

# FLYING WILD

AN EVALUATION OF THE HOUSTON INITIATIVE

Prepared for the  
Council for Environmental Education

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## **Introduction**

The primary focus of this evaluation is to describe the Houston Initiative—the Flying WILD pilot program implemented at Johnston Middle School in the Houston Independent School District during the first two months of the 2004-2005 school year. The secondary focus of the evaluation is to describe the perceptions of the teachers who participated in training designed to prepare them to implement the Flying WILD program—and to describe the demographic characteristics of those teachers. This report contains four sections. The first section of the report provides demographic information about the teachers who participated in the training. The second section presents a description of the perceptions of those teachers regarding the effectiveness of the training in which they participated. The third section summarizes the observations Flying WILD program staff made of “festival” activities that were conducted as part of the pilot program. Finally, the fourth section describes the perceptions of Johnston Middle School teachers who participated in the training and who implemented the pilot program regarding various aspects of the pilot program.

## **Participant Information**

Twenty teachers participated in a three-hour training session designed to prepare them to implement the Flying WILD program. The training was held on September 13, 2004 at Johnston Middle School and was conducted by a Flying WILD program staff member. During the training, each participant was asked to complete the Flying WILD Training Participant Information Form, an instrument designed to collect demographic information about the teachers who participated in the training session. That information is summarized in Table 1 on the next page.

As shown in Table 1, 19 of the 20 participants (95.00%) were female and only one (5.00%) was male; 16 of the 20 participants (80.00%) were white, three (15.00%) were African American, one (5.00%) was Hispanic, and none were Asian; eight of the 20 participants (40.00%) were secondary school teachers, six (30.00%) were elementary school teachers, three (15.00%) were curriculum specialists, and three (15.00%) were non-formal educators; and eleven of the 20 participants (55.00%) were science teachers, four (16.00%) were elementary teachers who taught all subjects, two (10.00%) were educators employed by the Houston Zoo, one (5.00%) was a mathematics teacher, and one (5.00%) was an environmental educator.

Seven of the 20 participants (35.00%) indicated that they would use Flying WILD materials with between 61 and 120 students during a one-year period; another six (30.00%) indicated that they would use Flying WILD materials with more than 210 students during a one-year period. A majority of the participants indicated that they taught classes that had high percentages of minority students; seven (36.84%) indicated that 90% or more of the students in their classes are minority students and four (21.05%) indicated that 76% to 89% of the students in their classes are minority students.

The demographic information also indicated that six of the twenty participants are teachers at Johnston Middle School—the Houston Independent School District school where the Flying WILD program was piloted.

Table 1  
*Participant Information*

Category	<i>N</i>	%
<b>Gender</b>		
Female	19	95.00
Male	1	5.00
<b>Ethnicity</b>		
African American	3	15.00
Asian	0	0.00
Hispanic	1	5.00
White	16	80.00
<b>Current Position</b>		
Elementary School Teacher	6	30.00
Secondary School Teacher	8	40.00
Curriculum Specialist	3	15.00
Non-Formal Educator	3	15.00
<b>Subject Area Taught</b>		
Elementary (All Subjects)	4	20.00
Science	11	55.00
Mathematics	1	5.00
Environmental Education	1	5.00
Houston Zoo	2	10.00
<b>Number of Students with Whom Flying WILD Materials Likely to be Used</b>		
1 to 30	1	5.00
31 to 60	4	20.00
61 to 120	7	35.00
121 to 150	1	5.00
151 to 210	1	5.00
Over 210	6	30.00
<b>Percent Minority Students in Classes</b>		
10% or Less	3	15.79
11% to 24%	0	0.00
26% to 50%	5	26.32
51% to 75%	0	0.00
76% to 89%	4	21.05
90% or More	7	36.84

## Educator Training Evaluation

At the conclusion of the three-hour workshop held on September 13, 2004, each participant was asked to complete the *Educator Training Evaluation*, a survey designed to provide him or her with an opportunity to evaluate the training session in which he or she had participated. The survey contained five four-point Likert scales which ranged from “strongly disagree” (1) to “strongly agree” (4) that asked the participant to indicate what he or she had learned from the workshop. The results obtained from those five scales are reported in Table 2 below and Figure 1 on the next page.

Table 2

*Results Obtained from Educator Training Evaluation Survey (Items 1 through 5)*

Item		Strongly Disagree 1	Slightly Disagree 2	Slightly Agree 3	Strongly Agree 4	Mean	SD
I learned a lot of new content in the subject area or areas I teach.	<i>N</i>	0	0	15	4	3.21	0.42
	%	0.00	0.00	78.95	21.05		
I learned new information about birds and their conservation needs.	<i>N</i>	1	0	8	11	3.45	0.76
	%	5.00	0.00	40.00	55.00		
I learned new information I can use in my classroom.	<i>N</i>	0	1	9	10	3.45	0.61
	%	0.00	5.00	45.00	50.00		
I learned new teaching concepts and instructional strategies.	<i>N</i>	0	2	7	10	3.42	0.69
	%	0.00	10.53	36.84	52.63		
I learned about materials available for my classroom.	<i>N</i>	0	2	8	10	3.40	0.68
	%	0.00	10.00	40.00	50.00		

As suggested by the means presented in Table 2—means that ranged from 3.21 to 3.45, the participants—on average—agreed (slightly agreed or strongly agreed) that they had acquired new knowledge in all five areas assessed. 100.00% agreed (78.95% slightly agreed and 21.05% strongly agreed) that they had learned a lot of new content in the subject areas they taught; 95.00% agreed (45.00% slightly agreed and 55.00% strongly agreed) that they had learned new information about birds and their conservation needs; 95.00% agreed (45.00% slightly agreed and 50.00% strongly agreed) that they had learned new information they could use in their classrooms; 89.47% agreed (36.84% slightly agreed and 52.63% strongly agreed) that they had learned new teaching concepts and instructional strategies; and 90.00% agreed (40.00% slightly agreed and 50.00% strongly agreed) that they had learned about materials available for their classrooms. These results provide strong evidence that participants felt that the workshop had increased their knowledge in five areas critical to the implementation of the Flying WILD program.

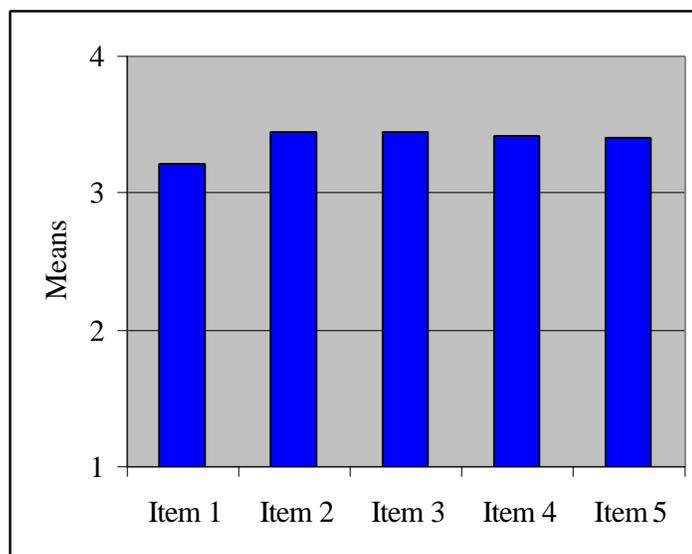


Figure 1

*Results Obtained from Educator Training Evaluation Survey (Item 1, New Content; Item 2, New Information about Birds; Item 3, New Information to Use in Classroom; Item 4, New Teaching Concepts and Instructional Strategies; and Item 5, Materials Available for Classroom)*

The survey also contained two four-point Likert scales which ranged from “poor” (1) to “excellent” (4) that asked the participant to indicate rate the activities from Flying WILD: An Educator’s Guide to Celebrating Birds and the festival planning portion of the training with regard to their usefulness in his or her classroom. The results obtained from those two scales are reported in Table 3 and Figure 2 on the next page.

Table 3

*Results Obtained from Educator Training Evaluation Survey (Items 6 and 7)*

Item		Poor 1	Average 2	Good 3	Excellent 4	Mean	SD
Quality of the activities from <i>Flying WILD: An Educator’s Guide to Celebrating Birds.</i>	<i>N</i>	0	2	7	10	3.42	0.69
	%	0.00	10.53	36.84	52.63		
Quality of the festival planning portion of the training.	<i>N</i>	2	5	6	7	2.90	1.02
	%	10.00	25.00	30.00	35.00		

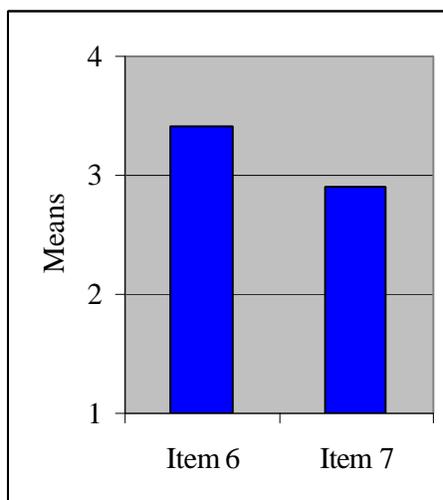


Figure 2

*Results Obtained from Educator Training Evaluation Survey (Item 6, Activities from Flying WILD: An Educator’s Guide to Celebrating Birds; and Item 7, Festival Planning Portion of the Training)*

As shown in Table 3, a large majority (89.47%) of the participants viewed the activities from *Flying WILD: An Educator’s Guide to Celebrating Birds* as either excellent (52.63%) or good (36.84%). This is confirmed by a mean of 3.42 for this item. As also shown in Table 3, a majority (65.00%) of the participants viewed the festival planning portion of the training as either excellent (35.00%) or good (30.00%). This is confirmed by a mean of 2.90 for this item. These results suggest that—on average—the participants saw the both the book and the festival planning portion of the training as useful.

The survey also asked the participant to indicate: (1) his or her feelings regarding the appropriateness of the level of work expected during the workshop; and (2) how confident he or she was that he or she could use the Flying WILD activities with his or her students. In each instance, the participant was asked to respond by selecting one of four descriptors. Table 4 on the next page presents the results obtained for these two items.

As shown in Table 4, a large majority of the participants (75.00%) indicated that they thought that the level of work expected during the workshop was “just about right.” In addition, as also shown in Table 4, a majority of the participants (55.00%) indicated that they were “very confident” that they could use Flying WILD activities with their students; another 35.00% indicated that they were “confident” that they could use the activities with their students.

The next two items on the survey asked the participant to indicate whether he or she: (1) planned to use the Flying WILD Activities with his or her students; and (2) planned to conduct a Flying WILD Festival. Table 5 on the next page and Figure 3 on the following page summarize the responses participants made.

Table 4

*Results Obtained from Educator Training Evaluation Survey (Item 8, Work Level and Item 9, Confidence Level)*

Item	N	%
Level of Work Expected During the Workshop		
Way Too Much To Do	0	0.00
A Little Too Much To Do	1	5.00
Just About Right	15	75.00
Could Have Included More	4	20.00
Level of Confidence of Ability to Use Activities with Students		
Not at All	0	0.00
Slightly Confident	2	10.00
Confident	7	35.00
Very Confident	11	55.00

Table 5

*Results Obtained from Educator Training Evaluation Survey (Items 10 and 11)*

Item	Yes		No	
	N	%	N	%
Do you plan to use the Flying WILD Activities with your students?	18	94.74	1	5.26
Do you plan to conduct a Flying WILD Festival?	13	72.22	5	27.78

As shown in Table 5, an overwhelming majority of the participants (94.74%) indicated that they planned to use the Flying WILD Activities with their students and a large majority of the participants (72.22%) indicated they planned to conduct a Flying WILD Festival. This suggests that most participants were favorably impressed by the usefulness of both the Flying WILD activities and a Flying WILD Festival.

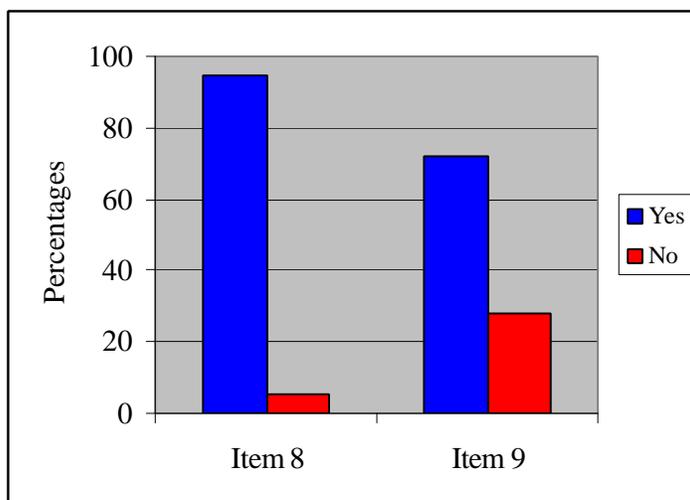


Figure 3

*Results Obtained from Educator Training Evaluation Survey (Item 8, Use Flying WILD Activities; and Item 9, Conduct Flying WILD Festival)*

The next section of the survey asked the participant to list one activity he or she planned to use with his or her students. The following is a list of the responses participants made.

- Teacher 1. “Birding Techniques in the Field”
- Teacher 2. “Adaptation Artistry”
- Teacher 3. “Bird Proverbs”
- Teacher 5. “Fill the Bill”
- Teacher 6. “Busy Bird Motel”
- Teacher 7. “Food Chain Tag”
- Teacher 8. “Migratory Mapping”
- Teacher 9. “Feeder Frenzy (modified)”
- Teacher 10. “Bird Olympics”
- Teacher 11. “Food Chain Tag, Fill the Bill, Food for the Brood”
- Teacher 12. “Bird Olympics”
- Teacher 13. “Food Chain Tag”
- Teacher 14. “Bird Feedery, Migration, Becks Pickup”
- Teacher 15. “Maybe the bird sayings on cards”
- Teacher 17. “Fill the Bill”
- Teacher 18. “Fill the Bill”
- Teacher 19. “Food chain—tie into gardening/wildscape”
- Teacher 20. “Bird Adaptations”

The survey also asked the participant to list the one thing about the workshop that he or she might change about the workshop. The following is a list of the responses participants made.

- Teacher 1. "A little less about festival planning and more activities in classroom"
- Teacher 5. "Having it on a Saturday (maybe)"
- Teacher 6. "More training/time for workshop"
- Teacher 12. "After school is difficult."
- Teacher 13. "To get more accomplished for the festival"
- Teacher 14. "Time of the day"
- Teacher 18. "I would not be tired."

The survey also asked the participant to list what they considered to be the best thing about the workshop. The responses made are listed below.

- Teacher 1. "Activities"
- Teacher 5. "Lots of support and information."
- Teacher 8. "Timing"
- Teacher 9. "The book!"
- Teacher 10. "Feed us—after school it helps"
- Teacher 11. "Activity guide with great activities and only three hours"
- Teacher 12. "Information was useful."
- Teacher 13. "Having time to meet with those in the festival"
- Teacher 14. "Getting the information and meeting other teachers"
- Teacher 15. "The hands-on birds activities"
- Teacher 17. "Valuable information."
- Teacher 20. "The activities"

Finally, the survey provided the participant the opportunity to make any additional comments he or she wished to make. Their comments are listed below.

- Teacher 1. "Excellent! Thanks!"
- Teacher 5. "Thanks"
- Teacher 13. "The festival seems unorganized and rushed. We need to see what is being done to help us meet such a strenuous date."
- Teacher 15. "Thanks for letting me participate."

### **Activity Observations**

On the evening of September 28, 2004, Flying WILD Festival Activities were conducted as a part of Math and Science Family Night at Johnston Middle School. The activities were visited by two members of the Flying WILD project staff. They used an *Activity Observation Form* to record their observations. Their observations are summarized in the sections that follow.

Activity: Aiming to Save

Number of People Leading Activity: Five

Activity Leaders: Students

How engaged was the leader of the activity? Very Much

How engaged were the participants of the activity? Very Much

How clearly did the leader explain the directions for the activity? Excellent

How accurately did the leader explain the content the activity teaches? Good

How well did the leaders answer questions posed by festival attendees? Excellent

Did the leader ask the participant questions about the concepts? No

Were the materials used for the activity appropriate? Yes

Is the activity easy to use as a festival booth? Yes

Other comments: Student leaders described and understood habitat concept and the different needs of birds were addressed in each putting situation.

Activity: Bird Banding (Registration)

Activity Leaders: Parent Volunteers

How engaged was the leader of the activity? Very Much

How engaged were the participants of the activity? Somewhat

How clearly did the leader explain the directions for the activity? Good

How accurately did the leader explain the content the activity teaches? Good

How well did the leaders answer questions posed by festival attendees? Good

Did the leader ask the participant questions about the concepts? No

Were the materials used for the activity appropriate? Yes

Is the activity easy to use as a festival booth? Yes

Other comments: There were two banding stations. There was congestion at these entrance points in the first twenty minutes of the event. More banding stations would help disperse the crowd.

Activity: Bird Feeders

Number of People Leading Activity: Three

Activity Presenters: Teachers

How engaged was the leader of the activity? Somewhat

How engaged were the participants of the activity? Very Much

How clearly did the leader explain the directions for the activity? Excellent

How accurately did the leader explain the content the activity teaches? Poor

How well did the leaders answer questions posed by festival attendees? No Evidence

Did the leader ask the participant questions about the concepts? No

Were the materials used for the activity appropriate? Yes

Is the activity easy to use as a festival booth? Yes

Activity: Birds on Display

Number of People Leading Activity: None (Student Exhibit)

Activity Presenters: Students

How engaged was the leader of the activity? Not Applicable

How engaged were the participants of the activity? Not Applicable

How clearly did the leader explain the directions for the activity? Not Applicable

How accurately did the leader explain the content the activity teaches? Not Applicable

How well did the leaders answer questions posed by festival attendees? Not Applicable

Did the leader ask the participant questions about the concepts? Not Applicable

Were the materials used for the activity appropriate? Yes

Is the activity easy to use as a festival booth? Yes

Other comments: Information on the value of birds to people. The main values were highlighted—economic, recreation, ecological. The details were lacking. In one case, the information presented was misleading—“machines destroy habit.”

Activity: Bird Team Sports Trivia

Number of People Leading Activity: Two

Activity Leaders: Students (Seventh Grade Students)

How engaged was the leader of the activity? Very Much

How engaged were the participants of the activity? Somewhat

How clearly did the leader explain the directions for the activity? Somewhat

How accurately did the leader explain the content the activity teaches? Poor

How well did the leaders answer questions posed by festival attendees? No Evidence

Did the leader ask the participant questions about the concepts? No

Were the materials used for the activity appropriate? Yes

Is the activity easy to use as a festival booth? Yes

Activity: Busy Bird Motel

Number of People Leading Activity: One

Activity Leader: Science Teacher

How engaged was the leader of the activity? Very Much

How engaged were the participants of the activity? Very Much

How clearly did the leader explain the directions for the activity? Excellent

How accurately did the leader explain the content the activity teaches? Excellent

How well did the leaders answer questions posed by festival attendees? Excellent

Did the leader ask the participant questions about the concepts? No

Were the materials used for the activity appropriate? Yes

Is the activity easy to use as a festival booth? Yes

Other comments: There was not a booth that instructed participants on the use of binoculars. Such a booth would help this activity run more smoothly. Also, the leader needs to make sure participants put neck strap around their heads as soon as they pick up binoculars.

Activity: Busy Bird Motel

Number of People Leading Activity: Two

Activity Leaders: One student and one volunteer

How engaged was the leader of the activity? Somewhat

How engaged were the participants of the activity? Very Much

How clearly did the leader explain the directions for the activity? Good

How accurately did the leader explain the content the activity teaches? Poor

How well did the leaders answer questions posed by festival attendees? Poor

Did the leader ask the participant questions about the concepts? No

Were the materials used for the activity appropriate? Yes

Is the activity easy to use as a festival booth? Yes

Activity: Fill the Bill

Number of People Leading Activity: Four

Activity Leaders: Students

How engaged was the leader of the activity? Very Much

How engaged were the participants of the activity? Somewhat

How clearly did the leader explain the directions for the activity? Excellent

How accurately did the leader explain the content the activity teaches? Good

How well did the leaders answer questions posed by festival attendees? Excellent

Did the leader ask the participant questions about the concepts? No

Were the materials used for the activity appropriate? Yes

Is the activity easy to use as a festival booth? Yes

Other comments: Students connected types of food a bird would typically eat with the sample activity food.

Activity: Food for Birds/Bird Buffet

Number of People Leading Activity: Two

Activity Leaders: Students

How engaged was the leader of the activity? Very Much

How engaged were the participants of the activity? Very Much

How clearly did the leader explain the directions for the activity? Excellent

How accurately did the leader explain the content the activity teaches? Excellent

How well did the leaders answer questions posed by festival attendees? Excellent

Did the leader ask the participant questions about the concepts? No

Were the materials used for the activity appropriate? Yes

Is the activity easy to use as a festival booth? Yes

Activity: Hidden Hazards

Number of People Leading Activity: One

Activity Leaders: Science Teacher

How engaged was the leader of the activity? Very Much

How engaged were the participants of the activity? Very Much

How clearly did the leader explain the directions for the activity? Excellent

How accurately did the leader explain the content the activity teaches? Excellent

How well did the leaders answer questions posed by festival attendees? No Evidence

Did the leader ask the participant questions about the concepts? No

Were the materials used for the activity appropriate? Yes

Is the activity easy to use as a festival booth? No; this was an activity that was held as a special area within the festival—not as a booth.

Other comments: This is a teacher-led activity that was used at the festival (indoors). This was a popular activity for students—including younger elementary students.

Activity: Live Bird Presentation

Number of People Leading Activity: Two

Activity Leaders: Bird Rehabilitation Specialists

How engaged was the leader of the activity? Very Much

How engaged were the participants of the activity? Very Much

How clearly did the leader explain the directions for the activity? Not Applicable

How accurately did the leader explain the content the activity teaches? Excellent

How well did the leaders answer questions posed by festival attendees? Excellent

Did the leader ask the participant questions about the concepts? No

Were the materials used for the activity appropriate? Yes

Is the activity easy to use as a festival booth? Yes

Other comments: This was a very popular activity. I overheard many positive remarks about the screech owl exhibit throughout the course of the event.

Activity: Outdoor Bird Scavenger Hunt/The Birding Beat

Number of People Leading Activity: Two

Activity Leaders: Students

How engaged was the leader of the activity? Poor

How engaged were the participants of the activity? Somewhat

How clearly did the leader explain the directions for the activity? Good

- How accurately did the leader explain the content the activity teaches? No Evidence  
 How well did the leaders answer questions posed by festival attendees? No Evidence  
 Did the leader ask the participant questions about the concepts? No  
 Were the materials used for the activity appropriate? Yes  
 Is the activity easy to use as a festival booth? Yes

## Teacher Perceptions

This, the fourth and last section of this report, describes the perceptions of Johnston Middle School teachers who participated in the training and who implemented the pilot program regarding various aspects of the pilot program. Data concerning teacher perceptions were gathered through two means: (1) the administration of the *Educator Follow-Up Evaluation*, a one-page survey designed to provide teachers with an opportunity to share their perceptions regarding the Flying WILD pilot program; and (2) a focus group session conducted by a project staff member and the external evaluator.

**Results from the Educator Follow-Up Evaluation.** The Educator Follow-Up Evaluation form was sent to the teachers on October 14 with a request that it be completed and returned by the end of the following day. Eleven teachers completed and returned the survey.

The first item on the survey asked the teacher to identify the grade level or levels and the subject or subjects he or she teaches. Table 6 below summarizes the responses received.

Table 6

*Grade Levels and Subjects Taught by Respondents to the Educator Follow-Up Evaluation*

Grade Levels and Subjects	<i>N</i>
Sixth Grade Mathematics	1
Sixth Grade Science	2
Sixth, Seventh, and Eighth Grade English as a Second Language and French	1
Sixth, Seventh, and Eighth Grade Health and Physical Education	1
Seventh Grade Science	1
Eighth Grade Mathematics	2
Eighth Grade Science	2
Eighth Grade Science and Sixth, Seventh, and Eighth Grade Enrichment	1

As shown in Table 1, as would be expected, a majority of the eleven respondents—six—teach science while another three teach mathematics.

The next set of five items asked the teacher to indicate his or her involvement with the Flying WILD pilot project by checking one or more of five statements. The first statement asked him or her to indicate whether he or she had attended the three-hour Flying WILD Educator Training on Monday, September 13; the second statement asked him or her to indicate whether he or she had conducted Flying WILD activities with my students prior to the Family Math and Science Night on September 28 and to indicate how many such activities he or she had conducted; and the third statement asked him or her to indicate whether a staff member from the Council for Environmental Education had worked directly with his or her students on a date prior to the Family Math and Science Night and, if so, to indicate whether the time the staff member had spent with his or her students was “not at all helpful,” “a little helpful,” or “very helpful.” The fourth statement asked him or her to indicate whether he or she had participated in the planning of the Family Math and Science Night; and the fifth statement asked him or her to indicate whether he or she had participated in the production of the Family Math and Science Night (including set-up, leading one or more activities, supervising students, registration, and clean-up). Table 7 below summarizes the responses obtained to each of the five items.

Table 7

*Activities in Which the Teacher Participated*

Activity	<i>N</i>
Attended the Three-Hour Flying WILD Educator Training on September 13	9
Conducted Flying WILD Activities with Students Prior to Family Math and Science Night on September 28	4
Staff Member Worked Directly with Students on Date Prior to Family Math and Science Night	2
Participated in Planning of Family Math and Science Night	9
Participated in the Production of the Family Math and Science Night	11

As shown in Table 7, nine of the respondents attended the three-hour Flying WILD Educator Training on September 13, four conducted Flying WILD activities with students prior to the Family Math and Science Night on September 28, two had a staff member work directly with their students prior to the Family Math and Science Night, nine participated in the planning of the Family Math and Science Night, and all eleven participated in the production of the Family Math and Science Night.

The two teachers who indicated that a staff member from the Council for Environmental Education had worked directly with their students prior to the Family Math and Science Night were asked to assess the helpfulness of the assistance provided. One of the teachers indicated that it was “more than a little bit helpful” while the second indicated that it was “very helpful” to have had a staff member work with their students prior to the Family Math and Science Night.

The next three items asked the teacher to indicate the number of his or her students who had participated in Flying WILD activities prior to the Family Math and Science Night, the number of his or her students who had participated in leading activities at the Family Math and Science Night, and the approximate number of his or her students—including activity leaders—who attended the Family Math and Science Night. Table 9 below summarizes the responses made by the teachers who responded to one or more of these items.

Table 9

*Number of Students Who Participated in Flying WILD Activities*

Activity	<i>N</i>	Range	Mean
Participated in Flying WILD Activities Prior to the Family Math and Science Night	3	19-50	16.44
Participated in Leading Activities at the Family Math and Science Night	4	2-10	4.12
Attended the Family Math and Science Night	8	25-50	10.15

The next item asked the teacher to indicate all the activities the teacher used and to indicate who conducted those activities during the Family Math and Science Night. Those were: (1) teacher-led activities; (2) volunteer-led activities led by either: (a) an adult volunteer; or (b) a teacher; (3) student-led activities conducted by either: (a) students; (b) a student/adult team; or (c) a teacher and other adult; and (4) other. Table 10 on the next page summarizes the responses obtained from the seven teachers who responded by “checking” one or more activities.

Seven teachers indicated that they had conducted activities during the Family Math and Science Night. As shown in Table 10, four of those seven teachers indicated that they had led activities, five of those teachers indicated their students had led activities, and one of those teachers indicated that an adult volunteer—assisted by the teacher—had led an activity.

Table 10

*Persons who Conducted Activities at the Family Math and Science Night*

Person or Persons	<i>N</i>
Teacher-Led Activities	4
Volunteer-Led Activities	1
Adult Volunteers	1
Teachers	1
Student-Led Activities	5
Students	5
Student-Adult Team	0
Teacher or Other Adult	0
Other	0

The next five items on the survey consisted of five four-point Likert scales. The scales ranged from “strongly disagree” (1) to “strongly agree” (4) and asked the participant to indicate the extent to which he or she agreed or disagreed with five statements:

1. “I will use the Flying WILD Guide again.”
2. “I would recommend *Flying WILD: An Educator’s Guide to Celebrating Birds* to a friend.”
3. “Johnston Middle School teacher had the resources they need to prepare for, organize, and lead a school bird festival with their students and community.”
4. “The Family Math and Science Night helped increase students’ knowledge about the conservation needs of migratory birds.”
5. “Either through their participation in the Family Math and Science Night or through other Flying WILD activities, students became involved in school, community service, and/or home activities that will benefit bird conservation.”

All eleven teachers who responded to the survey completed this section of the survey. Table 11 on the next page and Figure 4 on page 18 summarize the results obtained in response to these five Likert-scale items.

Table 11  
*Results Obtained from Educator Follow-Up Evaluation*

Item		Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4	Mean	SD
I will use the Flying WILD Guide again.	<i>N</i>	0	3	3	4	3.10	0.88
	%	0.00	30.00	30.00	40.00		
I would recommend <i>Flying WILD: An Educator's Guide to Celebrating Birds</i> to a friend.	<i>N</i>	0	0	3	8	3.73	0.47
	%	0.00	0.00	27.27	72.73		
Johnston Middle School Teachers had the resources they need to prepare for, organize, and lead a school bird festival with their students and community.	<i>N</i>	0	1	6	4	3.27	0.65
	%	0.00	9.09	54.55	36.36		
The Family Math and Science Night helped increase students' knowledge about the conservation needs of migratory birds.	<i>N</i>	0	0	6	5	3.46	0.52
	%	0.00	0.00	54.55	45.46		
Either through their participation in the Family Math and Science Night or through other Flying WILD activities, students became involved in school, community, and/or home activities that will benefit bird conservation.	<i>N</i>	0	0	6	4	3.40	0.52
	%	0.00	0.00	60.00	40.00		

As shown in Table 11, for the most part, the teachers agreed or strongly agreed with each of the five statements. Seventy percent agreed (30.00% agreed and 40.00% strongly disagreed) that they would use the *Flying WILD: An Educator's Guide to Celebrating Birds* again; 100% agreed (27.27% agreed and 72.73% strongly agreed) that they would recommend *Flying WILD: An Educator's Guide to Celebrating Birds* to a friend; 90.91% agreed (54.55% agreed and 36.36% strongly agreed) that Johnston Middle School teachers had the resources they needed to prepare for, organize, and lead a school bird festival with their students and the community; 100.00% agreed (54.55% agreed and 45.46% strongly agreed) that the Family Math and Science Night helped increase student knowledge concerning the conservation needs of migratory birds; and 100.00% agreed (60.00% agreed and 40.00% strongly agreed) that, either through their participation in the Family Math and Science Night or through other

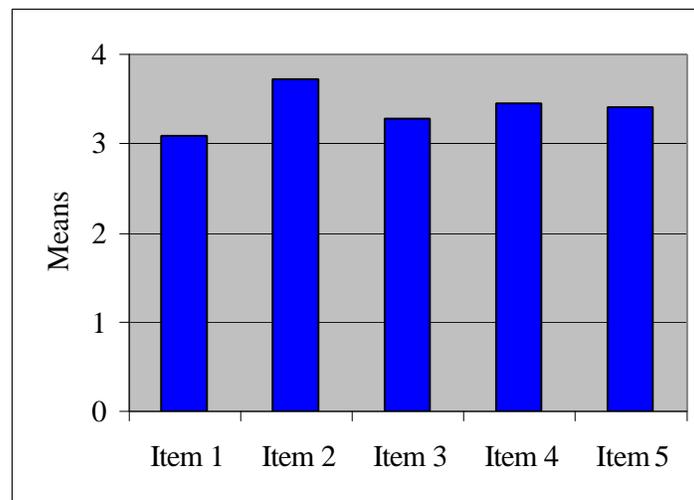


Figure 4

*Results Obtained from Teacher Responses to Likert Scales on Educator Follow-Up Evaluation (Item 1: Use Flying WILD Guide again; Item 2: Recommend Flying WILD Educator's Guide to a friend; Item 3: Johnston Middle School teachers had resources needed; Item 4: The Family Math and Science Night increased students' knowledge about the conservation needs of migratory birds; and Item 5: Students became involved in school, community, and/or home activities that will benefit bird conservation.*

Flying WILD activities, students became involved in school, community, and/or home activities that will benefit bird conservation. These results provide strong evidence that the teachers felt very positive about the Flying WILD Guide and the Family Math and Science Night.

The next item asked the teacher to list the "one thing" he or she would change about the Family Math and Science Night. The comments teachers made in response to this item are listed below.

Teacher 1. "More time to plan"

Teacher 2. "More lead time in planning."

Teacher 3. "More time to prepare; later in year; more outside vendors, birds, and so forth."

Teacher 7. "Have more time to plan and advertise. Too close to the beginning of the school year."

Teacher 10. "More planning time prior to the event."

Teacher 11. "More time, more preparation"

Clearly, the comments made by the teachers indicate that they believe that there should have been more time to plan for the bird festival and, consequently, it should be held later in the school year.

The next item asked the teacher to indicate what they believed was the “best thing” about the Family Math and Science Night. The responses the teachers made are presented below.

- Teacher 1. “It was fun and educational.”
- Teacher 2. “Large turnout, the screech owl, a definite theme for Math and Science Night.”
- Teacher 3. “Large turnout of participants; science teachers worked hard to ensure success of night.”
- Teacher 4. “Everything! The turnout was great!”
- Teacher 7. “Watching staff and families interact together”
- Teacher 8. “Family participation and excitement”
- Teacher 9. “The number of people involved and that came and participated.”
- Teacher 10. “The number of teachers and students participating and the large response of parents and students attending the event”
- Teacher 11. “Watching the students lead the activities and seeing their excitement”

These comments from the teachers suggest that many of the teachers who responded were pleased by the large turnout and by the participation and excitement of parents and students.

The final item on the survey invited the teacher to provide any additional comments he or she wished to provide. Only one teacher made an additional comment; it is presented below.

- Teacher 4. “I would like a copy of the guide and I would like to invite you (Marc) to present at our next Texas Outdoor Education Association annual conference. If interested, let me know at pberkstr@houstonisd.org or contact TOEA president Melanie Milner.”

**Results from the Focus Group Session.** A focus group session was conducted by a project staff member and the external evaluator with seven Johnston Middle School teachers who had participated in the three-hour workshop conducted on September 13, had been involved in preparing for the Family Math and Science Night, and had been involved in conducting activities during the Family Math and Science Night on September 28. Over the course of the session, the staff member and the external evaluator asked the teachers to respond to four general questions: How do you feel about the training? How do you feel about the Flying WILD guide? If a staff member worked directly with your students, how do you feel about that? How do you feel about the Family Math and Science Night? The following is a summary of the comments they made in response to these four questions.

When asked about their feelings concerning the training, the general consensus expressed was that the three-hour workshop was effective but might have been even more effective if it had been longer—at least a full day. According to the teachers, additional time would have provided the opportunity to: (1) actually do some of the recommended activities; and (2) have the facilitator work with teachers as they begin the planning process.

When asked about their feelings concerning the Flying WILD guide, all responded that they thought it was very good. One teacher indicated that she thought the descriptions of the activities were “very helpful.” Another indicated that the “visuals in the guide are great” and

that it was easy to make copies of some of the materials for students. Yet another described the guide as “use friendly.” Others echoed these opinions.

When asked about their feelings concerning the benefits of having a Council for Environmental Education staff member work directly with their students, several teachers indicated that there was not enough time for that. However, it was suggested that had the bird festival—the Family Math and Science Night—been later in the school year, time would have allowed for this. The two teachers whose students did work directly with a staff member were enthusiastic in describing those interactions as effective. One said that it was “very helpful” to have the staff member work with her students. The other said that her students were “glad” that the staff member had worked with them.

Finally, when asked about their feelings concerning the Family Math and Science Night, the teachers made many comments. Most were very positive. As might be expected from the written comments on the survey, several suggested that there should have been more time for planning and that the event should have been held later in the school year—perhaps during the spring. A few recommended that in the future there should be more activities for parents, more vendors, more live birds, and “experts” who could have handled some of the questions asked by parents and students.

Many comments were made about the large turnout; clearly, attendance far exceeded their expectations. While they were happy to see so many parents, students, and family members attend the event, the large number of attendees—estimated to be almost seven hundred—did cause some minor problems. For example, the food “ran out.” In the main, however, most comments were very positive. A number of teachers indicated how delighted they were to see parents, children, and teachers interacting. One teacher described the event as “an excellent outreach.” Among the “hits” of the evening, teachers listed the screech owl, the making of bird feeders, and activities done in Spanish. It was noted that several students who are often “discipline problems,” loved to share their knowledge as they conducted activities. All agreed that they would recommend this type of event to other schools. Several indicated that it would be helpful for Johnston Middle School teachers who had experienced this to share their experiences with others who would undertake similar events.

Clearly, the teachers found the Family Math and Science Night to be a very positive experience for parents, students, family members, and for themselves. While they had some suggestions for improvement, none indicated that they regretted participating.

## **Summary**

The primary focus of this report has been to describe the results from an evaluation of the Houston Initiative—the Flying WILD pilot program implemented at Johnston Middle School in the Houston Independent School District during the first two months of the 2004-2005 school year. The secondary focus of the evaluation has been to describe the perceptions of the teachers who participated in training designed to prepare them to implement the Flying WILD program—and to describe the demographic characteristics of those teachers. The report contains four sections. The first section of the report has provided demographic information about the teachers who participated in the training. The second section has presented a description of the perceptions of those teachers regarding the effectiveness of the training in

which they participated. The results presented in that section indicate that the workshop participants believed that the workshop was a good experience—but too short. The third section has summarized the observations Flying WILD program staff made of “festival” activities that were conducted as part of the pilot program. Finally, the fourth section has described the perceptions of Johnston Middle School teachers who participated in the training and who implemented the pilot program regarding various aspects of the pilot program. In the main, those teachers who completed a survey designed to assess their perceptions and those teachers who participated in a focus group that gave them an opportunity to express their opinions, were very positive regarding each aspect of the initiative at Johnston Middle School. In addition, they made recommendations that should prove valuable as attempts are made to improve the program.