intern seminars as valuable when they were planned and specific. “I think that there are

things that I learn in seminar that even if I don't use them here, they're going to help me reach children in my future life wherever I go.”

RIs heard promises for college credit, certifications, and experiences, but many of those promises “never materialized.” Participants expressed frustrations on personal and professional levels: “All the certifications are beneficial to the person going through the testing, the other staff members, the school, the kids, and for the programs we want to run,” and they did not understand the lack of follow-through.

***O. Basic frameworks from other graduate programs can provide a model.***

All of the alternative graduate programs contacted included work assignments, experiential-learning opportunities, and academic classes. Students in the program have teaching responsibilities for EE programs at each of the environmental learning centers (ELCs) that provide the graduate experience.

Participants mentioned scheduling academic classes in the evenings or during regularly scheduled weekly times between the ELC programs, in most cases. Some use block scheduling, taking advantage of times when ELC programming is taking place. Others have cohort groups that rotate biweekly between work responsibilities and academics.

Pine Jog’s graduate students are bound to the FAU schedule. The graduate students say, “They’re pretty lenient about missing time here to go to class.” “Academics is the primary reason they’re here, so classes come first” at Pine Jog. ELC leaders highlighted the importance of flexibility in scheduling.

Groups of graduate students (cohorts) move through all of the programs together, except for Pine Jog. According to participants at Pine Jog, the ideal would be to have all of the students go through at the same time to minimize training and orientation, and maintain a more homogenous culture and experience level among the graduate students. Participants thought that dividing the students into two cohort groups that rotated weekly or biweekly through different responsibilities worked well for both the organization and the students.

#### **Theme 4: Meeting the challenges of residential living requires specific training.**

##### ***P. Residential life can be consuming.***

Participants identified that residential living requires quantities of quality time. Providing a good student life experience is not an hourly job. "It's a 24-hour-a-day, seven-day-a-week job. It's not really a job, it's a lifestyle."

Participants acknowledged the significance for students to see the staff as being accessible, but that "it's been a challenge for everybody here to separate work from your personal life." Some participants compared the lack of privacy that comes with residential living to living in a fishbowl.

Many people experienced feeling overworked. Still, upon reflection, they feel that the investment in residential living pays off. "I like having closeness with the kids. It's this great community and I like it . . . I know all the girls and their personalities. If a kid's abrasive, I know why."



***Q. Achieving balance is complex.***

A good balance between professional and personal life in a residential setting is difficult. The program should provide enough structure that the graduate students learn how to be effective in their education, their jobs, and to have “time to just go camp or do whatever they want.” Participants encourage structure for the program so that “it doesn't get so muddled in the residential life day to day and duties that they're not learning [skills] to take out into the world.”

Structure should also help provide guidelines for balancing work time, personal time and academic time. Participants stated, “It’s important to have a liaison or coordinator for students to help them achieve balance between work experience and academic work.”

***R. Care of adolescents takes special skills and training.***

The residential interns in the current program come from a variety of backgrounds. While some of them have experience working with elementary-aged children at camps or college-aged peers in residential halls, few have much experience working with adolescents and their issues.

Many RIs realize they are not equipped to handle these issues. Other staff members see the results of that deficiency. “RIs lack experience and judgment to lead adolescents and sometimes problems arise from that lack of experience.”

A problem that seems to arise frequently is dealing with discipline issues. Discipline is seen as difficult, “the least favorite part of my job altogether. It’s hard to have the kids hate you when you yell at them and they don’t want to listen.” Adding to

that difficulty is the perception that the way discipline is handled is not always consistent among residential-life staff.

Additionally, relationships between RIs and high school students are challenging because of the closeness in age between the two. They need to understand the difference between dealing with their peers in college and mentoring the high school students. The RIs need to perceive themselves as the responsible adults and hold the high school students accountable for their behavior.

Future graduate students need training on the psychology of adolescents to give them the skills and confidence they need to deal with a variety of situations.

They need to understand adolescent development. The adolescent mind so many times is unable to reason as we do. It's not because they [adolescents] are horrible people. It's what they are designed to do at this developmental stage in their lives. (28,6)

In addition, RIs felt that "there should be a whole class on behavioral problems, deciphering between a psychological issue and behavior disciplinary situation." Some also expressed a feeling of uncertainty over how to take care of an adolescent with a physical ailment.

***S. Training for residential life should be thorough and specific.***

A number of situations that occur in residential-life situations reoccur frequently. For example, a student is homesick, a student has a rough time with her boyfriend, or a student will not clean her room.

There has to be a book of procedures of what to do. . . Then we need to revisit some of that stuff [training] and say, what worked for you most? What didn't work? What do you need help with? What are you experiencing that you didn't think of? (21,5)

Current RIs felt they do not receive enough training to handle many of the different job responsibilities. Time seemed to be a limiting factor for training. Actual training requires time, and “they need to have time to let it sift in.” In addition, veteran staff members should have time to “give the RIs feedback so they have a quality experience.”

***T. Residential-life staff needs professional development time together.***

Other residential-life staff echoes the concept of needing more time as well. They expressed that the entire residential-life staff needed time to form a cohesive body for dealing with residential life.

At least at the beginning of the year, or a few times throughout the year we have to have a day or two completely set aside for figuring out residential programs. We need a lot of time, not like a quick morning staff meeting. It should be at least a daylong thing I think. (26,7)

**Theme 5: Support is fundamental to a successful experience.**

***U. Mentorship plays an important role.***

One of the beneficial parts of the current RI program is the “relationships we established on our own with a mentor faculty.” Participants identified opportunities for professional development at Conserve School, such as the opportunity to learn from master teachers and other experienced staff.

Staff also realizes that “not only are we teaching these 150 high school students, but we've taken it on as part of the school that we are also going to be furthering the professional development of these interns.” The staff members at Conserve School see

themselves as “role models for the kids, role models for the RIs, and role models for each other.”

While mentorship and role modeling are valuable, obstacles still exist. Participants noted that they want to be good mentors, “but there's no time that is scheduled in the early part of the year for that.” Teachers and other staff need guidelines for working with the RIs. Both experienced staff and novices need coaching on effective mentorship. In addition, “teach interns how to be mentees . . . how you do encourage an experienced person to take you under their wing and use that as a way that is productive to you.”

Participants suggested introducing formal mentoring with regular communication, including goal setting and debriefing. Mentors should “have reflective and critical dialog between educators/instructors and the students, so the students understand why they do what they do.”

Proactive action mentioned by participants included introducing the mentor to the staff person and spelling out their responsibilities. “I go to the staff person and say, ‘you’re going to meet with them regularly, give them meaningful work, and be flexible with their schedule because they have classes and will be teaching’.” A key to successful mentoring is regular and frequent meetings between mentor and mentee.

#### ***V. Resources help provide support.***

Participants at Conserve School have a high opinion of the design and functionality of living and working spaces overall. “They do talk about when building a

residential curriculum how important it is to have your staff feel at home and comfortable. In that regard, I can't imagine it being much better."

Graduate coordinators for other programs emphasized the importance of each graduate student having private space, especially a private bedroom. A private bath is optimal, when possible.

Faculty and permanent staff at Conserve School mentioned well-equipped classrooms and pleasing office space. Although the RIs currently have a shared office space, it is not functional for more than 3 or 4 people at a time. Participants noted that they do not feel as if they have a dedicated workspace.

I have to work out of my briefcase. It's not very efficient. I don't get as much work done . . . I started out working at home, but that became a credibility issue, because people didn't think that you were working from home. They thought you were sleeping. (24, 3)

Living space and meals are attractive benefits to working at Conserve School, as are the stipends that the RIs receive. However, the lack of any furnishings in the residences presents a frustration for some RIs: "We're not paid very much or expected to be here any longer than two years and they don't supply us with any furniture whatsoever."

The lack of health insurance for RIs is a concern for permanent staff members and RIs as well. "I really wish we would get health insurance. [We are] in charge of students and to be taking them on activities which are considered dangerous for them, and which are dangerous for ourselves."

***W. Peer support is vital.***

Current RIs stated they needed opportunities to meet regularly as a group, more than the intern seminars provided. They felt that time together for sharing their experiences working at Conserve School and discussing issues would help group cohesiveness and help them feel like more of a team. “The interns aren’t close at all and there’s no bond. . . I feel like everyone just does their own thing.” They suggest that time for group bonding should be part of training when interns first arrive in the fall.

Other participants think that being in the rural northwoods setting is “a difficult place to live as a young person, a single person.” They recommend that RIs need to “have enough people in their age group” with whom to interact.

In other programs, team building among the graduate students at the beginning of the program offers an excellent foundation for success. In addition, the younger members of the staff can introduce the graduate students to area social opportunities to help build camaraderie.

***X. A dedicated support person is essential.***

Some of the inconsistencies in the RI program are due to of the lack of follow-through. While a lack of follow-through might indicate that no one has the desire to do that, “in this case, it really is just a lack of time to do a good job.” Promises of graduate credit, classroom teaching, and rotation through different experiences for the RIs never materialized. Some RIs left after a year because of unfulfilled assurances.

The future graduate program needs someone whose primary responsibility is that program, “a full-time coordinator. Part of that person's responsibility would be to

safeguard the interns' time” and give them the support they need so they would be able to accomplish their graduate coursework and projects along with their work responsibilities.

The program coordinator should “hire the [graduate students] and meet with them weekly or biweekly.” Participants also mentioned that having supervision and consistent feedback for the graduate students would be valuable benefits of having a full-time coordinator.

Participants from ELCs stressed the need of a dedicated coordinator who understands the needs of the graduate students and has a depth of knowledge about the program. Schedules, coursework, and workload must be coordinated.

## **Theme 6: Effective communication is critical.**

### ***Y. Communication issues lead to differing perceptions.***

Faculty and administrators who participated in this study see “a lot of good environmental education going on inside and outside of the classroom.” They “see it layered into the educational curriculum . . . into residential life and outdoor activities.” While they acknowledged, “we could do more,” faculty and administrators provided specific examples of how and where environmental education is practiced at Conserve School, including taking students into the local environment for science, literature, and art classes. In addition, they specified environmentally friendly aspects of the buildings and infrastructure.

The perception of many of the RIs is “Where is the EE? . . . Environmental Education is very much a part of the school’s mission on paper, but I think that one thing that isn’t done very well . . . is the fostering of an actual connection to the environment that they live in.” Some were not aware of any EE going on in or outside of classrooms other than biology, and most were unaware of many of the green infrastructure features at Conserve School.

***Z. Internal communication issues affect the Conserve School culture.***

Communication about issues in the dorms and classrooms is erratic among residential-life staff, especially from the RI point of view, leaving them feeling left out and without support. Participants also noted, “tension or disconnect between the administration and the staff.” “The way the school is administered feels cold, and that culture comes down.” Communication issues are perceived to be enduring: “Communication comes up graded very poorly every year during our faculty culture profiles, but then nothing is ever done to address those low numbers. It just falls away.”

***AA. Lack of understanding creates tensions.***

The roles of RIs are evolving. During the early years, “they were the ‘gofers’ of the campus. They were used, not as professionals, but as laborers.” Some of the participants did not recognize names of some RIs or understand what their current role was. “It would be valuable . . . for the rest of staff to be informed about what the RIs main jobs are.” RIs assigned to assist in the classroom sometimes inadvertently created confusion. For example, a teacher for one classroom did not find out about the



assignment until the RI appeared, and then did not quite know what role the RI should have.

Some participants believe “[RIs] sometimes get bogged down in doing the dirty work” and get requests to do things that are not part of their jobs. Others see them as resistant to doing what the job entails. While some participants see the RIs as an equal to other staff, that perception is not typical. “I think sometimes they [RIs] don’t feel like they are part of the staff. I would like to see them more integrated.”

Lack of respect by both faculty and students for the RIs and the program was an issue. A perceived lack of authority affected how RIs function in the dorms. The students “get the impression that is more okay to disrespect an RI than it is to disrespect a teacher.”

***AB. Communication creates clarity.***

Effective “communication is critical—meet regularly, debrief, share information.” Internal communication, both oral and written, should be a high priority, according to participants. Communication helps ensure that “the faculty, the advisors, and the supervisors are acting as a team so the students aren’t being pulled in different directions.” Communication also helps make sure that everyone understands and agrees on program criteria and validity, participants noted.

## **Theme 7: Building a community of learners involves multiple elements.**

### ***AC. Systematic training provides a foundation.***

Participants said that learning the structure of the work environment and what procedures and protocols are involved should happen when the graduate students first arrive and be constant throughout the year. “We sit down with them when they first get here and find out what are their professional goals besides classes? Then we figure out what we can do to get them there.”

They need to know basics, such as how to answer the phone, how to talk to students or parents or their colleagues in a professional setting. They need training in emergency protocols, leadership skills, group dynamics, supervision skills, school policies and procedures, and discipline techniques. “They need opportunities to really hone their skills.”

For non-formal teaching, such as planning and facilitating programs for high school students, “I could use more techniques. How to fill idle time, techniques on how to create interest in the subject that may or may not be interesting, techniques and how to create cooperation amongst a group.” RIs need not only to understand EE “but to be able to interpret and teach it in a way that is understandable and attractive to kids.”

Regular meetings and trainings should follow a thorough orientation at the beginning of the year. Besides the formal training, graduate students need time to digest, ask questions, and discuss what is working and what is not. Building in time for reflection is important.

Participants at other ELCs appreciated presenting sessions and networking at professional conferences as part of professional development. They also appreciated workshops and trainings that tapped into the expertise of administrators and instructors who work there. “We’ve learned CPR and first aid, grant writing, team building, how to put on teacher workshops, and had energy workshops” from the staff.

Enrichment activities such as birding, snowshoeing, or natural history walks are popular with graduate students. One ELC does “integrative sessions” consisting of daylong visits to other nature centers or environmentally related organizations, “travelling to see how EE looks in the working world.”

***AD. Academics give structure.***

Many participants saw adding graduate credits or shifting the current RI program to a full graduate program as important. “Graduate credits not only need to be there and they should be meaningful both for those students moving on to the next level, and in terms of what they bring here.”

Some participants suggested coursework that should be part of a graduate program. “There are RIs here who have no outdoor education or environmental-education skills. We need to have a class to teach them that stuff.” Essential tools for working with the high school students include courses on the ecology of the north woods.

One of the advantages of learning in a residential-type setting is the opportunity to apply directly what is being taught in an academic class, say participants. A best practice in this type of setting is to “create a program in which they have real-life

experience at the same time they're able to step back and think about it. [The program] should be academic coursework alongside professional experience.”

Learning specific theory in rigorous academic classes with high standards is important. Participants also thought that it would be a good idea to build “curriculum that is flexible enough to attract a wide range of people, but structured enough to be [feasible] and easily implementable.”

In addition, RIs would like to discuss current issues that have an effect on lives of people in the school community, with appropriate reading and writing components. Further, several participants stated “I think that self reflection on what we’re doing is really important.” Structuring time for both will help ensure that they happen.

Participants identified specific coursework, such as teaching methods and curriculum development, as being helpful. “The most valuable classes I’ve taken have been curriculum assessment and evaluation for EE.” Others appreciated administrative leadership classes.

A capstone type of project is a component of many of the other ELC programs. A project “with a publishable paper as an endpoint” is a valuable learning tool for both research methodology and writing skills. Graduate projects need to have longevity and be “meaningful to the organization and to our own professional development.” Projects need definition, evaluation, and documentation so that later, someone else can use the information. Projects are an important aspect of the graduate experience, partially because the graduate students “have the freedom in time to pick up the wonderful projects that no one else has time to do. I don’t want to lose that.”

Since graduate students can come from a variety of undergraduate disciplines, basic classes on the local environment, EE and its foundations, and outdoor skills are essential. Participants suggested a best practice of taking that type of class with someone who has a background in EE. “The instructors are really important. You could have the most brilliant syllabus laid out, but if the instructor isn’t trained in EE, it won’t be an EE course.” Many of the participants noted that the instructors of their graduate courses are instructors at the ELC, although a few have faculty dedicated to the graduate program.

***AE. Meaningful experiences add reinforcement.***

A common theme was to ensure that the jobs defined in a graduate assistantship have opportunities for a breadth of experience. AGPs recommended “structure for the breadth of experience along with focus to receive enrichment in an area of their choice as the interns.”

Participants liked the idea of rotating through experiences, but also liked to balance that with having an area in which the graduates can develop expertise. One-year rotations provided a good compromise. “It helped me with learning what I wanted to do, but also what I didn’t like doing, which is just as important.”

Several thought that the experiences should provide “opportunities to come in and do the job they want to do [out in the real world].” Many ELCs offer those kinds of experiences: Volunteer coordination, administrative responsibilities, program coordination, non-formal teaching, and resource management are some examples.

Others like encouragement “to design our own job. I get to explore and find a niche here that wasn’t being filled, that I can fill.”

Having opportunities to get experiences with multiple types of programs, from preschool through adult, is an advantage. Organizing special events or adult workshops, and developing programs for all ages of school children give graduate students a range of experiences. In addition to teaching, having the chance to learn administrative skills such as budgeting, grant writing, and marketing is valuable.

Graduate students should get real-world experience and opportunities to apply their learning, say participants. Students created day camp programs that repeated three times, giving the students opportunities to field test and adapt the lessons. Others worked on interpretive signage and trails for an ELC.

Every position in every organization had different levels of tasks. Participants emphasized, “Make sure that they [graduate assistants] are not always the shuttle drivers, and sometimes they're teaching classes, or doing a counseling session, or other things. Everybody has to do mundane stuff, but [ensure that's not all they do.]”

Participants also wanted to be sure that a graduate program does not

. . . lose sight of what we were originally thinking that we needed the help for. . . the youth and the energy and creativity to go out and do orienteering or geocaching or GPS things because I don't have time to do that or the energy. (15, 6)

They considered the outdoor focus, with nature-centered activities and programs, an essential part of a future program.

I think it’s very important that [graduate students] are still a big fixture in the student’s lives. I don't just mean being on duty and doing curfew. But I also think it's important they offer great activities, and that they are creative in the things they do. (8, 3)

**AF. Vision focuses the community towards the future.**

One participant's future vision of the Conserve School's environmental emphasis compared it to Interlochen, a performing arts school known for its music program. Just as a musically inclined student or teacher would regard Interlochen as the top option, an environmentally inclined student or teacher will regard Conserve School as the top preference.

Another participant suggested:

Maybe we could build an intern house. They could build a super sustainable residential house that the interns could live in with a special set of kids that wanted to live specifically with the interns and create something. I know that in some schools they have an honors House, or French house where everybody speaks French when they're living there. We could have an off the grid house, where they would agree to use wood or solar for their heating, or be cold most of the time. And they would make their own food. (26, 8)

Participants wanted assurance that whatever forms the graduate program takes, that it will "be part of the fabric of the school, not set apart." Others had broader visions of the future learning community at Conserve School:

I would like to see a community of people that is clearly and totally dedicated to a goal . . . where you all coalesce together around a single goal and you all do whatever it takes to get to that goal. (25, 6)

Another participant thought more broadly still:

It would be great to have an exchange program with other [graduate EE programs], especially for students on a career path to work in an EE center. Such as management of the operation of nature centers. It could be like a semester-abroad program that teaches the culture of different EE centers where the students earn academic credit. (37, 1)

### **III. Summary**

Qualitative analysis of the interview data produced rich results for the researcher to apply to the subproblems in this study. In Chapter Five, the researcher will discuss how these results are relevant to each subproblem, and show how they form the basis for the recommendations for this study.



# CHAPTER FIVE: CONCLUSIONS, RECOMMENDATIONS, AND IMPLICATIONS

## I. Introduction

The purpose of this study was to develop, implement, and formatively evaluate a programmatic framework and curriculum for a Residential Graduate Program in Environmental Education. The study identified seven subproblems and research methodology collected information to apply to those subproblems. This chapter assesses the results of the qualitative analysis of interviews with Conserve School personnel and others (reported in Chapter Four), information from meetings with CNR faculty, the literature review, and documents pertinent to the study (Appendix A). This chapter also presents conclusions and recommendations, organized to correspond with the subproblems of the study.

### **Subproblems of the Study**

1. Assess potential needs/interests of stakeholders to be met by the programmatic framework.
2. Define, develop, and implement the programmatic framework.
3. Facilitate the development of the curriculum as part of the programmatic framework.
4. Facilitate the development of an advising plan for the program.
5. Develop and implement a marketing plan.
6. Complete formative evaluations of each of the above subproblems as they are being developed and implemented.

7. Develop a participant evaluation protocol.

## **II. Conclusions, Recommendations, and Implications Related to**

### **Subproblem I: *Assess potential needs/interests of stakeholders to be met by the programmatic framework.***

Subproblem 1's goal assessed the stakeholders' needs and interests as they pertained to the proposed programmatic framework for a graduate program in residential Environmental Education (EE). Stakeholders included UWSP/CNR, Treehaven, and Conserve School, and these participants identified the following ideas as important to the success of the framework. Many of the stakeholders' ideas strongly support information from the literature review, interviews with alternative graduate programs in EE (AGPs) staff, and other relevant documents.

#### **A. Conclusions**

##### ***Culture of Learners***

During the course of the research, participants repeatedly suggested an organization's positive learning culture provides the framework for a successful program. Schein (2004) asserts that new members of a community absorb the existing organizational culture as the "right way" of performing. One participant advised, "Create a culture of learners, and then let the culture do the teaching." Other participants encourage integrating graduate students in all facets of the organization so that they help contribute to a positive learning culture.

Results of interviews with Conserve School staff suggest that the organizational culture of the school values and supports learning for all members of its community.

The staff is caring and committed to providing quality academic and residential experiences for the boarding school students. Overall, the school is growing and positive towards change, indicating a capacity for new programs.

Initial research focusing on the organizational cultures of UWSP, Treehaven, and Conserve School indicated that it would be feasible to build the programmatic framework within the existing cultures. The research process included repeatedly addressing two questions: “Has any information come to light that would prevent the development of this project?” and “Do the needs and interests of the partners involved support the proposed project?” No insurmountable obstacles appeared at any phase. Results indicated support for the project; therefore, the process continued to move forward.

### ***Organizational Support***

Many specific forms of organizational support exist for the proposed program. For example, personnel at Conserve School view Residential Interns (RIs) as valuable contributors to residential life because of their vitality, energy, ideas, and ability to relate to the youth at the school. While both staff and RIs acknowledged challenges in the current configuration of the RI program, they saw opportunities and avenues for improving the program in order to meet the needs of Conserve School and RI staff members better. Participants uniformly valued retaining post-undergraduate students as residential-life staff.

Conserve School provides an array of resources that can support graduate students. Staff members have a wealth of experience and knowledge that they can

share with both high school and graduate students, and many of them express a willingness to act as mentors. Work spaces, equipment, and support services from desks to laptops to an efficient maintenance staff are available. Graduate students can be assigned well-appointed living accommodations. Opportunities, facilities, and equipment for recreation and entertainment are easily accessible.

A review of the UWSP-CNR graduate programs indicates organizational support for a Master of Science (MS) in Residential Environmental Education. The guidelines and protocols of the college support the program's formation. Meetings with Director of the Wisconsin Center for EE and the Director of Treehaven indicate that the college supports the concept of an MS in residential EE program. Courses that currently exist are applicable to this program and instructors are available for those courses as well as for the development of potential new courses.

### ***Needs and interests of the CNR/Treehaven***

CNR documents and meetings with CNR faculty demonstrate that the college is interested in providing opportunities for advanced study in natural resources with an environmental education emphasis. The CNR has limited capacity for accepting graduate-level students due to the limited availability of graduate assistantships. New graduate assistantships through this program can expand that capacity.

The results of information gathered from meetings with the Treehaven director and staff support Treehaven's interest in promoting the profession of residential environmental education. Treehaven also wants to continue providing quality environmental education, research, and recreation experiences. To accomplish this,

Treehaven needs staff members to work with visitors. Treehaven staff needs to be well trained in EE and experienced in working with students and the public.

Treehaven has other staffing needs as well. A number of administrative-function needs exist, such as marketing, volunteer management, and research coordination. In addition to presenting school and public programs, staff is needed to assist with developing a science involvement project for schools, creating interpretive trails and signs, and producing educational resources. Current Treehaven staff also identified resource management responsibilities, such as planning and coordinating resource-based projects, developing site-based research protocols, and land-management tasks as needs (Appendix J).

According to source documents and non-structured interviews with UWSP/CNR faculty and staff, the CNR is interested in providing individualized learning through meaningful and applicable courses and experiences. Guidelines and protocols for the CNR, applicable to every CNR graduate program, allow for variations on existing programs to help provide individualized learning. A strong interest of CNR/Treehaven is to ensure that students in a Master's program in EE are well suited for that program and can benefit from the learning opportunities offered in this framework.

### ***Needs and interests of Conserve School***

Interviews with Conserve School personnel reveal a large set of interests and needs. For Conserve School to succeed in its aims, it needs qualified, competent staff. Attracting and retaining staff for the residential-life program can be challenging, but those who stay find it a rewarding experience.

Residential-life duties, according to interviews and other supporting documents, include residential supervision on evenings and weekends, ensuring safety and enforcing rules, supporting individual students, and community building, which consist of support for a variety of activities and traditions throughout the year. For members of a residential community, residential- life responsibilities are so all encompassing that the work becomes a lifestyle, not just a job.

Residential life requires young, energetic adults who have stamina and a strong work ethic. They need to have multiple talents, maturity, and fresh ideas. Their youth facilitates relationships with the school-aged students, and a high level of maturity helps them to be good role models for each other and for the students in their care.

Residential-life staff members need to have training to teach life skills to their charges, much the way that parents teach their children. They need coaching in handling discipline or behavior problems in a fair and compassionate manner. Training in basic adolescent psychology will help enable staff members to be effective as residential-life leaders.

In addition, residential-life staff needs a structured program with a strong support system. Briefly, program goals and outcomes need definition; job responsibilities need to be articulated; and training needs to be thorough and ongoing. A strong support system includes personnel assigned as mentors and supervisors, and inclusion into the Conserve School culture. Program structure and support are detailed under needs and interests of the students and in Subproblem 2.

Results indicate that Conserve School has an interest in well-considered graduate student selection. Participants encourage careful selection to ensure that members of the staff possess personal characteristics such as strong motivation, self-confidence, and passion for the outdoors along with interests and experiences that will help them succeed (See Appendix K).

Besides residential-life duties, Conserve School has identified additional staffing needs that graduate students could fill. Those duties include administrative support, outdoor and environmental education instruction, substitute teaching, community-service project support, and recreation assistants (see Appendix L).

### ***Needs and interests of potential students***

During their interviews, RIs and graduate students in other AGPs expressed needs for training, support and structure, similar those articulated by Conserve School staff members. RIs and other MS students focused their stated needs and interests on what they need to obtain potential jobs. MS students are interested in obtaining skills, experiences, and knowledge that they will be able to use in their future careers.

Feedback from the RIs identified a graduate program as a means of furthering their career goals. They are interested in combining academic courses with meaningful and applicable experiences. Specifically, they identified regional natural history and ecology, environmental education methods, curriculum development, and teaching methods as desirable academic courses. In addition, they requested training and experience in developing programs, leading outdoor experiences, and counseling

students, as well as various outdoor certifications, such as Wilderness First Aid, Certified Interpretive Guide and naturalist training (Appendix M).

For best chances of success, their responses suggest that they need the support of their peers, as well as of supervisors, mentors, and a liaison between all of the partners in the MS program. In addition to individual support, responses indicate a need for institutional support. To achieve this, MS students need to feel as if they are part of the cultures of Conserve School, Treehaven, and UWSP. One important way to convey cultural inclusion is to treat the MS students as the full-staff members that they are. Other proposed means to accomplish inclusion comprise open and effective communication, regular, inclusive staff meetings, thorough and ongoing training, and opportunities for personal and professional enrichment.

### ***Summary for Subproblem 1***

The UWSP, Conserve School, and Treehaven have a unique combination of cultures, resources, and structures that support the development of a programmatic framework and curriculum for an MS program in natural resources with an emphasis in residential environmental education. Documents and interviews collected at other alternative graduate programs in environmental education indicated that no graduate environmental education program exists that includes a combination of academics and experiences in residential environmental education. Therefore, this program has groundbreaking possibilities.

A new MS in residential EE program has the potential to meet many of the needs and interests of the stakeholders while at the same time creating a new dimension to



education and skills training for residential environmental educators. Based on the results of the research, the project is feasible, fills a niche, the partners desire it, and existing parameters and structures of UWSP, Conserve School, and Treehaven support it.

## **B. Recommendations for Subproblem 1**

- Move forward with planning the proposed MS in residential EE.
- Design and implement a programmatic framework.
- Address the needs and interests of the primary stakeholders in the programmatic framework.
- Integrate ideas from other alternative environmental education MS programs as appropriate. (Specific recommendations for the programmatic framework are detailed under Subproblem 2.)

## **C. Implications**

Given project feasibility, the partners formalized their relationship and moved forward in the planning process in December 2008. The graduate program is known as the Graduate Fellowship in Residential Environmental Education.

### **III. Conclusions, Recommendations, and Implications Related to Subproblem 2: *Define, develop, and implement the programmatic framework.***

#### **A. Conclusions**

##### ***Frameworks of other graduate programs***

The definition of the programmatic framework is the total student experience, consisting of working with students, resident life, college-credit courses, non-formal workshops, and practical experience. Results indicate the total student experience in the other alternative graduate programs in environmental education have some shared characteristics. All have academic courses and practical experience. They all provide some type of hands-on experience teaching environmental or science education in non-formal settings. Many of the programs have requirements or opportunities for the MS students to live where they are learning and working. Most AGPs have a cohort of students that moves through the program as a group, with some cohorts divided on a weekly or biweekly scale between work and school activities (Appendix N).

Other residential aspects of AGPs have some commonalities as well. For example, according to the information obtained from the results of interviews and AGP documents, none of AGPs has residential stays lasting longer than a week. In addition, none has a residential-life curriculum.

##### ***A specific framework for the proposed program***

Results discussed under Subproblem 1 reveal that the stakeholders for this research have different needs and interests than those of the alternative graduate programs in EE. For example, Conserve School has a defined residential-life curriculum.

The staff and students live together in a community setting for an entire school year, and many return for several years in a row. In addition, both Treehaven and Conserve School have staffing needs beyond teaching. Furthermore, the academic coursework for this proposed project will result in a completed MS while in residence, unlike the other alternative graduate programs. To meet the stakeholder's needs and interests the programmatic framework, specifically tailored to the primary stakeholders, incorporates components as appropriate from other programs.

Since this proposed program is specific to residential EE, results suggest that accomplishing many of the elements of residential-life training works best with the graduate students living in a residential community. In that way, they can receive training in residential curriculum while at the same time gaining meaningful experience at a residential outdoor setting.

***Meet the needs of organizations and students***

Treehaven's and Conserve School's needs for staffing in various areas can be met through the same means as the graduate student's needs for meaningful work experience in both graduate assistantships and residential-life duties. For example, graduate students can obtain applicable experience from planning and teaching non-formal environmental education classes, learning and assisting with administrative functions in a non-profit organization, and learning and assisting land-management responsibilities. In addition, residential-life duties include student support, safety, and creating recreational and learning opportunities.

### ***Define a structure***

The research suggests that defining the structure of the programmatic framework in detail and providing strong support systems are important keys to a successful program for both the graduate students and the primary stakeholders. Interviews with the Conserve School staff indicated a great deal of frustration with the lack of structure, follow-through, and consistent support for the current RIs. Input from them, the other project partners, and other alternative graduate program research participants shaped the recommendations listed at the end of this subproblem.

The programmatic framework structure needs enough detail to eliminate ambiguity. Graduate students and other stakeholders need to know what all of the program components are and how they fit together. Results from AGP coordinators indicate the need for structure to help guide graduate students and staff involved with the program through an intense experience.

### ***Select the right students for the program***

Participants emphasized the importance of investing thought and consideration into selecting the right candidates for the fellowship. Research results suggest several personal characteristics that fit the position, including experience with and comfort around young people, self-confidence and self-direction, a solid work ethic and good study habits. Graduate students with passion for EE and the environment and some skills or experience that fit a niche offered by the program are most likely to be successful. In addition, the group of graduate students needs to be large enough to

generate a peer support structure. Information from other graduate programs suggests a minimum of 10 students. No program had over 22 students.

***Provide training and ongoing support***

The results suggest that an underpinning to MS student success is thorough training and continuing staff development. Training that the RIs have received in the past has not fully met participants' expectations. Past and current RIs developed a list of training needs as a suggestion for the future (Appendix O). Haskin (2003) emphasizes the importance of providing exceptional role models, especially in the preliminary stages of training and orientation, to help graduate students start properly.

Participant interviews indicate that graduate students need training in residential-life procedures. Beyond initial training, professional development to help graduate students develop new knowledge and skills as well as reinforce prior knowledge should be ongoing. Formal and casual meetings for reflection and discussion are important components of staff development as well (Haskin, 2003).

Cultural inclusion is another strong factor in supporting MS students, according to research results. To ensure a feeling of support, research suggests that the graduate students should be considered as full-time staff members, including participation in staff meetings and staff planning, and opportunities to serve on teams and participate in decision making, as appropriate. Mentorship can be an effective way of supporting and including MS students as well. In addition, results point to encouraging structured and unstructured interaction time between all staff, peer groups, and work groups as a good practice. Other support needs, including adequate dedicated workspace and tools

needed for the various jobs, adequate to comfortable living spaces, and opportunities for relaxing and recreating in a community setting are necessary. Conserve School has these resources available for future graduate students.

***Set clear goals and expectations***

Participants indicated a need for written program goals and outcomes. Written job descriptions, and program expectations for MS students, Conserve School, and UWSP/CNR/Treehaven need to be prepared. The interviews further indicate that the current RI program lacks strength in these areas. Many of the AGPs define their goals, outcomes, and participant/institutional expectations on their websites.

***Define graduate assistantships and residential life duties***

The CNR has defined graduate assistantships as an approximately 20-hour-per-week job. Assistantships can help meet the outcomes of this program with assignments in areas such as administrative duties, non-formal teaching, activities, or sustainability. Different successful structures for graduate assistantships exist, but most participants favored at least a two-semester assignment, with an option of having two different assistantships during the course of the program. Other recommendations include a written work schedule for each job description; however, some flexibility is important.

Conserve School has outlined residential-life duties as taking 20 or fewer hours per week. Residential life will provide additional experiences towards the program outcomes. Residential-life responsibilities can become all consuming, so paying careful attention to structuring the residential-life schedule to be manageable and flexible is

important. Conserve School is in the process of adapting its student-life program; completion of the restructuring plan is due in early summer, 2009.

Both graduate assistantship and residential-life duties require supervision and support for success. A supervisor assigned to each set of duties and oriented to their roles is most effective. Participants encouraged establishing a system of accountability and creating a position for a dedicated staff person to accomplish support and liaison functions that will help ensure program success.

### ***Summary for Subproblem 2***

The primary stakeholders have identified needs and interests in three areas addressed by the programmatic framework: academic experiences, graduate-assistantship experiences, and residential-life experiences. Academic experiences include appropriate coursework and practical application opportunities provided by UWSP. Details of the academic curriculum are discussed under Subproblem 3.

Both Treehaven and Conserve School can provide graduate assistantship and residential-life opportunities. Conserve School's residential program has the capacity to provide longer-term, residential-life experiences, while Treehaven can provide opportunities for a more typical EE residential program. In addition, Conserve School has the infrastructure for housing and other support services.

The programmatic framework should address the student experience from the moment of selection until the student graduates. Stated goals and objectives should provide guidance for developing the framework, and all components of the program

should support the stated goals and objectives. The programmatic framework needs to be useful and meaningful for the organizations and students alike.

Support for the MS students and the program in general needs to be broad, intentional, and well planned. Communication and cultural inclusion will both contribute to an effective support system. In addition, a program coordinator can act as a liaison to ensure effective communication and monitor that the programmatic framework is running as intended. A program coordinator can also evaluate efficacy of the programmatic framework in meeting the program outcomes and recommend necessary changes to ensure a complete and effective MS program.

## **B. Recommendations for Subproblem 2**

- Design the graduate program in residential EE to follow a four-semester plan (summers off) beginning in Fall 2009.
- Begin with 14 students, selected from a pool of applicants that best fit the program.
- Develop three aspects for the programmatic framework: academic experiences, graduate assistantship experiences, and residential-life experiences.
- Develop goals and outcomes for the program.
- House the graduate students at Conserve School.
- Provide shorter-term residential EE experiences at Treehaven.
- Provide graduate-assistantship experiences at both Conserve School and Treehaven.
  - Create written job descriptions and program expectations for all parties.
  - Identify and prepare supervisors and mentors.



- Provide initial orientation and ongoing training sessions for graduate students.
  - Take advantage of staff expertise and talents.
  - Schedule time for training well in advance.
- Offer graduate assistantships as at least a two-semester assignment, with an option of having two different assistantships during the course of the program.
- Hire a dedicated program coordinator who will:
  - guide the program development and implementation;
  - facilitate the development of a schedule showing the overall structure of the programmatic framework that integrates academics, graduate assistantships, and residential-life duties;
  - serve as a liaison between the graduate students, UWSP/CNR, Treehaven, and Conserve School;
  - champion the program and its participants; and
  - ensure smooth operation of support systems including communication, cultural inclusion, and mentors.

### **C. Implications**

On March 1, 2009, UWSP hired a graduate program coordinator to guide the program development and implementation, serve as a liaison and champion, and fulfill other duties as recommended for that position. The recommendations above guide the

design of the programmatic framework. Goals and outcomes have been identified and reviewed (Appendix P) and continue to guide each facet of development.

#### **IV. Conclusions, Recommendations, and Implications Related to Subproblem 3: *Facilitate the development of the curriculum as part of the programmatic framework.***

##### **A. Conclusions**

###### ***CNR requirements***

Meetings with CNR faculty and PAC members and CNR documents specify curriculum guidelines for all graduate programs in the CNR. For an MS in Natural Resources with an emphasis in residential environmental education, a student must earn at least 30 credits in advisor-approved graduate courses. At least 15 of those credits must be in courses numbered 700 or above.

In addition, a student must complete graduate courses in at least three disciplines. Some requirements exist for specific independent study and thesis credits, seminar credits, and maximums of certain credits that may count toward the requirement. CNR MS programs include both thesis and non-thesis options.

###### ***Curriculum ideas***

UNESCO recommends that general course content for training environmental educators include ecological and environmental concepts, the relationship between the environment and the economy, and the relationship of the environment to different professions. In addition, courses that support the Tbilisi guidelines (Appendix Q) are

indicated (Knapp, 2000). Many of the courses covering the recommended topics are offered each year by the CNR.

Curriculum for this program should include coursework in environmental topics, including natural history and various facets of environmental education, according to participants. Courses in non-formal teaching methods and curriculum development, leadership, and outdoor skills are also needed. In addition, participants identified a need for time for reflection and discussion as well as a need for a course in adolescent behavior to provide a backbone for the residential-life curriculum.

In an October 2008 meeting at Conserve School, current RIs identified a list of skills, knowledge, and experiences that they would like to have when they leave the program (Appendix M). This list included a variety of certification courses, such as Wilderness First Aid, interpretive guide training, and water safety. The RIs also listed outdoor leadership, general teaching skills, and naturalist skills. These findings suggest the need for a practicum course in addition to other coursework.

AGPs offer for-credit courses that fall generally under these topics: environmental education knowledge, environmental education application, natural systems/place-based ecology, natural science, non-formal instructional methods, research methods, and field techniques. In addition, a meaningful capstone project using research methodology and advanced writing skills would be beneficial. A list of courses and experiences used in other graduate programs that may be of potential interest to this program is located in Appendix R.

### ***Logistical considerations***

Recommendations in Subproblem 2 for housing the graduate students at Conserve School and providing graduate assistantships at Conserve School and Treehaven pose some logistical implications for the curriculum. The time required to travel between UWSP and Treehaven (approximately 1.5 hours each way) or UWSP and Conserve School (approximately 2.75 hours each way) is significant. Travel time between Conserve School and Treehaven is approximately 1.25 hours.

In addition, in a residential program, MS students have many time demands due to the nature of the position. Residential duties and other work responsibilities can consume approximately 40 hours per week. Academic coursework is in addition to that base workload.

Some AGPs deal with limitations of time by scheduling courses in the evening, after work responsibilities have been fulfilled. Others rotate two groups of MS students between academics and work responsibilities. One group takes academic courses for two weeks while the other works, and then they switch positions. Two other options that AGPs use are block scheduling the classes around the work schedule or scheduling work around the course schedule.

### ***Summary for Subproblem 3***

A number of desirable practices for coursework and experiences for a residential environmental education program are appropriate. The guideposts for curriculum development are UWSP/CNR requirements, the program outcomes, identified good

practices, and EE standards. Current program participants have identified desired skills, experiences, and knowledge that can guide curriculum as well.

Logistical parameters have implications for curriculum delivery. Travel time between UWSP and the MS students' work and residential locations is a significant factor in considering where courses should be offered. The amounts of time spent working and time spent on academic classes need to be considered.

Options for UWSP curriculum delivery include distance (online) learning, face-to-face courses at Conserve School or Treehaven, and hybrids of both distance and face-to-face. Potentially, a virtual classroom could provide delivery for some courses, as that technology exists at UWSP, and the possibility of a virtual classroom in the future at Conserve School exists. UWSP instructors are potentially available for each of the delivery methods.

### **B. Recommendations for Subproblem 3**

- Determine a list of courses to meet UWSP/CNR requirements, participant outcomes, and partner and participant needs.
  - Determine which of those courses currently exists that can be delivered online, face-to-face at Treehaven or Conserve School, or as a hybrid of these two delivery methods.
  - Distinguish between required and elective course options.
  - Determine the need and develop any additional courses to meet participant outcomes as well as stakeholder needs and interests.
  - Identify potential instructors for all courses.

- Develop a curriculum showing scope and sequence of coursework and potential instructors.
- Develop a descriptive list of required and elective courses.

### **C. Implications**

A survey of existing UWSP courses produced a list of potential courses to meet both graduate student and institutional needs. Classes that could be delivered as distance learning courses, hybrids, or face-to-face courses that could be taught at Treehaven or Conserve School currently exist. Two final filters guided curriculum planning: Selecting courses with potential to support the program outcomes (Appendix S) and designating the courses as required or potential elective credits.

Four new courses need to be developed to meet the needs and interests of the stakeholders for this program: Quantitative Research Techniques, Qualitative Research Techniques, Practicum in Residential Environmental Education and Interpretation, and Adolescent Behavior in Residential Environmental Education. An appropriate instructor is developing each new course.

The program coordinator created a curriculum matrix showing the proposed sequence of required courses for the two years of the program and identified instructors for the first two semesters (Appendix T). A list and description of required courses and recommended electives is located in Appendix U. The Program Academic Team (PAT) has reviewed and made recommendations on the curriculum and other academic documents that were incorporated into each document.

## **V. Conclusions and Recommendations Related to Subproblem 4:** *Facilitate the development of an advising plan for the program.*

### **A. Conclusions**

Advising graduate students in this type of a program takes place on many levels. Research suggests incorporating a broadened context of advising that includes more than academic advising. Recommended forms of advising include academic advisors, mentors, job supervisors, a program coordinator, and residential-life support.

Academic advising must follow the policies and procedures governing UWSP/CNR. Results propose good practices for supervision and support, detailed in Subproblem 1 and included in Appendix V. Hiring a graduate program coordinator, recommended in Subproblem 2, will help ensure implementation and continuing diligence.

### **B. Recommendations for Subproblem 4**

Advising is recommended through four different strands.

- Academic advising by CNR graduate faculty for projects, Program of Study, and graduate assistantships.
- Residential-life advising and mentoring by the Dean of boys and the Dean of girls at Conserve School.
- Supervision and mentoring by the appropriate day-to-day person responsible for each assistantship job at either Conserve School or Treehaven.
- Advocacy, support, and supervision by the graduate program coordinator.

## **VI. Conclusions, Recommendations, and Implications Related to Subproblem 5: *Develop and implement a marketing plan.***

### **A. Conclusions**

Results indicate that most graduate students and RIs find out about alternative graduate-school programs on the Internet or by word of mouth. GradSchools.com was specifically mentioned as a frequently used source. All of the identified alternative graduate programs in EE have information about their programs on their organization's website. Teton Science School conducted a survey of alumni of their program in which 62% of the 125 respondents reported that they heard about the program through a personal contact. RI participants mentioned personal contacts as the first way they heard about the program as well.

AGPs each have a printed brochure about their program. Program coordinators mail brochures upon request or distribute information at conferences and other venues. Marketing efforts tend to be informal among AGPs. None identified a specific marketing plan. The research suggests that the most effective marketing is through personal contact or the Internet.

A basic marketing plan can be simple and still be effective. Levinson (2003) suggests first identifying the purpose of the marketing, target audiences, niche, and types of marketing in brief sentences. The second part of the marketing plan should include a chart indicating marketing tools, targets, and timeline for implementation.



## **B. Recommendations for Subproblem 5**

- Develop basic marketing plan.
- Target marketing for the graduate program's initial cohort.
  - Develop a website
  - Develop a brochure
  - Advertise on GradSchools.com
- Survey the applicants to determine how they learned about the program and make appropriate adjustments to the marketing plan.

## **C. Implications**

The graduate coordinator created a preliminary marketing plan to address marketing needs for the first group of students (Appendix W). Primary marketing efforts involved developing a website, with links from the CNR, Treehaven, and Conserve School. The website premiered on March 20, 2009, with appropriate links. The GradSchools.com website also advertises the program.

Marketing efforts included a full-color, four-page brochure printed at the end of March 2009. Twelve colleagues who are members of the Association of Nature Center Administrators (ANCA) received a one-time special mailing of this brochure along with a letter asking that they distribute the brochures to their seasonal employees who are interested in graduate school.

## **VII. Conclusions and Recommendations Related to Subproblem 6:**

*Complete formative evaluations of each of the above subproblems as they are being developed and implemented.*

### **A. Conclusions**

No results were specific to this subproblem. However, each step of project development included formative evaluation.

- For Subproblem 1, formative evaluation consisted of pilot testing and revision of the long-interview questionnaire validation before use.
- Subproblems 2 and 3—stakeholders reviewed many drafts of the programmatic framework and curriculum designs and recommended revisions. Each incorporation of new information resulted in further reviews and revisions.
- Subproblem 4—marketing tools underwent formative evaluation. A group of residential interns pilot tested the website design, resulting in a cycle of revisions before website launch, testing and revisions. Partners and a test audience reviewed brochure drafts. Their comments formed the basis for revisions.
- Subproblems 5 and 7—created, reviewed, and revised drafts.

### **B. Recommendations for Subproblem 6**

- Conduct formative evaluations as more diverse users are exposed to the materials.
- Make revisions as necessary.

## **VIII. Conclusions, Recommendations, and Implications Related to Subproblem 7: *Develop a participant evaluation protocol.***

### **A. Conclusions**

Lack of feedback from participants was a problem identified in the results. Of the AGPs, only Pine Jog ELC and Teton Science School have conducted a formal evaluation after participants finished the program. Results did not identify a specific evaluation protocol.

The program coordinator should use best practice methods to develop an evaluation protocol. An evaluation protocol should identify which outcomes are evaluated as well as the timetable and methods used for evaluation. In addition, the protocol should list reporting times and methods.

### **B. Recommendations for Subproblem 7**

- Develop an evaluation protocol based on learner outcomes for the program according to the principles used in the course *Applied EE Program Evaluation*.
  - Evaluate graduate-program effectiveness from the learners' perspectives.
  - Evaluate the graduate-program effectiveness from the partners' perspectives.
- Analyze the results of the evaluation and recommend adjustments to the program as warranted.

### **C. Implications**

A draft of the participant evaluation protocol is included (Appendix X).

## **IX. Further Implications and Recommendations**

In qualitative research, the methods often have unintended outcomes that add depth, meaning, and relevance to the data. Although the research was not specific to determining best practices for graduate studies in environmental education, this information is indicated in the results. Practices identified in the recommendations should continue to guide the development and implementation of the graduate program. Note that the research did not investigate best practices beyond the scope of this project.

Another unintended outcome was the collection of some participants' long-term visions for an EE learning community of the future. These visions reach beyond the limits of this study, but merit further thought as the program grows and evolves.

Participants envision:

- A school that is to EE what Interlochen is to the performing arts;
- A magnet dorm (house), built green and off the grid, where graduate students and high school students could model sustainable living;
- A community where “everyone coalesces together around a single goal, and you all do whatever it takes to get to that goal;” and
- An exchange program with other alternative graduate EE programs that will give graduate students opportunities to experience the cultures of other EE centers while earning credit.

These unintended outcomes underscore that qualitative methodology was the best approach to complete this research. The results are valuable in moving ahead with

the project and in thinking beyond it. Early in the research process, the researcher made the decision to collect stakeholder views through long and non-structured interviews. Information obtained from documents supplemented interview data. Using structured observations (e.g., systematic, timed observations) as another data-collecting tool could add to the richness of the findings for future studies of this type.

Two parallel goals existed within this study. The first goal was to determine the feasibility of the program. The second goal was to apply the results to a programmatic framework. The process of working on a hybrid of research and project-driven results simultaneously was a challenge. In the future, if this type of research were undertaken, the application of the results to a specific project would best be undertaken separately.

The Project Advisory Committee continues to develop the Graduate Fellowship in Residential Environmental Education as a UWSP/CNR graduate program option as this study recommends. As development progresses, project committees should continue the formative evaluation process. Program assessment should be an integral component, and the results of the assessment should continue to drive improvements to the framework and curriculum.

## **X. Opportunities for Further Study**

A number of opportunities to augment the research completed in this study exist. For example, expanding the study of stakeholder interests and needs to include other EE-providing organizations (nature centers, government, etc.) could provide

information on fine-tuning as well as expanding this program. No such study appears to exist at this time.

A longitudinal study to determine what implications this graduate fellowship has for long-term involvement in environmental leadership and the other stated program goals could be interesting. A study to determine whether the graduates of the program are more likely to specialize in residential EE as a career choice could be a logical next choice. Another study could determine whether graduates of an experience-based/alternative graduate program in EE have different career paths than graduates of traditional university-based EE graduate programs. Although challenging, longitudinal studies would help further refine this program to meet its goals.

In addition, future research might lead to developing a list of best practices that apply a wide range of alternative EE graduate programs. In-depth studies of graduates of AGPs could yield quality information towards this end. The applications of this type of research could have implications for the quality of environmental educators, the efficacy of environmental education, and ultimately the quality of the environment in the future.

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## Appendix A

### List of Documents Used as Source Material

Source	Type	Title
UWSP	document	2007-2009 Catalog
UWSP (UWSP Graduate School)	Website	Graduate School
UWSP/CNR	Document	Graduate Student Handbook
UWSP/CNR (CNR Graduate Program)	website	Graduate Program, Teacher's Program
Conserve School	Document	Staff Handbook 2008-2009
Conserve School	Document	Residential Life Handbook 2008-2009
Conserve School	Document	Student Handbook 2008-2009
Conserve School	Document	Handout from the TABS conference, RI program
PAC, PAT, PSC meetings	Documents	Meeting Notes
Gore Range NSS	Documents & Website	Graduate Studies Program
IslandWood	Documents & Website	Graduate Studies Program
Merry Lea ELC	Documents & Website	Graduate Studies Program
McCall Outdoor Science School	Documents & Website	Graduate Studies Program
North Cascades Institute	Documents & Website	Graduate Studies Program
Pine Jog ELC	Documents & Website	Graduate Studies Program
Teton Science School	Documents & Website	Graduate Studies Program Program Evaluation
Wolf Ridge ELC	Documents & Website	Graduate Studies Program

Note: Other source documents are included in the appendices.

**Appendix B**  
**Letter to alternative graduate EE programs**

Dear ,

I'm a graduate student at the University of Wisconsin-Steven's Point, and am working on developing a programmatic framework and curriculum for a Master's Program in Residential Environmental Education in a partnership with the Conserve School and UWSP/Treehaven Environmental Learning Center. I am wondering if you might have time for a telephone call to talk to me about Wolf Ridge's Naturalist Training Program. I anticipate that it should not take longer than 20-30 minutes.

If it is possible for you, it would be helpful for me to call you sometime before the end of March. My schedule is flexible, including evenings and weekends. If it agreeable to you, please let me know what days or times might work best for you.

If there is someone else at Wolf Ridge that I should speak to regarding this, I would appreciate it if you would send me the contact information for that person.

I appreciate whatever time you can spare, and hope that you are enjoying a wonderful Minnesota winter!

Thank you,

Fran Blanchard  
Graduate Assistant  
University of Wisconsin-Stevens Point  
College of Natural Resources

## **Appendix C**

### **Alternative Graduate Studies in Environmental Education Programs**

Gore Range Natural Science School

P.O. Box 9469

Avon, CO 81620

(970) 827-9725

[www.gorerange.org](http://www.gorerange.org)

IslandWood

4450 Blakely Avenue NE

Bainbridge Island, WA 98110-2257

206.855.4301

[www.islandwood.org](http://www.islandwood.org)

Merry Lea Environmental Learning Center

P.O. Box 263

Wolf Lake, IN 46796

260-799-5869

[www.goshen.edu/merrylea](http://www.goshen.edu/merrylea)

North Cascades Institute

810 State Route 20

Sedro Woolley WA 98284

360-856-5700

[www.ncascades.org](http://www.ncascades.org)

Pine Jog Environmental Education Center

6301 Summit Bld.

West Palm Beach, FL

561-686-6600

[www.pinejog.org](http://www.pinejog.org)

Teton Science Schools

PO Box 68

Kelly, WY 83011

307-734-5659

[www.tetonscience.org](http://www.tetonscience.org)

Wolf Ridge Environmental Learning Center

6282 Cranberry Road

Finland, MN 55603

218-353-7414

[www.wolf-ridge.org](http://www.wolf-ridge.org)

<b>Appendix D</b>				
<b>Program Information: Selected Alternative Graduate Studies Programs in EE</b>				
<b>Organization</b>	<b>Degree Earned</b>	<b>Program in Brief</b>	<b>Graduate Cr.</b>	<b>Notes</b>
Antioch University New England	MS in Environmental Education	2-semester Practicum--theory and practice of residential environmental education at Boston University Sargent Center	10 semester hours practicum + academic coursework	12 positions, \$3000 stipend + room and board
Delaware Nature Society	Graduate credits applicable to University of Delaware Museum Studies	1-month Environmental Institution Management—through seminars, field trips, group projects and preparation of individual reference manuals	6 semester hours	6-8 students \$1513 in-state, \$3853 out of state, includes room
Florida Atlantic University (Pine Jog Environmental Education Center)	Master's in Curriculum and Instruction with EE emphasis	2-year experiential academic program includes academic coursework, teaching practicum, experience in developing EE programs, practical experience of working at an EE center (non-residential center)	36 semester hours	6 positions, some Grad Assistantships Available
Gore Range Natural Science School (CO)	Graduate credits applicable to Colorado State University for coursework	15-month Fellowship preparing and teaching lessons for K-12 students in natural science, mentoring incoming fellowship students. Residential EE	12 semester hours	4 positions/year, stipend + housing June-Aug; \$20,000 stipend, no housing Sept-Aug.

<b>Program Information: Selected Alternative Graduate Studies Programs in EE</b>				
<b>Organization</b>	<b>Degree Earned</b>	<b>Program in Brief</b>	<b>Graduate Cr.</b>	<b>Notes</b>
IslandWood	Graduate credits applicable to University of Washington MEd. Science Education or MEd. Teaching and Curriculum or MS Biology for Teachers or to City University towards Master in Teaching/Teacher Certification	10-month Graduate Residency in Education, Environment and Community. Academic coursework and teaching experiences with school overnight program as well as outreach. Focus on 4-6 <sup>th</sup> grade students. Residential EE. 2 cohorts of students rotate biweekly.	39 quarter hours earned— 27 can apply to Master's Program at University of Washington, 26 can apply to City University	20 to 25 students Cost to student: \$17,000 included tuition and housing (housing available for 16 students)
Merry Lea Environmental Learning Center	MA in Environmental Education— complete degree in 11 months	11-month program, intensive, only Master's program at Goshen College, includes all courses.  Experience in EE with elementary aged students 5 days a week.  Non-residential for Master's students or ELC participants.	Full graduate program	First year 2009 3 students, Cost to student \$21,000 (\$6,000 scholarships available, half tuition for IN residents) does not include room and board

<b>Program Information: Selected Alternative Graduate Studies Programs in EE</b>				
<b>Organization</b>	<b>Degree Earned</b>	<b>Program in Brief</b>	<b>Graduate Cr.</b>	<b>Notes</b>
North Cascades Institute	MEd. In Environmental Education, Certificate in Leadership and Nonprofit Administration from Western Washington University	1-year residency at the Institute (4 quarters); 7-quarter program in total. At Institute, includes field studies, environmental education, field science, cultural studies, teaching and nonprofit administration. Residential EE.	52 quarter hours	10 students per year Cost to student: \$15,850 (plus tuition of \$11,000 in state/\$25,000 out of state) room and board are included
Southern Oregon University	MS	As of November 2007, partnerships being planned in conjunction with Deer Creek Center for Research and Education field station.	Quarter-long experiential program	To be offered in the future
Teton Science School	Certificate in Environmental Education, graduate credits applicable to MS programs at University of Wyoming, Utah State University, University of Idaho	50-week residential graduate program, integrates academic coursework with practicum in intensive mentored teaching. 2 cohorts of students, alternates 2 weeks practicum with 2 weeks academics. Residential EE.	Up to 32 semester hours	Up to 24 students per year Cost to student: \$14,400 with no housing; \$19,000 with housing (Room and board options are \$80-\$95 per week)



<b>Program Information: Selected Alternative Graduate Studies Programs in EE</b>				
<b>Organization</b>	<b>Degree Earned</b>	<b>Program in Brief</b>	<b>Graduate Cr.</b>	<b>Notes</b>
University of Idaho (McCall Outdoor Science School)	Graduate Certificate in Environmental Education, MS Conservation Social Sciences	One semester Graduate Residency includes graduate course work and a 5-week practicum in field science teaching (elementary and middle-school students)	15 semester hours	20 positions over a 2 year period, assistantships and tuition waivers available
Wolf Ridge Environmental Learning Center	Certificate of Environmental Education and graduate credits applicable to MEd. At University of Minnesota	9-month naturalist training program includes teaching classes to 4-8 <sup>th</sup> graders in ecology, cultural history, and team building. (Residential center)	18 semester hours, core and electives	16 students \$3500 scholarship towards cost to student of ~ \$8000 tuition. Room and board included.

## Appendix E

### Questionnaire for Long Interviews

#### Interview Questions for Conserve School Staff/Administrators:

1. Tell me about coming to work at Conserve School.

**Objectives:**

to identify perspectives.

to determine what expectations staff/administrators came here with.

2. Tell me about the spaces you live in and work in.

**Objectives:**

to gather information about facilities, tools, housing.

to find out if there are physical spaces or tools that will help ensure success for future GAs.

3. Tell me about the different kinds of people who work here.

**Objectives:**

to gather information about their perceptions of the culture of the school.

to help determine if the GA program can fit in here.

4. Walk me through what a typical night/weekend on duty is like, from the moment it starts until the moment it ends.

**Objectives:**

to gather information about their perceptions of the current RI program.

to gather information about the strengths and limitations of the RI program so that the GA program can build on the strengths, and improve the limitations.

5. Tell me about environmental education at Conserve School.

**Objective:**

to determine perspectives and perceptions of EE at Conserve.

6. Describe your vision for the proposed Residential Graduate Program.

**Objective:**

to find out needs and interests for the program that might help shape it and make it the best possible.

7. Tell me about any concerns you have about my project.

**Objectives:**

to find out concerns so that they can be addressed, resulting in better communication about the project.

to identify potential stumbling blocks or red flags.

## **Interview Questions for Conserve School Residential Interns:**

1. Tell me about coming to work at Conserve School.

**Objectives:**

to identify perspectives, find out background skills, knowledge, abilities, why RIs chose to be an intern at CS (will help to target future potential RIs).

to determine what expectations RIs came here with.

2. Tell me about the spaces you live in and work in.

**Objectives:**

to gather information about facilities, tools, housing.

to find out if there are physical spaces or tools that will help ensure success for future GAs.

3. Who are the different kinds of people who work here?

**Objectives:**

to gather information about their perceptions of the culture of the school

to help determine if the GA program can fit in here.

4. I'm interested in knowing the details of typical on duty and off duty days, from the time you get up until you go to bed.

**Objectives:**

to gather information about their perceptions of the current RI program.

to gather information about the strengths and limitations of the RI program so that the GA program can build on the strengths, and improve the limitations.

6. Walk me through what a typical night/weekend on duty is like, from the moment it starts until the moment it ends.

**Objective:**

to find out what other duties RIs perform, how they use their free time.

7. Tell me about environmental education at Conserve School.

**Objective:**

to determine perspectives and perceptions of EE at Conserve.

8. What preparation, tools, education and training would be of benefit to another person coming into this position at Conserve School or another similar school?

**Objectives:**

to help determine personal characteristics and other factors that point to a successful GA or to help identify potential training needs.

9. Tell me about any concerns you have about my project.

**Objectives:**

to find out concerns so that they can be addressed, resulting in better communication about the project.

to identify potential stumbling blocks or red flags.

**Possible prompts for both groups:**

Are there others? Is there more? Is there anyone else?

You mentioned \*\*\*\*. Tell me a little more about that.

That's not something I've heard before. Can you expand on that?

Response for negative comments:

That's interesting. It doesn't really fit in with what I've experienced with that person/program, etc. Tell me more.

## Appendix F

### IRB Approval Form

University of Wisconsin-Stevens Point  
Institutional Review Board for the Protection of Human Subjects

### Protocol for Original Submissions

A complete protocol must be submitted to the IRB for approval prior to the initiation of any investigations involving human subjects or human materials, including studies in the behavioral and social sciences.

If the research does not involve vulnerable subjects such as minors or inmates, send **6 copies** of (1) the completed protocol; (2) project abstract; and (3) samples of informed consent forms to the IRB chairperson. PROTOCOLS LACKING ANY ONE OF THESE THREE ELEMENTS WILL NOT BE APPROVED. In addition, copies of questionnaires or interview questions MUST be attached. If the research does involve subjects that may be considered vulnerable, please send 12 copies.

PLEASE TYPE

Project Title: Developing the Programmatic Framework and Curriculum for a Master's in Residential Environmental Education

Principal Investigator: Frances "Fran" Blanchard

Department: CNR

Rank: Graduate Assistant

Campus Mailing Address: Treehaven Environmental Learning Center

Telephone: 715-453-4106

E-mail address: fblan707@uwsp.edu

Faculty Sponsor (if required): Randy Champeau

(Faculty sponsor required if investigator is below rank of instructor.)

Expected Starting Date: March, 2008

Expected Completion Date:

March, 2009

Are you applying for funding of this research? Yes \_\_\_\_\_ No XXX

If yes, what agency? \_\_\_\_\_

Please indicate the categories of subjects to be included in this project. Please check all that apply.

Normal adult volunteers

Minors (under 18 years of age)

Incarcerated individuals

Mentally Disabled

Pregnant women

Other \_\_\_\_\_ (specify)

**(Faculty Member)** I have completed the "Human Subjects Protection Training" (available at <http://www.uwsp.edu/special/irb/start.htm>) and agree to accept responsibility for conducting or directing this research in accordance with the guidelines.

\_\_\_\_\_  
(Signature of Faculty Member responsible for research)

**(Department Chair or equivalent)** I have reviewed this research proposal and, to the best of my knowledge, believe that it meets the ethical standards of the discipline.

\_\_\_\_\_  
(Signature of Department Chair or equivalent)

\*\*\*\*\* Do not write below this line – for IRB use only \*\*\*\*\*

IRB approval \_\_\_\_\_ Date \_\_\_\_\_  
(Signature of IRB Chair)

**Approval for this research expires one year from the above date.  
If research is not completed by this date, a request for continuation must be filed  
and approved before continuing.**

Revised form:

January 2001

### **Proposal Abstract**

Write a brief description of the purpose of the proposed research project. (100-200 words)

Interviews and focus groups will be conducted with and surveys will be sent out to stakeholders with an interest in a possible new UWSP Master's Program in Environmental Education. Stakeholders include selected UWSP faculty, students, and staff in the CNR, faculty and staff at the Conserve School, former Residential Interns from the Conserve School, and staff from selected Residential Environmental Learning Centers. It is anticipated that interviews will be conducted with approximately 40 people, focus groups will involve approximately 100 people and surveys will be sent to approximately 50 people. The interviews, focus groups, and surveys will gather information on Residential Environmental Education programs and how a Master's program can support those programs. The purpose is to determine a best practices model for the development of a programmatic framework and curriculum for a new Master's Program in Residential Environmental Education.

## **Appendix G**

### **Informed Consent Form**

This research project has been approved by the UWSP Institutional Review Board for the Protection of Human Subjects.

#### **Informed Consent to Participate in Human Subject Research**

Dear Conserve School Staff,

Fran Blanchard, Graduate Student from the College of Natural Resources at the University of Wisconsin-Stevens Point, would appreciate your participation in interviews designed to assist with the development of a Master's. You are being asked to participate in 1-3 interviews that could take a total of approximately 2 hours or less of your time.

We anticipate no risk to you as a result of your participation in this study other than the inconvenience of the time in being interviewed.

It is hoped that we may gain valuable information that will result in the development of a programmatic framework and curriculum for a Master's Program in Residential Environmental Education. It is also hoped that the information will help Conserve School to attract and retain qualified graduate students to assist with residential life and other essential functions at Conserve School.

The information that you provide in the interviews will be recorded in anonymous form. We will not release information that could identify you. All transcriptions and notes from the interviews will be kept in the office of Fran Blanchard and will not be available to anyone except her, except as aggregate information identified only by number.

If you want to withdraw from the study at any time you may do so without penalty. The information from you up to that point would be destroyed.

I would be glad to share the results when completed. If you have any questions, please contact:  
Fran Blanchard, Graduate Assistant, UWSP  
Treehaven Environmental Learning Center  
W2540 Pickerel Creek Rd.  
Tomahawk, WI 54487  
(715) 453-4106, fblan707@uwsp.edu

If you have any complaints about your treatment as participant in this study, please contact:  
Dr. Jason Davis, Chair  
Institutional Review Board for the Protection of Human Subjects  
Department of Business & Economics  
University of Wisconsin-Stevens Point  
Stevens Point, WI 54481  
(715) 346-4598

Although Dr. Davis will ask your name, all complaints are kept in confidence.  
I have received a complete explanation of the study and agree to participate.

Name \_\_\_\_\_ Date \_\_\_\_\_  
(Signature of subject)

## **Appendix H**

### **Requirements and Expectations for a Conserve School Residential Intern (2007-08)**

#### **Residential Duties**

- Wing duty—once per week (Wednesday—wing meetings)
- Supervise Room/wing cleaning (1 time per week)
- House duty—once per week (M, T, Th, F) and 1 weekend per month
- Weekend Activity team—1 weekend per month
- Wing treks—3 per year
- Lunch with wing—M,W,F

#### **Academic Support Duties**

- Advisor to 2-4 students—meet at least 1 time per week/contact with parents by phone and email (no standard about how often, but about 1 time per month)
- Campus service teams—1 afternoon per week
- Afternoon activities—2 afternoons per week

#### **Professional Development**

- RI seminar—Tuesdays and Thursdays (3 hours total)
- Rotate through coaching, student services, teaching, outdoor education
- Staff meetings—Wednesdays, as scheduled

#### **Campus Activities/Events**

- Earth Days—1 in October, 1 in April
- Fall Exploration week—September
- Healthy choices activities
- Winter Carnival
- Orientation--Fall
- Family weekends—2 per year
- End of the Year
- Campus Traditions

#### **Other**

- Spend time in classroom building (LAB) each day—be visible
- Get to know wing residents, be available
- Driving for errands, appointments for students (volunteer basis)
- Clubs and activities (optional, but strongly encouraged)
- Substitute teaching (volunteer basis)
- Community meeting—Tuesday and Thursday 30 minutes each morning (optional, but strongly encouraged)
- Sunday dinner/gathering (required if on duty, optional but strongly encouraged otherwise)



## **Appendix I**

### **Themes, Categories, Subcategories and Propositions from Data**

A list of propositions taken from the raw interview data, and the subcategories, categories and themes developed from those propositions is below. Themes are numbered TI through TVII. Categories are lettered A-GG. Subcategories are labeled SC1-SC107. Propositions are numbered P1-P273.

Following each proposition are references to the interview number and the page on which the relevant text is found. For example, a proposition that is from relevant text in interview number 8, on page 4 of the transcript is denoted: (8, 4). A proposition that is repeated by several interview participants has notations for each applicable interview and page number, in the following manner: (8, 4)(23, 3)(16, 2). (Note: Long interviews are numbered 1-36. Non-structured interviews are numbered 37 to 45.)

#### **T1 Existing culture nourishes a learning community**

##### **(A) C18 Positive culture is apparent in community members**

###### **SC51 Community is like-minded**

P53. It's nice to be in a community that thinks similar to me. This is the first place I've ever been where most of the people are environmentally centered. (12, 1)(15, 2)(17, 2)(26, 2)(29, 3)

###### **SC48 Atmosphere of kindness and respect**

P44. The people are very kind here . . . they go out of their way to be kind and respectful towards one another. It makes me happy to come to work every day. (19, 1)(20, 2)(26, 3)

###### **SC49 Staff contribute an array of experiences**

P45. It's a pretty interesting diverse staff. It's a neat group of people who are attracted to the school and stay. (1, 2)(3, 2)(6, 3)(12, 1)(24, 3)(25, 2)

###### **SC52 Feeling of passion and commitment**

P47. I think pretty much everybody who is here has a real love of their discipline and what they do that jazzes them up. They're very passionate, the faculty and staff. (4, 2)(5, 4)(6, 3)(15, 4)

P48. The majority of the people are here to make the kids' learning and students' time here the best. So work blends in with their regular life. (4, 2)(5, 4)(6, 3)(29, 2)

P49. I think the faculty as a whole are really, really committed, and they're very talented. It's one of the most idealistic and skilled faculties have ever worked with. (1, 2)(3, 2)(4, 2)(5, 4)(6, 8)(11, 3)

##### **(B) C14 The culture supports learning opportunities and varied interests.**

###### **SC38 Opportunities to learn from staff**

P50. Faculty and staff here are from real world experience, and then coming here. As far as being an intern and coming here to learn and grow, to have those kinds of mentors is just amazing. (6, 3)

(1, 2)(2, 1)(7,1)(8,3)(9,1)(9,6)(29,5)(31,1)

P61. The RIs have had an opportunity to pursue some of their interests. (14, 5)(17, 3)

**(C) C19 Learning is valued on multiple levels**

**SC53 Staff takes advantage of learning opportunities**

P59. This place has a lot of great opportunities for every student and faculty. There's never a missed opportunity for improvement or for growth for faculty as well. (10, 1)

P164. Having many talented people means that everybody gets a chance to learn from each other. (12, 1)

**SC76 Grad students teach as well as learn**

P109. I would love to see grads training staff. A lot of our staff are not skilled in some of the areas that the interns are. (26, 8)

P110. [I'd like to see RIs have] opportunities for teaching in seminar and also teaching students in the classroom and on the fields and courts. I'd love to see them creating their own courses. (20, 6)(26, 8)

**(D) C20 Overall, change is perceived as a positive part of the culture**

**SC54 Though there are changes, cohesiveness is building**

P165. Conserve School is a young growing school that is still evolving. (11, 1)(13, 1)(14, 1)(15, 2)(18, 1)(22, 2)(23, 3)(25, 4)(26, 1)(28, 2)(29, 1)

P57. I was pleasantly surprised at their [staff overall] individual excitement about change and about the school getting its act together. (11, 1)(18, 1)(25, 5)(26, 5)(29, 4)

P58. We are all in the same boat, and we're all pulling the oars at the same time. (29, 2)

**(E) C21 An array of resources promotes well-being**

**SC55 Outdoor amenities provide professional and personal opportunities**

P62. The variety of resources [available] is overwhelming. There's really nice athletic equipment, a lot of nice spaces to use. (6, 3)(6, 7)(20, 1)(24, 3)

P63. The campus is a pretty neat place to work--trail systems and the lakes in the forest that you have access to. It's an amazing place to live and work. You can take the kids out with you and show you them what you've learned. (24, 3)

P73. This campus is beautiful, it's magical. People choose these kinds of locations for vacation and we get to live here all the time. It certainly is a privilege to work here (11, 2-3)(25, 1)(27, 1)

**SC60 Pleasing surroundings help people feel at home**

P74. Most things you need are here--there are cultural events, music, a library, the use of great facilities. It's unique and different. (31, 1)

P75. The apartments are beautiful. I'm on the second floor and I feel like I'm living in a tree house because of all the trees that are outside. Nature sort of feels like it's inside. (1, 2)(2, 2)(3, 2)(4, 2)(5, 3)(6, 2)(12, 1)(16, 1)(26, 2) It's the best, largest, most well furnished, and well taken care of apartment that I have ever had in my life. (1, 2)(4, 2)(6, 2)(9, 1)(10, 1)(20, 2)(23, 1)

P76. They do talk about when building a residential curriculum how important it is to have your staff feel at home and comfortable. In that regard, I can't imagine the living spaces being much better. (6, 2)(11, 2)(15, 3)(29, 2)(19, 1)(24, 7)

P77. There's a quality of calm in the workspaces I inhabit. The light is more pleasant. There's natural wood molding and paneling around the room. The colors are clearly chosen with some calculation (15, 3)(25, 2)(29, 2)

## **(F) C22 Graduate students are valuable community contributors**

### **SC56 RIs contribute activities and programs**

P66. They have brought talents and time to do things that no one else has—additional activities, curricular things, new ways of thinking, questioning.

P169 The programs, like the green bike program, and food waste and battery recycling have come from them. The community service program has improved. And outdoor activities. (13, 3)(15, 4)(19, 3)(20, 5)(27, 3)(30, 2)

P68. The awesome RIs—some of them have enough initiative and enough creativity that they have actually launched programs at the school that are now stable programs and may even be stable after they leave. (23, 4)(11, 6)(19, 3)(27, 3)(29, 6)

### **SC59 RIs bring time and energy**

P71. I think it's vitally important that we have these young adults here. They bring so much to the school. They have a lot of energy, they have a lot of ideas, they have a lot of stamina . . . and they have time to make things happen. (19, 3)(22, 4)(30, 2)(30, 3)(31, 2)

P72. The work they [RIs] do is pretty essential work. They are some other of the staff doing those tasks; they improve the overall quality of the effort here at the school. (11, 6)(13, 3)(14, 5)(15, 4)(19, 3)(25, 5)(29, 5)

### **SC57 RIs have fresh perspectives, new knowledge**

P67. They're fresher on technology, of what's available or where education is going, because they're fresh out of school and they kind of know what's available or coming down the line. (21, 2)(22, 4)

### **SC58 RIs are role models and mentors**

P69. They [RIs] are an incredible addition to the school community—younger people in the community that the students can connect with. They have rapport with the kids. (15, 4)(20, 5)(21, 2)(28, 4)(22, 4)(27, 3)

P70. It's useful for the high school students to be interacting with younger staff who are very close to that college student character. They're good role models in that respect. (15, 4)(21, 2)(23, 4)(25, 5)(27, 3)(21, 2)

## **(G) C31 Encourage the growth of a positive culture.**

### **SC27 Positive culture is inclusive**

P32. I think sometimes they [RIs] don't feel like they are part of the staff. I would like to see them more integrated. (11, 6)(18, 6)(26, 7)

P33. Graduate staff is seen as full staff members. They have equal input in decisions; their ideas and opinions are valued and shared. As part of their professional development, they serve on teams and take on responsibilities. (36, 2)(37, 1)(18, 6)(31, 1)

P229. Involve them in the culture of Pine Jog. We do that with lots of orientation at the beginning. we meet regularly and have staff planning days. (36, 3)

### **SC104 Create learning culture**

P241. Retreat for fun—hike, canoe, etc. Social things—set up situations for them early on. (37, 2)

P222. I try to empower the graduate students. I tell them that this is YOUR program. You're in charge of what you want to get out of it. (36, 2)

P258. Create a culture of learners, let culture do the teaching. (43, 2)

**T2 Selecting the right students increases chances for success**

**(H) C1 Successful residential graduate students have appropriate personal attributes**

**SC10 Experience and enjoyment of youth and people in general**

P3. You should have experience working with youth, comfort around youth. You're like their aunt or their uncle in a lot of ways. (1, 5)(3, 3)(4, 5)(5, 12)(6, 6)(6, 8)(7, 5)(24, 6)(27, 1)

P 143 You need enjoy the teenagers, even if they drive you nuts, you still need to enjoy them. (26, 4)

P210. If you're going to go into EE, you need to be good with children. I would say that you really need to be good with every age—you interact with a lot of people. (32, 2)(33, 2)(34, 2)

**SC13 Sense of direction**

P6. They need to have an idea of what they want to be able to get out of [graduate school] and how people get that here. (2, 4)(3, 4)(5, 12)(6, 7)(9, 4)(21, 3)(21, 4)(31, 2) 1 or 2 years in the field before the graduate program—they have explored options and decided EE is what they want to do. (37, 2)(39, 1)(43, 2)

P259. Graduate students are responsible to request what they need (people who thrive on that really thrive; students who don't buy in don't necessarily do well)(43, 2)

**SC14 Self-starters**

P7. I think first and foremost, all [fellows] should be self-starters; be people that are creative enough, outgoing enough to discern a need and run with it. (1, 5)(3, 4)(5, 13)(6, 6)(15, 7)(20, 5)(21, 3)(24, 6)(36, 3)(37, 2)(39, 1)

**SC15 Self-confidence**

P8. Having confidence in who you are and what you think is right is really important for working with these teenagers. No one's going to read your mind, no one's going to know what you need. (4, 4)(5, 3)(5, 6)(6, 6)

**SC15 Flexibility**

P10. The graduate students need to be flexible. (9, 4)(36, 3)

**SC16 Patience**

P11. They need to have lots of patience. (5, 10)

**SC17 Energy**

P12. People who are outgoing and are high energy. (1, 5)(6, 8)(21, 3)

**SC18 Good work ethic**

P13. I would like to see people with hard work ethics. (4, 6)(13, 4)

P239. They take direction well and know when to ask for more information. (37, 2)(39, 1)

**SC19 Teamwork**

P14. Ability to cooperate and work as a team, which almost sounds like a cliché, but it's so important. (4, 6)(6, 2)(14, 4)

**(I) C17 Work and study habits need to be solid**

**SC45 Inconsistencies in work habits**

P41. I think you've got some really good people [as RIs]. And I think you've got some real duds. I think it's horribly polarized. I think there are some who really have the

spirit. They've got the commitment. Then you've got some duds that I think are just kind of going along. (2, 5)(4, 2)(5, 5)(7, 1)(12, 2)(15-5)(18, 6)(20, 5)(21, 4)(29, 4)(30, 3)  
P42. Sometimes I've seen resistance from RIs that I don't notice from other employees. I've have felt a little bit of resistance to being a complete team player and doing all it takes I have a concern about the resentful comments by RIs about the kind of work they have to do. (18, 6)(29, 4)(30, 3)

#### **SC96 Desirable work and study habits**

P232. The graduate students need to have a willingness to learn. (36, 3)

P271. They participate fully in the program. (43, 1)

#### **(J) C29 Successful graduate students have passion, skills, and experiences to fill an available niche.**

##### **SC78 Select multi-talented people that fit the position**

P115. The characteristics that I look for when I hire someone is that they can't be one dimensional. As we do recruiting and selection, we could be looking for someone who has some skills or interests [that fill needed niches] (11, 7)(14, 4)(30, 1)

P117. For graduate students, make sure that what their interests are can be fulfilled here. (6, 9)

P233. Passion—that's what has set the program apart—our GAs want to be HERE (36, 4). They have embraced the opportunity to learn as much as possible and have sought out opportunities for learning. They have a realization of the possibilities that Pine Jog provides. (37, 2)(39, 1)

P266. It helped that I came and looked around—I shadowed someone in the program to see what they did. (35, 2)

P249. Make sure they are a good match for BOTH academics and hands-on learning. (40, 2)

##### **SC1 Graduate students need to be grounded in EE**

P1. To keep the environmental mission at its core, they [RIs] have to live it and breathe it. (1, 5)(6, 6)(6, 8)(24, 6)(21, 3)(22, 5)(27, 1)(27, 4)

P206. Having a strong science base means that I understand the concepts to be able to teach EE. I think that really helped me. (33, 2)

##### **SC14 Graduate students should have good communication skills**

P9. Future graduate students should have good oral and written communication skills (1, 5)(36, 3)

##### **SC12 Choose people with diverse interests**

P5. Bringing in people with an environmental background is also good, but also bring in people with other kinds of backgrounds because there's a lot of other things going on in places that need attention. (1, 5)(6, 6)(3, 4)(5, 11)(6, 6)

#### **(K) C4 Good selection practices increase the chances for success**

##### **SC7 Select the appropriate applicants**

P114. Hire the best people you can. Get the right people, clearly define their job responsibilities and duties, supervise them, and motivate them. (29, 4)

P217. Before I came they asked me about prior experience, career goals, and what about Pine Jog suited me. They asked about my comfort level with living in shared spaces. (35, 2)

**SC97 Clarify expectations**

P209. People need to understand what they're getting into in this kind of a program. I've really struggled with this whole EE thing, but now I understand it better. Maybe people should know about Tbilisi before they get here. (33, 2)

P215. Set up work expectations (more than 40 hours/week)(40, 2)(42, 1)

**(L) C26 Informal marketing strategies attract the target audience.****SC84 Marketing on Web**

P139. A friend saw advertisement on Purdue job center website (2, 1)

P190. I found out about the program online through GradSchools.com (32, 1)(33, 1)(36, 3)(40, 2)

**SC85 Marketing by word of mouth**

P140. A friend thought I would be interested and mentioned it to me (1, 1)(4, 1)(6, 1)(7, 1)(9, 1)(17, 1)(34, 1)(35, 1) 90% of our marketing is by word of mouth (44, 1)

P141. A friend I went to college with was a current intern here (10, 1)

P142. My family lives in the area (3, 1)(5, 1)

**SC98 Marketing materials reflect program**

P253. Make sure that the marketing materials reflect all parts of the program. (40, 2)

**T3 Defining the structure and framework for a graduate program is key****(M) C9 The program needs a defined structure****SC29 Program organization and definition**

P34. It [current RI program] needs consistency . . . there is a lack of structure. It's not organized enough. I feel like it would have helped if I had had a more definite plan of what I was going to be doing while I was here instead of having this feeling of sort of vaguely floating around until I found something to do. (7, 1)(7, 5)(5, 12)(9, 5)(9, 12)(24, 1)(24, 2)(30, 1)(30, 3)

P95. Having a Master's program would be great, because it would really help define what it interns role is. It needs to be structured, more defined. (5, 13)(14, 9)(17, 4)(20, 6)(31, 2)

P128. It's one of the great blessings and one of the great curses as an intern that you don't have a lot of structure to your day. (1, 2)(1, 5)(2, 1)(3, 1)(6, 1)(6, 7)(7, 6)(10, 3)

**SC30 Program accountability**

P35. We need accountability. I just think some sort of quality control so that the interns are all accountable for minimum amount of work and maybe told not to over a maximum amount of work. (2, 5)(3, 1)(4, 6)(5, 13)(6, 8)(10, 4)(12, 3)(14, 6)(31, 2)(29, 4)

**SC31 Supervision and support**

P36. Having the program be divided up between 2 supervisors, there is a lot of disconnect. It was difficult to figure out what you're supposed to be doing. There wasn't one person I could go to and find out. (24, 1)(24, 2)

P99. We need to give the RIs feedback so that they have a quality experience. (30, 1)

P132. They [RIs] need to be re-energized and they need to be supported. Big time supported. (22, 4)

**SC80 Responsibilities clearly defined**

P118. We need a detailed description of responsibilities in each of the areas. Clear definition of what is the job, what is part of free time or part of residential life. (2, 6)(4, 7)(5, 5)(5, 13)(8, 3)(10, 4)(14, 6)(11, 7)(14, 6)

**SC88 Job hard to quantify**

P145. The RI job duties are hard to quantify because there are many duties that occur irregularly or just occasionally. (1, 3)

**SC89 Workload uneven between RIs**

P157. I had so many things I had to do every day. It was very hard, the first couple months. (5, 5)

P147. I mean, honestly I have days that I could sleep, I could stay in my room until 3 p.m. and no one would notice. (2, 3)

P159. There is inconsistency in the work load among RIs (7, 2)(10, 3)(12, 3)(15, 5)

**SC93 Intern seminar is haphazard**

P160 Intern seminar is haphazard—a complete waste of time some weeks.

(2,5)(5,11)(6,8)(7, 5)(9,6)(10,3)(24,6)

P161 I think that there are things that learn seminar that even if I don't use them here, they're going to help me reach children in my future life wherever I go. (4, 6)

**SC87 Lack of consistency is a challenge**

P 144. Discipline and school rules not consistently enforced (1, 4)(4, 1)(5, 8)(5, 10)(7, 3)

P 154. RIs sometimes expected to do things that there's no buy in from staff (discipline, Sunday gathering). (4, 3)

**(N) C12 Outcomes for graduate students need definition and follow through****SC34 Expectations and goals need definition**

P96. They need to have a clear understanding of the expectations they have before them. Maybe their final goal needs to be identified. So the balance between what the students will give to Conserve School and what Conserve School will give to the student. (4, 6)(5, 13)(8, 2)(14, 6)(21, 6)(22, 5)

P163. Promises were made to the RIs that didn't materialize (graduate credit, rotation through big 4). (8, 2)(10, 3)(17, 4)(20, 5)(24, 2)

**SC37 Lack of professional development**

P39. The one severe weakness is the education that we are personally getting out of it. The enrichment I've gotten out of this experience has not been the education that should have been provided in the intern program (9, 4)

P160 Intern seminar is haphazard—a complete waste of time some weeks. There are a lot of cancellations (2, 5)(5, 11)(6, 8)(7, 5)(9, 6)(10, 3)(24, 6)

P161 I think that there are things that learn seminar that even if I don't use them here, they're going to help me reach children in my future life wherever I go. (4, 6)

**SC39 Program must deliver what it promises**

P91. We didn't get the certifications or training or college credit we were promised. (24, 7)

P231. it's very important that you don't promise them something that can't be delivered (36.3)

**(O) C30 Basic frameworks from other graduate programs can provide a model.**

**SC105 General framework**

P178 GAs work with students at the environmental learning center or do other jobs (33, 1)(34, 1)(35, 1)(37, 1)(38, 1)(39, 1)(41, 2)

P179 GAs have academic classes (33, 1)(34, 1)(35, 1)(36, 1)(37, 1)(38, 1)(39, 1)(41, 2)

P180 GAs have a variety of hands on experiences. (35, 1)(36, 1)(37, 1)(38, 1)(39, 1)(40, 1)(41, 1)

**SC106 Academic framework**

P216. They're pretty lenient about missing time here to go to class. (35, 2)

P272. Classes take place at regularly scheduled weekly times between programs. (38, 1)

Most academics are in the evenings. (42, 1) Each week everyone takes classes together Thursday evenings and Fridays (39, 1) Flexible scheduling is important. (36, 2)

P273. Academics is the primary reason they're here, so their classes come first. (36, 2)

P254. [We use] block scheduling—don't do classes on same day as practicum. (41, 1)

P245. Have 2 tracks: one for environmental education and one for interpretation (38, 2)

**SC107 Cohort group structure**

P234. My ideal would be to have 8 grads come in at one time. The first year grads think everything is great. They want to get everything they can out of the experience. The second year grads sometimes get that I'm out of here mindset, (36, 4)

P246. The program operates on a cohort system—there are 2 cohorts. 1 teaches, the other works on homework, do school visits, act as school liaisons, or do projects in the community. It works well for everyone. Cohorts rotate biweekly (39, 1) Cohorts rotate in 2 week blocks (38, 1)

**T4 Meeting the challenges of residential living requires specific training**

**(P) C5 Residential life can be consuming**

**SC8 Residential communities are a lifestyle, not just a job**

P26. They [RIs] need to know, too, generally the constraints of a boarding school. It's a 24 hour a day, seven day a week job. It's not really a job, it's a lifestyle. (10, 2)(21, 6)(26, 2)(26, 4)(27, 4)

P27. You're in a fishbowl. it's been a challenge for everybody here to separate work from your personal life. (3, 5)(5, 3)(9, 1)(11, 4)(21, 6)(24, 2)(24, 4)

P78. I think it's really important for the students, that even if you're just sitting somewhere and working, they see you as you are accessible, versus being locked up in your office. (4, 2)(5, 3)(6, 2)(9, 2)

**SC9 Residential life workload**

P28. It's really hard to explain the quality of time that faculty put in, especially in the dorms. And the fact that to do it well, you're not on an hourly clock. It's not an hourly job. (11, 3)(11, 4)(26, 2)(27, 4)

**SC11 Residential life has rewards**

P4. I like having closeness with the kids. It's really like this great community and I like it now. And I know all the girls and their personalities. If a kid's abrasive I know why. (2, 3)(5, 4)(24, 3)



**(Q) C10 Achieving balance is complex.**

**SC33 Balancing professional and personal life**

P133. Another thing that needs to be tweaked is them to have time to be on their own too, time to just go camp or do whatever they want. Two days together would be best. (21, 6)

P134. Finding that balance between personal and professional life is something we all struggle with. Finding that balance of education versus work-study or however that assignment would be. That it doesn't get so muddled in the residential life day-to-day and duties that they're not learning to go out into the world. (5, 13)(6, 9)(10, 4)(20, 5)(21, 4)(21, 6)(23, 3)(24, 7)

P226. Communicate guidelines--academic homework should not be done on work time (36, 2)

P252. It's important to have a liaison or coordinator for students to help them achieve balance between work experience and academic work (40, 2)

**(R) C6 Care of adolescents takes special skills and training**

**SC20 Lack of experience with adolescent issues**

P15. RIs lack experience and judgment to lead adolescents and that sometimes problems arise from that lack of experience. (18, 5)(18, 6)(21, 5-6)(22, 4)(28, 6)

P148. I think a lot of people, a lot of interns, especially those with really strong environmental backgrounds, aren't necessarily prepared to deal with adolescent issues. (2, 4)

**SC21 Discipline difficult**

P16. The least favorite part of my job altogether, I think the hardest thing is discipline, because it's hard to have the kids hate you when you yell at them and they don't want to listen, but that's the thing that's most important that we do.

(2,4)(3,4)(4,2)(5,9)(7,4)(8,1)

**SC87 Lack of consistency is a challenge**

P 144. Discipline and school rules not consistently enforced (1, 4)(4, 1)(5, 8)(5, 10)(7, 3)

P 154. RIs sometimes expected to do things that there's no buy in from staff (discipline, Sunday gathering). (4, 3)

**SC23 Young adult/student relationships are challenging**

P19. The RIs have to be comfortable enough to be the students' mentor, rather than their friend. They need to know that dealing with their peers in college is different than dealing with adolescents. (5, 12)(21, 5)(28, 6)

P52. [in reference to dealing with teenaged students] I think all RIs should feel like us, as responsible adults. Some RIs have done this--they have said, I'm an adult here and I'm going to hold you responsible. (28, 6)

**SC22 Need training on psychology of adolescents**

P17. There should be a whole class on behavioral problems, deciphering between a psychological issue and behavior disciplinary situation. (17, 5)(5, 6)(10, 1)

P18. They need to understand adolescent development. (2, 4-5)(17, 4)(18, 6)(21, 5)(22, 5)(28, 6)

P 156. I wish I would have taken more psychology courses in my college education because there are a lot of things that I don't know how to handle (5, 5)

**SC86 Need training on how to take care of physical needs of students**

P138. Sometimes when the kids get sick, I'm not sure how to deal with that. (2, 4; 2, 5)

**(S) C13 Training for residential life should be thorough and specific**

**SC35 Need training and resources student life issues**

P98. There has to be a book of procedures of what to do. Someone might have a panic attack, or they're totally homesick, or they're suicidal. What do I do? Who do I call?

How do I get kids to clean their room? (21, 5)

P138. Sometimes when the kids get sick, I'm not sure how to deal with that. (2, 4; 2, 5)

P97. We need to revisit some of the that stuff [training] and say, what worked for you more we gave you as your training, and what didn't work? What do you need help with? What are you experiencing that you didn't think? (22, 4)(26, 7)

P 153. Did not receive enough training to handle many of the different job responsibilities. (1, 1)(4, 1)(4, 6)(24, 1)

**SC66 Training time is essential**

P112. [We need] time for training--they are adults, but they are young adults and they don't have the life experiences that we do so they need to be taught. And they need to have time to let it sift in. (14, 8)(18, 6)(22, 4)

**(T) C15 Residential life staff needs professional development time together**

**SC40 Residential life staff needs professional development time together**

P101. At least at the beginning of the year, or a few times throughout the year we have to have a day or two completely set aside for figuring out residential programs. And we need a lot of time, not like a quick morning staff meeting. It should be at least a daylong thing I think. (26, 7)(28, 3)

**T5 Support is fundamental to a successful experience**

**(U) C3 Mentorship plays an important role**

**SC4 Mentoring relationships need to be defined and nurtured**

P65. [One of the good things about the program now is] Relationships we established on our own with a mentor faculty. (5, 12)(7, 2)(9, 3)(11, 7)(12, 1)

P94. Teaching interns how to be mentees--how do you ask for what you need and how do you encourage an experienced person to take you under their wing and use that as a way that is productive to you.

P183. We as adults here at Conserve School forget who we role model for. We are all role models for the kids and we are role models for the RIs and we are role models for each other. (7, 6)(11, 7)(22, 6)(26, 7-8)

P127. It is a great opportunity from a professional development standpoint to start in this setting and there's quality or master teachers that could help them in this process. Especially boarding school or people who want to work in education. (1, 6)(3, 4)(10, 4)(13, 3)

P111. We need to train them (faculty) to mentor, and that takes time. We need to give the RIs feedback so that they have a quality experience. (12, 3)(14, 9)(16, 2)(19, 4)(30, 1)(30, 3)

P166. Guidelines for working with the RIs need to be communicated to teachers (19, 4)

P167. I think we might need to do a little bit more with coaching with house parents and how they might need to mentor those folks [RIs]. (26, 7)

P220. Set up formal mentoring with regular communication, setting goals, and debriefing. Have reflective and critical dialog between educators/instructors and the students, so the students understand why they do what they do. (36, 2)(37, 1)(38, 1)(39, 2)(42, 1)

### **SC32 Time for mentorship to take place**

P37. Sometimes I feel like maybe I'm not doing enough mentoring with her (intern). The interns get right to it; they have to kind of learn on the job. Again, it's not because we don't want to try and mentor her, but there's no time that is scheduled in the early part of the year for that. (8, 2)

P221. For the mentors, I go to the staff person and say, this is your graduate assistant. You're going to meet with them regularly—that's the biggest mechanism for success—give them meaningful work, and be flexible with their schedule, because they also have classes and will be teaching. (36, 2)

### **(V) C8 Resources help provide support**

#### **SC96 Living and working spaces support staff**

P76. They do talk about when building a residential curriculum how important it is to have your staff feel at home and comfortable. In that regard, I can't imagine the living spaces being much better. (6, 2)(11, 2). (15, 3)(29, 2)(19, 1)(24, 7)

P77. There's a quality of calm in the workspaces I inhabit. Great lighting and views. Colors are chosen with care. (15, 3)(25, 2)(29, 2)

P235. All need to have their own room, their own private space, and it's best if they have their own private bathroom (36, 4)

#### **SC47 Better workspace needed for RIs**

P43. I would like a bigger work space with the desk or something, some kind of thing designated for all of us even if we just had a file cabinet or something. I don't have a solid workspace . . . I have to work out of my briefcase. It's not very efficient. I don't get as much work done. (1, 2)(1, 6)(2, 2)(3, 2)(5, 3)(6, 2)(17, 1)(24, 3)

P31. I started out working at home, but that became a credibility issue, because people didn't think that you were working from home. They thought you were sleeping. (24, 3)

#### **SC28 Support should include health benefits**

P23. I really wish we would get health insurance. [We are] in charge of students and to be taking them on activities which are considered dangerous for them, and which are dangerous for ourselves. (24, 6)(26, 7)(31, 2)

### **(W) C11 Peer support is vital**

#### **SC5 Graduate students need opportunities to work together as a group**

P107. [We need] opportunities for interns to meet as a group on a regular basis. Not just through intern seminars. [RI's need time for] professional and personal sharing of their experiences working at Conserve School, to share issues. The interns aren't close at all and there's no cohesive bond. Even among the staff, I feel like everyone just does their own thing. At summer camp we worked together to complete a common task. That might be something that the RIs could do. Because we only come together in

seminar we're not getting together as a team to do something. So there's not that collectivity. (1, 6)(2, 5)(3, 1)(3, 5) (5, 5)(6, 8)(7, 3)

**SC3 Graduate students need to have a peer support group**

P2. {RIs need to] have enough people in their age group [to interact with]. (21, 6)

P24. This is a difficult place to live as a young person, a single person. It's not going to be the place where you going to make a lot of friends and have parties. You're going to have to entertain yourself somehow. I thought I knew what rural was. (3, 5)(6, 1)(6, 8)(7, 3)(9, 3)(20, 5)(21, 6)

P25. If they have enough people in their age group that would be good. (21, 6)

**SC92 Team development important**

P 152. Interns needed more bonding time at the beginning. (4, 1)(37, 2)

P242. Younger staff introduce them to area social opportunities (37, 2)

**(X) C27 A dedicated support person is essential**

**SC6 Need someone whose primary responsibility is the RI program**

P64. Our boss is always extremely supportive of any idea. She does a great job of being supportive of us. (1, 6)(2, 2-3)(5, 12) You need support from people who know what's going on with the whole program. (33, 2)(34, 2)

P93. Have a full-time coordinator for the program is critical . . . Part of that person's responsibility would be to safeguard the interns' time. Making sure they have time to take the environmental online class and write the 20 our papers a week, or to work with the teacher at Stevens Point and find out if we can run that program an extra two weeks so the students have time to finish it, or whatever. Also hire, meet with interns weekly or biweekly. (1, 6)(9, 8)(10, 4)(12, 3)(14, 7)(18, 7)(20, 6)(24, 8)(30, 3)(37, 2)

P100. Four, you supervise the heck out of them. You supervise them because they not only need supervision, they want supervision. You supervise them and you support them with salary and education. (29, 4)

P22. As far as the job I don't feel like I get a lot of feedback on that. (6, 8)

P252. You need dedicated faculty, coordinator and graduate advisors who understand the needs of students and have a depth of EE knowledge and understanding so they are able to guide students. (37, 1)(40, 2)

P248. There's a lot to try to coordinate—schedules, coursework, and workload. (39, 1)(42, 2)

**SC95 Follow through needed**

P155. The internship program is kind of had its ups and downs even this year because of the lack of follow-through. Generally, when I would say there is a lack of follow-through, it would have something to do with the person's desire to do it. But in this case, it really is just a lack of time to do a good job (4, 6)

**T6 Effective communication is critical**

**(Y) C2 Communication issues lead to differing perceptions**

**SC2 RIs perceive environmental education differently than teaching faculty**

P54. There's a lot of good [environmental] education going on inside and outside of the classroom (19, 2)(17, 3) [faculty]

P55. Where is the EE? Environmental education is . . . very much a part of the school's mission on paper, but I think that one thing that isn't done it is actually very hard to do

is the fostering of an actual connection to the environment that they live in.

(1,2)(1,4)(2,2)(4, 4)(5,11)(6, 5)(8,2)(8, 9) [RIs]

P170. I see it [EE] layered into the educational curriculum. I see it layered into residential life, outdoor activities. (18, 5)(12, 2)(15, 3)(14, 4)(31, 2)

**(Z) C28 Internal communication issues affect the CS culture**

**SC90 Communication among staff about issues needs to improve**

P150. Better communication so that everyone knows what issues there are in the dorms and classrooms (2, 6)(6, 3)(9, 7)(23, 3)

**SC94 Disconnect affects culture at school**

P162. There is some tension or disconnect between the administration and the staff.

The way the school is administered feels cold, and that culture comes down. (6, 3)(11, 2)(20, 3)(24, 4)(30, 1)

P40. Everybody, not just the RIs, is overworked. The RIs sometimes get bogged down in doing dirty work. (26, 6)(30, 3)(31, 1)

**(AA) C7 Lack of understanding creates tension**

**SC25 Staff understanding of RI roles**

P20. It would be valuable . . . for the rest of staff to be informed about what the RIs main jobs are. (2, 6)(5, 12)(6, 3)(7,2)(9, 7)(15,5)(16,3)(17,4)(18,2)(19,3)(23,4)(29,5)(30,3)

P30. From the previous years, those who were in my age bracket or who had a similar job, I think they have different needs. They were kind of given the duties of getting firewood, kind of being the gofers of the campus. They were used, not as professionals, but as laborers. (21, 3)(24, 1)

**SC26 Respect is an issue**

P21. The respect has to be given to the program. It has to be received both by faculty and by students. (21, 3)

P29. They [students] get the impression that it is more okay to disrespect an RI than it is to disrespect and teacher. (4, 3)(17, 4) (11-4)(21, 3)(28, 5)(24, 1)

**(AB) C32 Communication creates clarity**

**SC98 Communicate internally**

P193. Communication is critical—meet regularly, debrief, share information. (36, 2)(37, 1) (39, 2)(42, 1)

P213. The faculty, the advisors, and the supervisors need to be acting as a team so the students aren't being pulled in different directions. (32, 2)(33, 2)(34, 2)

P257. Be sure to be very clear who is driving the program—be sure that everyone agrees on criteria and validity (42, 2)

**T7 Building a community of learners involves multiple elements.**

**(AC) C16 Systematic training provides a foundation**

**SC102 Orientation and ongoing training**

P244. We sit down with them when they first get here, find out what their expectations are, what their goals are—their professional goals. We ask them, what do you want to get out of this besides classes? Sometimes they don't know, so together we craft something and figure out what we can do to get them there. We try to plan it so their individual professional development plan hopefully dovetails with their work plan. (36, 2)(37, 2)

P251. Orientation at beginning, meet regularly after they start, do lots of follow up (40, 2)

**SC41 Training in professional communication**

P102. Learning the structure of the school environment or a work environment, how to communicate differently with different people at the school. [They need to know how to] answer the phone, or talk to students when they come in the office. (20, 5)(22, 5)

**SC42 Training in supervisory/managerial skills**

P103. [They should get experience in] protocols to do in the event of an emergency, leadership skills, supervision. (21, 3)

P104. I think an awareness of, or training in what happens to groups--group dynamics. They need to be able to recognize when their group is having difficulty. (22, 5)

**SC43 Training in educational techniques**

P105. I could use more of is more techniques on how to handle certain educational situations and teaching methods. How to fill idle time, techniques on how to create interest in the subject that may or may not be interesting, techniques and how to create cooperation amongst a group. We should learn age appropriate activities (for high school students) Being able to put on a program, how to facilitate a program, and what it takes to put it on. (4, 4-5)(9, 1)(10, 4)(17, 5)(33, 2)(34, 2)

P137. They need an opportunity to really hone their skills. Not only to understand it [EE/outdoor programs but to be able to interpret and teach it in a way that is understandable and attractive to kids. . . I think it would be great focus the RI program to focus on the experiential aspect [of EE]. (21, 2)(22, 5)(22, 6)

**SC99 Professional development opportunities**

P202. I got to present a session at NAAEE. It was a great opportunity to network. Meeting other people in the field helped me feel less isolated. (33, 1)(34, 1)(36, 4)

P208. The best thing about this whole program is the professional development we get from staff. They've done workshops for us on Project Wet and the other Projects, we've learned CPR and first aid, grant writing, team building, how to put on teacher workshops, energy workshops. People might not think that's important, but it strengthens our resumes a lot. (32, 2)(33, 2)(33, 2)

P244. Birding, snowshoeing, naturalist things for the community, trips to natural areas—take field trips with students for enrichment (37, 2)

P255. integrative session—a day (sometimes 2) of consciously taking subjects and smashing them together, travelling to see how EE looks in the working world. (41, 2)

**(AD) C23 Academics give structure.**

**SC61 Theory, rigor, flexibility and structure**

P82. There needs to be specific theory and academic rigor that has a very high standard attached to this. (18, 6-7)

P83. Curriculum for program that is flexible enough to attract a wide range of people, but structured enough to be doable and easily implementable. (14, 7)

**SC63 Grad students need reflective and discussion times**

P131. Discuss current issues that have an effect on the lives of our kids. It can still be discussion based but also have a lot of writing components and reading components

that are worthwhile and still apply to student issues and school issues... (2, 6)(7, 6)(10, 4) (2, 6)(24, 6)

P149. I think that self reflection on what we're doing is really important (1, 6)(2, 5)

**SC64 Program should be a combination of experience and coursework**

P84. Create a program in which they have real life experience at the same time they're able to step back and think about it. It should be academic coursework alongside professional experience. (1, 6)(11, 7)(20, 5)(22, 4)

**SC100 Grad students need education coursework**

P79. The graduate program should have general education courses. (17, 5)

P207. I had never taught before, so having some teaching methods courses really helped. (33, 2)(34, 2)

P195. The most valuable classes I've taken have been in curriculum development and program assessment and evaluation for EE. (32, 1)

P198. I think that the administrative leadership classes were really helpful. (33, 1)(36, 1)

**SC101 Capstone project**

P230. It is important to have the experience of capstone type of class with a project, with a publishable paper as an end product. (35, 2)(36, 3)(41, 1)(42, 2)(38, 1)(40, 1)

**SC62 Grad students need EE, environmental courses**

P80. There are RIs here] who have no outdoor education or environmental skills. We need to have a class to teach them that stuff. (17, 4)

P81. We should have a localized education class [on the ecology of the northwoods] so that we can go out and recognize the patterns ourselves . . . for when we're working with kids. (17, 5)

P196. The basics of EE, the foundations for it, is the best class I've taken. And I've taken it with someone who is the top EE person around. (33, 1)(34, 1)(36, 1)

**SC103 Faculty should be well-qualified**

P204. It's really important to take that kind of foundations of EE class with someone with a lot of background in EE. (34, 1)

P211. The instructors are really important. You could have the most brilliant syllabus laid out, but if the instructor isn't trained in EE, it won't be an EE course. (32, 2)(33, 2)(34, 2)(35, 1)(37, 1)(42, 1)

P247. Instructors of the graduate courses are instructors at the RELC. (38, 1)(39, 1)

**(AE) C24 Meaningful experiences add reinforcement.**

**SC65 Job opportunities should reflect real world experiences**

P86. Community service is important--it's a volunteer coordinator position. I would love to see that be an integral part of someone's experience. (15, 5)

P87. Opportunity to come in and do the job they want to do [out in the real world], and the school to trust that process (18, 7)(29, 5)

P203. I learned a wide range of administrative things: how the facility works, how it's funded, the audience and contacts. (33, 1)(35, 2)

### **SC68 Grad students should have a breadth of experience**

P125. [We need] structured times in various areas of the boarding school from athletics to academics to student services to environmental education . . . the idea of a rotation, and of a breadth of experience. (1,6)(2,6)(3,4)(5,6)(6,1)(7,6)(9,7)

P136. I would see having some sort of rotation, even though it's great having an area of expertise, but also to work in other areas for the experience. This is something it's kind of difficult, if we switch every semester, they just learn and get settled in and then they have to switch. (15, 5)(21, 3) I got to rotate experiences each year. It helped me with learning what I wanted to do, but also what I didn't like doing, which is just as important. I found out that I didn't like doing development work. (33, 1)(34, 1)(35, 1)

P126. I think one of the strengths is that we are really able to design our own job what I like about it the most is that I kind of get to explore and find a niche here that wasn't being filled that I could fill, and it was actually encouraged. (2,5)(3,5)(4,6)(5,6)(6,5)

P204. Provide a range of experiences: adult summer workshops, working with different ages, coordinating special projects, program development, (34, and 1)

### **SC67 Grad students should leave with meaningful credit and experiences**

P113. Graduate credits not only need to be there and they should be meaningful both for those students moving on to the next level, and in terms of what they bring here. (11-6)(21, 4)(24, 7)(25, 5)(26, 6)(30, 2)(31, 2)

P219. For the assistantships, we try to match student with their interest area. (36, 1) Whatever our interests were here, they helped us focus in that direction and get experience in our area of focus. (34, 1)(36, 3)

P192. The program offers real world experience and opportunities to apply learning. (32,1)(33,1)(34,1)(35,1)(39,2)(43,1)

P205. The best part was that I did it the day camp program 3 times in a row and got to make changes to make it better. (34, 2)(36, 3)

P201. I did a little trail development, interpretive signage for the new visitor center. (32, 1)(35, 1)

P225. I wish that they could all leave here with fiscal experience, like how to manage a budget, or manage a grant, They need facilitative leadership skills. We do workshops on grant writing and allow them to have the experience of writing a grant (36, 2)

P227. All environmental education professionals should have experience with both teaching and training. (32, 1)(33, 1)(35, 1)(36, 3)

### **SC69 Provide different levels of tasks**

P88. Make sure that they're not always the shuttle drivers, and sometimes they're teaching classes, or doing a counseling session, or other things. Everybody has to do mundane stuff, but [they have to make sure that's not all they do.] (18, 7)

### **SC72 Project experiences must be valuable**

P129. Do projects (or run programs) that are meaningful to the school and to our own professional development (2, 6)(21, 6). (21, 3)(26, 6)

P130. [Projects] would need to be quantified or evaluated. We need to keep track of what people are doing so somebody else can pick it up later on [so the work that they're doing doesn't disappear. Freedom in time to pick up the wonderful projects that no one else has time for. (11, 6)(19, 4)(21, 3)(26, 7)



P215. I'm working on a project developing a green schools award to recognize schools that are making strides towards sustainability. (35, 1)

**SC74 Outdoor activity jobs**

P90. I don't want us to lose sight of what we were originally thinking that we needed the help for. . .the youth and the energy and creativity to go out and do orienteering or geocaching or GPS things because I don't have time to do that or the energy. I would really like to see that-- natural world, action things. I think the outdoor focus is essential. (1, 5)(2, 4)(4, 4)(15, 6)(26, 8)(29, 3)

P92. I think that's a very important that [RIs] are still a big fixture in the student's lives. I don't just mean being on duty and doing curfew. But I also think it's important they offer great activities, they are creative the things they do. (8, 3)(11, 2)(28, 4)

**(AF) C 25 Vision focuses the community towards the future**

**SC73 Program should be part of culture of the school**

P85. I would want it [the graduate program] to be part of the fabric of the school, not set apart. (20, 6)

**SC77 Community of learners**

P106. Maybe we could build an intern house. They could build a super sustainable residential house that the interns could live in with a special set of kids that wanted to live specifically with the interns and create something. I know that in some schools they have an honors House, or French house where everybody speaks French when they're living there. We could have an off the grid house, where they would agree to use would or solar for their heating, or be cold most of the time. Or they would make their own food. (26, 8)

**SC82 Build a culture of working together for a common goal**

P121. I would like to see a community of people that are clearly and totally dedicated to a goal. . .where you all coalesce together around a single goal in you all do whatever it takes to get to that goal. (25, 6)

P122. It's too individualistic an operation is what I'm saying. [Instead of working together--individuals operate in brand maintenance mode.] Let's produce net product. (25, 7)

**SC70 Expanding the community**

P 236. It would be great to have an exchange program with other colleges at FAU, especially for students on a career path to work in an EE center. Such as management of the operation of nature centers. It could be like a semester abroad program that teaches the culture of different EE centers where the students earn academic credit. (37, 1)

## **Appendix J**

### **Graduate Assistantship Opportunities at TELC (Treehaven Environmental Learning Center)**

#### **Education and Interpretation—John Heusinkveld**

- Design, organize and coordinate the development of new community-based programs
- Teach environmental education (EE) day programs to school groups at Treehaven including Rhinelander Environmental Stewardship Academy
- Teach EE residential programs to school groups at Treehaven
- Develop science involvement programs with area schools
- Create and teach 2 site-based lesson plans and teaching outlines
- Organize and inventory educational materials and displays
- Help coordinate residential EE programs on site as needed
- Help repair, secure, and produce new educational resources
- Assist in interpretive trail creation, signage, and restoration
- Assist in land management exercises as applicable to EE programs
- Help develop marketing database for EE programs

#### **Nature Center/Non-profit Administration—Corky McReynolds**

- Develop marketing approaches to target audiences
- Coordinate on-site services for professional development groups
- Coordinate development of a capital campaign donor base
- Develop presentations for professional development workshops
- Coordinate and enhance volunteer program
- Support the coordination of a science involvement project

#### **Resource Management—Kevin Burns**

- Participate in and coordinate natural resource-based projects
- Research information as part of a Wisconsin Forestry Center
- Develop protocol for Treehaven site-based research
- Assist in the development of long-term, site-based research
- Assist and administer long-term ecological monitoring
- Land Management Assistant, general projects as assigned, may include the following:
  - GIS maintenance, updates, and custom map creation
  - Forestry education programs assistant/coordinator/instructor
  - Forestry research assistant/coordinator
  - Assist/Administer long-term ecological monitoring
  - Implement recreation and trail use plan
  - Student liaison/coordinator between UWSP and Treehaven
  - Implement plans, such as urban forestry, wildlife management and stream improvement

## **Appendix K**

### **Conserve School Graduate Student Performance Profile**

#### **Connection**

- \*welcoming
- \*accepting
- \*get to know *individuals*

#### **Initiative**

- \*self-starter
- \*ability to see what needs to be done, and the willingness to do it (without being asked)

#### **Stamina**

- \*consistent performance, incl. punctuality and follow-through with duties/assignments
- \*self-care to sustain performance

#### **Ethical leadership**

- \*role model – lead through your *actions* more than your words
- \*exercises sound judgment in decision-making, esp. with students
- \*integrity – the same person when students are watching, and when not

#### **Servant leadership**

- \*humility in service – willing to do the “behind-the-scenes” tasks
- \*able to take and follow direction
- \*openness to constructive criticism and correction
- \*willing to set aside plans in response to changing circumstances, when appropriate

#### **Collaborate with others**

- \*willing to share ideas, while open to the ideas of others
- \*understand that decisions and actions affect others
- \*communicate in such a way that others feel included and informed

#### **Appropriate relationship boundaries**

- \*don't rely on the approval of others for self-worth
- \*can make tough decisions, even when they threaten personal relationships
- \*can give honest feedback in a disarming way
- \*nurture a “mentor/mentee” relationship with students, not a “friend” relationship

#### **Willingness to participate in outdoor and wilderness activities**

- \*open to learning outdoor skills
- \*when feasible, facilitate activities that encourage an appreciation of the outdoors

#### **Remains in good academic standing**

- \*meets UWSP requirements, as listed in handbook and UWSP website

## **Appendix L**

### **Draft of Ideas for Assistantship Teams at Conserve School**

3-25-09

#### Activities Team

Coordinate outdoor activities  
Manage outdoor gear and gear room  
Staff the LRC/waterfront  
Coordinate intramurals and other activities  
Coordinate community service operations

#### Sustainability Team

Treehaven  
Care for garden and orchard  
Bee-keeping  
Maple syrup  
Composting  
Energy-monitoring  
Coordinate sustainability efforts  
Green bikes  
Community sustainability service

#### Administrative Leadership Team

Assist admission office (incl. summer camp admissions)  
Staff student services office  
Staff the library  
Coordinate community service opportunities  
Proctor tests  
Tutoring

Each team could have a minimum of 3 grad fellows, bringing us to a total of 12. We could begin by assigning 4 to two of the teams, bringing us to 14, but this would build in some flexibility (in case 1 or 2 leave in the middle of the year). We could pull one person from 2 different teams each week to give us “floaters” (substitute teachers, emergency drivers, tour guides, “oops we need this”, etc.). This plan would assure that we have at least 2 on each team on any given week. Under this plan, each grad fellow would serve as a floater every 7 weeks, on a rotating basis.

## **Appendix M**

### **Knowledge, Skills, & Experiences Desired by Current RIs**

**Meeting with RIs 10-24-08***(number in parentheses indicates how many chose that item as one of their top 3 choices)*

**What skills/knowledge/experience would you like to have when you leave Conserve School?**

#### **Skills**

- Develop lesson plans (1)
- Develop curriculum (1)
- Outdoor skills (biology)(1)
- General teaching skills (4)
- Keep teaching skills current
- Student services (scheduling/prioritization)
- Lead Outdoor programs (4)
- Certification (woofer, water safety, CDL, CIG)(3)
- Excursion planning
- Campus planning, housing, administration, discipline (3)
- Counseling (advising, college, admissions, and personal)(5)
- Land management
- Crisis response

#### **Knowledge**

- Adolescent/Developmental Psych
- Career Development
- Naturalist training (2)
- Cross-cultural education
- Technology training
- School/Res Life Operations (2)
- Local resources (1)
- Grant writing
- Outdoor skills

#### **Experience**

- Research (1)
- Teaching (1)
- In subject area
- Course development
- Challenge Course

- Mentor/Mentee Relationship (1)
- Developing/Implementing Staff Development (2)
- Discipline
- Accountability
- Leadership
- Crisis Response (2)
- Tripping (planning outdoor trips)(1)

<b>Appendix N Programmatic Frameworks of Selected Alternative Graduate Programs</b>				
<b>Organization</b>	<b>Academics</b>	<b>Experiences/Living arrangements</b>	<b>Teaching</b>	<b>Program Length</b>
Gore Range Natural Science School (CO)	12 semester hours total  3 cr. courses Seminar style weekly classes (take place between programs) Taught by GRNSS staff	Program development Field and classroom instruction Program coordination Mentorship/supervision Operations/risk management Professional development  Non-residential for grads	EE programs Backcountry courses—3-day Field & classroom experiences Occasional overnight supervision of students	15 month program  No cohort groups
IslandWood (WA)	21 quarter credits 3 courses/semester (full academic load) Taught by Islandwood staff Teaching practicum	1 month of training Natural history/ecology Group management  Residential for grads	4 <sup>th</sup> -6 <sup>th</sup> grade 4-day Res. EE programs Outreach programs  Rotate teaching and coursework	10 month program  2 cohort groups rotate biweekly
McCall Outdoor Science School	18 semester credits Taught by MOSS staff	Plan and lead EE activities in classroom and field Design lesson plans Office/Admin support Assist teachers Curricula research/design Recruit/support volunteers  Residential for grads	K-6 <sup>th</sup> grade Day programs	12 month program

<b>Appendix N Programmatic Frameworks of Selected Alternative Graduate Programs</b>				
<b>Organization</b>	<b>Academics</b>	<b>Experiences/Living arrangements</b>	<b>Teaching</b>	<b>Program Length</b>
Merry Lea (Goshen College)	30 semester credits Seminars for teaching strategies and issues Integrative field trips Taught by Goshen faculty	Practicum 300-350 hours  Residential option for grads (pay for housing)	K-6 <sup>th</sup> grade programs Non-residential Farm Craft, Sugar Bush Ecology Some public programs	11 Months (full MA earned) Only 3 students  Work 50-60 hours/week school and practicum
North Cascades Institute (WA)	52 quarter hours Begins with academics at university in summer	Plan and lead Residential EE programs  Residential for Grads	5 <sup>th</sup> grade, some MS, HS 3-5 day residential programs  Few public programs	1 year residency  10 students per year
Florida Atlantic University (Pine Jog Environmental Education Center)	36 semester hours credit taught by FAU staff Teaching practicum	experience in developing EE programs, practical experience of working at an EE center  20 hours/week assistantship  Residential option for grads 20 hours/week in exchange for housing	EE programs (non-residential) primarily for elementary students	2 year program, full M.Ed .earned



<b>Appendix N Programmatic Frameworks of Selected Alternative Graduate Programs</b>				
<b>Organization</b>	<b>Academics</b>	<b>Experiences/Living arrangements</b>	<b>Teaching</b>	<b>Program Length</b>
Teton Science School	15-21 semester credits Most taught in evening by TSS staff	Plan and lead Residential EE programs  Field research opportunity  Residential for most grads.	teaching practicum at Journeys School or EE programs Residential programs (3-7 days) Outreach	50 Week program 2 cohorts (18-24 total students) alt. 2 weeks practicum with 2 weeks academics. Team oriented
Wolf Ridge Environmental Learning Center	18 semester hours, core and electives  All at Wolf Ridge, except 10 Fridays go to Duluth for 4 hour seminar	Two weeks of initial training 6 half-day classes 5 days a week + 1 weekend/month  Residential for grads	4-8 <sup>th</sup> graders Classes in ecology, cultural history, and team building. Residential programs (3-5 days)	9 month naturalist training

## Appendix O

### Training Suggestions from Conserve School Residential Interns

Compiled May, 2008

- Teambuilding activities with new and returning RIs (mentioned by almost all of the RIs—they need formal time together)
- Assign a “go-to person” for each RI (perhaps a buddy system pairing an experienced RI with the new RIs)
- How do I . . .? (Role playing for situations that have come up with in the past—discipline issues, stressed/sad/belligerent students, security issues, setting boundaries with students, emergencies, how to deal with sick students/knowing when it’s serious enough to get additional help from the health center, common issues in the houses—brainstorm with returning RIs or house parents for what issues are pertinent)
- Primer on teen issues (in-depth on these throughout the year, but an overview before the students get there will help)
- Substitute Parenting 101 (effective communication and discipline basics, RI role is not a peer, listening, giving choices when appropriate, natural consequences, alternatives to drill sergeant discipline)
- A day in the life of an RI (CS expectations, scheduling their time)
- RI to RI (Formal/scheduled time for returning RIs to share with new RIs—issues, challenges, joys, etc)
- Where is it? How can I find out? (Conserve School ground, building and people resources, including security, vehicle use, phone and computer systems, and other procedures)
- Effective Group Leadership (how to take a group outside, getting participation, etc.—this could be a good place for new or returning RIs with experience in youth/teen camps to share techniques, facilitated by RL staff)
- Pop-culture (what are the students interested in that RIs could tap into to design fun and interesting activities?)
- RI Opportunities (how to get involved, what are ongoing projects that need a new champion, ideas for projects that need to be restarted)

- Cross-cultural sensitivity—being an effective mentor for international students
- Ideally, it would be helpful to have most of the above take place before students arrive, realizing that in-depth information on many of these topics will take place in seminar throughout the year. There might be short readings that could be assigned right away—articles, chapters of books—that they could read and reflect on, then discuss as a group, maybe on the days that the teachers are working on classroom preparation.
- Another procedural suggestion—provide each RI with a printed copy of the photos of the students in their wing, the other house parents in their house, and their go-to person/people. Many of the RIs said that their initial few days contained so much information that they were in overload mode trying to remember the names of everyone they met. They need to know immediately how to look up people on the intranet—we could easily design an activity for that.
- For seminars, consider guest speakers—staff talking about their jobs (administrative, support, counseling, instructional team, etc) and what background or education led them to CS. The staff talents are extraordinary and it would be great to share that formally.

## **Appendix P**

### **Goals and Outcomes of the Graduate Fellowship**

Goals of the Graduate Fellowship

*Graduates of this program will be well equipped with academics and experiences to continue a path of life-long learning and involvement towards these goals:*

- Foster future generations of environmental leaders
- Understand different facets of human associations with natural resources
- Nurture and mentor youth
- Cultivate environmental literacy in communities
- Establish personal environmental leadership
- Encourage and model sustainable values and behaviors

### **Outcomes of the Graduate Fellowship**

*Upon graduating from this program, graduate fellows:*

- A. Have knowledge of environmental processes and systems
- B. Have skills for understanding and addressing environmental issues
- C. Practice personal and civic environmental responsibility
- D. Can articulate characteristics, goals, and evolution of EE
- E. Plan and deliver meaningful/purposeful environmental education and outdoor learning opportunities
- F. Are experienced EE/interpretive practitioners and leaders
- G. Practice assessment, evaluation, and research
- H. Are effective residential life leaders and mentors
- I. Are collaborative, self-directed educators and team leaders
- J. Are reflective and critical thinkers
- K. Are sensitive and aware of themselves and others
- L. Demonstrate effective oral communication
- M. Communicate effectively in writing

## Appendix Q

### Tbilisi Declaration and Recommendations

#### (Excerpt)

II. The Conference *endorses* the following goals, objectives, and guiding principles for environmental education:

The goals of environmental education are:

1. to foster clear awareness of, and concern about, economic, social, political, and ecological interdependence in urban and rural areas;
2. to provide every person with opportunities to acquire the knowledge, values, attitudes, commitment, and skills needed to protect and improve the environment;
3. to create new patterns of behavior of individuals, groups, and society as a whole towards the environment.

The categories of environmental education *objectives* are:

**Awareness**—to help social groups and individuals acquire an awareness and sensitivity to the total environment and its allied problems.

**Knowledge**—to help social groups and individuals gain a variety of experience in, and acquire a basic understanding of, the environment and its associated problems.

**Attitudes**—to help social groups and individuals acquire a set of values and feelings of concern for the environment and the motivation for actively participating in environmental improvement and protection.

**Skills**—to help social groups and individuals acquire the skills for identifying and solving environmental problems.

**Participation**—to provide social groups and individuals with an opportunity to be actively involved at all levels in working toward resolution of environmental problems.

Some *guiding principles* for environmental education:

Environmental education should:

- consider the environment in its totality—natural and built, technological and social (economic, political, cultural-historical, ethical, esthetic);
- be a continuous lifelong process, beginning at the preschool level and continuing through all formal and nonformal stages;

- be interdisciplinary in its approach, drawing on the specific content of each discipline in making possible a holistic and balanced perspective;
- examine major environmental issues from local, national, regional, and international points of view so that students receive insights into environmental conditions in other geographical areas;
- focus on current and potential environmental situations while taking into account the historical perspective;
- promote the value and necessity of local, national, and international cooperation in the prevention and solution of environmental problems;
- explicitly consider environmental aspects in plans for development and growth;
- enable learners to have a role in planning their learning experiences and provide an opportunity for making decisions and accepting their consequences;
- relate environmental sensitivity, knowledge, problem-solving skills, and values clarification to every age, but with special emphasis on environmental sensitivity to the learner's own community in early years;
- help learners discover the symptoms and real causes of environmental problems;
- emphasize the complexity of environmental problems and thus the need to develop critical thinking and problem-solving skills;
- utilize diverse learning environments and a broad array of educational approaches to teaching, learning about and from the environment with due stress on practical activities and first-hand experience (UNESCO, 1977, pp. 26-27).

<b>Appendix R Academic Courses at AGPs</b>				
<b>Center</b>	<b>EE Courses</b>	<b>Other Courses of note</b>	<b>Cr.</b>	<b>Projects/Certifications</b>
Gore Range NSS	4 unspecified EE courses –weekly seminar format		12 (s)	Avalanche I
Islandwood	Natural history/Ecology EE History & Methods Sustainability/Social Responsibility Teaching Practicum	Child growth & Development Science Methods Non-profit Mgmt Educational Philosophy Curriculum/Instruction methods Integrating Art/Technology	21 (q)	Independent Study Project
McCall Outdoor Science School	Teaching Practicum in EE Community Ecology for EE providers Outdoor Leadership for EE providers	Instructional strategies	18 (s)	Professional Certificate in EE
Merry Lea ELC	Natural History of S. Great Lakes Principles of EE Env. Issues and history of EE Teaching Practicum in EE	Research Methods Leadership for EE programs/centers Land mgmt for EE	30 (s)	MA Portfolio (observe, writing, photog.) Project (non-thesis)
N. Cascades Inst.	EE foundations Intro to Place-based EE Resource Issues of Cascades Assessment, Eval., Research in EE Practicum in Teaching Nat. Cult. Hist. Curriculum in EE	Cultural Studies of Cascades Natural History & Science of Cascades. Non-profit Admin for EE Professional writing & presentation Conservation Psychology Language and discourse of the environment		Non-profit Leadership/Admin. Capstone project

<b>Academic Courses at AGPs</b>				
<b>Center</b>	<b>EE Courses</b>	<b>Other Courses of note</b>	<b>Cr.</b>	<b>Projects/Certifications</b>
Pine Jog ELC	Perspectives of EE Advanced Methods of EE Trends and Issues of EE Design, Implementation, Evaluation of EE Programs Practicum in EE is non-credit	Program Evaluation in Curriculum Global education Educational Statistics Educational Research (also wide range of electives)	36 (s)	Capstone project
Teton SS	Teaching Practicum	Field Science/Principles of Interpretation Community Ecology Place-based Education Management/Outdoor Education Teaching in a Winter Environment Advanced Inst. Strategies Ecological Inquiry Advanced Field Ecology	15- 21 (s)	Capstone project—field research
Wolf Ridge ELC	Introduction to EE Theories & Models of EE Environmental Issues Investigation Practicum in Teaching	Field Interpretive Techniques Outdoor Education Methods Research & Issues in Science Ed. Classroom Learning Applications	18 (s)	Naturalist Certification

(s) = semester credits

(q) = quarter credits



## **Appendix S**

### **Learner Outcomes and Applicable Coursework**

*Upon graduating from this program, graduate fellows:*

#### **A. Have knowledge of environmental processes and systems**

***Opportunities to foster this outcome and assess progress:***

**Core courses and experiences:**

NR701 Fundamentals of EE

NR612 Ecological Basis for EE

NR605 Seminar in Natural Resources

NR682 Practicum in EE/interpretation

NR798 Advanced Project Work

Assistantships and Residential life

**Possible Electives (a limited selection of electives is offered each semester)**

NR558 Biodiversity

NR590 Nature Interpretation in Wisconsin

FOR701 Survey of Forestry

NR715 Plant Resources and Humans

NR 733 Energy Education: Concepts and Practices

WLDL740 Wildlife Investigations

WATR 750 Water Resources in Society

#### **B. Have skills for understanding and addressing environmental issues**

***Opportunities to foster this outcome and assess progress:***

**Core courses and experiences:**

NR612 Ecological Basis for EE

NR682 Practicum in EE/interpretation

NR701 Fundamentals of EE

NR798 Advanced Project Work

Assistantships and Residential life

**Possible Electives (a limited selection of electives is offered each semester)**

NR540 Basic Concepts of Sustainability

HIS594 Topics in Environmental History

NR600 Wisconsin Environmental Studies

NR605 Wolf Ecology Workshop

NR704 Ecological Lifestyles

NR705 Environmental Issue Investigation

NR731 Climate Change Action Planning

NR733 Energy Education: Concepts and Practices

NR735 Renewable Energy

WLDL740 Wildlife Issues Investigation

NR743 Human Influence on Wisconsin Forests

### **C. Practice personal and civic environmental responsibility**

***Opportunities to foster this outcome and assess progress:***

**Core courses and experiences:**

NR682 Practicum in EE/interpretation

NR701 Fundamentals of EE

NR682 Practicum in EE/interpretation

NR798 Advanced Project Work

Assistantships and residential life

Community projects and possible service learning

**Possible Electives (a limited selection of electives is offered each semester)**

NR540 Basic Concepts of Sustainability

HIS594 Topics in Environmental History

NR600 Wisconsin Environmental Studies

NR703 Group Process

NR703 Strategic Planning

NR704 Ecological Lifestyles

NR705 Environmental Issue Investigation and Action

NR735 Renewable Energy

### **D. Can articulate characteristics, goals, and evolution of EE**

***Opportunities to foster this outcome and assess progress:***

**Core courses and experiences:**

NR682 Practicum in EE/interpretation

NR701 Fundamentals of EE

NR798 Advanced Project Work

Assistantships and residential life

**Possible Electives (a limited selection of electives is offered each semester)**

NR610 Applied Environmental Education Program Evaluation

NR614 EE Teaching Strategies

### **E. Plan and deliver meaningful/purposeful environmental education and outdoor learning opportunities**

***Opportunities to foster this outcome and assess progress:***

**Core courses and experiences:**

NR682 Practicum in EE/interpretation

NR701 Fundamentals of EE

Certified Interpretive Guide training

Outdoors skills/trainings/certifications such as Leave No Trace

Assistantships and Residential life training and experiences

**Possible Electives (a limited selection of electives is offered each semester)**

EDUC570 Creative Problem Solving: Tools and Processes  
NR610 Applied Environmental Education Program Evaluation  
NR614 EE Teaching Strategies  
NR706 Community Resources in EE  
EDUC726 Models of Teaching and Learning

**F. Are experienced EE/interpretive practitioners and leaders**

***Opportunities to foster this outcome and assess progress:***

**Core courses and experiences:**

NR682 Practicum in EE/interpretation (breadth of experiences)  
NR761 Personal Leadership in EE  
Assistantship experiences (in depth development)  
Residential life experiences

**G. Practice assessment, evaluation, and research**

***Opportunities to foster this outcome and assess progress:***

**Core courses and experiences:**

NR682 Practicum in EE/interpretation  
NR701 Fundamentals of EE  
NR750-A Research Design., NR750-B Quantitative Analysis, NR750-C Qualitative Analysis  
NR794-95 Graduate Seminars  
NR798 Graduate Project

**Possible Electives (a limited selection of electives is offered each semester)**

NR610 Applied Environmental Education Program Evaluation

**H. Are effective residential life leaders and mentors**

***Opportunities to foster this outcome and assess progress:***

**Core courses and experiences:**

NR610 Adolescent Psychology in Residential Environmental Education  
NR682 Practicum in EE/interpretation  
NR794 Seminar Topics in Residential Life  
NR761 Personal Leadership in EE  
NR703 Team Development  
Residential Life training and experiences

**Possible Electives (a limited selection of electives is offered each semester)**

NR703 Group Process  
EDUC790 Brain-based Education

## **I. Are collaborative, self-directed educators and team leaders**

### ***Opportunities to foster this outcome and assess progress:***

#### **Core courses and experiences:**

NR682 Practicum in EE/interpretation

NR610 Adolescent Psychology in Residential Environmental Education

NR703 Team development

NR703 Group Process

NR798 Advanced Project Work

Residential life experiences

#### **Possible Electives (a limited selection of electives is offered each semester)**

NR703 Strategic Planning

EDUC790 Brain-based Education

## **J. Are reflective and critical thinkers**

### ***Opportunities to foster this outcome and assess progress:***

#### **Core courses and experiences:**

NR610 Adolescent Psychology in Residential Environmental Education

NR682 Practicum in EE/interpretation

NR701 Fundamentals of EE

NR750-A Research Design, NR750-B Quantitative Analysis, NR750-C Qualitative Analysis

NR794-95 Graduate Seminars

NR798 Advanced Project Work

## **K. Are sensitive and aware of themselves and others**

### ***Opportunities to foster this outcome and assess progress:***

#### **Core courses and experiences:**

NR610 Making EE Relevant to Culturally Diverse Audiences

NR610 Adolescent Psychology in Residential Environmental Education

NR682 Practicum in EE/interpretation

NR761 Personal Leadership in EE

Residential life experiences

Assistantship experiences

## **L. Demonstrate effective oral communication**

### ***Opportunities to foster this outcome and assess progress:***

#### **Core courses and experiences:**

NR795 Graduate Seminar

NR610 Adolescent Psychology in Residential Environmental Education

NR682 Practicum in EE/interpretation

NR761 Personal Leadership in EE

NR703 Team Development

NR798 Graduate Project  
Residential life experiences  
Assistantship experiences

### **M. Communicate effectively in writing**

***Opportunities to foster this outcome and assess progress:***

**Core courses and experiences:**

NR701 Fundamentals of EE

NR610 Adolescent Psychology in Residential Environmental Education

NR612 Ecological Basis for EE

NR682 Practicum in EE/interpretation

NR750-A Research Design, NR750-B Quantitative Analysis, NR750-C Qualitative Analysis

NR798 Graduate Project

Residential life experiences

Assistantship experiences

## Appendix T

### Course Matrix—Graduate Fellowship in Residential EE (2009-10)

(F2F=face to face, D2L= online, hybrid= combination of F2F and D2L)

#### Fall 2009 (all required courses)

Course No.	Course Title	Cr.	Instructor	Inst. Method	Start date	End Date
NRES 750 A	Research in EE/Interpretation	1	Brenda Lackey	hybrid		
NRES 798	Advanced Project work	1	Advisors	hybrid	Oct 15	Dec 5
NRES 7610	Adolescent Psych. & Res. EE	3	Debbie Palmer	F2F	Sept. 4	Dec 5
NRES 701	Fundamentals of EE	3	Randy, Tim, Fran	hybrid	Sept 1	Nov 15
NRES 612	Ecological Basis for EE	1	Dorothy Ginnett	D2L	Oct 15	Nov 20

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#### Spring 2010 (8 cr. required, 1 cr. elective)

Course No.	Course Title	Cr.	Instructor	Inst. Method	Start date	End Date
NRES 750 B	Quantitative Research Methods	1	Brenda Lackey	D2L	Jan 17	Feb 28
NRES 750 C	Techniques in Qualitative Research	1	Corky	D2L	Mar 12	April 30
NRES 798	Advanced Project work	1	Advisors	hybrid	Jan 17	May 5
NRES 682	Practicum in EE/Interpretation	3	Fran	F2F	Jan 1	May 10
NRES 761	Personal Leadership in EE	1	Corky	F2F		
NRES 795 A	Presentation—Project Proposal	1	Advisors/Fran	F2F	Feb 1	March 30
	Elective	1				

**Course Matrix—Graduate Fellowship in Residential EE (2010-11)**

(F2F=face to face, D2L= online, hybrid= combination of F2F and D2L)

**Fall 2010 (9 cr. required \*, 3 cr. elective)**

Course No.	Course Title	Cr	Instructor	Inst. Method	Start date	End Date
NRES 794	Seminar *	1		F2F	Sept 7	Dec 5
NRES 798	Advanced Project work *	1	Advisors	hybrid	Sept 7	Dec 5
NRES 682	Practicum in EE/Interpretation*	3	Fran	F2F	Aug 25	Dec 5
NRES 703	Team Development*	1	Corky	F2F		
	Electives	3				

**Spring 2011 (5 cr. required \*, 4 cr. elective)**

Course No.	Course Title	Cr	Instructor	Inst. Method	Start date	End Date
NRES 795 B	Presentation of Project *	1	Advisors	F2F		
NRES 798	Advanced Project work *	1	Advisors	hybrid	Jan 17	May 5
NRES 682	Practicum in EE/Interpretation *	3	Fran	F2F	Jan 8	May 5
	Electives	4				

Elective options: each semester, 3-4 options, with one out of discipline

## Appendix U

### Course Descriptions—Potential Courses for Graduate Fellowship



#### **MS in Natural Resources/Environmental Education Graduate Fellowship**

**in Residential Environmental Education**  
UWSP College of Natural Resources (CNR)  
Course Descriptions 2009

#### **Required Courses (28 required credits)**

##### **Research and Project Courses (9 credits)**

NRES 750-A Research in Environmental Education/Interpretation (1 cr.)

Discuss research methods, relevant literature, and current issues in environmental education and interpretation. May repeat for 4 cr. max. (I, II)

NRES 750-B Quantitative Research Methods (1 cr.)

Discuss and apply quantitative research methods, emphasizing statistical analysis, descriptive survey techniques, etc.

NRES 750-C Techniques in Qualitative Research \*(1 cr.)

Discuss and apply qualitative research methods, emphasizing development of research protocols, examination of a variety of qualitative methodologies, and application of appropriate analysis techniques to the methods.

NRES 795 Graduate Seminar (1 cr.)

Student presentation and discussion of selected environmental and natural resource topics including results of student project.

NRES 795 Graduate Seminar (1 cr.)

Student presentation and discussion of selected environmental and natural resource topics including results of student project.

NRES 798 Graduate Project (4 cr.)

Advanced work on specific natural resource/environmental/interpretive project.

##### **Residential Life (4 credits)**

NRES 794 (1 cr.)—Seminar—Topics in Residential Life

Readings and discussions on current issues related to student and residential life.

NRES 610 (3 cr.)—Adolescent Psychology in Residential Environmental Education

This period of life is examined and contrasted with other phases, with an emphasis on how biological, social, family, and cognitive changes influence development and how that relates to residential environmental education settings.



## **Natural Resource Education, Leadership, and Practicum (15 credits)**

NRES 682 (9 cr.)—Environmental Education and Interpretation Practicum \* (3 cr./semester)

Practical experience in environmental education/interpretation in planning and implementing programs for school groups, public programs for visitor and nature centers, programs and activities for grades 9-12 at Conserve School and visitors at Treehaven Environmental Learning Center.

NRES 701 Fundamentals of Environmental Education (3 cr. – online/hybrid)

This course provides you with a foundational knowledge of EE and the skills to become a more effective educator. Several states require EE in K-12 curriculums and many others support its inclusion. This course is a great way for you to develop the skills and knowledge to include EE in your instruction. You will develop a better sense of what EE is and expand your skills as an educator. You will become familiar with many resources that will assist the environmental educator in you.

NRES 612 Ecological Basis for Environmental Education (1 cr. – online)

This one-credit course familiarizes K-12 educators with modern ecological theories, issues, and practices that are relevant to Environmental Education. The course will facilitate ecology-based Environmental Education curriculum development which: 1) encourages interactive inquiry lesson plans, 2) encourages place-based field trips, and 3) addresses the needs of diverse student learners.

NRES 703 Team Development (1 cr.)

Learn, participate, and practice the principles and skills needed to develop a high functioning team. This course combines small group experiences using best practices for team building with activities that put the principles into practice.

NRES 761 Personal Leadership for Environmental Education (1 cr.)

Learning more about yourself, your preferences, and your strengths are core to developing leadership. This course focuses on understanding yourself through theory and principles of personal leadership development.

## **Potential Electives (8 credits required, at least 2 classes in other disciplines)**

*Listing is of courses offered in the past. A selection of 4-5 of these courses will be offered each semester.*

### **Natural Resources Courses**

NRES 530 Environmental Health (1 cr. - online)

Study of types, levels, and sources of environmental contaminants that impact human health; discussion of individual and community risk related to environmental

contaminants; availability of personal and community environmental health resources; and importance of natural environment to mental health.

**NRES 540 Basic Concepts of Sustainability (1 cr. - online)**

Citizens of a sustainable society can be defined as a people, regardless of geographical location, who believe in the care of nature to be as equal as to the care of people to people. How do we go about accomplishing such a society built on cooperation and peace rather than confrontation, fear and war? In this course, we will explore just that, the importance, the why and how of a sustainable society. We will learn to work with nature rather against it; approach problems in nature and turn them into solutions in nature; act and think globally and locally; establish durable, waste-free resource base and connect with like-minded individuals with the same ethical principles and form extended families that cross not only political boundaries but also cultural boundaries. Join us on this unique opportunity to act a catalyst towards a sustainable future for us all. Mother Earth and your great-grandchildren will thank you!

**NRES 558 Biodiversity (1 cr. - online)**

This web-based course (Internet delivery) provides an overview, explores background information, discusses importance, researches issues, investigates threats, reviews values, and examines solutions in Biodiversity and Conservation Biology. Economic, education, political, and lifestyle effects will be addressed.

**NRES 590 Nature Interpretation in Wisconsin (1 or 2 cr. - face to face, summer)**

Become acquainted with the major terrestrial communities of central Wisconsin, their relationship to landforms and climate, key plants and animals, their interrelationship and the effect of human activities. May require field trip fee.

**NRES 600 Wisconsin Environmental Studies (3 cr. – online)**

This web-based course (Internet delivery) provides an overview of Wisconsin's environment and issues. The historical, natural, social, and economic factors that influence the quality of Wisconsin's environment will be explored. Major theme areas include: Conservation History, Ecological Foundations, Biodiversity, Water, Land, Energy, Air, Environmental Health, and Environmental Quality and the Future.

**NRES 605 Wolf Ecology Workshop (1 cr.—Treehaven)**

Experience shared learning with other wolf enthusiasts while tracking, studying in the classroom and field, and learning from professionals and members of the Timber Wolf Information Network in Treehaven's northwoods setting. You will experience actual tracking and nighttime howling survey.

**NRES 605 Seminar—topical with speakers from faculty travelling to CS**  
e.g., Cougars of WI, Urban Forestry, Waste Management, Speaker series UWSP

NRES 610 Applied Environmental Education Program Evaluation (3 cr. – online)  
Learn to evaluate environmental education and outreach programs by designing evaluation tools such as questionnaires, observation forms, and interview and focus group guides. This course was designed for environmental educators, natural resource professionals, and graduate students who can apply the tools they develop to a specific education program or research study.

NRES 610 Making EE Relevant to Culturally Diverse Audiences (2 cr. – online)  
This course is designed to provide participants with the basic knowledge and skills needed to make EE relevant to culturally diverse audiences. Through this course you will broaden your perspective of EE to encompass interests and issues of concern to culturally diverse audiences, assess barriers to participation among these audiences, and appraise the role and significance of building relationships and partnerships with members of an audience you intend to work with in the future. As part of this course you will adapt a component of your program to make it more relevant for a culturally diverse audience of your choice.

NRES 610 Teaching About the Environment Outdoors (1 cr. – online)  
This online course (Internet delivery) is aimed at providing teachers with strategies and experience leading environmental programs in the outdoors. So you may be asking yourself, a course on **outdoor** environmental education on the **computer**?!? TAEO offers outdoor assignments, online discussions about outdoor experiences, and a practical outdoor teaching assignment.

NRES 614 Environmental Education Teaching Strategies (1 cr. – face to face)  
Study of and planning and evaluation of environmental education curriculum materials and teaching methods.

NRES 679 International Environmental Studies Seminar: Global Environmental Teachings (1 to 3 cr. – online)  
A series of travel courses, set up by online review of the area to be visited that support GET's aims. The mission of GET is to advance environmental/ conservation education worldwide through students and educators. GET broadens activities of the WCEE by offering programs that allow participants to truly "Think Globally; Act Locally." International partnerships, networks, courses, and exchanges help get promote the sustainability of the world's natural resources.

NRES 703 Leadership Development in Natural Resources (1 cr. – face to face)  
Assessment and experiences to develop leadership capacity in natural resources organizations. Individual and small group activities to explore current theories and practices in leadership and implications for successful organizational and personal development.

NRES 703 Group Process and Facilitation (1 cr. face to face—weekend at Treehaven)  
This course will focus on Group Process and Facilitation Skills and provides assessment and experiences to develop leadership capacity in natural resources organizations. Individual and small group activities explore current theories and practices in leadership and implications for successful organizational and personal development.

NRES 703 Leadership Development in NRES: Strategic Planning and Implementation (1 cr. – online)

Learn how to develop successful strategic planning and implementation models, processes and techniques. Emphasis will be placed on managing the strategic planning process to build the capacity of organizations to provide effective environmental education programs. Course participants will also have an opportunity for individual consultation time with the course instructor to discuss specific issues/questions they might have regarding strategic planning. This new course has been designed for environmental educators, natural resource professionals and graduate students who are currently involved in a strategic planning process or may become involved in one in the future.

NRES 704 Ecological Lifestyles (1 cr. – online)

This course offers an examination of personal lifestyles in light of ecological considerations. Together we will explore several dimensions of everyday life such as transportation, home energy use, food, consumer habits, solid waste, and water use. We will examine the impact of everyday lifestyle activities on the environment and emphasis will be placed on alternative behaviors that foster environmental quality and quality of life.

NRES 705 Environmental Issue Investigation and Action (1 cr. –not yet online)

Use primary and secondary information sources to investigate environmental issues. Strategies for issue analysis/resolution. May not take both 705 and 678.

NRES 706 Community Resources in Environmental Education (1 cr. – not yet online)

Exploration of the variety of human, cultural, technological, and natural resources that can be used to enrich environmental education curricula; emphasis on field trips as a means of integrating environmental education with classroom instruction.

NRES 715 Plant Resources and Humans (1 cr. - online)

This course explores how the continued existence of humans is linked to the conservation of plant diversity. Topics include: utilization of plant resources to provide food, medicine, fiber, shelter and other needs to past and present cultures worldwide; evolutionary ecology of domesticated plants; preservation of traditional knowledge of useful plants; and conservation strategies and techniques for maintaining plant diversity for future generations.

**NRES 731 Climate Change Action Planning (1 cr. – online)**

This course is an opportunity to learn about climate change issues and to write an action plan (e.g., a revised unit plan or a school presentation or a student project) that integrates climate change topics using KEEP support materials.

**NRES 733 Energy Education: Concepts and Practices (1 cr. - online)**

This web-based course (Internet delivery) addresses energy concepts in three modules, 1) energy definitions, natural laws and flows in living and non-living systems 2) development and effects of energy use, and 3) management of energy resources. (KEEP)

**NRES 735 Renewable Energy (1 cr. – online)**

Participants will gain a fundamental knowledge about renewable energy, how to incorporate renewable energy into their daily operations at work and at home, the pros and cons of using renewable energy, and will gain insight into the renewable world by discussing case studies and talking directly to course guest speakers who have experience with renewables.

**NRES 743 Human Influence on Wisconsin Forests (1 cr. - online)**

This web-based course (Internet delivery) addresses forestry concepts and content and the major factors of forestry health and vitality that human influences cause.

### **Other Disciplines**

**EDUC 726 Models of Teaching and Learning (3 cr. – online)**

This is a course that focuses on understanding the varied aspects of instructional environments and being able to master these and use them to enhance instructional variety and quality. Content and processes in this course also deal with developing instructional repertoires, understanding curricular foci, gaining clearer perspectives as to what works with different types of learners, and the reasons why some methods work and others do not.

**EDUC 790 Brain-based Education (3 cr. - online, 2 required F2F meetings)**

This course aims to address the relevance and importance of brain research to practicing, professional educators. Participants will enter into the world of modern cognitive neuroscience by way of readings, Internet explorations, and activities designed to provide the educator opportunities to consider the potential impact of this area of active research to the practice of education of both mainstream and special needs students.

ENGL 595 Wildlife in Literature

"Wildlife in Literature": A survey or writing by naturalists, poets, and fiction writers about wildlife and wildlife issues. Students will read the writings of famous naturalist of yore such as John James Audubon and John Muir as well as of contemporary authors such as Barry Lopez, Barbara Kingsolver, Gary Snyder, and Mary Oliver. Discussions, activities, and assignments will be geared both to understanding the history of the representation of wildlife in our literature and culture as well as to incorporating such understanding into our various curricula.

FOR 701 Survey of Forestry (1 cr. - online)

Key elements of forest ecology, silviculture, management and amenities, and their relation to key issues in forestry at the local, national, and international level.

HIST 594 Topics in Environmental History (1 cr. - online)

How historical events, people, and actions affected the environment in American history. Participants will explore and analyze events with an eye to understanding present conditions.

WLDL 740 Wildlife Issue Investigations (1 cr. – online)

Applications of ecological principles and management techniques for studying the relationships between wildlife issues and land uses, culture, economic, and political actions.

WATR 750 Water Resources in Society (1 cr. – online)

Explore and explain use and management of water resources.

## **Appendix V**

### **Best Practices for Training and Support of Graduate Students**

Adapted from Haskin (2003)

#### **Throughout the experience**

Weekly seminars/discussions (regular and short)

- Exploring a new topic or skill
- Discussing specific residential life issues/experiences
- Encourage development of a systematic way for participants to track ideas, insights, new knowledge

#### **Early in the experience**

- Provide exceptional role models, especially in the preliminary stages of training and orientation Encourage peer collaboration and mentoring relationships
- Integrate supervisors in formal and non-formal opportunities to support relationship building
- Attend trainings
- Create opportunities at breaks and lunch
- Provide time and means for reflection through journals, seminars, and informal discussions

#### **Middle of the experience**

- Provide formal opportunities to share struggles and ideas
- Provide enrichment and development opportunities
- Visits to or staff exchanges with other RELCs or nature centers,
- Bring in outside speakers for enrichment or training on specific issues
- Have the graduate students provide in-service trainings, programs

#### **Late in the experience**

Initiate opportunities to summarize ideas

- What graduate students have learned
- What the next career steps are for them

## **Appendix W**

### **Simple Marketing Plan**

#### **Graduate Fellowship in Residential Environmental Education**

##### **Purpose of marketing:**

Attract applicants for the Graduate Fellowship in Residential Environmental Education.

##### **Main benefits of the program:**

- Master's degree in REE
- Academic courses from university with an excellent reputation in EE
- Paid tuition, housing, stipend

##### **Target audience:**

Recent college graduates interested in a career in EE

##### **Marketing weapons:**

- Website
- Links from other websites (graduate school and job listings)
- Brochure explaining the program
- Target market to ANCA member ELCs

##### **Niche:**

Residential environmental program, seamless integration of experience and academics

##### **Identity:**

Graduate program at a well-known university with a good reputation for undergraduate natural resources

##### **Marketing budget:**

\$800 startup

##### **Future Marketing Suggestions:**

- Find out where graduate students in the program found out about it
- Get quotes from graduate students (evaluation forms)
- Identify new target markets (camp management, recreation programs?)
- Have graduate students in the program:
- Make a benefits list (can be boastful)
- Develop a theme line—short, not boastful
- Determine the simplest possible way to communicate the program—Meme (eagle=meme for USA)
- Develop blog



**Marketing Strategies Timeline**

<b>2009</b>	Graduate Fellowship Website	Brochure sent to targeted ELCs	Active solicitation through other web resources
January			
February			
March			
April			
May			
June			
July			
August			
September			
October		NAAEE presence	
November		NAI presence	
December			

<b>2010</b>	Graduate Fellowship Website active solicitation	Press releases, media push	Active solicitation through other web resources
January	Add Blog		
February			
March			
April			
May		Identify new markets	Identify new markets
June			
July	Refresh website		
August			
September			
October		Speak at NAAEE	
November		Speak at NAI	
December			

<b>2011</b>	Graduate Fellowship Website active solicitation	Press releases, media push	Active solicitation through other web resources
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

**Appendix X**  
**Evaluation Protocol**  
**Graduate Fellowship in Residential Environmental Education**

This evaluation protocol will measure participant experiences for students in the Graduate Fellowship in Residential Environmental Education.

The first cohort is a pilot group for the Graduate Fellowship program. There is a need for formal evaluation to determine the success of the programmatic framework and curriculum in meeting participant needs and learner outcomes. A formal evaluation will provide stakeholders with information to make any necessary changes in the program before offering it again; therefore, a formal evaluation is needed. The evaluation plan below is formative. The data collected will help to determine the effectiveness programmatic framework and curriculum for the graduate students enrolled in the program pilot. This evaluation will provide a basis for revisions to the program. The results will be reported to the Project Steering Committee and the Program Academic team to aid in their decision-making.

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<b>Focusing the evaluation</b>			<b>Collecting the information</b>	
<b>Evaluation Questions</b>	<b>Indicators</b>	<b>Sources</b>	<b>Methods</b>	<b>Managing</b>
<i>What do you want to know?</i>	<i>How will you know it?</i>	<i>Who will have the information?</i>	<i>How will you gather the data?</i>	<i>When will the information be collected?</i>
What parts of the training did the MS students perceive as most helpful?	MS student responses and ratings and open-ended questions	MS students and staff.	Questionnaire in which MS students will be asked to rate activities on a numerical scale and provide additional feedback through open ended questions. Staff will get a parallel survey	Questionnaire at the end of semesters 1 & 4 of the practicum.
What assistantship, practicum, or residential life experiences did the MS students enjoy/	MS student responses and ratings and open ended questions	MS Students	Survey in which MS students will be asked to rate experiences on a numerical scale & provide additional feedback through open-ended	At the end of each school year

Focusing the evaluation			Collecting the information	
Evaluation Questions	Indicators	Sources	Methods	Managing
perceive as most beneficial?			questions. Will also ask open-ended questions about experiences specific to each student.	
What assistantship, practicum, or residential life experiences did Conserve School and TELC perceive as most beneficial?	Administration and staff responses and ratings and open ended questions	Conserve School (CS), Treehaven (TH) administration and involved staff.	Survey in which selected CS and TH personnel will be asked to rate activities on a numerical scale & focus group in which participants are asked open-ended questions and the facilitator records their answers.	Rated at the end of each school year
What other experiences, tools, and strategies would the MS students like to gain from this program?	MS Student responses to open ended questions	MS Students	Focus group/seminar in which students are asked open-ended questions and the facilitator records their answers.	At the end of each of the two school years.
How are the MS students demonstrating what they've learned in their EE and outdoor skills programs?	Evaluating program plans, observing program delivery, self/peer evaluations of program delivery.	MS Students, EE/outdoor skills program participants, Teachers, CS & TH Staff	Designated observer watches program delivery and records on rubric as well as comments. Self and peer evaluations.	2 observations per semester using formal observation sheets, questionnaire at end of each semester
How are MS students demonstrating environmental leadership in the CS community?	MS student responses, practices observed in the wings, informal interviews with wing students/CS/TH administration and staff.	MS students, wing students Administrations/ staff at CS and TH	Self and peer evaluations given to MS students, designated observer uses rubric for evaluating wing practices, informal interviews recorded as comments	Evaluations & observations at beginning of first semester, late in 2 <sup>nd</sup> , 4 <sup>th</sup> semesters, interviews at 2 <sup>nd</sup> , 4 <sup>th</sup> semesters

Focusing the evaluation			Collecting the information	
Evaluation Questions	Indicators	Sources	Methods	Managing
How do MS students perceive that the learner outcomes have been met by the program?	MS student responses	MS students	Self evaluations given to MS students, seminar discussions	Self evaluations at each semester's end, seminar discussions throughout semester
What evidence do the MS students show that the learner outcomes are being met in those classes?	staff and coordinator responses, observed behavior/practices of students	MS Students, Faculty, staff for the program	Observations, staff/faculty meetings, review of assessment tools used in each course.	Observations throughout semester, review at end of each semester

Evaluation Questions	Analyzing and Reporting	
	Analysis	Reporting
<i>What do you want to know?</i>	<i>How will the data be analyzed?</i>	<i>How will the results be communicated? To whom?</i>
What parts of the training did the MS students perceive as most helpful?	Qualitative responses: summarized and reported as bullet points, &/or quotes. Quantitative responses will be shown in tables and bar charts.	Written and oral reports at staff meeting and to project committee with discussions on strategies to improve training.
What assistantship, practicum, or residential life experiences did the MS students enjoy/ perceive as most beneficial to them?	Bullet points and supporting quotes on open-ended questions, counts, percentages, means, ranges & rankings will be calculated & displayed in tables & bar charts and compared with the information below.	Written and oral reports at staff and advisory committee meetings, and MS seminar with discussion and recommendations for strategies for making improvements.
What assistantship, practicum, or residential life experiences did the Conserve School and Treehaven perceive as most beneficial to their organizations?	Bullet points and supporting quotes on open-ended questions, counts, percentages, means, ranges & rankings will be calculated & displayed in tables & bar charts and will be compared with the information above.	Written report, discussion at staff, advisory committee meetings, MS seminar with recommended strategies for making improvements.

<b>Evaluation Questions</b>	<b>Analyzing and Reporting</b>	
	<b>Analysis</b>	<b>Reporting</b>
What other experiences, tools, and strategies would the MS students like to gain from this program?	Bullet points and supporting quotes derived from qualitative data.	PowerPoint of results, discussion at staff, advisory committee meetings, MS seminar with recommended strategies for making improvements.
How are the MS students demonstrating what they've learned in their EE and outdoor skills programs?	Quantitative: from rubrics ranges, means calculated and displayed as tables, bar graphs for rubrics, Qualitative: narrative summary of comments, using supportive quotes.	Oral/written evaluation individually to MS students via coaching sessions, PPT and discussions to staff, PPT report to admin and stakeholders. MS seminar discussions and PPT to increase successes, share effective programs.
How are MS students demonstrating environmental leadership in the CS community?	Qualitative responses: summarized and reported as bullet points, &/or quotes. Quantitative responses will be shown in tables and bar charts.	PPT report and discussions to staff, written report to admin and stakeholders. MS seminar discussions and PPT to showcase best practices.
How do MS students perceive that the learner outcomes have been met by the program?	Bullet points and Qualitative responses: summarized and reported as bullet points, &/or quotes. Quantitative responses will be shown in tables and bar charts.	Staff and advisory group meetings, PPT and/or written report
What evidence do the MS students show that the learner outcomes are being met in those classes?	Qualitative responses: summarized and reported as bullet points, &/or quotes. Quantitative responses will be shown in tables and bar charts.	Staff and advisory group meetings, PPT and/or written report