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FOCUS ON NATURE: RESULTS OF A PROGRAM EVALUATION

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Kathleen Slemon**, Marian Kelly*, Karen Nelson***,
Lindsey Thomson****, Rebecca Pereira*

*Research Shop Intern

**Research Shop Project Manager

***Research Shop Project Manager/Coordinator

****Research Shop Project Manager/Community
Engaged Learning Manager

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SUMMARY

Purpose

- The purpose of this project is to evaluate the impacts of a one-day nature photography workshop for students conducted by Focus on Nature (FoN). It explored:
 - Students' experiences of participating in the FoN program, including:
 - What students learned from the program
 - How participation affected students' connection to nature

Methods

- Surveys consisting of 12 multiple-choice questions were distributed to 154 student participants during the afternoon segment of the workshop at their school. Data collection took place in 16 classrooms across nine participating schools in the Guelph-Wellington area.

Main Findings

- FoN appears to have positively impacted students' connection to nature. Most students reported that their participation in the program (70%) and the experience of using a camera outdoors (71%) changed how they see nature. The majority also reported that it made them notice more details in their natural environment.
- 62% of students identified at least three elements of design in their photos.
- 64% of students wanted to spend more time outside following the workshop.
- 52% of participants reported that they think about their effect on the environment, which was identified as a potential area for improvement.

Conclusions

- FoN appears to be fulfilling its objectives of fostering students' creative expression and a deeper sense of connection to nature. Future research and



work should be directed towards promoting environmental consciousness among students.



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INTRODUCTION

This project was prepared for Focus on Nature (FoN), a registered charity based in Guelph, Ontario. The program aims to inspire young people to explore and connect with nature through photography. FoN offers workshops for elementary-school aged children in Wellington, Halton and Waterloo regions. The workshops bring trained volunteers into classrooms to engage students in hands-on nature and photography activities.

The goal of this project was to evaluate the impact of a one-day nature photography workshop on student participants. Specifically, we aimed to understand what students learned as a result of the program and how it affected their connection to nature. This evaluation will help provide formal documentation of the impacts of the program as well as provide recommendations for improving the program going forward. The current evaluation was conducted through the Research Shop based on the framework developed during the primary authors' practicum.¹

Background

FoN is a registered charity that offers full-day workshops in elementary school classes that are designed to align with the Ontario Arts Curriculum for grades 5 and 6. These workshops have been adapted for students ranging from grade 3 to grade 11.

FoN's mission is inspired by the belief that spending time in nature is crucial to physical, mental and emotional health and wellbeing. Young people are spending more time indoors engaged in screen-related activities, and as a result they are spending less time outside engaging with nature. According to a recent report, the average Canadian adolescent is spending 6.5 hours a day on screens (i.e. computer, TV and video games) on weekdays and seven hours on weekends (Active Healthy Kids Canada Report Card, 2010). Numerous research studies have pointed to the harms of this increasing disconnection with nature, as well as to the benefits of time spent in nature for young people's development, health and wellbeing (Louv, 2005; Ontario Nature & Ontario College of Family Physicians, 2010).

¹ This project was a continuation of previous research conducted by Kathleen Slemon, a Project Manager at the Research Shop, during her practicum placement through the Community Engaged Scholarship Institute (CESI). During this practicum, she conducted an environmental scan (Appendix A), created a program logic model (Appendix B) and an evaluation framework for FoN (Appendix C) under the supervision of Lindsey Thomson, CESI Manager.



FoN seeks to promote respect and appreciation for nature through encouraging students to spend time exploring and discovering the outdoors, as well as through engaging students in nature photography activities. Photography has been associated with improved student focus, engagement and depth of learning across several disciplines (FoN, 2010). Through combining photography and nature-awareness activities, the FoN workshops aim to foster students' creative expression, observational skills and attentiveness to their natural surroundings, helping them to deepen their connection to nature.

While there are many programs available that aim to improve students' relationship with nature or their artistic abilities, very few programs incorporate nature and art into one workshop. An environmental scan previously completed by Slemon (the primary author of this report) suggested that being outside and participating in arts-based programs has many benefits for children. One study reported improvement in behavioural and emotional issues over the course of a 12-week arts program (Rousseau et al., 2005). Another study found that children were able to make connections to the content around them and their community after a one-day outdoor conservation program (Powers, 2004). While the literature supports arts programming and nature workshops for children, very few programs that incorporate both elements have been formally evaluated. The environmental scan demonstrated FoN's uniqueness as a program and provided insight as to how to evaluate such a program.

Workshops

Originally based in the City of Guelph and County of Wellington, FoN has expanded to serve Waterloo and Halton regions as well. To date, FoN has conducted 534 workshops in 95 schools, reaching 13,256 students in Wellington County, Waterloo and Halton Region.

One paid staff member and two or three additional volunteers typically run FoN workshops. Volunteers are identified as the key to success of the program, as they provide valuable expertise, skills, appreciation for nature, and provide an opportunity for students to connect with members of their community. To date, FoN has trained 76 volunteers.

Workshops include the following elements:



- An interactive lesson covering design, composition and use of a digital camera
- A nature walk during which children can take photos of their natural surroundings
- Hands-on nature awareness and sensory activities (e.g. scavenger hunt, nature sculptures)
- A photo editing workshop
- A slideshow of students' "top shots" that students share and discuss with the class

Research Goals

This project is an outcome evaluation of a nature photography program in Guelph-Wellington, at the request of and in collaboration with FoN. The purpose of this project is to evaluate the impacts of a one-day nature photography workshop for students. In addition, the evaluation also looked at the experience of FoN volunteers.

The following evaluation questions were used to investigate the objectives identified above:

1. How do students feel about being outside as a result of their participation in the program?
2. Does using a camera impact students' experience of being outdoors?
3. What did students learn as a result of the program?

METHODS

Measures

To gather feedback from participants, a short survey consisting of 12 multiple-choice questions was created. This survey was modified from an existing survey measuring Nature Relatedness (Nisbet, Zelenski & Murphy, 2009). In addition, the survey included questions regarding the skills students learned in the workshop and their enjoyment of the program. This survey was distributed to participants during the workshop using a mobile device or on paper. Ethics approval was received from the University of Guelph



Research Ethics Board, The Upper Grand District School Board and the Wellington Catholic School Board.

Recruitment

Nine schools were identified as potential sites for the evaluation. Inclusion criteria was jointly determined by FoN and the Research Shop based on the date of workshops as well as the location. Another consideration was to target schools where the program was well established to ensure the evaluation did not overly burden teachers, students or program staff. These schools included a mix of Catholic and public schools in the Guelph-Wellington region. Once ethics approval was received, researchers sought permission from the principal of each school. Permission was granted in all schools except one, where a scheduling conflict meant that the workshop had to be rescheduled.

Procedure

Once the research team confirmed a schedule of data collection days, student recruitment began. Data was collected at a total of 16 workshops in these nine schools, though some data collection dates had to be rescheduled or cancelled due to weather or lack of permission forms. As students were under 18, parental consent and student assent was sought. Teachers sent consent forms home as part of the FoN information package approximately one week before the workshop. Reminders were sent to teachers to collect consent forms before the workshop to ensure students were able to participate in the evaluation. All those who returned a signed parental consent form were eligible to participate. The researchers took eligible students aside in small groups to review the survey and provide an opportunity for students to ask questions. If students wished to participate after reviewing the survey and consent form, they were asked to provide their consent by checking a box or clicking ahead on the electronic survey. Most students completed the survey in under ten minutes.

In most cases, surveys were conducted in the afternoon of the FoN program following the morning activities. In cases where this was not possible, they were carried out within a few days of the FoN workshop during the next visit to the school. Physical copies of consent forms and completed surveys were stored securely in a locked office.

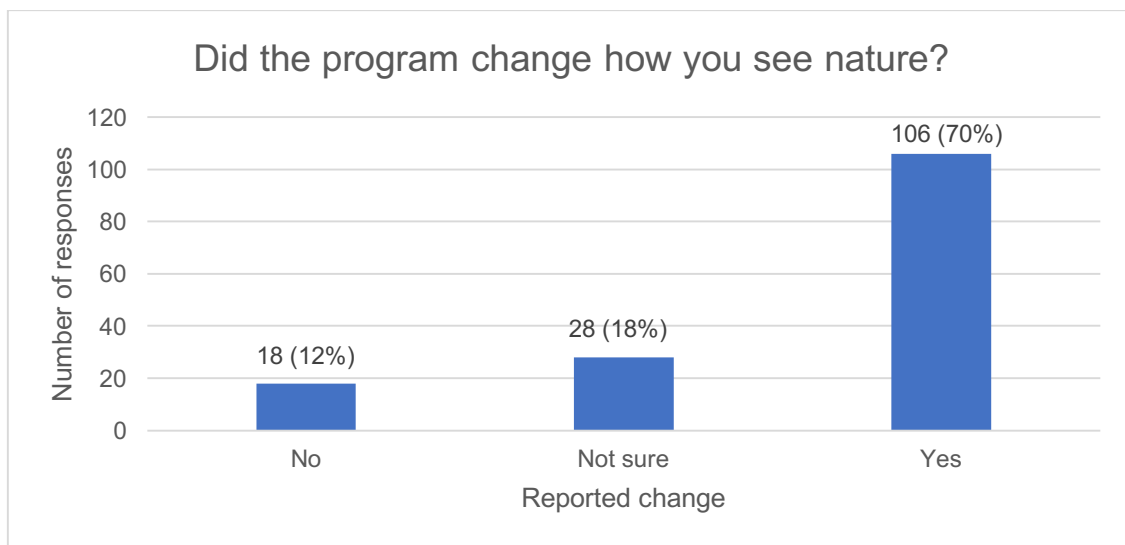


RESULTS

In total, 154 students between grades 5 and 8 completed the survey. Participants included students from both Catholic and public school boards in Guelph-Wellington. Students were asked about their experiences in the program and their attitudes towards nature. Most survey responses indicated that students had a positive experience in the FoN program. The responses also indicated that the program is realizing many of its objectives, including strengthening students' connection to nature. Survey results also suggested some possible areas for improvement. The results of individual questions are summarized below.

Participants' Relationship to Nature

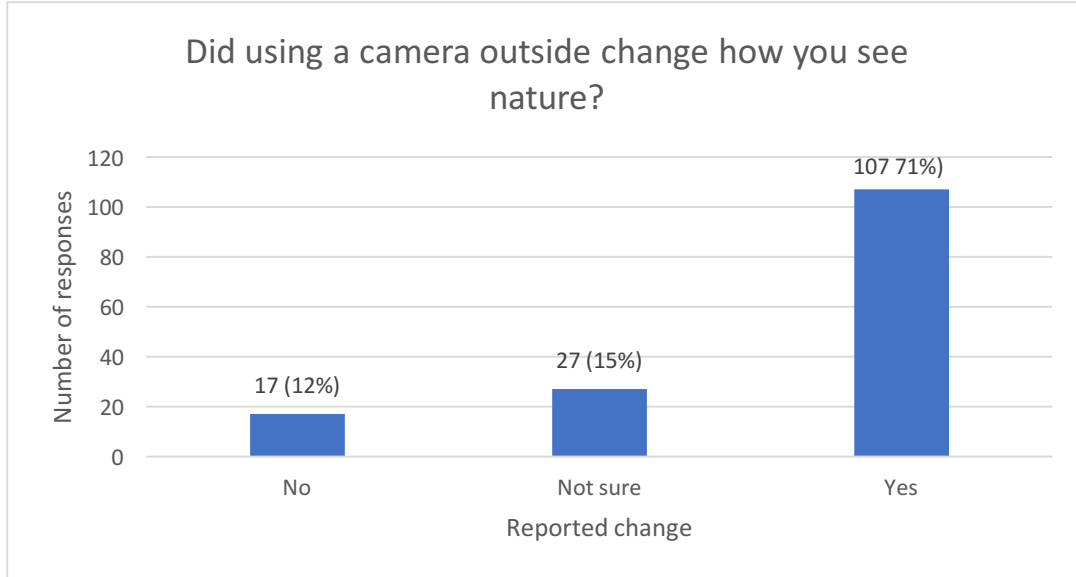
According to the survey results, 70% of student participants (n=106) reported that the FoN program changed how they see nature. Nearly one fifth (18%) indicated they were "not sure", and 5% indicated that it did not.



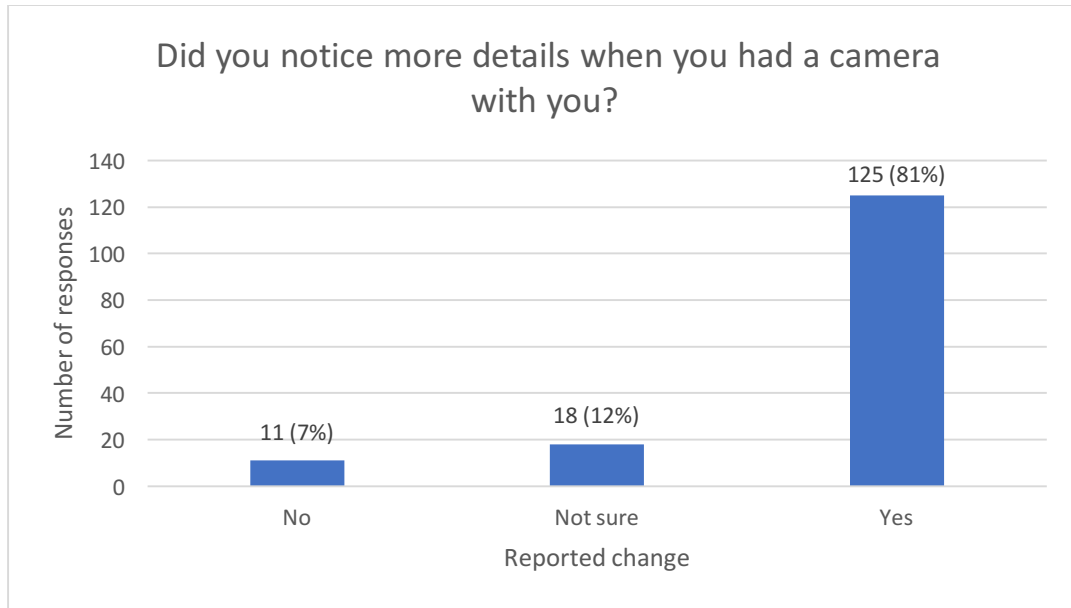
Similarly, 71% of student participants (n=107) reported that using a camera outside changed how they see nature. In contrast to the previous question, this question specifically looked at whether taking pictures, rather than simply being outside, had an impact on participants. It should be noted that the results of this question are consistent



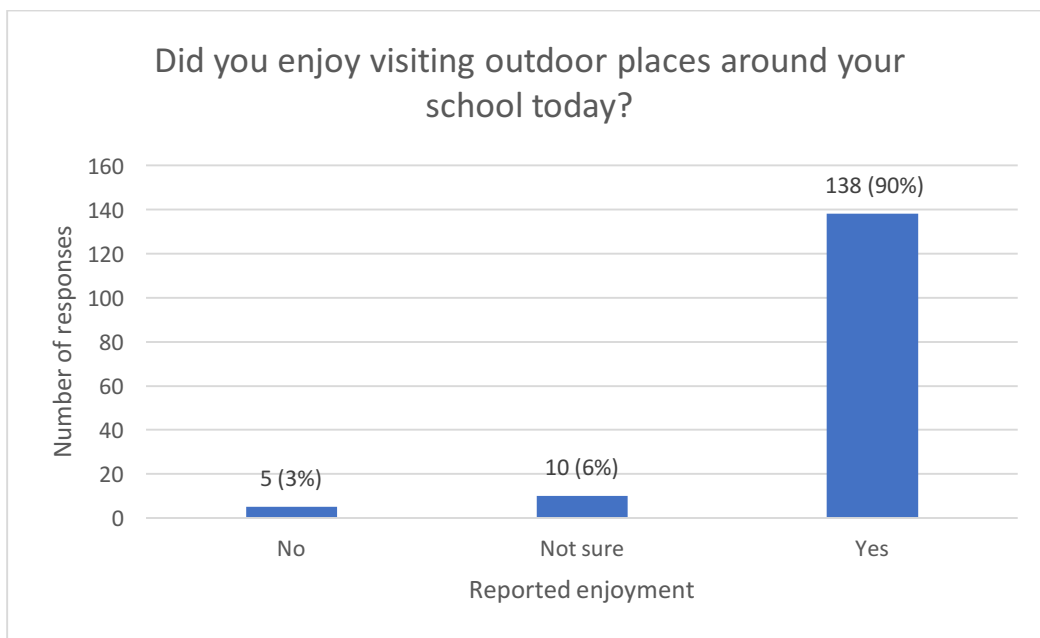
with the previous question, which suggests that having a camera outside is a key program element that affects participants' perception of nature.



In addition, when asked if they noticed more details when they had a camera with them, 81% of participants (n=125) answered “yes”. This suggests that one of the programs’ objectives – using photography to encourage a different way of seeing and experiencing nature – was achieved with most participants.

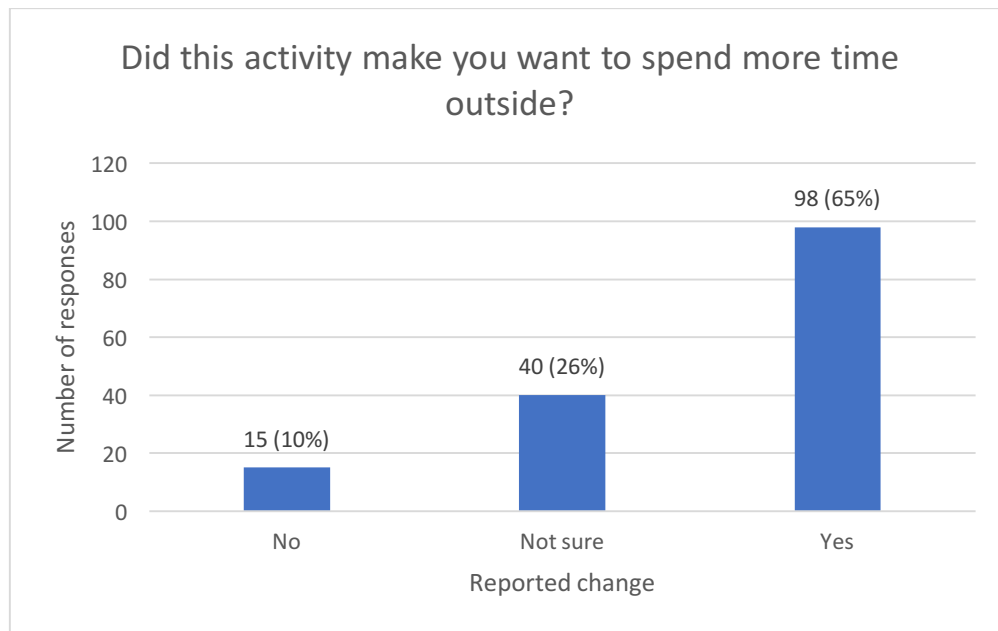


The majority (90%) of student participants (n=138) reported that they enjoyed visiting outdoor places around their school as part of the FoN programming.

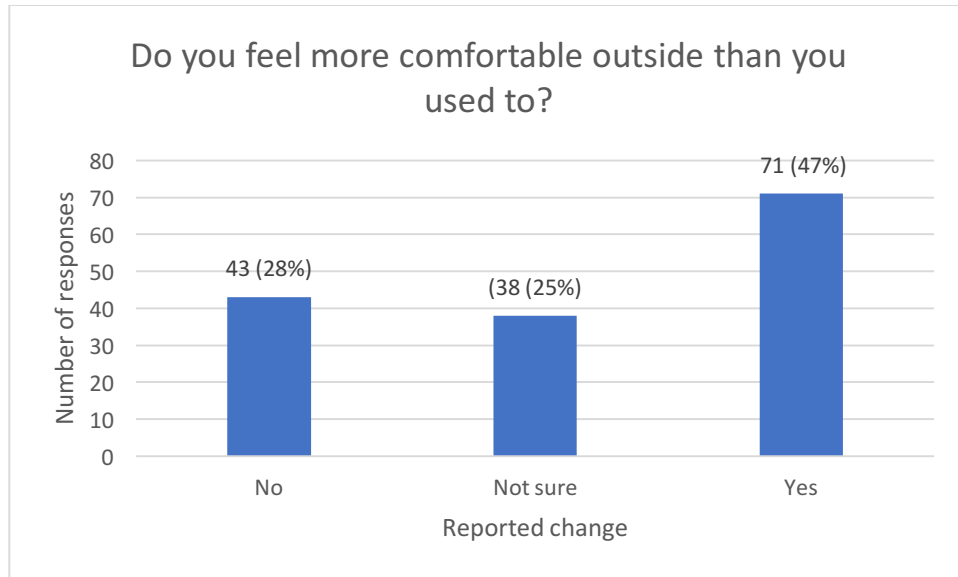




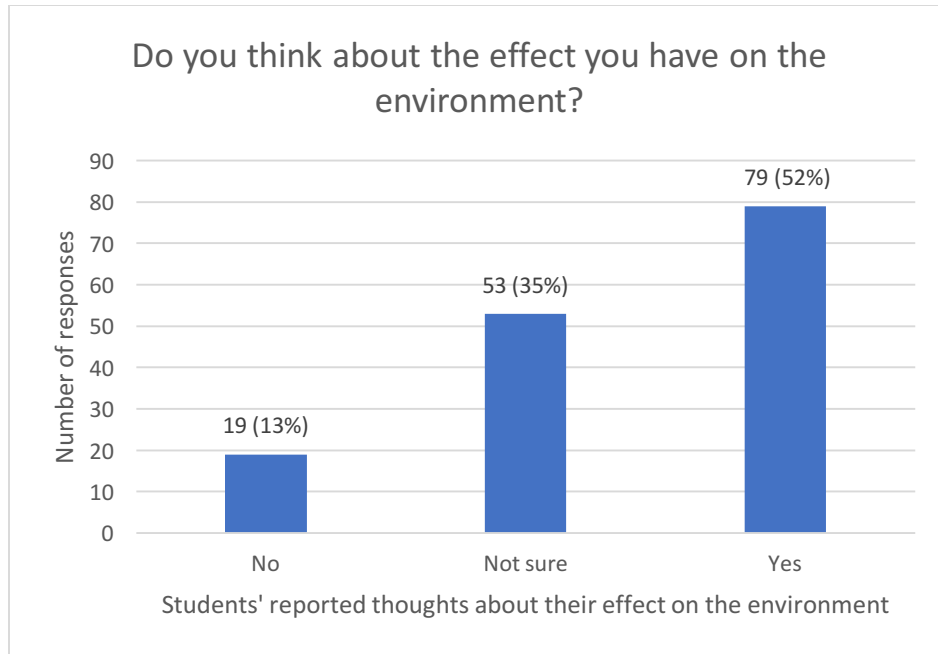
Interestingly, only 65% (n=68) of student participants reported that this activity made them want to spend more time outside. Given the results of the previous question, this might indicate that participants already enjoy spending time outside. Therefore, the workshop may not be expected to generate a significant change in terms of students' interest in spending time outside.



While most students reported that they enjoyed the time spent outdoors during the FoN workshop, only 47% of student participants (n=71) reported that they felt more comfortable outside following the program. This may indicate that participants are already very comfortable outside and therefore the program did not change their level of comfort. It may also be the case that a one-day workshop is not enough to change the attitudes of participants who do not enjoy being outdoors or do not feel comfortable being outside. In addition, some “nature walks” were spent on school property while others took place in local areas. Therefore, it is not surprising that some students did not see a change in their comfort level with being outdoors, as many students were engaging with areas that were already familiar to them.



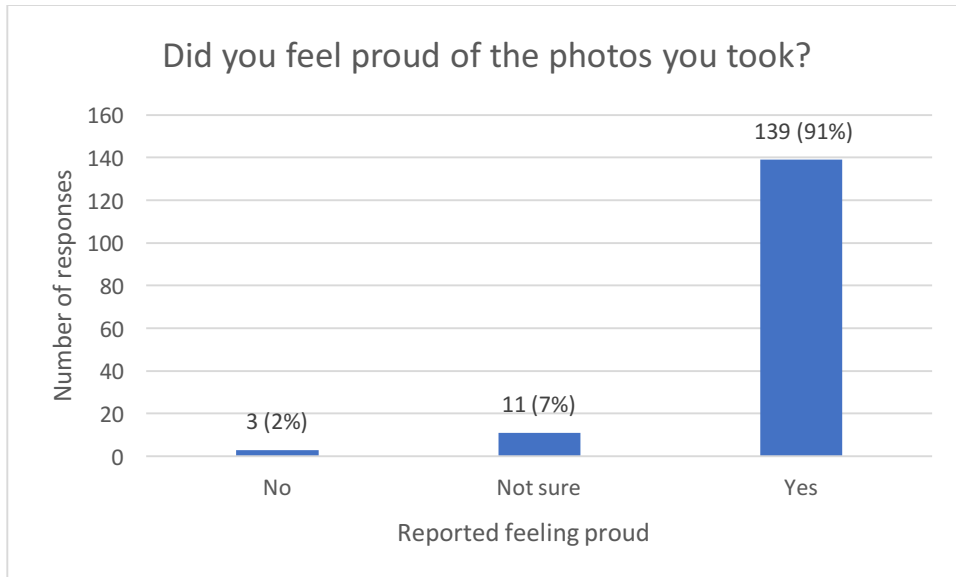
Finally, the survey investigated the students' relationship to nature overall. The goal of many nature programs is to improve children's perception of, and relationship to nature to promote pro-environmental behaviours. Just over half (52%) of student participants (n=79) reported that they think about their effect on the environment. While not an explicit outcome of the program, this indicates that many students are not conscious of their environmental impact. This finding could inform future program development, pointing to a need to promote students' consideration of their impact on the environment.



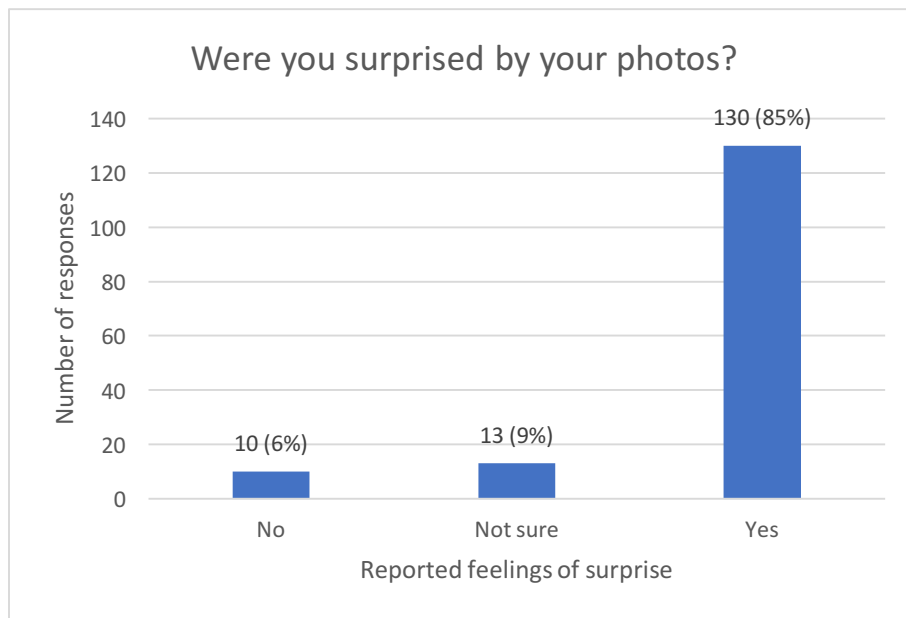
Participants' Perceptions of their Photos

The following questions explored participants' perceptions of the photos they took. Overall, participants felt very positively about the photos they took as part of the workshop.

The majority (91%) of student participants (n=139) reported that they felt proud of the photos they took. Only three students (2%) indicated that they did not feel proud of the photos they took, and 11 students (7%) indicated that were not sure.

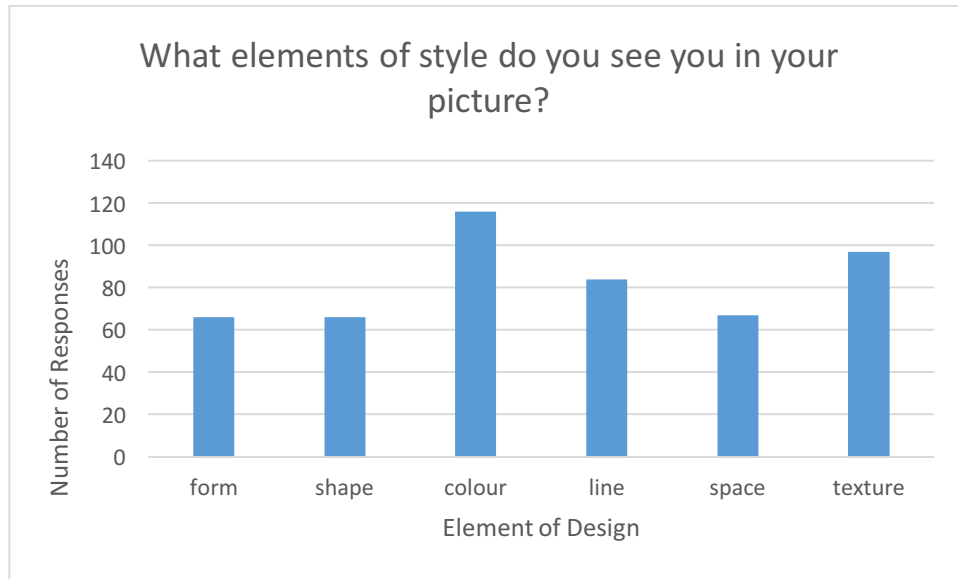


Similarly, 85% of participants (n=130) indicated that the photos they took surprised them. Only 10 students (7%) indicated that they were not surprised by the photos they took, while 13 (8%) indicated that they were not sure.





Students were also asked to identify the elements of design present in their favourite photo. The graph below shows how many design elements students were able to identify:



Over half (62%) of all student participants identified at least three of the six elements of design in their photos. Nearly half (49%) of all student participants identified at least four of the six elements of design. A little over 20% of all student participants identified all six elements of design. The most identified element of style was colour.



Summary of Participant Survey

Positive Feedback

- 90% of students reported that they enjoyed the experience of visiting outdoor places around their school.
- 64% of students reported that the program made them want to spend more time outside.
- Most students reported that their participation in the program (70%) and having a camera outdoors (71%) changed how they see nature.
- Most participants identified feeling proud of (91%) and surprised by (85%) the photos they took. Also, the majority (64%) were able to identify several different elements of design in their favorite photo.

Opportunities for Improvement

- Just under half of students (47%) identified feeling more comfortable outside as a result of the program. While participants may have already felt very comfortable outside, this may also be identified as an opportunity for improvement.
- Approximately half of students (52%) reported that they think about their effect on the environment. This points to an opportunity for the FoN program to cultivate greater awareness of environmental issues and inspire a sense of environmental responsibility among students.

CONCLUSIONS

In summary, this report has evaluated the extent to which the FoN program is meeting its objectives by analysing the results of a student feedback survey.

Based on the results of this survey, the FoN program appears to have succeeded at enhancing students' connection to nature. Nearly two-thirds of student participants identified that they wanted to spend more time outside because of the workshop. Further, the majority indicated that their view of nature had changed because of their participation in the program and their experience with using a camera outside. Most students reported that using a camera made them notice more details in the natural environment. This suggests that nature photography is an effective activity to promote a



deeper connection to nature among young people by cultivating greater attention to their natural surroundings.

The student survey also indicated that students are having fun in the program, enjoy expressing their creativity, and are gaining knowledge and skills related to photography. Most students reported that they enjoyed visiting outdoor places around their school as part of the FoN program. The survey also revealed very positive reactions to the photography and editing activity. Nearly all students identified feeling proud of and surprised by the photos they took during the FoN workshop. In terms of skills gained from the program, most students surveyed were able to identify several elements of design in their favourite photo by the end of the day. This suggests that students have gained an understanding of the basics of photo design.

The evaluation also provides some opportunities for improving the program in the future. The survey revealed that just over half of students think about their effect on the environment. This may point to an opportunity for FoN to foster greater environmental awareness and responsibility in students. It was also found that less than half of students felt more comfortable being outside after the workshop. FoN may wish to emphasize this more in their future programming. That said, it might also be the case that students are already comfortable spending time outdoors, particularly in the familiar settings explored during the workshop.

Limitations of the Report

The current program evaluation provided valuable information regarding the effectiveness and areas for improvement of the FoN workshop. The key limitation in this report is the self-reported survey measures, which were taken during the FoN workshop. Ideally, measures could be completed before and after the workshop, or at a later date, to measure the program's overall impact. In addition, some questions were worded too generally to identify whether the program had an impact. For instance, the question about impact on the environment refers to whether students consider their impact generally, and not as a result of the program. This was done because environmental impact is not a key element of the program. That said, the current program evaluation provides evidence for the effectiveness of programs that incorporate both arts and nature elements in their programming.



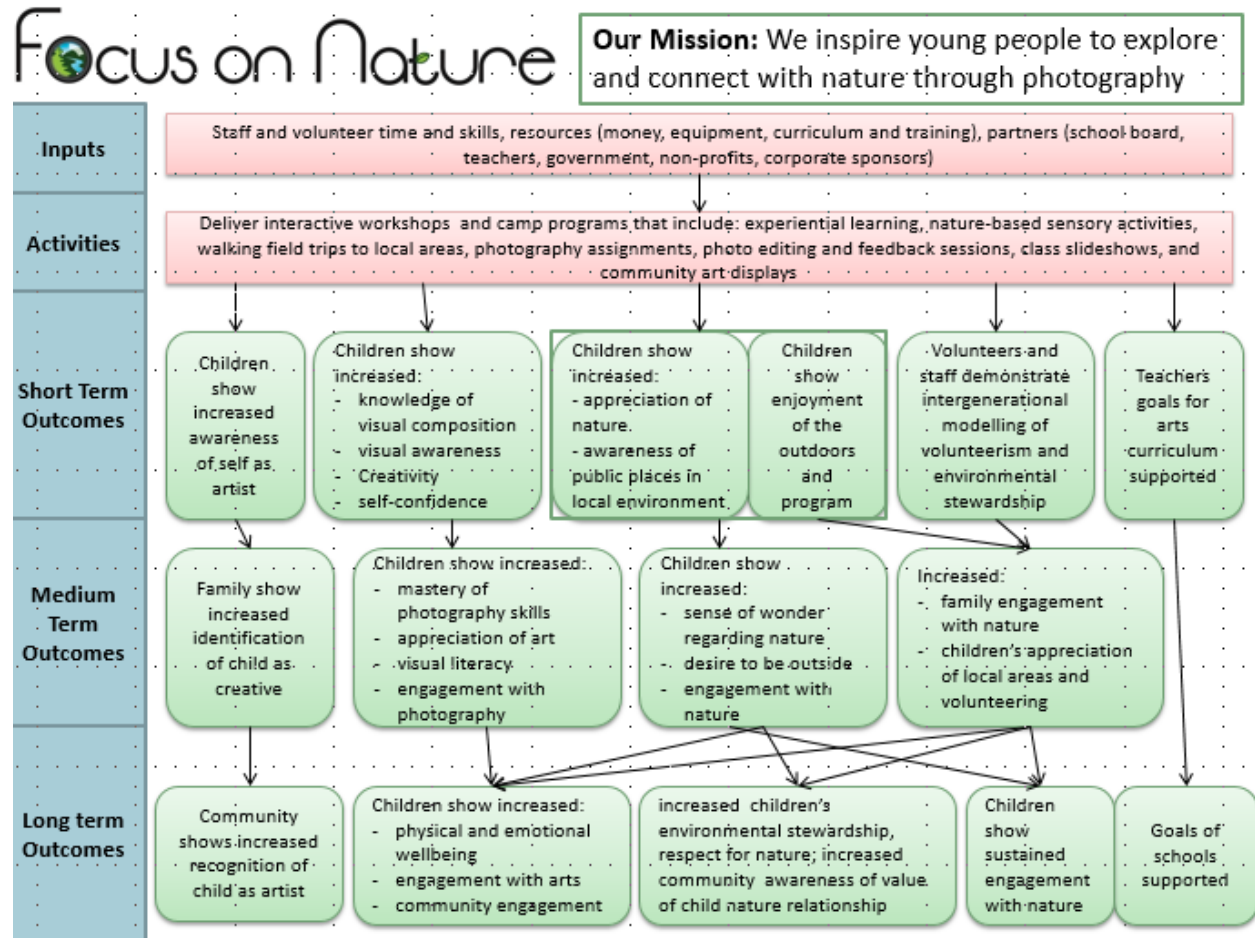
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APPENDIX A: PROGRAM LOGIC MODEL

Developed by Kathleen Slemon and Lindsey Thomson in collaboration with FoN:





APPENDIX B: STUDENT EVALUATION MEASURES

Survey Questions

Please circle your answer: (select one response)

- | | |
|---|-----------------|
| 1. Did the program change how you see nature? | Yes/no/not sure |
| 2. Did using a camera outside change how you see nature? | Yes/no/not sure |
| 3. Did you notice more details when you had a camera with you? | Yes/no/not sure |
| 4. Did you enjoy visiting outdoor places around your school today? | Yes/no/not sure |
| 5. Do you think about the effect you have on the environment? | Yes/no/not sure |
| 6. Did this this activity make you want to spend more time outside? | Yes/no/not sure |
| 7. Do you feel more comfortable outside than you used to? | Yes/no/not sure |
| 8. Were you surprised by your photos? | Yes/no/not sure |
| 9. Did you feel proud of the photos you took? | Yes/no/not sure |

Pick your favourite photo that you took today

What elements of design do you see? (circle all that apply)

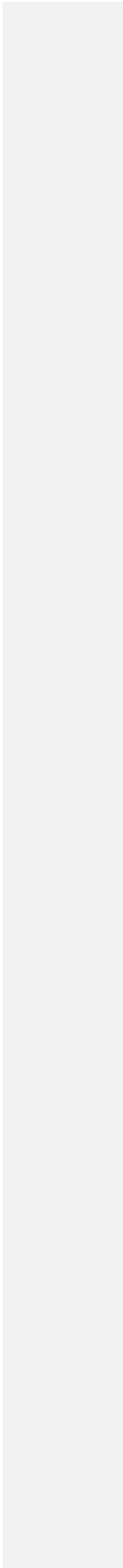
Form Shape Colour Line Space Texture

What do you like best about this picture? (select one only)

- The Colours
- The Lighting
- The elements of design
- What's in the photo (ex. flower, animal)
- The special effects I added
- It's my best photo
- Not sure



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**COMMUNITY ENGAGED
SCHOLARSHIP INSTITUTE**

College of Social and Applied Human Sciences
University of Guelph · Guelph, Ontario Canada N1G 2W1
519.824.4120 Ext. 53829 | cesi@uoguelph.ca
www.cesinstitute.ca