



# Big Urban Woods

## 4-H Club

### Abstract

The Big Urban Woods 4-H Club is composed of 20 students in grades 4-6 at American Indian Magnet School, in St. Paul, Minnesota. The program is conducted at the end of the school day for two and a half hours one day a week. Youth take regular walking field trips to a 5-acre plot of land less than a mile away called The Big Urban Woods. Located in one of the most economically stressed neighborhoods of the city, this area had been used as an informal dumping ground for years until a group of concerned community-members began to clean it up on their own. The Big Urban Woods 4-H Club has since adopted it as an on-going service learning project, and has played an integral role in lobbying with the city of St. Paul and the Minnesota Department of Natural Resources to preserve the Big Urban Woods as one of over a hundred School Forest Programs. The Big Urban Woods 4-H Club allows youth to explore the natural world in the context of Ojibwe and Lakota cultures. Its purpose is to engage youth in service learning projects that raise public awareness of the Woods and use the area to educate youth about wildlife identification, preservation, photography, and journaling, as well as to teach them how traditional Ojibwe and Lakota cultures use plants and other wildlife, such as in art and medicine-making. Technology is infused in the curriculum through use of cameras, GPS/GIS units, and computers to complete projects and learning/leadership portfolios. The aim of the program is to ignite youth excitement about learning and help them develop tangible learning, leadership, citizenship, and technology skills that can help them build a sense of hope and expectation for future educational and career opportunities.

### Program Needs

The primary goal of the program is to help youth connect their learning and interests to potential higher education and career opportunities. This goal is based on a number of findings that shed light on the importance of post-secondary education.

Native Americans are the most underrepresented group in science and technology fields compared to their percentage of the US workforce (Commission on Professionals in Science and Technology, 2005). Nationally, the poverty rate of urban Indians is 20.3 percent compared to 12.7 percent for the general urban population. The unemployment rate of urban Indians is 1.7 times higher than that of non-Indians in urban areas, and urban Indians are 1.7 times less likely to have a high school diploma than non-Indians (National Urban Indian Family Coalition, 2008). Low-income students are much less likely to pursue post-secondary education (Baum & Payea, 2004), and according to the U.S. Bureau of Labor Statistics, nearly two-thirds of the fastest growing occupations through the year 2012 will require post-secondary education (Bureau of Labor Statistics, 2004). According to a study published by the College Board, "any college experience produces a measurable benefit when compared with no postsecondary education," including higher lifetime earnings, lower rates of poverty and unemployment, and higher school readiness of children whose parents have attended college (Baum & Payea, 2004). In fact, studies indicate that children of parents who have not attended college are less likely to do so themselves than children of parents who have (Baum & Payea, 2004).

## Jessica Pierson Russo



### **Assistant Extension Professor**

University of Minnesota  
Twin Cities, MN  
[pier0239@umn.edu](mailto:pier0239@umn.edu)



## Targeted Audience

The target audience is middle school youth (grades 5-8, approximately 10-14 years old) who are eligible for free or reduced school lunch. With this particular club, the audience includes youth in Native American families from varied tribal backgrounds.

## Program Goals and Objectives

1. Youth in the program will build tangible skills for driving their futures and will see a real and hopeful connection between their learning and interests and potential higher education and career opportunities.

### **Objectives:**

- Parents will engage with youth in setting educational goals.
- Youth will set short-term and long-term personal education goals in the context of careers and higher education.
- Youth will exhibit mastery in a topic area of their choice through development and presentation of learning/leadership portfolios.

2. Youth will understand themselves as positive leaders for themselves, their communities, and the world.

### **Objectives:**

- Youth will work with adults to create and engage in service learning projects.
- Youth will demonstrate growth in personal leadership skills and knowledge through creation and presentation of learning/leadership portfolios.
- Youth will work with adults to increase public awareness of the Big Urban Woods through public presentations, showcasing of student work, and website development about the Big Urban Woods.
- Youth will gain knowledge and understanding about the role of nature in Ojibwe and Lakota cultures.

3. Youth will gain scientific and technological literacy in the context of environmental conservation.

### **Objectives:**

- Youth will learn basic plant and wildlife identification and record knowledge through nature journals, photography, and contributions to website content.
- Youth will demonstrate growth in technological literacy through activities focused on digital photography, videography, GPS/GIS, and website development.

## Program Design/Curricula and Materials

The program leader developed the *Organic Middle School Youth Program Model*, which is designed to meet middle school youth where they are in terms of age, culture, gender, education level, language-base, and socio-economic status, and enable them to achieve educational success (see Skuza, 2004). The model is organic, which means that it is developed from the community up rather than from the program down, while using a research base to inform devel-

opment. This design provides a structure conducive to middle school development and learning and fluidness needed to engage youth as individuals in an inclusive group setting over time. The model is intended to help at-risk youth own their learning by igniting their interest in education while facilitating a process to craft long-term educational plans. The model includes a parent/guardian component designed to involve families through home visits, orientations, and quarterly empowerment sessions to reinforce that parents are the child's first educator.

Curricula and materials utilized include the following:

- *WeConnect: An opening to the world* (Skuza, Russo, & Hurtado, 2009)
- Skuza, J. A., Russo, J. P., Gates, E. F., & Kawase, M. (2006). *Urban youth lead: Becoming the authors of their lives*. Minneapolis: Regents of the University of Minnesota.
- Peterson's Guides to Trees, Flowers, Herbs
- Leslie, C. W. & Roth, C. E. (2003). *Keeping a nature journal: Discover a whole new way of seeing the world around you*. North Adams, MA: Storey Publishing.
- Louv, R. (2005). *Last child in the woods*. Chapel Hill, NC: Algonquin Books.

## Knowledge and Research Base

The adult facilitators work hard to deliver a program that respects the youth as human beings, allows them to explore their interests in the context of their cultural heritage, and provides a highly engaging means for youth to understand their learning and leadership. The following base of research is used in the development of the program and curricula.

**21st Century Learning and Leadership.** According to the Partnership for 21st Century Skills, the U.S. has shifted from a manufacturing to a service-based economy, requiring a different set of skills focused on knowledge, creativity, and innovation, not just in the highest-level jobs, but in jobs across the spectrum of the workforce. Twenty-first century learners should be able to think critically, communicate and collaborate across cultural, geographic, and other boundaries, and lead utilizing the skills and talents of others (Partnership for 21st Century Skills, 2008). Most importantly, they have the ability to drive their own learning because they understand how and what motivates them to learn (Skuza, Russo, & Hurtado, 2009). The Big Urban Woods program provides intentional space for young people to understanding their learning, discover their interests, develop focused skills, and then connect these skills and interests to future learning possibilities. To accomplish this goal, the program focuses on self-directed learning, innovative leadership, and global awareness and citizenship as 21st century skills that can help youth carve positive pathways to drive their futures.

**Experiential and Inquiry Learning Methods.** More than simply "learning by doing," experiential learning calls for personal involvement, promotes self-discovery, inspires self-initiative, and fosters critical thinking. It takes youth outside of themselves, as they share and process the results of their experience and begin to connect their learning to real experiences (Dewey, 1938). Inquiry is an approach highly complementary to experiential learning in that it incorporates reflection into every aspect of the learning process and allows youth to explore topics in a way that builds on their natural curiosity (National Research Council, 2000).

**Service Learning.** The many benefits to meaningful service learning include an increased sense of self-efficacy, higher academic achievement, interest in future education, and improved problem-solving, teamwork, and planning skills (Roehlkepartain, 2007). According to the National Youth Leadership Council's standards, service-learning: (a) actively





engages participants in meaningful and personally relevant service activities; (b) is intentionally used as a strategy to meet learning goals; (c) incorporates ongoing, challenging reflection that explores the relationship of self to society; (d) promotes understanding and respect among diverse participants; (e) provides youth with a strong voice; (f) addresses community needs; (g) engages participants in an ongoing process of improvement and sustainability; and (h) lasts long enough to address community needs and desired outcomes (National Youth Leadership Council).

*International Education.* An international education approach helps learners understand their reactions to unfamiliar viewpoints, contexts, and situations. With this approach, youth come to understand that they are participants in a global society, inspiring a sense of understanding and confidence in relating and connecting to other people and preparing them to thrive in culturally diverse settings by giving them the opportunity to learn and use culturally responsive skills and knowledge (Skuza, Russo, & Hurtado, 2009).

## Partners

- American Indian Magnet School
- St. Paul Area Council of Churches
- St. Paul Community Education
- St. Paul Parks and Recreation
- Conservation Corps Minnesota, Minnesota Department of Natural Resources

## Funding

- USDA Children, Families, and Youth At-Risk (CYFAR) project
- St. Paul Area Council of Churches
- St. Paul Community Education

## Staffing

- The UMN Urban 4-H Extension Educator serves as the local project director for CYFAR (Children, Youth and Families at Risk) programs in St. Paul, the Big Urban Woods 4-H Club being one of two of those programs. The project director oversees management of the St. Paul portion of the grant, leads the development and implementation of the program vision and outcomes, and nurtures relationships with primary partners.
- The Urban 4-H Program Coordinator coordinates implementation of grant expectations and works with the intern to design, adapt, and implement curricula related to 4-H, leadership/citizenship development, global/cultural competence, and awareness of higher education and career opportunities.
- The Urban 4-H intern works with the Coordinator to design and implement curricula, and coordinates activities and field trips related to 4-H, leadership/citizenship development, global/cultural competence, and awareness of higher education and career opportunities.
- The Native American cultural liaison teaches youth about Ojibwe and Lakota methods of identifying, collecting, and preserving herbs for basic medicinal uses. The liaison serves as the nature guide during hikes

through the Big Urban Woods, and is also well-connected with the Department of Natural Resources and other city and community efforts of conservation.

- There are two program facilitators (from the American Indian Magnet School). The first facilitator teaches youth about photography and website development, and works with the intern and cultural liaison to help youth design their service learning projects. The second facilitator teaches youth drawing and writing techniques for nature journaling and helps youth design their service learning projects. Both also serve as cultural liaisons, helping to carry out the delivery of the program in a manner appropriate to the preservation of Native American cultural heritage.

## Program Delivery

Participants are students or alumni of American Indian Magnet School, and stay after school to meet once a week for two and a half hours. In addition to time spent in the school building, part of their time is spent in a 5-acre plot of wooded land close to their school called The Big Urban Woods.

The program begins with 4-H learning activities, led by 4-H staff, that tie into the main activity. These learning activities are focused on building group cohesion and personal awareness. Youth learn about personal learning and leadership styles using the Ojibwe and Lakota clan system, they build community awareness and global citizenship through activities in the *WeConnect* curriculum, they reflect on their learning in their nature journals; and they set SMART goals for their time in the program using these principles. Specific lessons on these topics are incorporated into the activities. This time sets the tone for the day in a way that helps the participants latch on to specific skills they will be using throughout their time in the program and introduces the main activity. This time is also used to help youth make decisions about the program.

The main activities, led mainly by school and community staff/volunteers, focus on exploration of the natural world through journaling, photography, plant identification, and medicine-making. Youth learn what herbs can be used for basic first aid, and prepare the herbs using traditional Ojibwe and Lakota methods. In the fall, they collect seeds from the Big Urban Woods to be planted in the spring, and they learn to identify which plants are growing in the Woods, to be added to the growing list on the [Big Urban Woods](#) website. Participants collect flowers and plants to make paper, which is included in their nature journals. These nature journals are brought out to draw and record the wildlife they find and to reflect on their learning. In the winter, youth spend time learning about the significance of Ojibwe and Lakota art, which is based on native plants and flowers. They then design their own bandolier bags using this art. Throughout the program, youth are using the knowledge gained to complete service-learning projects and presentations that incorporate the use of photography, GPS/GIS units (used to map trails and create geo-caching courses through the Woods), and the development of a Big Urban Woods website to increase public awareness of the Big Urban Woods.

Quarterly parent meetings will be scheduled to showcase youth learning and empower parents to understand how they are their child's first educator. Speakers will be brought in to talk with parents about relevant topics, including resources in St. Paul for Native students, how they can prepare their children early for high school graduation requirements and college readiness, and how they can work with their child to set and meet educational goals.

## Recognition of Participants

Youth in the Big Urban Woods 4-H Club are developing portfolios that document their learning, and parts of these portfolios (photographs, letters to city commissioners) will be displayed in St. Paul's city hall.





In addition, throughout the program, youth have been working on the development of a website for the *Big Urban Woods*, where their letters, photographs, lists of identified wildlife, and other work is displayed. The youth and adults will be presenting this website at meetings and events (i.e., other 4-H club meetings, city meetings, fairs, Urban 4-H showcase) that can help further the cause of educating the public about the area.

American Indian Magnet School shows their work in special display cases in the school, and youth present at school Powwow's and culture fairs throughout the year.

Youth presented a skit about the Big Urban Woods to 200 other 4-H youth and their families at our Urban 4-H Showcase Event. Similar to a county fair, they will be judged and have the opportunity to win a ribbon or a trip to the Minnesota State Fair to present and compete again.

Youth have an end-of-year celebration, where they will have the opportunity to present their learning portfolios to their parents and share reflections of their time in the program in a more intimate setting.

## Program Evaluation and Outcomes/Impact

### **Short Term:**

1. Youth will set short-term personal education goals.
2. Youth will demonstrate growth in personal leadership skills and knowledge.
3. Youth will demonstrate growth in technological literacy.

### **Long Term:**

1. Youth will set long-term personal education goals in the context of careers and higher education.
2. Youth will exhibit mastery in a topic area of their choice.
3. Parents/guardians will be engaged with their children on setting and obtaining common education goals.

### **Program evaluation includes the following methods:**

1. Spreadsheet documenting attendance, technology use, youth leadership rates, and completion of learning style assessment, field experience, portfolio, and public presentation (quantitative data).
2. Youth peer-assessment of leadership portfolio that assesses leadership growth, education goals, and technology literacy using established criteria (quantitative data).
3. Youth self-assessment on the field experience. Youth will be asked to evaluate their learning/growth (pre/post surveys and focus groups).

## Evidence of Sustainability

The school (American Indian Magnet) is fully committed to and thrilled with the program. Students who are not in the club come up to the Big Urban Woods teachers throughout the day and at school culture fairs to ask how they can become involved in 4-H. The principal of the school has agreed to allow alumni of the school to attend the program. Also, the St. Paul school district will be making significant changes, one of which will be to increase the grade

range of American Indian Magnet School to 7th grade, and then 8th grade. This will make a positive impact on the 4-H club, as it will make it easier to retain students over a longer period of time. The biggest issue in the sustainability of the program is transportation. Currently, the program is able to utilize busing through a partnership with another afterschool provider, and it is anticipated that this opportunity will continue, as will sources of funding for other aspects of the program for at least the next two years. In the mean time, both 4-H staff and school staff and volunteers are actively seeking other financial and human resources to support the program over time.

## Awards/Recognition for Program

A representative from the Minnesota Department of Natural Resources (DNR) working on their 25-year Legacy Strategic Plan met with the Big Urban Woods 4-H Club. The youth drew pictures of themselves in nature illustrating what they wanted access to and shared with him the importance of the Big Urban Woods. A few weeks later on a visit to the Big Urban Woods, the youth learned that the recreation center and the Woods were in discussion for development and there would be a meeting to discuss the future of the woods. The youth wrote letters to city commissioners asking them to stop any plans of developing the Woods and outlining its importance as an educational area worthy of preserving as a natural space. The city has since designated the Big Urban Woods as an official School Forest Program, one of over a hundred recognized by the Minnesota Department of Natural Resources.

## Considerations for Replication

*Organic process of development:* Community partners work side-by-side with 4-H staff to continually evaluate and develop the program based on the needs of the youth. In this way, the goals of both the school and 4-H maintain harmony. However, delivery of the main content is carried out by the people who are most likely to be long-term participants (e.g., community partners). In other words, the school partner is the main driver of the program, much like the youth and volunteers would be of a traditional 4-H community club. This is the key element of the sustainability of the program—the community partner has meaningful commitment to the success of the program such that it is not completely dependent on the presence of 4-H staff.

*Youth Voice:* Youth are involved in key decisions of the club and have increasing roles of responsibility and leadership as they grow in the program. The youth are also key players in the sustainability of the program. Our program model aims to engage youth over the longest period of time possible. Thus, alumni of the school are encouraged to return to participate in the program over time. The lower turn-over rate of participants allows for a more stable club culture that can be carried on by the most steady and consistent members.

*Opportunity to master content (reflect, produce, present, connect):* Part of the program model is to focus on mastery. “Mastery” means that youth have the opportunity to reflect on their learning, produce a tangible product (such as a project or presentation), gain the ability to present and articulate their learning, and find ways of connecting their interests to higher education and career opportunities. To accomplish this, all activities are presented using the experiential learning and inquiry-based approach. Also, youth are working towards the completion of projects with multiple opportunities to present them, and opportunities are woven throughout the program (campus visits, career speakers) to help youth make connections to future possibilities.





## References

- Baum, S., & Payea, K. (2004). *Education pays 2004: The benefits of higher education for individuals and society*. Washington, DC: The College Board
- Bureau of Labor Statistics. 2004. *Occupational Outlook Handbook: 2004-05 Edition*. Washington, DC: U.S. Government Printing Office.
- Commission on Professionals in Science and Technology. (2005). *The status of native Americans in science and engineering*. Washington, DC: Commission on Professionals in Science and Technology.
- Dewey, J. (1938). *Experience and Education*. New York: Macmillan.
- Jones-DeWeever, A., & Gault, B. (2006). *Resilient & reaching for more: Challenges and benefits of higher education for welfare participants and their children*. Washington DC: Institute for Women's Policy Research.
- National Research Council. (2000). *Inquiry and the national science education standards: A guide for teaching and learning*. Washington, DC: National Academy Press.
- National Urban Indian Family Coalition. (2008). *Urban Indian America: The status of American Indian and Alaska Native children and families today*. Seattle, WA: National Urban Indian Family Coalition; The Annie E. Casey Foundation; National Urban Indian Family Coalition; Marguerite Casey Foundation; Americans for Indian Opportunity; National Indian Child Welfare Association. Retrieved from <http://www.aecf.org>
- National Youth Leadership Council. *K-12 Service-learning standards for quality practice*. St. Paul, MN: National Youth Leadership Council. Retrieved February 18, 2011 from <http://www.nylc.org/k-12-service-learning-standards-quality-practice>
- Partnership for 21st Century Skills. (2008). *21st Century Skills, Education & Competitiveness: A Resource and Policy Guide*. Retrieved December 6, 2010 from [http://www.p21.org/storage/documents/21st\\_century\\_skills\\_education\\_and\\_competitiveness\\_guide.pdf](http://www.p21.org/storage/documents/21st_century_skills_education_and_competitiveness_guide.pdf)
- Roehlkepartain, E. C. (2007). *Benefits of community-based service-learning (fact sheet)*. Scotts Valley, CA: National Service-Learning Clearinghouse. Retrieved February 21, 2011 from [http://www.servicelearning.org/instant\\_info/fact\\_sheets/cb\\_facts/benefits\\_cbosl](http://www.servicelearning.org/instant_info/fact_sheets/cb_facts/benefits_cbosl)
- Skuza, J. (2004). *Site-based youth development programs: Reaching underserved youth in targeted communities*. *Journal of Extension*, 42(1). Retrieved at: <http://www.joe.org/joe/2004february/iw4.shtml> .
- Skuza, J. A, Russo, J. P., & Hurtado, G. A. (2009). *WeConnect: An opening to the world*. Minneapolis: Regents of the University of Minnesota.

## In Partnership With

