

“Birding to Change the World”



(Photo by UVM Mentor Emily Peters)

UVM-Flynn After-School Birding Club
April 6, 2016

Application for Engaged Practices Innovation (EPI) Grant
April 15, 2016

Applicants:

Trish O’Kane, PhD
Creator of “Birding to Change the World” after-school program
Lecturer, Department of Environmental Studies
Rubenstein School of Environment and Natural Resources
University of Vermont

Kimberly Wallin, PhD
Interim Associate Dean for Research and Graduate Programs
Rubenstein School of Environment and Natural Resources

Abstract: This is a proposal to expand a new course—ENVS 295: Birding to Change the World—into a community-based enviro-mentoring program by hiring two interns to help design and implement this expansion. This course is the foundation for a long-term experiential learning program that will engage and retain undergraduates. It will also give them real world experience that could lead to a career in education after graduation. It will also strengthen UVM's community outreach. ENVS 295: "Birding to Change the World" is a new UVM course taught in the spring of 2016. It pairs UVM undergraduates as birding mentors with children at Flynn Elementary School in Burlington's New North End neighborhood. Mentoring teams work together all semester in a weekly after-school program, learning outside in Burlington's greenspaces. This course will be taught every semester to build a strong partnership with Flynn Elementary. The ultimate goal is to follow a cohort of Flynn children through the school system and attract a more diverse student body to UVM. With this grant, additional courses will be designed for Hunt Middle School and Burlington High School to create a diversity pipeline program. and The course is based on a six-year community-based model implemented at the University of Wisconsin-Madison to engage and retain undergraduates, and to increase student diversity. The proof of engagement and retention is that at the end of each semester, undergraduates ask to repeat the course so they can continue to be mentors. This has already occurred at UVM; three students are asking how they can continue to work with their Flynn children. By hiring two of the best UVM mentors from this first spring semester to survey UVM students and community partners, UVM students can design a longer-term mentoring program to meet both their needs and the community partner's needs. This grant will turn UVM students into the architects of this new program and give them ownership of it.

Introduction and Background:

“After the last day I was surprised at how sad I felt. When I got home I felt sort of depressed that our class and Nature Club was over and there would be no more morning bird walks...I guess it meant that I was actually going to miss the class, Nature Club, and the kids. I have never had a class like this before because usually I’m just glad when they are finally over. This...was more of an experience rather than a class and that allowed me to learn more about myself, my classmates, and of course, our-co-explorers.”

UW-Madison undergraduate mentor, 5/7/13.

The “Birding to Change the World” course and after-school program is based on seven years of community-based action research and teaching in Madison, Wisconsin that I conducted for my doctorate, see: [The New York Times, August 16, 2014](#). The Madison program began with 13 UW-Madison undergraduates and six middle school children in a lower-income neighborhood. Within five years, I had trained 123 undergraduate enviro-mentors who worked with nearly 250 middle school children, over half of them children of color, see: [The Capital Times, April 22, 2011](#). A proven sustainable, replicable, and scalable model, this program is also a template to help public universities motivate students by connecting them to their greater community. This sense of connection gives their education meaning (hooks, 2003) which is a proven driver of retention (O’Kane, 2015).

During the spring semester of 2016, I am replicating this model at Flynn Elementary School in the ethnically diverse New North End neighborhood in Burlington. Based on the theoretical framework of environmental justice—that the environment is where we live, work and play (Alston, 1992) --22 UVM student-mentors and 20 elementary school students connect to their immediate environment and to each other through the after-school mentoring program. Utilizing Comstock’s (1912) Nature Study pedagogy and Freire’s (1970) pedagogy of contextual and non-hierarchical education, course structure is based on two types of learning: **learning**

through practices; and learning through relationships. In this course UVM students engage in three weekly practices: 1) birding; 2) nature-study and public research with schoolchildren; and 3) reflective reading and writing. By mentoring a child, undergraduates learn from that child, from a particular place (our outdoor classroom is Derway Island, a mile walk from Flynn Elementary), from that place's non-human residents, from one of Burlington's most ethnically diverse neighborhoods, from each other, and from public school staff.



(Derway Island, outdoor classroom for Flynn program. Photo by UVM Mentor Emily Peters)

Project Description and Literature:

“I can't think of any other course that offers us as much time outside in nature, a chance to give back to the community, and practical learning...As a senior with a zoology major, I have taken a lot of classes that emphasize learning through reading, learning through doing multiple problem sets, and learning through lecture...I think I've only had 2-3 classes besides this one that emphasize learning through *doing*...This is why I care so much about this course. I want to teach people how cool going outside can be...Maybe when they're older these children will look

back...and say 'Hey, a long time ago I used to go bird watching. It's a beautiful day out, so maybe I'll spend the afternoon outside walking in the park. Maybe I'll teach my children how cool birds are one day, just like my mentors did.'"

Jackie Edmunds, former student mentor in Madison, now director of one of the largest wildlife rehabilitation centers in the US.

This interdisciplinary project draws on the following bodies of literature: 1) Dewey's philosophy of "learning by doing" (1916); 2) service and community-based learning, particularly Pulido's (2008) emphasis on "accountability and reciprocity," and Stoecker and Tryon's (2009) critique of service learning programs that offload teaching responsibility to overburdened community partners; 3) place-based learning as a model for civic engagement (Boyer, 1996); and 4) recent neuroscience proving the health benefits of time spent in green spaces, including improved cognitive function (Bratman, et al. 2015).

The project is also based on my participant-observation research on the Madison service learning model which found that for undergraduates **studying for a grade is very different from studying for a purpose; meaning fuels motivation** (O'Kane, 2015). Approximately 8% of all UW-Madison students who took the original course were so motivated that they asked to enroll again at the end of the semester. In an analysis of 1476 reflection journal entries written by all 123 undergraduate mentors over a four-year period, I found that undergraduates were motivated because they were spending time outside in relationship with a child and because **they felt needed** (O'Kane, 2015). The UVM program is based on the same principle of motivating undergraduates by positioning them to meet both a child's needs and a community need. In meetings during the fall of 2015, Flynn Elementary School Principal Graham Clarke said his school needs a stronger connection to UVM. He emphasized that many Flynn students are from

families with no college graduates; these children need college mentors to become first-generation students.



Photo by UVM Mentor Emily Peters

UVM mentor Ali Colbert in action, April, 2016

Expected Impacts (engagement, success and retention):

The impacts of this new course on student engagement and success are already evident:

- 1) three UVM mentors from this first spring 2016 class have asked how they can continue to help at Flynn;
- 2) the 22 current class mentors, completely on their own initiative have been advertising the course on various social media (Facebook, Instagram);
- 3) current mentors have recruited future mentors for the fall; and
- 4) at least one Flynn Elementary student has begged their college mentor to continue next year.

With this grant we would like to hire two of the

current mentors to research and design mechanisms to allow UVM students to continue mentoring post-course, and to extend the program to Hunt Middle School as our Flynn fifth-graders will be graduating and attending Hunt in the fall. These two interns would also help collect and compile all research done by the children and their college mentors in our outdoor classroom at Derway Island. The mentoring team's research on Derway's flora and fauna will be posted on the [Burlington Geographic website](#) and also on the websites of both Flynn and Hunt Middle school. Flynn's principal Graham Clarke has asked our current class to do this and I have not been able to meet that need. Grant funds would also be used to purchase binoculars and books for the new birding club at Hunt Middle School, and more binoculars and books for the growing club at Flynn.

This course and program also helps boost retention by creating community inside and outside the UVM classroom. Each UVM student is paired up for the entire semester with a "bird buddy" in the class with whom they have to study birds outside for at least an hour weekly. Our students not only mentor a child--they mentor each other. Students socialize outside of class and are organizing a bird costume party. This type of course and program can help ameliorate social isolation among undergraduates. In March UVM mentor Karen Obertubbesing wrote in a weekly reflection: "I appreciate the community that our class has become...This is very unique for a university class, and I am so appreciative of it."

Because a UVM student team will conduct a community and student survey to design the expansion, the program will fit both our students' needs and community needs. By engaging UVM students in program design, it will become **their** program.

Our goal is that within four years—by 2020—this program will operate in three public schools (elementary, middle and high school) so that we can follow a cohort of children and help

them get into college, preferably UVM. We would also like to integrate the future service learning courses planned for Flynn Elementary School, Hunt Middle School and Burlington High School into a master's program that emphasizes environmental and sustainability education, and real job experience.

This program is financially sustainable. It will generate press attention to attract funding and become an admission draw for future UVM students. In Burlington we will explore how to make this model scalable to transform it into a diversity pipeline program.

Assessment Plan:

In Burlington we are using the same assessment model developed in Madison: weekly meetings with both the community partner and with UVM student mentors, and a weekly ethnographic reading of mentors' reflection journals. I (Trish O'Kane) visit Flynn Elementary School every Friday to have lunch with our kids and check in with school staff. I make immediate adjustments to the program based on their weekly input. I will train the two new student interns in these assessment methods.

Assessment of program expansion to Hunt Middle School will be both quantitative and qualitative. By the spring of 2017, there should be a new birding club at Hunt Middle School started by UVM students which will provide the foundation for a second service learning course. Success can be measured by the number of children who attend regularly and the club's growth. Qualitative assessment will be carried out through interviews with Hunt and Flynn after-school staff and informal sessions with the children.

References

- Alston, Dana. "Transforming a movement: People of color unite at summit against environmental racism." *Sojourner*, 21 (1) (1992): 30–31.
- Boyer, Ernest L. *Scholarship Reconsidered: Priorities of the Professoriate*. Princeton, N.J.: Carnegie Foundation for the Advancement of Teaching, 1997.
- Bratman, G. N., Hamilton, J. P., Hahn, K. S., Daily, G. C., & Gross, J. J. (2015). Nature experience reduces rumination and subgenual prefrontal cortex activation. *Proceedings of the National Academy of Sciences*, 112(28), 8567-8572.
- Comstock, Anna Botsford. *Handbook of Nature-study*. Oxford: Benediction Classics, 2009.
- Freire, Paolo. *Pedagogy of the Oppressed*. New York: Continuum, 1970.
- hooks, bell. *Teaching Community: A Pedagogy of Hope*. New York: Routledge, 2003
- O’Kane, Trish. *Nesting in the City: Birds, Children and a City Park as Teachers of Environmental Literacy*. Diss. University of Wisconsin-Madison, 2015.
- Pulido, Laura. "FAQs: Frequently (Un) Asked Questions about Being a Scholar Activist." In *Engaging Contradictions: Theory, Politics, and Methods of Activist Scholarship*, edited by Charles R. Hale. Berkeley and Los Angeles, California: University of California Press, 2008. 341-366.
- Stoecker, Randy and Elizabeth A. Tryon. *The Unheard voices: Community Organizations and Service Learning*. Philadelphia: Temple University Press, 2009.

Budget

1) Supplies and equipment:

-50 pairs of EagleOptic Kingbird binoculars (special 2-for-1 price for buying in bulk).	\$2,374.75
-50 Peterson's field guides for beginning birders (\$7.95 each).	\$ 397.50
-25 waterproof field journals (\$8.99 each).	\$ 224.75

2) Salary for one intern:

-10 hours per week for 30 weeks (two semesters) at minimum wage of \$15.00 an hour.	<u>\$4,500.00</u>
---	-------------------

Total requested from EPI grant:	\$7,497.00
--	-------------------

Proposed Cost Share

-Salary for second intern paid from Trish O'Kane's new faculty start-up fund. Same rate and number of hours as first intern (10 hours per week for 30 weeks (two semesters) at minimum wage of \$15.00 an hour.	\$4,500.00
---	------------