

The Ohio State University
Campus as a Living Laboratory

Ohio State University's Wetlands *Watercolors* Eco Art Exhibition Proposal

Jacquelyn Cole; Victoria Nabors; Shawn O'Connor;
Erin Nelson; and Kevin Inks

ENR 2367
OSU School of Environment and Natural Resources

December 4, 2013

Disclaimer

Ohio State's Campus as a Living Laboratory program provides students with the opportunity to share the findings of their studies, as well as their opinions, conclusions and recommendations with the Ohio State community. The reader should bear in mind that this is a student project/report and is not an official document of Ohio State. Furthermore, readers should bear in mind that this report may not reflect the current status of activities at Ohio State. We hope the ideas recorded here can be built upon by other students and researchers. We urge you to contact the persons mentioned in this report or appropriate Ohio State offices or departments about the current status of the subject matter of this report.

Campus as a Living Laboratory is a collaborative program of OSU Energy Services and Sustainability
Aparna Dial, University Director, Energy Services and Sustainability
Dial.15@osu.edu

INDEX

TOPIC	PAGE NUMBER
EXECUTIVE SUMMARY.....	2
INTRODUCTION.....	3
NEED FOR ENVIRONMENTAL EDUCATION.....	3
ART AS AN EDUCATIONAL TOOL.....	5
CLEVELAND CLINIC <i>EXPRESSIONS</i> CASE STUDY.....	7
CREATION OF <i>WATERCOLORS</i> AND HOW IT WILL BE CONDUCTED.....	8
BENEFITS.....	11
DRAWBACKS/SOLUTIONS.....	13
FUTURE WORKS.....	14
CONCLUSION.....	15
WORKS CITED.....	17

EXECUTIVE SUMMARY

The *Watercolors* Eco Art Exhibition Proposal is our solution to the need for public education about environmental issues. There are many educational techniques currently being used, few of which involve art. However, those that do use this non-traditional method appear to be very successful. Studies done by a group of psychologists in the 1950's show that people learn in a variety of different ways: visually, auditorily, and otherwise. Traditionally, visual learning has been ignored in modern education. Art education is an approach that focuses on this type of learning, and allows students to fully engage in a subject that they might not otherwise have felt drawn to. There are numerous positive examples of schools using art as a tool to teach core classes. Cleveland Clinic's *eXpressions* exhibit is one of the most well-known examples, and was the basis for our project. The *eXpressions* program successfully uses art, science, language, and math to educate the public on medical research being done annually at the clinic by high school interns. We believe that combining art and environmental science into an art show would also be successful; it would be a way to increase the spectrum of people interested in environmental science. The *Watercolors* art show, which would take place at the Wilma H. Schiermeier Olentangy River Wetland Research Park, would have high school art students working with research done by Ohio State graduate students to create art. The exhibit addresses both the desire for expanded environmental education at the Wetlands and also the specific need for decoration in the Heffner Wetland Research Building. A beautified lobby will not only make the building more appealing to visitors, but will also increase foot traffic throughout the Wetlands, which, in turn, will increase public awareness. We believe the art created will serve as a bridge between the artistic and scientific communities.

INTRODUCTION

When considering possible solutions to our world's environmental issues, ideas such as recycling, clean energy, environmental engineering, and reduced carbon emissions often come to mind. Although these are all key elements to a more sustainable planet, education is another important method to promote a viable future. Education can be found in many different mediums, including art. Art allows us to express ourselves, our feelings, and how we see the world around us. Combining art and environmental education allows students to express their views of the environment in a more creative and less technical setting. For The Ohio State University's Heffner Research and Education Wetlands Building, the coupling of environmental education and art is one approach to promoting sustainability around Ohio State, increasing foot traffic and interest in the Wetlands, and beautifying the wetland's research building. Establishing the *Watercolors* environmental art exhibit is our answer to this hybrid concept; it will serve as an innovative way to introduce students and the public to creative pieces that promote research at the Wetlands. The goal of the *Watercolors* exhibit is to increase environmental consciousness, decorate the research and education building, and increase public awareness of the Wetlands. The exhibit will specifically focus on combining the works of advanced high school art students from local high schools and graduate research from students at the university. Using existing examples of science-based art competitions as models for our own exhibit, such as Cleveland Clinic's *eXpressions*, will allow us to construct a successful, educational, and creative show.

NEED FOR ENVIRONMENTAL EDUCATION

Environmental education has been largely overlooked in schools. Many high schools have no classes focusing on environmental education, and students at those schools receive practically no exposure to environmental issues. However, environmental science is far from insignificant. The need for environmental education is growing every day, and future generations will need to be environmentally focused for the sake of the world, society, and public health. If we can instill an interest and passion for the environment, students may be more inclined to spend their free time exploring the natural world than stay inside. Through environmental education, students can also gain critical thinking skills, problem solving abilities, and service experience.

Educating young adults about the environment is crucial and needs to be of higher concern in the United States, but traditional classroom-style education doesn't appear to be up to the task. A study done by JM Hines refutes the misconception that people only need to be educated on environmental issues in order to take action, and that many other factors are needed in combination with knowledge of the subject. This study provides convincing proof that our youth need more than what small amount of education is offered to them in traditional schooling (Hungerford & Volk, 1990). Giving information to students in hopes that they will be interested enough to get involved isn't effective. Current education techniques involve normal classroom settings where information is presented and students are expected to memorize the material and repeat it back for a test. There is often no actual understanding of the subject. Studies done by Ramsey and Rickson have shown that if students are given a specific problem or issue that could affect them personally, they are more likely to get involved outside of the classroom (Hungerford & Volk, 1990). The problem with this method is that often students will ignore other issues, or they may generalize all problems into a single category and will not innovate or create new solutions when faced with different problems. This technique may be useful to grasp attention and introduce students to basic concepts, but it isn't enough. Other techniques for environmental education include going on nature hikes, using interactive websites, and simply holding class outside, though these practices are not as widely used as we feel they should be.

Reaching out to students that would not normally get involved in environmental science is also imperative. Focusing on educating students that have already taken an interest in science would include only a small sector of the population. Research has been done by the Teacher Training Department of the University of Ghent on getting students in English classes involved with environmental science. In the study, students looked at environmental artwork and then wrote short essays and poems about the piece (Soetaert, 1996). The results of this study showed that students began to view environmental science as a dynamic combination of various subjects, and not strictly limited to traditional classroom science. *Watercolors* was designed with this strategy in mind: by reaching out to art students, we can synthesize multiple subjects into a fluid whole. Engaging advanced art students who may generally not be interested in environmental science may seem like an unconventional idea, but involving diverse groups of people is exactly what is needed to increase environmental consciousness.

ART AS AN EDUCATIONAL TOOL

Not only is there a need for environmental education, but there is also a need for a new way to approach environmental education. Using art as an educational tool is one of many recently popularized approaches to education. To begin, defining what we mean by art education will be helpful in preventing any misunderstanding. We do not mean the subject of art, where one learns about the fine arts. The definition that is most applicable to our project would be something along the lines of using different forms of art, such as paintings or sculptures, to improve understanding of educational material. This view of art education, and the idea of presenting educational material in a non-traditional way, is not a new concept to the educational world. The idea stems from research by two psychologists, Dr. Benjamin Bloom and Dr. Howard Gardner. Both psychologists focused their research on the idea that different people learn, perform, and understand in different ways. Dr. Bloom is famous for his taxonomy that was created in 1956. Bloom's taxonomy of learning domains was created "in order to promote higher forms of thinking in education, such as analyzing and evaluating, rather than just remembering facts (rote learning)," (Clark, n.d.). Dr. Bloom believed that the best type of education included all three categories of education techniques: knowledge, skill, and attitude. Bloom also identified three styles of learning: cognitive, affective, and psychomotor. Working with material in ways that educate cognitively, affectively, and in a psychomotor manner allows for each individual student to work with the material in a way that best fits their type of learning, therefore giving students the best education possible. Gardner's Theory of Multiple Intelligences states that there are seven different types of learning styles: visual/spatial, bodily/kinesthetic, musical, interpersonal, intrapersonal, linguistic, and logical/mathematical (Lane, n.d.).

Bloom's Taxonomy and Gardner's Theory of Multiple Intelligence support the idea that there are multiple types of learners, and that each type learns best in a different way. This concept has helped spur a reformation movement in the structure of the educational system. Many schools are now moving away from the idea that everyone should learn the same material in the same way and that they should be tested in a standardized way, and are instead moving towards the idea that catering the structure of how material is presented to each student helps to achieve greater overall understanding of the material. Using art as an educational tool is just one of the many ways that educators around the world are working to do this. Europe has taken a great interest in art in the classroom. ARTinED is one of the most popular examples of

unconventional teaching methods used in Europe; it is a program put on by the European Union that works to find new, innovative methods to incentivize the concept of using art in education, (European Union, 2013). ARTinED integrates art into every primary school subject in an attempt to foster creativity and reach students that learn in untraditional ways.

The United States has made an effort to reform their education system as well; many schools around the country have been implementing art education into their coursework and seeing positive results because of it. For example, at a small elementary school in Knoxville Tennessee, the third grade class at Lonsdale Elementary School received an overall “F” in Language Arts by the State Department of Education. Dr. Misty Anderson, along with Katie Daniel, did an experimental four-week theater workshop to test the use of art as an educational tool (Daniel, n.d). In the workshop, students were asked to rewrite common fairy tales in groups, later change these prose fairytales into dialogue, later on write them in forms of plays, and eventually design sets and costumes and perform the plays for an audience. At the end of the workshop, the students understanding of the material covered was reevaluated. In almost every instance, an improvement in comprehension of the content was seen.

Other instances of art being used as an educational tool include an 8th grade class at Vine Middle School. Mrs. Akers students were having a difficult time understanding the concept of verbal imagery in poetry. Mrs. Akers decided to experiment by having the students make a visual representation of what the poems were about. By combining visual imagery with the verbal imagery, students were better able to understand what imagery was, and what the poems were trying to say (Daniel, n.d).

Northshore High School English teacher Kathleen Modenbach has been using art projects to supplement her language arts curriculum for years, especially with her learning disabled students. After discovering that many of her learning disabled students had an interest in art, Mrs. Modenbach began using art projects to bolster the understanding of the material. Mrs. Modenbach stated that in addition to the educational benefits of using art in combination with traditional educational methods, “My classroom is beautifully decorated, and the kids are proud of their efforts. In addition, at open house, parents see creativity that many of them had never seen before in their children (Modenbach, 2010).”

The United States Environmental Protection Agency for Region 9 shows an excellent example of how art as an educational tool can be applied to environmental science. To celebrate

Earth Day 2011, the Region 9 EPA held a student art contest. The theme was “trash in our oceans,” an issue that is becoming an ever increasingly important global concern. Over 200 students from around the Region 9 area submitted art projects that portrayed the problem of waste in the ocean. The grand prize winners and their classmates were taken on a field trip to the EPA’s office to learn about an environmental issue of interest to the students. This not only educated students on the issue of ocean debris, but allowed them to follow their own interest in environmental problems as well.

CLEVELAND CLINIC *EXPRESSIONS* CASE STUDY

Studying such examples of successful combinations of science and art education, as well as specific examples of art and environmental education, will be extremely beneficial to planning and implementing a strong exhibit. An additional example is the Cleveland Clinic’s *eXpressions*, an art, science, language, and math exhibition. The exhibit showcases the work of high school science, math, and art enthusiasts by combining their talents with incredible results. Through the Cleveland Clinic’s high school internship program, students complete research during the summer of that year’s exhibit. This research is used as the basis and background for contest participants. Art, math, and language students are given their peer’s research work and use it as inspiration for their chosen subject area. The competition was started in 2005 and has been growing ever since, to over 889 art, language, and math submissions in 2011 alone (“eXpressions,” 2011). Scientists, educators, artists, and professionals judge the competition based on four main measures: interpretation, creativity, initiative, and presentation. The exhibit is particularly competitive and only accepts about 10% of all entries received. Our group has used this specific case study to help plan our success in allowing *Watercolors* to become an annual, growing event in the Ohio State and Columbus communities.

One extremely successful part of the eXpressions exhibit was the creation of an art curriculum for high school art teachers (“eXpressions,” 2011). The existence of such a guide for educators takes pressure off teachers who may feel that some of the scientific knowledge is outside of their realm of comfort and teaching ability. Educators can use the given curriculum and edit, lengthen, or shorten it to their best liking and implement it in a way that does not seem intrusive to their pre-planned schedules. Creating a curriculum is not a present objective of this project; however, with further research and resources, the creation of a curriculum for

Watercolors is certainly a possibility. Another important take-away from the exhibit is its process: from criteria for submission to ideas for prizes, the *Watercolors* group has been able to learn much from *eXpressions*. For example, students receiving blue, red, or white ribbons in the clinic's show are each awarded a gift card (of varying amounts, per placement). This is an example of an inexpensive way to draw interest and motivate students to get involved.

Another important resource our group is working with (and learning from) is the Wexner Center for the Arts at Ohio State. Along with other assets such as exhibit expertise and experience, the center also has previously offered a course, *Art and the Environment*, specifically for advanced high school art students. At the end of the course, the students would put on an exhibit to showcase their artwork to the general public. The Wexner Center is currently redesigning the class's curriculum, under the direction of Shelly Casto, to be implemented in the immediate future. Ideally, our group would like to collaborate with the Wexner Center, and encourage the coupling of these two events, to be held at the Heffner Wetlands building. Shelly Casto, Wexner Center's Director of Education, has expressed interest in connecting the two exhibits together and has offered to get in touch with high school art teachers whom she has previously worked with for *Art and the Environment*. An additional benefit to collaborating with the center is the support provided by American Electric Power for the Wexner Center's course; the company could potentially sponsor *Watercolors* alongside *Art and the Environment*.

CREATION OF *WATERCOLORS* AND HOW IT WILL BE CONDUCTED

Organizing the *Watercolors* environmental art show at the Wetlands may change annually, so our group will provide a general outline of our plan for a successful exhibition. Art teachers in the Central Ohio region will be contacted the summer before the proposed exhibit, so enough time is left to add it to their curriculum if they so choose. At this time, interested researchers and graduate students will also be contacted to create a general description and infographic (if appropriate) of their research. Sponsors and interested donors will be contacted around this time to gauge interest in donating resources and prize money. Next, at the beginning of the school year, high school art groups will be contacted and given essential information to measure interest. The next step will involve circulating research information to interested students and classes, allowing time for the completion of their artwork. Approximately a month before the exhibition, appointed judges will be contacted, artwork will be judged, and pieces will

be chosen for the show. The exhibit would be best suited for early spring, perhaps late March or April due to the aesthetic appeal of the Wetlands during that time of year. At this time, winners will be notified and invited to the opening exhibition. Those failing to receive a position in the exhibit will be asked to pick up their art pieces. In the weeks preceding the *Watercolors* exhibit, the Heffner Wetland Research building will be readied for the placement of the artwork and the show. This will include setting up tables, designing the layout, and acquiring refreshments. The night of the opening, students, families, and other guests will browse the gallery and enjoy refreshments provided by sponsors, such as Lucky's Market and Jeni's Splendid Ice Cream, who have shown interest in sponsorship. Art pieces will stay up for the remainder of the chosen time period and then later be returned to artists. Artists will also be given the opportunity to donate or sell their pieces, which could stay in the Heffner Wetland building or possibly be moved elsewhere on Ohio State's School of Environment and Natural Resources' campus.

The *Watercolors* exhibit fulfills our goals in multiple ways. Increased environmental awareness among a younger generation is a major goal of ours because we want students on The Ohio State campus to lead environmentally friendly life styles. Students participating in the exhibit may have the chance to see the Ohio State University and environmental science in a new light, which could potentially increase attendance from local students interested in art and/or environmental science. Having a fun, interesting art exhibit at the Heffner Research Center will hopefully garner interest from not only the public, but also Ohio State students who are unaware of the Wetlands on campus. If we are able to increase environmental awareness with Ohio State students, then Ohio State may continue developing as a leader in the sustainability initiative. *Watercolors* also fulfills our goals by augmenting environmental education. There are not many high schools that have environmental science courses, so participants will be able to learn new, meaningful information. This will also help the public to see how strong Ohio State's School of Environment and Natural Resources programs are. The art show will provide decorations for the Wetlands facility and increase public awareness of the Wetlands as a destination. Our group believes that hosting *Watercolors* at The Wetlands Research Facility will increase the number of people who travel through the Wetlands, and ultimately that will increase the public's knowledge on environmental issues.

The *Watercolors* group will be creating a broad network that will build ongoing support for our program. This will help with the goal of being successful in starting an annual

competition and to ensure longevity and initial success. We will need the support of students, administrators, teachers and sponsors. Our target will be high-level art students who may be interested in building a portfolio for art school application, or are otherwise interested in strengthening their resumes. We anticipate a lot of the initial interest coming from this alone. Many of these high-level students have projects scheduled throughout the year, and an additional demanding outside project may be too much investment for a brand new program like ours. Offering incentive to the students will increase the level of response to our program. We believe that a monetary incentive will help draw student involvement and establish legitimacy; sponsorship will help us develop the capital we need to create this incentive. While the incentive is not absolutely necessary (we believe the program will get more than enough involvement to put on an exhibition even without sponsorship), an incentive would allow the exhibition to be of a high caliber.

Sponsors may not be absolutely necessary to attract students, but they are nevertheless an important tool for establishing the legitimacy of our program and maximizing student involvement. We plan to lobby for sponsorship from both the local business and art communities. Businesses, which have a vested interest in community involvement and positive public image, may be more willing to contribute funds. For example, Whole Foods, which relies on a community-driven, wealthy and socially responsible consumer base, has a reputation for sponsoring small events like our exhibition and may be a valuable partner. *Watercolors* will benefit from Whole Foods' positive image, and vice-versa. Similarly, Lucky's Market and Jeni's Splendid Ice Cream may also make great partners.

Both art teachers and administrators are essential to our program. All the incentives in the world will not guarantee student involvement if the students themselves never learn about our program. We need an infrastructure for reaching them in a diversity of schools, classes, districts and cities, every year. High schools, and specifically their art teachers, are the most reliable solution to this marketing problem. Working closely with these teachers will give us an opportunity to communicate with prospective participants. Based on survey responses from high schools around Central Ohio, including Upper Arlington and Olentangy Orange, nearly all teachers would be willing to tell their students about our program. At this point, however, few would advocate it or make it part of their curriculum in its current form. We anticipate more than enough early interest, but our long-term goals are to expand the *Watercolors* program. Ideally,

the best artists from around Central Ohio would enter the contest, and the best of those would be handpicked for the exhibit. This requires a high volume of entries, and the best way to achieve that would be for art teachers to make participation in the contest a mandatory assignment. Although the likelihood of this being a widespread practice is very small, participation from even a few individual classes in the region would expand our overall selection. Projects like these can eventually become a yearly part of the class, or even a new tradition.

One problem we'll counter when trying to get teachers to fully invest their time and energy is that educators want a feeling of legitimacy to surround a program before they commit at that level. Art teachers almost always have detailed schedules with specific projects, which they will be hesitant to alter for an unknown variable like our program. The need for legitimacy is a big part of the reason sponsors are an integral part of the program; they help create the clout needed to receive enthusiastic support and advocacy from high schools and art teachers. We want this program to be a meaningful experience for students while at the same time helping them think about the environment and more specifically, wetlands, in a different way. The last thing we want is to become another flyer buried in a desk or on a notification board. Promoting *Watercolors* as a prestigious event will reduce the chance of this happening. There is also importance and value in the personal exchange between teachers and students. We want this coming from teachers directly to students, and to earn that kind of support we will need to convince educators of the quality of our program over time. This is support that needs to be cultivated; until then, we'll ask for as much support as we can get from teachers. Even if the program is quickly mentioned to classes, or a flyer is sent out in an email, we anticipate more than enough student involvement to put on a successful exhibition.

BENEFITS

The benefits that will come from the art show at the Wetlands Research Center far outweigh any of the possible negatives. *Watercolors* has the potential to be a major event at the Heffner Wetland Research and Education Building and to unite the local community through environmental awareness. The Wetlands will benefit from the art show in several ways. There is a large amount of empty space in the Heffner building which the art show will improve by adding decoration. Beautifying the blank spaces on the walls in the lobby will improve the atmosphere of the Wetlands facility, as well as increase the overall aesthetic appeal of the

building. The Wetlands will also benefit from the increased awareness of environmental issues, a major goal of the School of Environmental Natural Resources. As the exhibit becomes more established over time, long-term community involvement will increase the amount of foot traffic throughout the Wetlands.

Watercolors will not only greatly benefit the Wetlands, but it will benefit the sponsors of the art show as well. Environmental issues are a hot topic in today's society, so a company sponsoring an environmental art show demonstrates to the public that the company is interested in more than their own success. This improves the company's personal branding and is advantageous for their business. Companies who take part in environmental issues often have a better standing with the local community, which has the potential to greatly improve their business. Galleries sponsoring *Watercolors* will have an additional benefit of being able to scout local artist talent. *Watercolors* is comprised of entries from only high school students, so galleries that choose to sponsor will be able to look at young talent and potentially develop them further. This is important because all galleries need young artists that are starting new trends; the gallery that develops a young demographic, along with their original demographic, will be able to appeal to all audiences.

Along with the Wetland Research Center and the sponsors, the community is another beneficiary with the creation of *Watercolors*. When the art show is created, the community will gain students that are environmentally conscious, as well as a free cultural event that the public can attend. Environmentally conscious students will be important in years to come because they will understand the sustainability process, a likely major topic of discussion. These students are more likely to assist the community environmentally because they will have a greater concern for the improvement of environmental status. Ideally, the art show will act as a place that community members can go to socialize and discover new research and artwork. This will bring many individuals closer and strengthen appreciation for the art show even more. When community members start to appreciate the event, many will attend annually, allowing *Watercolors* to expand.

Additional beneficiaries of the art show are the high school students that participate. Students have an economic incentive because the winners of the show may receive a monetary prize to be used to further their education. Due to the cost of college, scholarships are a necessity for many future students; *Watercolors* may give kids an opportunity to potentially earn financial

aid. Many high school students need money for college, and *Watercolors* will be a great way to assist them in their financial struggles. Additionally, participating in the art show is a great way for students applying to art school to start building their portfolio. Novice artists often need to participate in events to gain experience and confidence.

DRAWBACKS/SOLUTIONS

Creating an art show from scratch is no easy task; there will be many problems that arise during this process. When addressing potential problems, it is better to be proactive than reactive. Making an effort to prevent possible problems will let the art show carry on with few glitches. One environmental problem that may be associated with the art show is littering and damage to the Wetlands. People who come to the art show might not be as environmentally friendly as others there and could cause problems. A solution to the littering problem would be to put up easily accessible trash cans. Litter often occurs because individuals have trash but no convenient place to dispose of it. Trash and recycling cans should be put in various places on or around the Wetlands to deter individuals from damaging the environment. Signs will also be put up that clearly indicate where to put trash with information to educate people of the damage their trash could have on the Wetlands research center. With the proper signage and ropes showing people where to go, there should be minimal, if any, damage done to the Wetlands.

A major problem our group may face will be getting the public to come out and support the exhibition. Many of the participants' parents will come to support their kids, but our long-term goal is to get more people at the exhibit and create greater foot traffic throughout the Wetlands. Those who do not enjoy art may not be compelled to visit the exhibition, as may those who do not know much about the environmental sciences or Wetlands. Some may be critical of the combination of art and science as a form of education. However, the art show will allow the public to learn about environmental research in a creative atmosphere, which might make it easier for some visitors to comprehend the material. To inform the general public of the art show, we plan to advertise the exhibit around central Ohio by putting up flyers in participating communities, placing advertisements in local newspapers, and spreading the word through social media. By using social media websites such as Facebook, Twitter, and Instagram, the exhibit could reach out to many members of Central Ohio communities at no cost. These websites could also then be used to update fans and followers throughout the year on new and exciting

developments within the *Watercolors* exhibition, and possibly showcase winners with “Artist of the Week” posts. Social media will be a great, cost-effective resource that will keep the public excited for the art show year-round.

FUTURE WORKS

The most important goal for the future is to establish *Watercolors* as a major program for high school artists. For that to happen, the exhibit will need to have a relatively high number of submissions. That means we need to cast a wide net, and the best way to achieve that would be for art teachers to assign it to their students as a mandatory project, or as part of the curriculum. As previously stated, we do not anticipate this being a widespread practice, but even a few individual classes from around the region would expand our available pieces to select from. Projects like these can eventually become an organic part of the class, or like a tradition.

Additionally, we plan to create a student organization on campus to continue the work we have started. The organization could handle many of the details involved in running the exhibit, so that the burden would not fall upon members of the Wetlands Research and Education Center. Students from the School of Environment and Natural Resources at the Ohio State University will most likely have a strong interest in participating in such a club, as may many students majoring in other related disciplines, such as ecology and art. Extracurricular participation is beneficial to many students’ resumes, and many students have a strong interest in gaining experience with event planning. As long as the *Watercolors* Exhibition is open to all Ohio State students, the event would qualify for funds from the university. Being registered as a student organization also lends us more credibility, and it might be easier to find businesses to sponsor our event (and maybe even some on-campus institutions) if we have the perceived legitimacy that comes with being a student organization.

There are other benefits to registering with the university. Freshman can gain leadership opportunities and help put on something great; by the time they reach their third and fourth years they’ll be judging applications, getting in contact with teachers and looking over research. It will be a fantastic growing experience for everyone involved, and the experience of planning and hosting a large event like this is incredibly valuable. There are many reasons for students to want to get involved in our group, which will ensure that *Watercolors* stays alive year after year.

One of the fantastic things about *Watercolors* is that it has potential for growth. This exhibit is a model that can be applied in any number of contexts and age groups. Our primary goal, which is to increase the efficacy of environmental education through the fusing of research and art, is universal. Not only is *Watercolors* valuable for high school artists, but the exhibit may one day help college, middle school, or even elementary school artists to think about their world and wetlands differently. The more the program grows, the more impact it can have.

CONCLUSION

The *Watercolors* exhibit at the Heffner Wetland Research and Education building will enhance the Columbus area's art and environmental communities and benefit the Ohio State's wetlands, young artists, and environmental graduate student researchers. The combination of environmental science and art will promote interdisciplinary learning and a stronger, more holistic understanding of the environmental issues addressed by researchers. The coupling of the two disciplines will also allow for multiple learning styles to be addressed, which will ideally help the art show to reach a broader audience. The use of art as an education tool allows for a more creative interpretation of the modern environmental crisis, allowing us to educate people who may not generally be targeted by other environmental education endeavors. By showcasing environmental artwork at an annual exhibit, *Watercolors* will serve as a form of wide scale environmental education. High school artists will learn from participating graduate students and the public will learn from the artistic interpretations by these student artists. The exhibit will be a great way for the Ohio State Wetlands to both give back to the community and gain momentum from increased foot traffic and interest in the area. Local sponsors, though not necessary, will enhance the exhibit and assist in providing incentives for student participants and exhibit visitors. Creating a successful annual exhibition will take organization, communication, and support from the Ohio State wetlands, local businesses, and the general public. However, if successful, the exhibit will be able to reach many different segments of the Columbus community and, potentially, reach beyond the current scope. With proper management and organization, *Watercolors* could expand beyond Ohio into other areas of the country and, ideally, outside of the nation. One art show may not be the sole solution to our planet's energy and environmental crisis, but through education and outreach from one of the largest universities in

the world, *Watercolors* has the potential to change the way modern environmental education is viewed and executed.

Literature Cited

- Clark, D. (n.d.). Bloom's Taxonomy of Learning Domains. In *Big Dog and Little Dog's performance juxtaposition*. Retrieved October 16, 2013, from <http://www.nwlink.com/donclark/hrd/bloom.html>
- Daniel, K. (n.d.). The Arts as Educational Tools. In *The University of Tennessee Knoxville: Research and Creative Exchange*. Retrieved October 13, 2013, from http://trace.tennessee.edu/cgi/viewcontent.cgi?article=1085&context=utk_interstp2
- Earth Day art contest. (2011). In *United States Environmental Protection Agency*. Retrieved October 2, 2013, from <http://www.epa.gov/region9/artcontest/>
- European Union. (2013). ARTinED. In *ARTinED*. Retrieved October 14, 2013, from <http://www.artined.eu/home.html>
- “EXpressions,” (2011). Web. Retrieved 20 Oct. 2013 from <http://www.clevelandclinicexpressions.org/>
- Harness, H., & Drossman, H. (2011). The environmental education through filmmaking project. *Environmental Education Research*, 17(6), 829-849.
- Hungerford, H. R., & Volk, T. L. (1990). Changing learner behavior through environmental education. *Journal of environmental education*, 21(3), 8-22
- Lane, C. (n.d.). Gardner's Multiple Intelligences. In *Multiple Intelligences*. Retrieved October 12, 2013, from <http://www.tecweb.org/styles/gardner.html>
- Modenbach, K. (n.d.). Using Art to Reach and Teach. In *Education World*. Retrieved October 16, 2013, from http://www.educationworld.com/a_issues/issues294.shtml
- Soetaert, R. (1996). Art and literature in environmental education; Two research projects. *Environmental Education Research*, 2(1), 63.