

### Grassroots Green Schools: A Model Program for Increased Local Participation

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#### Abstract

The international Green Schools movement continues to grow, but it takes root locally, one school at a time. Learn how one US based county-level program increased local Green School participation in two years with the help of an innovative Ambassador program to mentor new schools. In 2016, the Green Schools Recognition Program at Florida Atlantic University's Pine Jog Environmental Education Center initiated a "program-within-a-program" to help new schools go green: the Green Schools Ambassador Program (GSAP). The purpose of this program was to grow more Green Schools in the two counties Pine Jog serves by providing new participants with experienced mentors to help them navigate the challenges of their first year: to develop green initiatives, find resources, make community connections, and successfully apply for recognition. The GSRP implemented the GSAP for the 2016-17 and 2017-18 school years, providing each school with a trained mentor who had prior experience with the GSRP. This initiative resulted in 36 new schools successfully joining the program, raising the total number of schools to 122, and contributing to ~40% increase in overall program participation from the previous years. This presentation will share strategies and successes of the GSRP's Ambassador Program.

**Keywords:** Green Schools; K-12 education; sustainability education;

#### 1. Introduction

Throughout a student's developmental years, they will spend a large proportion of their time in school. Many studies have shown that a robust environmental education program during these pivotal years of intense learning have numerous benefits [1, 2, 3, 4]. Across the globe, schools are embracing a culture of sustainability [5]. These programs (i.e. green schools, sustainable schools, enviroschools or eco-schools) play an important role in shaping our students into environmentally responsible citizens [5].

The U.S. Green Building Council [6] defines a green school as a school that "creates a healthy environment that is conducive to learning while saving energy, resources, and money." According to Hoffman [7], the key unifying feature in the green schools movement is to take action in three main areas: the school building, the school grounds and the curriculum. Many of these programs refer to the integration of these features as a "green school culture". Culture includes aspects such as core values, tradition, organization, leadership, roles, programs and curriculum [8]. Palm Beach County School District [9] defines a green school culture as: "the sum of the values, beliefs, norms, priorities, expectations, and organizational structures within a school that cause it to function and react in a way that engenders a overall sense of environmental stewardship in the staff, students, parents, and community."

#### 1.1 Palm Beach County Green School Recognition Program (GSRP) Overview

In 2008, Florida Atlantic University's Pine Jog Environmental Education Center (FAU Pine Jog) initiated the Green Schools Recognition Program (GSRP) to recognize schools for taking a holistic approach to going "green" with a school-wide commitment to sustainability and environmental stewardship as part of their school culture. The GSRP's aim is to recognize public and private schools that "encourage cultures of sustainability within their school environments." Schools document their attempts in an application that is then judged by community leaders according to guidelines outlined in a rubric. The GSRP is a partnership between the South Florida school districts of Martin and Palm Beach counties and FAU Pine Jog.



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Schools are awarded one of three designations: a School of Promise is a school that is beginning its green school efforts, a School of Quality is a school that is making great strides in its efforts, and a School of Excellence is one that is succeeding in integrating sustainability education throughout its school culture. FAU Pine Jog, the administers of the program, supports schools along their pathway with professional development workshops, providing information on available resources (lesson plans and funding opportunities) and by providing "green seed money", or small grants up to \$250 to help fund projects. School applicants are evaluated based on their performance in the following areas:

- School grounds enhancement
- School sustainability
- Curriculum integration
- Community involvement
- Administrative support
- Innovative practices

Over \$30,000 in cash prizes are awarded to schools annually in the form of "Judges Choice Awards", for awards within a specific category on the rubric.

Since its inception, the GSRP program has grown from 10 schools to 122 schools in 2018, representing 35% of potential schools in these counties. Although that is a significant number, there is still much work to be done. We have identified several barriers that schools face in becoming a Green School, including insufficient funding, lack of administrative support and a detailed application process. In an effort to mitigate these barriers and support the GSRP Program, in 2017 FAU Pine Jog created the Green Schools Ambassadors Program, which is designed to support schools during their first critical year of "going green," while helping them develop the knowledge and skills to continue their green efforts on their own.

#### 2. The Green Schools Ambassadors Program

The Green Schools Ambassadors Program (GSAP) is a program-within-a-program that provides experienced 'green' mentors and resources to new schools to help them achieve their green goals. This program aims to grow the quantity, quality and retention of Green Schools by helping to overcome barriers. Through this program, experienced mentors are provided to novice schools to guide them through researching, planning, and documenting green activities, assisting with the application process, and identifying funding sources.

Program mentors are recruited from our vast network of community members, including retired and active teachers, parents, community organizations (such as members of local garden clubs and environmental groups), local municipality sustainability officers and representatives at the two school districts. Mentors work with 1-2 schools to do the following: visit schools a minimum of 4 times, consult with the school regularly via email and phone, submit a quarterly communication log, and provide ongoing feedback to the FAU Pine Jog team. Mentors attend an initial training, as well as mid-year and final debriefing meeting wherein they complete a final evaluation reviewing the success of the program. Each mentor receives \$300 and travel reimbursement for each school that they assist.

Schools participating in the program are required to complete a letter of commitment, signed and submitted by their school's principal or assistant principal. In addition, schools are required to attend an introductory workshop, assemble a Green Team, designate a GSAP Liason, meet with their GSAP mentor 4 times during the school year and, finally, prepare and submit their application for the GSRP. Each school is provided with a "starter kit" which includes numerous resources to support the schools in their journey toward becoming "green." These resources include a planning guide, a timeline for implementation, a 1-year subscription to *Green Teacher Magazine*, a school gardening guide, and example lesson plans for curriculum integration.

#### 3. Results

Success of the GSAP can be measured by comparing the quantity, quality and retention of new schools in previous years with news schools in 2017 and 2018 that included the GSAP.

#### 3.1 Quantity

In year one, 29 new schools successfully applied for and earned Green Schools recognition of which 19 were due to participation in the GSAP. In year 2, 24 new schools applied and earned recognition, of which 17 were due to participation in the GSAP. Prior to this, the GSRP averaged approximately 16 new schools per year.

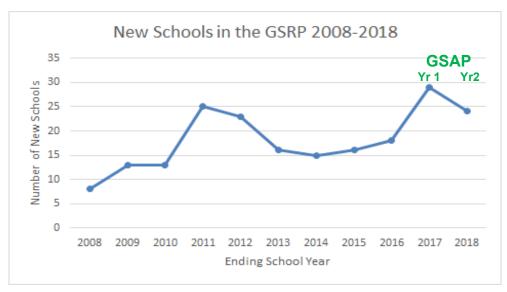


Figure 1. Yearly Number of New Schools entering the GSRP 2008 – 2018.

#### 3.2 Quality

Of the 19 schools in year 1, one earned a designation of Excellence, 12 earned Quality, and 6 earned Promise (Table 1). Of the 17 schools in year 2, 9 earned a designation of Quality and 8 earned Promise. Historically, less than half of all new schools entering the program earn the designation or Quality or Excellence. Through the GSAP, greater than 60% earned those designations, representing a 10% increase.

Another measure of success of the program was the improvement in the quality of the Ambassador Schools applications in their second year. Typically, approximately 35% of new schools increase a level from their first year to the next. However, 57% of the Ambassador schools increased a level the second year in the program (Table 2), with almost half of those schools achieving Excellence their second year.

Table 1. GSAP Quality Data.

Year	Number of Schools	GSRP Levels			
		Excellence	Quality	Promise	
Year 1	19	1	12	6	
Year 2	17	0	9	8	

Table 2. The percentage of new schools that increase a recognition level from one year to the next.

	2013 to 2014	2014 to 2015	2015 to 2016	2016 to 2017	2017 to 2018 - Not Ambassadors	2017 to 2018 - Ambassadors
Percentage	13%	53%	29%	39%	29%	57%

#### 3.3 Retention

Another clear sign of our success was evident when we tracked our first-year cohort of GSAP participants their second year in the program. Historically, approximately 23% of new schools entering the GSRP would not return the following year. Of the 19 schools that participated in Year 1 of the GSAP, 89% returned in the 2017-18 school year. While we haven't yet received applications for 2018-2019 cycle, all Ambassador Schools that were in Year 2 of the GSAP have submitted an "intent to apply", indicating that they are on track to complete applications this Spring.

#### 3.4 Evaluation Results



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All participants in the program provided feedback in the form of a survey. Success stories of the program are reflected in the comments of some of our participants:

- "The best part [of the program] was having one-on-one time and advice from our mentor. The process was daunting at first and [she] really helped us to see that we could do it!! Please continue to help new schools with this program. We could not have achieved as much as we did without our mentor. Thank you for everything! So proud to be a new Green School of Promise!"
- "This was an amazing experience! There is no one like [our Ambassador]. We couldn't have come this far without her incredible encouragement."
- "I think that everyone should have the opportunity to have an Ambassador or at least a copy of the guidebook. It was soooo very helpful! I really cannot say enough good things about this program... Thank you for inviting [our school] to participate!"
- "[Our school] is really looking forward to the next school year and can't wait to see how green our school becomes."

#### 4. Discussion and Conclusion

Schools have been increasingly called upon to serve as a conduit for training the next generations of environmental stewards, and also to act as a model of sustainability for their communities. The FAU Pine Jog Ambassador Program is a highly replicable program, designed to support schools during their first critical year of "going green," while helping them develop the knowledge and skills to continue their green efforts on their own.

The increases in the quantity of new schools as a result of the GSAP appear to have generated a new interest in the program. With 35% of the schools in these counties participating already, the GSAP provided the extra support needed to bring in new schools. This support provided schools with a solid foundation to continue to "green" their school culture and practices from which they were able to build and jump to the next quality level and the confidence to remain in the program.

The success demonstrated in the first two years of this program indicate that it can be a model that can be utilized in other green schools programs globally, to assist in the growth of the quantity and quality of their green schools efforts and their retention in the program.

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