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## Discovery Youth

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# An Evaluation of the San Jose Children's Discovery Museum After School and Weekend Program June 2004

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## Executive Summary

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ASSESS, a research and evaluation firm based out of Oakland, California, studied the impact of the San Jose Children's Discovery Museum's Discovery Youth program. Using data gathered from Discovery youth, youth parents, and Discovery Youth (DY) staff the evaluation builds from their experiences through surveys, focus groups, and interviews. The evaluation built an extensive understanding of how DY provides the youth with an increased level of self confidence through the use of technology skills while gaining confidence in social skills with peers and adults to help prepare them for the future; and to prove to themselves and to adults that they are important resources to the community. The principal design and results of the study are presented below.

### Evaluation Design

This evaluation presents a range of perspectives regarding the DY experience for youth, staff, and parents. From the fall of 2003 through the spring of 2004 multiple measures were used to collect data from each participant group.

The methods used to gather information from each participant group varied. To perform the analysis, the learning gains and sentiments of approximately 35 DY youth were measured by a pre and post survey for session I, multiple focus groups during sessions II and III, and a session III closing survey and questionnaire. Youth were exposed to the methods during their weekly DY program days and on the Saturday program day. All of the methods sought to garner a thorough understanding of the users experience during the DY programming year.

Parent questionnaires were distributed during the final week of session III. Along with the questionnaires, Informal parent interviews were conducted during session III with 9 parents who volunteered to participate. The interviews provided a stronger understanding of parent impressions of the program year as well as their thoughts on the programs effects on their child's behavior, self-esteem, academic achievement, and how to improve the program.

To investigate the inner workings of the DY program, the staff was asked to complete a comprehensive end of year questionnaire. The analysis focuses on the program's attempt to meet established goals and pinpointing the accomplishments and shortcomings for the year.

### Youth Outcomes

Developing a sense of responsibility towards what they are learning is a characteristic that all of the participants displayed. They felt that they are providing others with the knowledge that they glean from DY programs, "I have made an impact on someone because I was teaching to children experiments...before I would ask someone else for help, now I can help them myself". All of the youth seemed to have a strong admiration towards teaching children younger than themselves. The participants felt that all of the activities are fun and exciting. They also felt that they are much more comfortable around computer programs and camera equipment as a result of the program. Many of the focus group members feel that they have learned a great deal from the activities. There are also observed behavioral and attitude changes as a result of the DY program, "I am more polite...nice to people, and I help others more...I can improve anything that I want. I feel happy because I have more friends. I have grown to a higher level". One participant made it clear that since attending DY he has become more respectful towards his mother, "before I was mean to my mom, now I am nice to her". The survey results show an improvement in skills learned for the youth over the course of the programming year, they include; an increased understanding of rules, increased knowledge of technology, learning how to work as a team, improved relationships with friends and family, and an increase in self-esteem.

With the understanding that the DY program is still relatively young and experiencing the typical disruptions of starting a program of this capacity, the findings of improved youth skills is noteworthy, and

the rates of gains hold out the possibility of continued program growth. At the same time, continued efforts are needed to help youth feel that they too can be resources and acknowledging the importance of being an asset to their communities. It is necessary to continue the commitment to improving the programs ability to provide youth with the ability to receive both educationally-rich content while sharing this information with others by creating digital media projects, producing videos and animations, and facilitating activities for younger children in the Museum's ZOOMZone. Improving the experience for these youth inevitably means concentrating more resources in the ongoing research and development of the DY program.

The results point to positive effects from the efforts of DY staff towards increasing youth activity in the Museum and outside community, suggesting that supporting DY improvement is worth continuing.

### **Parent Outcomes**

Looking at the opportunities made available to the youth, parents urge that youth have improved in multiple ways since joining the program. The frequency of apprehension towards interactions with adults among the youth has decreased significantly while offset by the rate of time spent with the program. When this comparison is restricted to increased attendance by the youth the rate of youth interacting with adults and their communities is even higher.

Parents suggest that the program has been useful to their children because, as one parent put it, "It has been good for them to learn commitment and responsibility. They talked about what they do with excitement. All the skills that they have learned have been great for them. They both showed an increased level of social interactions". For the parents that significantly expanded their efforts to encourage a high level of attendance by their children, experienced major moments of surprise as their children expressed, "issues of today's youth and the creative control to express it". Because these changes have tremendous ramifications on the youth, they are attractive to the parents. Moreover, when parents make the decision to encourage their children to participate in the program they recognize positive changes in their child's behavior.

While those parents who have actively attended and or participated in the DY program have had positive feedback, many other parents have given the DY program only limited attention since enrolling their child(ren). Few of the parents have made substantial steps towards interacting with the staff. Nor have many invested in intensive strategies to communicate with one another methods of improving or continuing programming areas.

Increasing the amount of support for continued DY development can result in improvements in youth performance especially when parents have a direct link with DY staff. Creating an infrastructure to support DY staff and parent interactions present increased opportunities for the youth involved in the program. The fact that parents have a substantial effect on the experience of the youth is testimony to their needed support.

Dedicating resources to enhancing the knowledge and skills of parent involvement is essential if the benefits of the DY program are to be realized.

### **Discovery Youth Staff Feedback**

The reoccurring themes pulled from the staff feedback questionnaire evolve around time constraints, successful youth experiences, need for more parental involvement, increased consistency among technology used, clearer expectations for youth, and improved organization of staff reflection.

The staff as a whole agree that the bulk of the goals set at the onset of the programming year were met, while other specific goals were not met, including learning animation and having youth complete a personal web page. Overall the staff feels that the year has been successful in providing youth with ample opportunities to feel confident in their newfound knowledge.

## Introduction

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Children's Discovery Museum of San Jose (CDM) has served youth ages 10-14 for over three years through the comprehensive after school and summer program, Discovery Youth. The program takes young adolescents' healthy physical and emotional development as its theme, while using multimedia production, service learning, and inquiry-based methods as its approach, while fully utilizing CDM's unique learning environment. The program's overarching goal promotes the healthy emotional development of young adolescents by strengthening opportunities for youth to participate in meaningful and productive out-of-school hours programming; to develop skills in technology; to gain confidence in social skills with peers and adults and help prepare them for the future; and to prove to themselves and to adults that they are important resources to the community.

At the program's foundation are strong youth development practices, celebrating youth as resources and acknowledging the importance of adult role models and community assets in their healthy development. DY responds specifically to the well-documented needs of this population for structured multi-year programs, rewarding roles for them in the community, opportunities to make decisions about and plan for the program content and activities, and sustained relationships with peers and caring adults.

Discovery Youth emphasizes young people receiving both educationally-rich content and sharing this information with others by creating digital media projects, producing videos and animations, and facilitating activities for younger children in the Museum's *ZOOMZone*. Working in teams and/or independently with adult staff, more than 20 media productions are created each year and seen by 700+ youth in the community, and thousands of children are served through youth-led activities at CDM.

With grant support from the Lucile Packard Foundation for Children's Health (LPFCH), Discovery Youth is intended to address the needs of adolescent youth by, providing technology skills for youth to express themselves as they manage yearlong projects. Youth are given ample opportunities to enhance their learning experience by taking part in leadership roles, dealing with intellectually challenging material in health and social topics, and presenting their projects in fascinating mediums such as, video, photo, and acting.

All participating youth are able to access appropriate technology, regardless of the task at hand. In keeping with Discovery Youth's mission to promote emotional, mental and behavioral health and to bridge meaningful interactions with adults and peers, DY continues to develop avenues to make the program activities more meaningful and engaging for the youth. There is no dispute that DY has brought innovation to youth programs as the original framework intended. However, less is known about the direct effect of DY in fulfilling their mission. This study examines these key questions:

1. How has the Discovery Youth program increased the self-confidence of youth participants through the program activities?
2. Have youth built important relationships with their peers and the adult staff?
3. Have youth improved their knowledge of media, technology, project management, and communication?
4. Do youth feel as though they are resources for their community?
5. What are parental perceptions towards the Discovery Youth program?
6. How has the experience of the program staff been during the programming year?

## Methodology

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The evaluation was conducted using data from youth participants, parents, and program staff.

This evaluation presents a range of perspectives regarding the Discovery Youth experience for youth involved. The analysis uses data gathered from DY session's I-III during the 2003-2004 program year. From the fall of 2003 through the spring of 2004 multiple measures were used to collect data from each participant group.

The methods used to gather information from each participant group varied. To perform the analysis, five rounds of surveys and questionnaires were administered from October 2003 – May 2004, measuring the learning gains and sentiments of 35 DY members. Youth were exposed to the surveys during the after school program, either on Tuesday, Thursday, or Saturday. The questions and responses for each survey are listed in **Appendix 1**. In addition to the surveys, 10 Discovery Youth members volunteered to participate in one of three 2-hour focus group sessions conducted in December 2003 and March of 2004. The questions for the groups varied, however they followed the same theme. Youth were asked questions involving their experience, change in self-esteem, interactions with adults, interactions with peers, and relations with their communities. The set of focus group questions and responses can be seen in **Appendix 2 and 3**. Along with the surveys and focus groups a series of activities were put together to allow the youth alternate measures to express their sentiments. As part of a whole group exercise youth were divided into groups of about 4-5 then they were given markers and large sheets of paper each with a unique question. Each group then rotated around until they contributed to each open-ended question. The questions and responses can only be found in **Appendix 4**. The final data-gathering tool involved the entire Discovery Youth group; they were given the option of choosing between three methods to express their experience during the year. The group was given the option between constructing their experience with play dough, paper mache, or filming. Youth were not expected to produce a final product; instead they were encouraged to utilize their resources to formulate their feelings about the year. The responses to the activity will only be available in **Appendix 5**. The analysis of this evaluation uses youth surveys and focus groups. All of the methods sought to garner a thorough understanding of the youth experience with the program year.

Parent interviews were conducted over a three-hour session during the parent night of session III. During this same evening parents were also given a questionnaire to fill out. During parent night all of the youth made films were presented in the museums theatre. The interviews provided a stronger understanding of parent impressions of the DY program as well as their thoughts on the programs ability to provide increased self-confidence and ownership of the material learned. Also, parents were asked about the technology skills acquired by their children. The questions and responses are listed in **Appendix 6**.

To investigate the inner workings of the program, the Discovery Youth full-time and part-time staff was asked to conduct a comprehensive review of the program year. The analysis focuses on their complete experience during the year. The questions and responses can be found in **Appendix 7**.

### Analysis

A number of tabulations and statistical summaries were used in the analysis. For the learning gains and sentiments gathered from the youth surveys, simple statistical summaries were prepared. For the parent interviews, extensive tabular summaries were prepared. The youth focus groups involved thematic coding and chunking to ascertain differential impacts on their experience.

To determine a heightened impact on youth self-esteem, more sophisticated analysis was required. Since the DY program attendance is erratic, it was not possible to employ a full random assignment experimental design to control for possible differences in youth characteristics across attendance. Instead this evaluation attempts to use a broad range of youth to achieve as great a degree of control over variation in youth as possible without an experimental design.

The purpose of the analysis is to understand the relationship between a youth's experiences and whether or not she/he has increased their tech skills as well as increase self-confidence through peer/adult interactions. Thus, to evaluate the effect of DY, we must take all other factors into account.

## Findings

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This section presents the results of the youth surveys/focus groups, parent interviews/questionnaire, and program staff questionnaire. All differences were in a positive direction; in no cases were participants found to dislike the DY program. The analyses were affected by the challenge of calculating affect on the part of the youth, so the ability to establish significant differences among the youth sentiments was limited. However, this reality did not hamper our examination of the differences in the programs impact among them. The results show that the DY program not only generally produced more positive learning gains for the youth, but also affirmed the programs goal to increase youth self-confidence.

The overall significance of a youths experience resides in the programs ability to provide each youth member with the opportunity to apply their newly learned tech skills towards a project that they can call their own. When youth are shown how to use their skills to create film, skits, etc. their experience tended to be positive. In effect the results show that three sets of factors – youth involvement in projects, staff interactions with youth, and peer relations – tended to increase youth self-esteem. When a youth was interacting in the program with a high level of input, his or her willingness to participate was higher than youth surrounded by little opportunity to provide input towards projects. As for the parents, all of the interviews suggest that the DY program has increased their child's knowledge of technology skills while furthering their ability to act as a role model and teacher of the new found knowledge. The course of the effect over time is noteworthy: the need for staff to control the program had a high curve for many of the youth involved but has since tapered off. Youth are now becoming more engaged in the learning process, thus providing their input.

The remainder of this section focuses on the analytic results for the impact that the DY program has on its youth members. While the influence of other factors is pertinent, their inclusion in the model is intended to clarify the relationship between staff and the learning that occurs among the youth.

## Youth Focus Groups

The analysis of the user focus groups was both more difficult to generalize and more difficult to interpret. As mentioned earlier, the challenge of measuring youth self-esteem depends on the ability of the youth participant to articulate their feelings. Some of the patterns that have emerged from the focus groups are structural since DY is designed to be a developmental program. Responses from the focus groups yielded a series of responses, they can be seen below.

The analysis of the comparative effect of the DY program on the youth showed positive impacts overall. To represent the youth in the analysis the focus groups were conducted during session I and session II. **Appendix 2 and 3** present the responses of the youth. Across all of the focus groups, the existence of the services provided by the program was found to positively influence the youth and their feelings about the tools.

All of the youth that participated in the focus groups represented all of the age ranges possible; also each focus group had a unique participant pool. The developmental process for many of the youth was very positive. Support from DY staff was well received. Input from youth proved helpful to the staff during the program activities. Overall the youth had an encouraging experience with the production aspect. Following is a discussion and summary of the each focus group and the feelings of each youth.



## **Youth Focus Group One**

### **Notes about the participants:**

The three-member group consisted of a diverse racial and ethnic mix. The length of participation with Discovery Youth among the members ranged from 3 months to 2+ years. All of the focus groups members had an overall positive feeling and experience with DY. All of the participants came to the focus group fresh from DY activities.

Developing a sense of responsibility towards what they are learning is a characteristic that all of the participants displayed. They felt that they are providing others with the knowledge that they glean from DY programs, "I have made an impact on someone because I was teaching to children experiments...Before I would then to go ask someone else for help, now I can help them myself". All of the youth seemed to have a strong admiration towards teaching children younger than themselves. The participants felt that all of the activities are fun and exciting. They also felt that they are much more comfortable around computer programs and camera equipment as a result of the programs. Many of the focus group members feel that they have learned a great deal from the activities. There are also observed behavioral and attitude changes as a result of the DY program, "I am more polite...nice to people, and I help others more...I can improve anything that I want. I feel happy because I have more friends. I have grown to a higher level". One participant made it clear that since attending DY he has become more respectful towards his mother, "before I was mean to my mom, now I am nice to her". Some of the lessons learned include; an increased understanding of rules, learning how to work as a team, better relationship with friends and family, and an increase in self-esteem.

All agreed that the activities are a great way to keep busy while spending time with friends.

Among this group the participants felt that the DY program should help pay for food. The members felt that they would like to have more opportunity to choose the activities provided by DY programming or perhaps have a larger pool to choose from.

## **Youth Focus Group Two**

### **Notes about participants:**

The three-member group consisted of youth with ample energy and willingness to contribute. The length of participation with DY among the members ranged from 3 months to 2+ years. All of the focus groups members had an overall positive feeling and experience with DY.

Youth in this group felt that the DY program is very youth friendly and provides job related experience. One of the members cited communication as a strength of the program. The activities have induced an increased level of creativity among the members, "I feel more creative, because I can use computer programs without fear". When discussing the use of the Internet, computer programs, and equipment the youth feel comfortable enough to teach others. One member mentioned that, "I teach my dad how to use Adobe Photoshop". The program experience has helped all three participants have an "open mind to new things...I want to get to know many people". When asked whether or not they feel that their behavior, motivation, health, and academic achievement has changed since being in the program, the participants exclaimed, YES! One participant clamored that she has, "increased motivation because of my comfort when expressing myself". Another participant mentioned that her behavior has improved since joining DY. As a result of DY the members all agreed that they have made a difference in someone's life.

All agreed that the activities have helped them think about who they want to be someday.

Among this group the participants felt that the DY program is often too chaotic. They all felt that "improving participation" and "encouraging responsibility" is a must. They also don't feel as though they

have much say in creating activities for DY but they feel that this is ok for some cases. The participant with the least experience with DY felt that she was not doing well in her schooling early on in the program, because, the activities were taking away time that she normally spend on schoolwork. She felt that perhaps there could be more help with managing schoolwork and DY activities.

### ***Youth Focus Group Three***

#### **Notes about participants:**

The group consisted of four participants, 2 male and 2 female, representing ages 9, 10, and 13. Following the all group open-ended session, this focus group sought to provide a more in-depth look at the questions posed earlier. During this brief 20-minute focus group, 8 questions were posed followed by sub-questions. The language of each question to follow was adjusted to allow deeper understanding among the youth. Below is a brief summary and discussion for each question.

When asked to reflect upon their experiences following session II, the youth were especially delighted to express their feelings regarding the trips that they took during the session, primarily the trip to the donut museum. One youth had this to say about the museum trip, "We went to the Donut museum. It was a neat exhibit. We learned about potatoes". Also, the opportunity to work independent from the adults during the filmmaking process was well received, "I have learned how to create a movie" one youth said. Another youth felt that the staff provided ample opportunities for the youth to utilize their own creativity, "They gave us guidance and didn't tell us what to do. I think Imovie is awesome".

When discussing the necessary steps of moviemaking, the youth urged the importance of establishing a clear storyboard followed by ample filming and proper use of equipment. "You need to pick out a storyboard along with which scenes are the best", one youth added, "You gotta shoot the whole movie until it's perfect".

It seemed as though a heightened level of responsibility was established by the youth during session II. The group elaborated the importance of a good work ethic. "You have to work well with others...you also have to be serious when working in groups".

During the focus group the youth participants felt that the video projects provided them with the opportunity to express their feelings. One of the female participants suggested that, "by choosing our filming ideas we expressed ourselves more". This comment was followed by, "I was able to be a little creative". Teamwork and group cohesion were among the frequent sentiments displayed by the students when expressing their feelings about the movie/video making process, "It was fun to work with friends especially when people listened".

Completing their video project was a momentous feeling for each youth. Through the process they mentioned that they learned a great deal and they all felt that they grew closer to other group members, "I felt closer with new people. Because, some of us didn't work with our friends so we made new friends". "I was proud to work with my group".

Following the session the effects of filmmaking no longer overwhelmed the youth. They seemed to feel comfortable with the idea of understanding what they see in movies as a result of session II. "It's not so overwhelming anymore", "I know how to make my own movie now". The technology tools that the youth were able to use have enabled them to recognize the tools needed to create Hollywood films, "movies use the same type of cameras". When asked about how they relate to the images they see on television now that they have been a part of the movie making process, one youth replied to this question by adding that she felt that she now understands more than before that what she sees on the big screen or TV isn't necessarily real. But, the characteristics that actors portray in their roles do provide a glimpse of reality.

When asked how they have learned from their experience with DY to better interpret TV images differently, they all responded by suggesting that they can now interpret filming strategies at greater length, “I understand more about movie making and how things are not exactly real”.

When asked what they would most like to change about their experience during session II, the responses yielded were intriguing. The youth desired a more controlled work environment that allowed more time as well as added cooperation from group members, “some people needed not to goof off as much”. Along with the increased ability to use tools the youth most enjoyed the heightened responsibility and ownership they felt when working on their respective projects. Two of the youth had this to say, “I like this because it is a safe environment open to discussion and people are friendly”, “I am more confident to talk and work with others”.

## Youth Surveys

### *Statistical summary of session I pre survey and session I post survey*

Pre and Post Session I Survey Questions	I've Never Tried		I know a little		I can do it, but slowly		Pretty darn good		I rule	
	Pre Survey	Post Survey	Pre Survey	Post Survey	Pre Survey	Post Survey	Pre Survey	Post Survey	Pre Survey	Post Survey
Sending email	36%	5%	3%	5%	6%	24%	18%	24%	36%	43%
Surfing the web	6%	6%	3%	0%	12%	14%	21%	19%	59%	57%
Downloading images and files	18%	14%	27%	24%	12%	19%	15%	24%	27%	19%
Creating web pages	55%	52%	18%	14%	6%	19%	9%	0%	12%	14%
Scanning pictures	42%	33%	24%	28%	12%	24%	60%	0%	15%	14%
Using a digital camera	6%	4%	9%	0%	18%	9%	30%	46%	36%	38%
Using Microsoft word	21%	9%	3%	5%	3%	9%	18%	28%	54%	47%
Using Adobe photoshop	27%	4%	15%	19%	15%	24%	24%	19%	18%	33%
Using Adobe Illustrator	64%	47%	13%	9%	6%	14%	9%	14%	6%	14%
<b>Total Avg.</b>	<b>30%</b>	<b>19%</b>	<b>13%</b>	<b>11%</b>	<b>10%</b>	<b>17%</b>	<b>23%</b>	<b>19%</b>	<b>29%</b>	<b>31%</b>

During the beginning of session I youth were asked to provide their input by completing a two part survey with a total of sixteen questions. The survey intended to provide a gauge of each youth's comfort level around technology skills pertinent to the program as well as questions that sought to garner a heightened understanding of their confidence in social skills with peers and adults. The results from the survey can be seen in **Appendix 1**.

The table above displays the results for both the pre session I survey as well as the post session I survey. The numbers represent the percentage of students that responded to each category. When looking at the total averages row it is evident that all of the youth experienced a move from “I've never tried” towards

“I rule”. The shift was positive for all but one column, “Pretty darn good”. However, when looking at the skills at the left, all of the youth increased their comfort level with the specific tools and software.

**Pre Session I Statement Questions**

The second part of the pre and post session I survey included questions that were designed to ascertain youth self-esteem levels. For the pre survey a scale of no way, sort of, and I rule was used as choices for the youth. The numbers represent the total responses for each category. The results are shown below.

<b>Pre Session I Survey: Statement Questions</b>	No Way!	Sort of	I rule!
“I feel comfortable when working in groups”		9%	91%
“I enjoy contributing my ideas with people”	3%	22%	75%
“I am a resource for my community and friends”		27%	73%
“I feel that I can be a mentor for youth that are older and younger than me”	6%	22%	72%
“I feel comfortable when interacting with adults”	6%	31%	63%
“I enjoy letting an adult know how I feel”	12%	44%	44%
“I am confident when presenting in front of others”	22%	31%	47%
	8%	26%	66%

For the pre session I survey statement questions, far greater responses were fielded in the “I rule” category than either “sort of” or “no way”, regardless of the statement question. When comparing the statement questions, youth responded more highly for the “I feel comfortable when working in groups” than the other statement questions. However, the number of “agree” responses overall were higher, with no significant differences among the categories. This finding may be in part due to the challenge of creating questions that generate responses based on the youth’s developmental stages.

### Post Session I Statement Questions

During the post session I survey the analysis did not reveal any sharp differences by survey administration. For both surveys no significant differences exist between the distributions of the average for each response column. However, the difference between the distributions for “I feel comfortable when working in groups” experienced a decrease in students who feel that they “rule” in their level of comfort for this statement. The situation for the statements designed for the post session I survey, however, is much more positive. As a result of session I youth feel that they can express their ideas to people with more ease. The situation for the statement questions geared towards understanding the youth’s self-esteem change proves to be positive. Seventy six percent of the youth feel that since completing session I they feel more proud of themselves, while zero percent do not feel proud of themselves. Another positive point for session I that attempts to explain self-esteem change is the responses for the statement, “Since coming to Discovery Youth there more people who like me as a friend”. This statement produced a 76% “I rule” response and a 0% “No Way” response.

<b>Post Session I Survey: Statement Questions</b>	No Way!	Sort of	I rule!
“Since coming to Discovery Youth I feel comfortable working in groups”		29%	71%
“This session has taught me to tell people my ideas”		43%	57%
“Since joining Discovery Youth my friends and family ask me to help them”	15%	47%	38%
“I feel that I can help kids that are older and younger than me”	5%	25%	70%
“I am not scared to talk to adults”	10%	33%	57%
“I enjoy letting an adult know how I feel”	20%	47%	33%
“Since joining Discovery Youth I enjoy talking in front of people”	24%	43%	33%
“Since coming to Discovery Youth there are more people who like me as a friend”		24%	76%
“Since coming to Discovery Youth I feel more proud of myself”		24%	76%
	9%	35%	56%

At the conclusion of the post survey for session I youth were left with an open ended question, “I come to discovery youth because?” For this question the majority of the youth responded with comments similar to the following: “I enjoy helping people and being in groups. I also come to Discovery Youth because the museum is cool and we get to use digital computers”, “It’s something to keep us busy and away from things that are bad”, “It is fun I get to work on the floor, do volunteer work while meeting new people and getting to know them better”, and “I want to help people”.

## End of Year Survey

The rapid growth in the numbers of “I rule!” responses reflects the DY ability to affect the youth’s comfort level with technological skills. The table below illustrates these outcomes, which are significant for nearly all of the skills listed when being compared to the pre session I survey. This survey was administered in the final week of the programming year. It represents a comprehensive look at the growth for all of the youth in the program. While all of the areas experienced an improvement, there were three areas that need improvement; “Scanning pictures”, “Using Adobe Illustrator”, and “Editing film with iMovie”. The need to improve the area of “iMovie” may be associated with a small number of youth who had editing responsibilities in their group projects.

<b>End of Year Session III Survey Questions</b>	<b>No way!</b>	<b>Sort of</b>	<b>I rule!</b>
Sending email	4%	27%	69%
Surfing the web		23%	77%
Downloading files	4%	58%	38%
Creating web pages	16%	61%	23%
Scanning pictures	42%	42%	16%
Using a digital camera	8%	20%	72%
Using Microsoft Word		27%	73%
Using Adobe Photoshop	16%	42%	42%
Using Adobe Illustrator	37%	45%	18%
Editing film with iMovie	36%	32%	32%
Using Adobe GoLive	23%	41%	36%
Making Animations	35%	13%	52%
	19%	36%	45%

The table below explains that when comparing the statement question responses from this table, session I to session III, there is a steady improvement among the questions asked. This raises the notion that the DY program from the start of the year to the end of the program year blends together the effects of technology skills and the programs contribution towards improving the program members’ self-esteem as the year progresses.

While it is a challenge to measure youth self-esteem, it is evident through the progress between the time of session I surveys to session III surveys that considerable attention is given to the mental development of the youth. The association between increasing self-esteem by means of technology skills has been achieved by providing relevant opportunities for the youth to contribute and to have meaningful interactions with young children, their peers, and parents while developing sustained relationships with adult staff; to achieve program outcomes – video, digital and Web productions – with the use of new technology, communications and project management skills.

**End of Year Session III Survey:  
Statement Questions**

	No way	Sort of	Yes, Definitely
“Since coming to Discovery Youth I feel comfortable working in groups”		31%	69%
“This session has taught me to tell people my ideas”		31%	69%
“Since joining Discovery Youth my friends and family ask me to help them”	11%	46%	42%
“I feel that I can help kids that are older and younger than me”	12%	27%	61%
“I enjoy letting an adult know how I feel”	15%	54%	31%
“Since joining Discovery Youth I enjoy talking in front of people”	11%	26%	63%
“Since coming to Discovery Youth there are more people who like me as a friend”	13%	27%	63%
“Since coming to Discovery Youth I feel more proud of myself”	5%	24%	71%
	8%	33%	59%

**Parent Questionnaire**

At the end of session III parents were asked to participate in either a questionnaire or interview. For the parents that participated in either measuring tool particular characteristics were drawn out and analyzed to ascertain what effects they have noticed in their children(s) behavior since attending DY from the start of the program year.

The analysis of the parent interviews and questionnaires display an overall positive reaction towards the DY program. The parents urged that their child(ren) have become more confident since joining DY, “my child has really learned a lot, he has more confidence and has had good practice working in groups”. Many parents felt that the program introduced many important health and social issues to the youth that may not be available otherwise. Along with the staff support, parents feel that the youth are able to incorporate this newfound knowledge into a constructive means of presentation. “They deal with issues of today’s youth and they have the creative control to express it. The adults in the program encourage the youth. They are always showing the youth how to do something and how to work in the museum. They learn to work here. They look like they accomplished something”.

Across all of the responses, having the program staff surrounding the youth was found to positively influence student self-esteem and skills. To gain insight beyond the positive aspects, parents were asked to suggest any ideas for improving the program. Many suggested increased parent updates and perhaps creating more avenues to increase the diversity of the youth members. The full set of parent interview and questionnaire responses can be seen in **Appendix 6**.

One parent with two youth in the program stressed the positive influence of having an environment where youth can fully participate; “It has been good for them to learn commitment and responsibility. They talked about what they do with excitement. All the skills that they have learned have been great for them. They both showed an increased level of social interactions. I hope the program continues doing a good job with hands on training. This program was and is a good opportunity to learn technological skills. It has helped my kids be more outgoing and focused”.

## Program Staff Questionnaire

As an end of program year wrap up and reflection item, the staff questionnaire proved to critically evaluate the achievements of the year as well as the outlook for the future. Among the four staff members, only two plan to return for next years program, while only one of the two returning will be full-time. The estimated effect that a new staff will have on next years program is not known, however as previous Discovery Youth evaluations have suggested, a high turn over rate among staff makes the relationship among staff and youth a complicated one.

When asked whether not they feel that Discovery youth are more comfortable when using technology related tools like, the Internet, computer programs, and camera equipment, one staff member had this to say, "Yes. They pick up on new technologies quickly. Some had never used digital cameras before. But soon took to shooting pictures every week. They are all pretty proficient with the Internet and video. They also took on many different roles in the production of video projects. They had the opportunity to try their hands at many roles: shooting, acting, editing, directing, and props". According to the staff responses, ongoing assessments are made

Two of the four staff members provided a description regarding whether they felt the program goals were met, "Given the time limitations of each session, I feel we did meet our goals, and even exceeded them in terms of youth satisfaction. Some specific goals were not met, including learning animation and having youth complete a personal web page (many started but did not finish)", the other member suggested that, "Yes, in a degree we always finish what we started out to do. There are always secondary goals that are sometimes not focused on but the primary goals are always achieved".

In terms of the strengths and weaknesses of the program as observed by the staff, having utilized the lack of time to the best of their abilities proved to be a strength for the staff. Across all of the staff, a big impact was made on youth comfort because of the high level of support from the staff. In contrast the weaknesses exposed by the staff lean heavily towards but are not limited time and attendance. The staff felt that they were pressed to squeeze or cut short many agenda items. Overall, sessions felt too rushed. Also, the attendance of the youth proved to be problematic for the staff. The consensus was that, "erratic attendance from youth was detrimental to their growth and to final projects". A full list of the staff responses can be found in **Appendix 7**.

The results present a picture of the impact of the DY program on its youth. The often-unpredictable attendance of the youth limited growth according to the results. While for youth that were encouraged to attend tended to raise positive results obtained by the youth. If the policy of the Discovery Youth program is to provide opportunities of developmental learning, one must question the support that parents provide this group of staff to affect the youth. Alternatively, if each youth was able to fully explain his/her self-esteem change by way of the program, then the ability to extrapolate the effectiveness of Discovery Youth may be debatable. Likewise, our attempts to blend the staff influence on the youth helps to create a level of impact that was predisposed by the contributions of the entire staff.

Given the complexity of the program goals our insight is slightly cloudy. We did expect and continue to expect that the program is accomplishing the set out goals as indicated by the youth surveys and focus groups. In this respect the proportion of staff influenced youth proves to be a measure of DY effectiveness. Consistent through all of the results, we find all of the youth who had a positive experience with the program did so by way of staff encouragement. The consistency across youth strengthens the case that continued development of the Discovery Youth program with support from parents would strengthen the positive gains for all of the youth involved in the program.



## Discussions and Conclusions

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### Summary of Findings

In the introduction of this report, we discussed the Discovery Youth program as taking young adolescents' healthy physical and emotional development as its theme, while using multimedia production, service learning, and inquiry-based methods as its approach, and fully utilizing CDM's unique learning environment. By providing an additional source for youth to display their capability to succeed developmentally, the program makes it possible for high-quality material to be available to youth who might not otherwise consider it or have access to it. This evaluation of the Discovery Youth program shows that the program appears successful in all dimensions.

The evaluation can be summarized with three key conclusions.

1. On average, Discovery Youth staff members produced a positive effect on the youth's technology skills and emotional development levels relative to the myriad of activities afforded to the youth.

**In all the youth surveyed and interviewed, Discovery Youth had a positive effect on the youth, because of the extreme support and nurturing environment created by the staff. The results look strongest among the youth in the technology skills obtained and ability to serve as a community resource. Results in what staff would like to see changed involve better effort to maintain attendance requirements and improved time management during the program sessions.**

2. The differences between the youth focus groups and surveys are not very significant. Both measures shared similar improvements during the course of the program year.

**The corresponding questions posed to each group resulted in similar responses. All of the groups agreed that the program has increased their desire to speak and interact in public, because of an amplified level of confidence in their knowledge. However, many youth desired an increased level responsibility towards the projects assigned.**

3. While recognizing the inevitable variations among strategies to approach developmental issues in youth, the Discovery Youth program has displayed improvements in the eyes of the parents.

**The number of parents who felt that their child(ren) learned what they expected to learn was overwhelming, while the ability to relay what they have learned to others increased as well. In many cases, the parents expect that their children will go on to make these leaps as the program continues. Parents feel that sending their children to the program in the future is inevitable.**

## **Implications and Further Questions**

This evaluation was based on data gathered from youth, program staff, and parents. It is necessary to acknowledge that it was difficult to measure self-esteem among DY youth. Of course, many questions remain, and it would be imprudent to extrapolate too generally from this analysis. We cannot say, for example, what aspects of the staff and others account for differences in the performance and experiences of the youth. The evaluation focused on the program as a whole and how it was experienced by youth, staff, and parents, so we do not know if the effectiveness of the program is due to the type of youth surveyed, the participants from the focus groups, the staff, or a combination of factors. We encourage further study of these questions.

While the figures cannot speak to the effectiveness of each session offered, they do lend themselves to a few general comments about the effectiveness of the program. This analysis provides direct empirical evidence on the positive reactions to the program. As a threshold issue, the evaluation dispels the notion that only traditional routes of teaching and learning can produce good results. Based on the results of this study, attention to issues of the program can focus more usefully on understanding the dimensions on which the program is better suited for improving an adolescent's self-esteem.

There is no argument that continuing the program and furthering the resources available should be a high priority. Based on the findings of this evaluation, strictly regulating the process of improving the program along the lines of increasing enrollment seems less beneficial than specifying the expected performance levels that youth should follow after each session is completed. It then becomes the challenge and the opportunity for Discovery Youth to devise the blend of content knowledge, parent involvement, and philosophy of child development to produce an enhanced experience of the DY program.

The evaluation results presented here demonstrate that different approaches to improving adolescent development are feasible. Certainly continued evaluation of the DY program would be worthwhile, for both internal and external uses. Corroborating and expanding the results obtained here would contribute to both the program itself and the larger spectrum of youth learning.

Discovery Youth has shown to be a viable source for adolescent learning. With continuing attention to technology, attendance, staff time for programs, and parental involvement choosing to continue the program may become easier. The results of this Discovery Youth evaluation offer a balanced assessment of the merits of the program. Its findings could be replicated in other after school programs with the result that regular attention to use of technology in youth learning could make it a routine feature for many schools and local educational organizations.

## Appendices

### Appendix 1: Youth Surveys

Pre and Post Session I Survey Questions	I've Never Tried		I know a little		I can do it, but slowly		Pretty darn good		I rule	
	Pre Survey	Post Survey	Pre Survey	Post Survey	Pre Survey	Post Survey	Pre Survey	Post Survey	Pre Survey	Post Survey
Sending email	36%	5%	3%	5%	6%	24%	18%	24%	36%	43%
Surfing the web	6%	6%	3%	0%	12%	14%	21%	19%	59%	57%
Downloading images and files	18%	14%	27%	24%	12%	19%	15%	24%	27%	19%
Creating web pages	55%	52%	18%	14%	6%	19%	9%	0%	12%	14%
Scanning pictures	42%	33%	24%	28%	12%	24%	60%	0%	15%	14%
Using a digital camera	6%	4%	9%	0%	18%	9%	30%	46%	36%	38%
Using Microsoft word	21%	9%	3%	5%	3%	9%	18%	28%	54%	47%
Using Adobe photoshop	27%	4%	15%	19%	15%	24%	24%	19%	18%	33%
Using Adobe Illustrator	64%	47%	13%	9%	6%	14%	9%	14%	6%	14%
<b>Total Avg.</b>	<b>30%</b>	<b>19%</b>	<b>13%</b>	<b>11%</b>	<b>10%</b>	<b>17%</b>	<b>23%</b>	<b>19%</b>	<b>29%</b>	<b>31%</b>

#### Pre Survey for Session I: Statement Questions

	Disagree	Strongly Disagree	Sort of Agree	Agree	Strongly Agree
"I feel comfortable when working in groups"			3	12	17
"I enjoy contributing my ideas with people"	1		7	13	11
"I am a resource for my community and friends"			9	9	15
"I feel that I can be a mentor for youth that are older and younger than me"	2		7	10	13
"I feel comfortable when interacting with adults"	1	1	10	6	14
"I enjoy letting an adult know how I feel"	2	2	14	7	7
"I am confident when presenting in front of others"	5	2	10	7	8
	11	5	60	64	85

Post Survey for Session I: Statement Questions	No Way!	Sort of	I rule!
	"Since coming to Discovery Youth I feel comfortable working in groups"		6
"This session has taught me to tell people my ideas"		9	12
"Since joining Discovery Youth my friends and family ask me to help them"	3	10	8
"I feel that I can help kids that are older and younger than me"	1	5	14
"I am not scared to talk to adults"	2	7	12
"I enjoy letting an adult know how I feel"	4	10	7
"Since joining Discovery Youth I enjoy talking in front of people"	5	9	7
"Since coming to Discovery Youth there are more people who like me as a friend"		5	16
"Since coming to Discovery Youth I feel more proud of myself"		5	16
	15	66	107

Use this space to answering the following question.

12. I come to Discovery Youth because...

I enjoy helping people and being in groups. I also come to Discovery Youth because the museum is cool and we get to use digital computers

I feel maybe going here will improve my skills with things I suck at

I wanted to use a digital camera

I wanted to try it out

My brother use to come and said that it was really fun that's why I came

It's something to keep us busy and away from things that are bad

I can meet new people

I love working on the projects and seeing all of my friends (plus the instructors are great)

I like working on the floor

I enjoy spending time with my friends

I want to learn more about life skills

It's fun

My friends mom told my mom and we thought it would be cool

My friend Casey brought me and I liked it

It is fun and we get to do projects

It is fun I get to work on the floor, do volunteer work while meeting new people and getting to know them better

I want to help people

My mom made me

It's fun

It is fun

My mom signed me up

It is very fun and all my friends like it and it keeps me out of trouble

<b>End of Year Session III Survey Questions</b>	<b>I've Never Tried</b>	<b>I know a little</b>	<b>I am the best</b>
Sending email	4%	27%	69%
Surfing the web		23%	77%
Downloading files	4%	58%	38%
Creating web pages	16%	61%	23%
Scanning pictures	42%	42%	16%
Using a digital camera	8%	20%	72%
Using Microsoft Word		27%	73%
Using Adobe Photoshop	16%	42%	42%
Using Adobe Illustrator	37%	45%	18%
Editing film with iMovie	36%	32%	32%
Using Adobe GoLive	23%	41%	36%
Making Animations	35%	13%	52%
	19%	36%	45%

**End of Year Session III Survey:  
Statement Questions**

“Since coming to Discovery Youth I feel comfortable working in groups”

“This session has taught me to tell people my ideas”

“Since joining Discovery Youth my friends and family ask me to help them”

“I feel that I can help kids that are older and younger than me”

“I enjoy letting an adult know how I feel”

“Since joining Discovery Youth I enjoy talking in front of people”

“Since coming to Discovery Youth there are more people who like me as a friend”

“Since coming to Discovery Youth I feel more proud of myself”

	<b>No way</b>	<b>Sort of</b>	<b>Yes, Definitely</b>
		31%	69%
		31%	69%
	11%	46%	42%
	12%	27%	61%
	15%	54%	31%
	11%	26%	63%
	13%	27%	63%
	5%	24%	71%
	8%	33%	59%

## Appendix 2: First Youth Focus Groups (December)

### Focus Group Notes

<b>Facilitator:</b>	Sepehr Moghadam
<b>Date:</b>	December 6, 2003
<b>Number of participants:</b>	3
<b>Age range of participants:</b>	10, 12, and 15
<b>Gender of participants:</b>	3 male

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### Notes about participants:

The three-member group consisted of a diverse racial and ethnic mix. The length of participation with Discovery Youth among the members ranged from 3 months to 2+ years. All of the focus groups members had an overall positive feeling and experience with DY. All of the participants came to the focus group fresh from DY activities.

### Questions posed:

- What are the strengths and weaknesses of the DY program (What do you think is Good and Bad?)
- Do you feel that you have a part in creating Discovery Youth activities?
- Has your creativity been affected by the program?
- Are you more comfortable when using the internet, computer programs, and equipment?
- Do you feel that you have developed a new relationship with DY members?
- Do you feel that your behavior, motivation, health, and academic achievement has changed since being in the program?
- Do you feel DY addresses your needs?
- Are you more comfortable now when using technology?
- Do you feel that you have made an impact on someone else or made a difference for someone else?
- Has DY helped you think about who you want to be?

### Highlights of what's working:

Developing a sense of responsibility towards what they are learning is a characteristic that all of the participants displayed. They felt that they are providing others with the knowledge that they glean from DY programs, "I have made an impact on someone because I was teaching to children experiments...Before I would then to go ask someone else for help, now I can help them myself". All of the youth seemed to have a strong admiration towards teaching children younger than themselves. The participants felt that all of the activities are fun and exciting. They also felt that they are much more comfortable around computer programs and camera equipment as a result of the programs. Many of the focus group members feel that they have learned a great deal from the activities. There are also observed behavioral and attitude changes as a result of the DY program, "I am more polite...nice to people, and I help others more...I can improve anything that I want. I feel happy because I have more friends. I have grown to a higher level". One participant made it clear that since attending DY he has become more respectful towards his mother, "before I was mean to my mom, now I am nice to her". Some of the lessons learned include; an increased understanding of rules, learning how to work as a team, better relationship with friends and family, and an increase in self-esteem.

All agreed that the activities are a great way to keep busy while spending time with friends.

### Highlights of what students don't like or would like to see changed:

Among this group the participants felt that the DY program should help pay for food. One of the students mentioned that his grades have actually dropped since being in the program, because he is spending too much time at the museum. The members felt that they would like to have more opportunity to choose the activities provided by DY programming or perhaps have a larger pool to choose from.

### **Focus Group Notes**

**Facilitator:** Sepehr Moghadam  
**Date:** December 6, 2003  
**Number of participants:** 3  
**Age range of participants:** 13  
**Gender of participants:** 3 female

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### **Notes about participants:**

The three-member group consisted of youth with ample energy and willingness to contribute. The length of participation with Discovery Youth among the members ranged from 3 months to 2+ years. All of the focus groups members had an overall positive feeling and experience with DY. All of the participants came to the focus group fresh from DY activities.

### **Highlights of what's working:**

Youth in this group felt that the DY program is very youth friendly and provides job related experience. One of the members cited communication as strength of the program. The activities have induced an increased level of creativity among the members, "I feel more creative, because I can use computer programs without fear". When discussing the use of the internet, computer programs, and equipment the youth feel comfortable enough to teach others. One member mentioned that, "I teach my dad how to use Adobe Photoshop". The program experience has helped all three participants have an "open mind to new things...I want to get to know many people". When asked whether or not they feel that their behavior, motivation, health, and academic achievement has changed since being in the program, the participants exclaimed, YES! One participant clamored that she has, "increased motivation because of my comfort when expressing myself". Another participant mentioned that her behavior has improved since joining DY. As a result of DY the members all agreed that they have made a difference in someone's life.

All agreed that the activities have helped them think about who they want to be someday.

### **Highlights of what students don't like or would like to see changed:**

Among this group the participants felt that the DY program is often too chaotic. They all felt that "improving participation" and "encouraging responsibility" is a must. They also don't feel as though they have much say in creating activities for DY but they feel that this is ok for some cases. The participant with the least experience with DY felt that she was not doing well in her schooling early on the program, because, the activities were taking away time that she normally spend on schoolwork. She felt that perhaps there could be more help with managing schoolwork and DY activities.

## Appendix 3: Second Round of Youth Focus Group (March)

### Focus Group Notes

<b>Facilitator:</b>	Sepehr Moghadam
<b>Date:</b>	March 13, 2004
<b>Number of participants:</b>	4
<b>Age range of participants:</b>	9, 10, 13, and 13
<b>Gender of participants:</b>	2 female and 2 male

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### Notes about participants:

The group consisted of four participants, 2 male and 2 female, representing ages 9, 10, and 13. Following the all group open-ended session, this focus group sought to provide a more in-depth look at the questions posed earlier. During this brief 20-minute focus group, 8 questions were posed followed by sub-questions. The language of each question to follow was adjusted to allow deeper understanding among the youth. Below is a brief summary and discussion for each question.

#### 1. What happened during this session?

The youth were especially delighted to express their feelings regarding the trips that they took during the session. Primarily the trip to the Donut museum. Also, the opportunity to work independent from the adults during the filmmaking process was a well received.

>>>Female Youth: I have learned how to create a movie

>>>Female Youth: We went to an art museum in San Jose

>>>Male Youth: We went to the Donut museum, it was a neat exhibit. We learned about potatoes.

>>>Female Youth: They gave us guidance and didn't tell us what to do. I think iMovie is awesome.

>>>Female Youth: I never got to shoot anything. But I did do a lot of interviewing and research, I liked it a lot.

#### 2. How can I make my own video? What are the necessary steps?

When discussing the necessary steps of moviemaking, the youth urged the importance of establishing a clear storyboard followed by ample filming and proper use of equipment.

>>>Female Youth: You need to pick out a storyboard along with which scenes are the best.

>>>Female Youth: You gotta shoot the whole movie until it's perfect.

##### 2a. What tools do I need to use?

>>>Male Youth: lighting is right and microphone is very important.

#### 3. What are important factors in movie/video making?

It seemed as though a heightened level of responsibility was established by the youth during this session. The group elaborated the importance of a good work ethic often.

>>>Female Youth: You have to work well with others

>>>Male Youth: You also have to be serious when working in groups

##### 3c. Self-expression?



>>>Female Youth: By choosing our filming ideas we expressed ourselves more.  
>>>Female Youth: I was able to be a little creative  
>>>Male Youth: I was able to be creative  
>>>Male Youth: I expressed myself when using lighting and the equipment  
>>>Female Youth: We all learned.

#### **4. How did you feel during the movie/video making process?**

Teamwork and group cohesion were among the frequent sentiments displayed by the students when expressing their feelings about the movie/video making process.

>>>Male Youth: It was really fun but challenging to be someone else. I was able to impact in my group.  
>>>Male Youth: We were a small group so everybody worked.  
>>>Female Youth: It was fun to work with friends especially when people listened.

#### **5. When you completed your video how did it make you feel?**

Completing the video was a momentous feeling for each youth. They all agreed that it was satisfying to complete their respective projects. Through the process they mentioned that they learned a great deal as well as grow closer to group members.

>>>Male Youth: I was proud to accomplish something

##### **5a. Did you feel closer / More distant with your team?**

>>>Female Youth: I felt closer with new people. Because, some of us didn't work with our friends so we made new friends

##### **5c. Were you proud of your contribution to the process?**

>>>Male Youth: I was proud to work with my group  
>>>Female Youth: it was amazing to finish

##### **5d. Do you see a piece of yourself in the movie/video you helped make?**

>>>Male Youth: not really  
>>>Female Youth: yes!

#### **6. Now that you have made your own movie/video, what do you think about media?**

Following the session the effects of filmmaking no longer overwhelm the youth. They seemed to feel comfortable with the idea of understanding what they see in movies as a result of session II.

>>>Female Youth: It's not so overwhelming anymore  
>>>Male Youth: It's cool to know how much to make so much  
>>>Male Youth: I know how to make my own movie now.  
>>>Female Youth: movies use the same type of cameras.

##### **6a. Now that you see images on TV, how do they relate to your experience?**

One youth replied to this question. She felt that she now understands more than before that what she sees on the big screen or TV isn't necessarily real. But, the characteristics that actors portray in their roles do provide a glimpse of reality.

>>>Female Youth: They portray something in roles that aren't real, but aspects are real. Lord of the Rings for example. The effects aren't real, but the aspects of the actors are.

**6b. Now that you have made your own video/movie that could be on TV how do you understand/interpret TV images differently?**

It was challenging to pose this question in a manner that the youth would understand; nonetheless they feel that they can now interpret filming strategies at greater length.

>>>Female Youth: I understand more about movie making and how things are not exactly real

>>>Male Youth: I may want to make a fan flick.

**7. What would MOST want to CHANGE about the process you experienced during this session?**

I found the responses to this question very intriguing. The youth desired a more controlled work environment that allowed more time as well as added cooperation from group members.

>>>Male Youth: More time, I want to contribute more because of outside stuff.

>>>Female Youth: Some people needed not to goof off as much; I wanted to learn more about HTML

>>>Male Youth: Being able to do more interesting things with friends and important.

**8. What is the one thing you MOST enjoyed from this session?**

Along with the increased ability to use tools the youth most enjoyed the importance they felt when working on their respective projects.

>>>Female Youth: I like this because it is a safe environment open to discussion and people are friendly.

>>>Female Youth: I am more confident to talk and work with others.

>>>Male Youth: I learned how to act and I like taking pictures of interesting things.

**9. Any comments, suggestions, or feelings that you wish to add?**

No responses.

## Appendix 4: Group Activity Session II

### Questions and answers for end of session II

#### Large Group Questions

Youth were divided into groups of about 4-5 then they were provided with markers and large sheets of paper with one of the following questions on each sheet. Each group then rotated around until they contributed to each open-ended question. Following are their responses.

**Now that session II has come to an end,**

**I most enjoyed...**

- Helping others
- Safe night x3
- Volunteering x2
- Computers
- Making movies
- Working on the floor
- Filming movies
- Going on the computers
- Saturday games
- Working together
- Art museum was so cool
- Free time on the computer
- Field trips x3
- Food x2
- Working with david
- Working with EJ
- Hanging out with friends
- Making new friends
- The computers
- Making movies with friends and participating with a wide variety of people
- Cookies
- The volunteer things we do like working in fair like things
- David
- Helping the children on the floor
- The field trips we took like the donut house
- Making movies and working on the pc editing
- Meeting new people
- Making movies
- That EJ was here
- Playing on the computers
- Taking photos x2
- Making new friends
- Shooting videos
- Computer time

**I would like to change...**

- More time on floor
- More snacks x3

- More field trips x6
- Easier editing
- Play mafia more
- More time
- More activities
- Whole sheets of paper
- More places to volunteer
- More I love you game
- Better snacks
- More computer games
- More computer time
- We should be under a stronger rule because nobody really listens, but still given the chance to goof off.
- More volunteering opportunities
- More money for the people who volunteer (not just one person-all people)
- More projects x2
- More safe nights
- More movies
- We should have more say in what the activities are
- Wider range of snack options
- 

### **I learned...**

- How to work in groups x2
- How to make movies x4
- How to edit a movie x5
- How to make bloopers
- Imovie x3
- Edit photos and drawings
- That 35 people from the Donner party were eaten
- How to add transitions on imovie
- How to work with toddlers
- How to make a collage x3
- Teamwork
- How to use adobe photoshop
- Sharing
- Itunes
- How to work in groups and learning how to accept it
- How to change fonts on imovie
- The basics of editing on a pc
- How to operate video cameras
- Computer stuff
- Change fonts
- Different camera shots
- About media
- What year the Donner party got lost

### **I wish I could continue learning about...**

- Computer animation x2
- Games
- Movies x4

- Discovery youth
- Media
- Grand theft auto vice city
- Video editing
- Adobe workshop
- Filming
- Lighting
- Camera angles
- Camera features
- How to play mafia
- Community service
- Taking photos
- Imovie x2
- Media lab
- Doughnuts
- Movie editing
- Working with other people
- Internet

## Appendix 5: End of Year Youth Activity

The final data-gathering tool involved the entire Discovery Youth group; they were given the option of choosing between three methods to express their experience during the year. The group was given the option between constructing their experience with play dough, paper mache, or filming. Youth were not expected to produce a final product; instead they were encouraged to utilize their resources to formulate their feelings about the year. The responses to the activity

Youth responses to their projects...

- I made a round ball because it is equal on all sides, just like discovery youth. There is plenty of diversity and we express ourselves here.
- I made a battery because I am active when I come to DY like a battery in a CD player. I use my energy here and rest at home. I enjoyed doing editing on the computer. I enjoyed doing my art, because I express myself. I just go for it.
- I liked the extra activities, origami, and sailboat activities. We made cranes and snowflakes.
- I got to use my imagination.
- We learned a lot about what we like what we like about each other. We are making and that represents what we are, what we do and what we like. Because we learned all this from DY.
- It has been fun because I enjoy myself.
- I made a balance because it represents work and fun. DY has taught me how to work and have fun.
- The website project was fun because we made a couple of jokes on the website while we made it.
- I made a plane because it represents the year. Because whenever a plane flies over the building we have to dance.
- I liked the computers because I got to make my own websites and use adobe Photoshop.
- We did volunteering with little kids and did activities w/them, like hand painting. We worked with them in the ZoomZone. We taught them how to make helicopters. They liked it a lot.
- It was fun because we worked a lot on the computer.
- I made the alien because matt showed it to me and I watched him. So I liked that a lot.
- I made a brain that is steaming because I have learned so much.
- "3D DY" each square is for everything I liked about DY. Like I liked Jessica, EJ, David, and Nancy, because they helped with the program. Second because I worked with little kids and I was their role model. Third because I worked with people in the community and I taught them things.
- We made a skit and video, a musical based on the small world but called it a Small Museum. It represents us having fun and working together. It has been a group effort. At first we don't like it but then we make new friends.
- "Wild Collage" we did animation and made videos. We refuse to be ignored because we were encouraged to make our voice heard. We enjoyed using the web.

## Appendix 6: Parent Questionnaire and Interviews

**As the Discovery Youth programming year comes to an end we would like to hear from you, the parent on your feelings about the program. Below are the questions and responses to the questions.**

- 1. Please describe, if any, recognizable differences that you have observed in your child's behavior, self-esteem, and academic achievement since joining Discovery Youth?**
  - This is my daughters second year in DY it has risen her awareness of others and the need to be patient and caring. She has discovered great enjoyment in helping and working with others who enjoy helping others.
  - Yes to all of the above. My child is more out going, social, not afraid to try new things. She is happy and more willing to take a leadership role and be herself. Our child's self-esteem has blossomed.
  - Our son got a very rewarding and important feeling from accomplishing his video through the program. He wouldn't have done it with any other program.
  - My child has really learned a lot he has more confidence. Good practice working in groups. Has more awareness of social issues and health issues. He really enjoyed working a video and using the equipment. We don't have all this at home and he wouldn't have the chance to do this kind of work/play.
  
- 2. Do you feel that the Discovery Youth program has provided your son or daughter with the ability to teach others about computer skills? If yes, please explain.**
  - The only change would be to extend Saturday all year long. My daughter can't do SOS and misses the time.
  - Because, our child is shy and reserved, it would help us as parents to receive some feedback regarding his participation during the time he is in the museum by email or something.
  
- 3. What are ways that we can improve our services to better the experience for your child?**
  - My daughter loves Jessica; she is full of energy and shares that with the kids, that life should be exciting.
  - We believe it is a great program that provides a lot that our schools no longer provide. The team leaders and Jessica are great role models who allow the kids to be who they are in an environment that supports individuality and freedom to express themselves. The kids learn from all the activities that explore many different ideas, experiences, and acceptance of others while providing companionship and learning to work as a team. It's wonderful to have such a great groups of kids learning together and forming positive bonds.
  - Jessica made a big difference to the success of the program for our child. Thank you to the entire staff for their great work with our child.
  - This is really a great program.

**Below are the parent informal interview responses...**

**Mother (son, 2<sup>nd</sup> yr and daughter 2<sup>nd</sup> yr):** they came to Thursday learning how to make movies. They learn to make it and see what they created. This is not normal as a kid. They deal with issues of today's youth and they have the creative control to express it. The adults in the program encourage the youth. They are always showing the youth how to do something and how to work in the museum. They learn to work here. They come home tired. They look like they accomplished something. We've never had problems. I would like to suggest a way to encourage more youth of color to be involved in the program. I think it is important to promote different backgrounds.

**Dad (daughter, 2<sup>nd</sup> yr and son, 1<sup>st</sup> yr):** the program was complimentary to what my daughter liked. She wanted to come back every time we picked her up. My son was not as into the program, but enjoys moviemaking and working the floor. It has been good for them to learn commitment and responsibility. They talked about what they do with excitement. All the skills that they have learned have been great for them. They both showed an increased level of social interactions. I hope the program continues doing a good job with hands on training. This program was and is a good opportunity to learn technological skills. It has helped my kids be more outgoing and focused. I feel it is important to stress attendance and commitment with parents.

**Mom (daughter, 4 yrs and son, 3yrs):** they both love to come. My daughter is enthusiastic about coming every time, especially over the summer. My son is a bit different; it is a struggle to keep him in because he is very quiet. I think they are learning, but I don't see a lot except when I come to DY. They display a lot of knowledge and they have taught me how to be more tech literate. I think they have an increased level of confidence and self-esteem. Both are introverted but they seem much more confident as a result of the program. I would like to see programs for 9<sup>th</sup> and 10<sup>th</sup> graders. I would also like to see the Saturday activities continue. I love that it is free.

**Mom (son, 1<sup>st</sup> yr and Daughter, 4<sup>th</sup> yr):** my son has improved his social skills. He has shared a common interest. My daughter is very experimental and she has formed a close group of friends outside of school. The program has given her an interest in technology. Her confidence has also gone up. She works on stuff at home with the computer. It has been a great program. I like my children getting involved in the operation of the program. I like it when there is a project that is concrete and it gets them involved. I wish that SOS was allowed for younger youth and I wish it was affordable.

**Mom (son, 2yrs):** kids bring up real and serious issues. They are constantly dealing with social and health issues. It is much more than a talent show. My son is bringing the knowledge home. They get to work with fun equipment that we don't have at home. I am very grateful for the funders.



## Appendix 7: Staff Questionnaire and Feedback

Below are the questions and responses to the staff feedback questionnaire. All names and personal information have been deleted.

**Time with Discovery Youth:** No response, 10/03 – 5/04, 8 months, and 1.5 yrs

**Do you plan to return next year?** No, Yes (in a volunteer capacity), No, and Yes

**Please explain your job duties and role with DY:**

- Helped plan DY agenda & implement goals
- Assisted in facilitating activities
- Cleaned up after program
- Facilitated media trainings to youth.
- Encouraged creativity and originality in youth & projects
  
- Assist and support Jessica in coordinating the youth programs of the CDM. This entails coordinating educational activities, facilitating fun games, and researching volunteer opportunities for students in the Saturday program. During the week was mostly helping coordinate and prepare for the weekday program by helping brainstorm new ideas and achieve goals and project outline by each session.
  
- Responsible for conceptual outline for learning of DY. Outlined learning activities and agenda for sessions. Designed activities participated in program implementation. Facilitated media studio. Installed software, updated computers, maintained equipment.
  
- Coordinate staff meetings and responsibilities
- Recruit and retain participants in program,
- Communicate with parents of participants
- Plan DY agendas and activities w/ the help of DY staff, in line with our grant goals and objectives.
- Be a lead, mentor, and resource for DY youth
- Seek out venues of dissemination for DY productions

### **1. How have the DY sessions impacted the creative process of the youth? Please explain.**

- We provided an opportunity for them to have a safe place/outlet for them to express themselves. We did not limit ideas & let them to express themselves. We did not limit ideas & let them run wild (movies) the result is awesome.
  
- Educating and introducing the youth to new activities in media and art has given them new tools to express ideas and emotions in a whole new way they have never experienced before. Photo collages and movies that they made was one method of how the youth got their voice to be heard.
  
- I believe the sessions put creativity into their hands, giving them the confidence to produce creative works without self-consciousness or inhibition. We allowed them the ability to choose their own subject matter and express it in their own "voice".
  
- Numerous projects and activities that required creative imagination and follow through. Most participants saw their ideas manifest in a final product, giving them confidence in their creative process. Different modes to express creativity: hands-on crafts, photography, clay fun, video projects, web pages, personal art work to be displayed on web.

### **2. Do you feel that Discovery youth are more comfortable when using technology related tools like, the Internet, computer programs, and camera equipment? Please explain.**

- I think that they are limited in how “mainstream” the internet has gotten. But I liked that they did get to make a website because they actually are going to see it up and can maybe relate to how other sites are made. Answer to your question, yes, but there are so many possibilities.
- I wouldn't say more comfortable but it does allow them to experience new things they have never encountered before.
- Yes. They pick up on new technologies quickly. Some had never used digital cameras before. But soon took to shooting pictures every week. They are all pretty proficient with the internet and video games. They also took on many different roles in the productivity of video projects. Had the opportunity to try their hands at many roles: shooting, acting, editing, directing, props, etc.
- Yes, to varying degrees based partially on how interested an individual youth is in a particular technology. Most DY can now operate digital cameras, video cam, set up tripods, and use iMovie, Photoshop, GoLive, and yahoo email.

### **3. How does the staff work to ensure that the DY program is functioning well?**

- meeting often works well.
- Also making sure we are open to different ways of doing something.
- Making sure to use feedback from youth and co-workers to ensure the goal is always set on track.
- They /we are constantly monitoring the progress of program and adjusting accordingly. We meet regularly before program to plan well in advance and to reflect on past experiences and how they should shape future endeavors.
- Weekly staff meeting and check-in planning, and informal summaries after each session day. Nancy, David, or EJ often stayed on during Thursday or Tuesday program to provide extra staff support. All staff took an interest in helping kids 1-on-1 and checking in to ensure their satisfaction – tried to take into account their feedbacks, complaints, and suggestions.

### **4. During the year each session begins with a set of goals, do you feel as though the goals were met? Please explain.**

- Yes, we rock
- Yes, in a degree that we always finish what we started out to do. There are always secondary goals that are sometimes not focused on but the primary goals are always achieved.
- Given the time limitations of each session, I feel we did meet our goals, and even exceeded them in terms of youth satisfaction. Some specific goals were not met, including learning animation and having youth complete a personal web page (many started but did not finish).

### **5. Please explain the strengths and weaknesses of the Discovery Youth program?**

Strengths = we care about the kids; we act as a mentor and friend. We rock as a team!

Weaknesses = time often ran short, but we handled it well. (we planned for more than we had time for. Unrealistic sometimes.)

Strengths = are the teamwork, communication, and positive look at helping the community is what empowers the youth program.

Weaknesses = was the attendance and lack of a system to know what youth are available to plan what projects.

Strengths = caring, proactive, hard-working staff. We are all super intelligent and very good rapport with the kids.

Weaknesses = need more resources for software upgrades and hardware upgrades. Consistency across all machines and equipment would allow for a more seamless experience for the kids and staff.

Strengths = fantastic staff, very committed. Creative/enthusiastic youth. Solid planning and structure with time built in for tech learning. Games, field trips, and community service days. Friendships formed amongst youth. Yearlong program to encourage sustained growth in youth.

Weaknesses = erratic attendance from youth which was detrimental to their growth and to final projects. Sessions felt too rushed. Trying to do too much (tech, arts/hands on projects, service learning, leadership, relationship building, outings, etc.)

6. What can be improved to increase the effectiveness of the program?

Maybe provide more examples in the work expected of them (to get creative juices flowing). Also, relate activity to their lives or show relevance.

A reflection time or methods to help get more youth input into planning the activities and projects. Maybe chosen students to be part of a more leadership role in DY and get involve in planning what happens and how to do it.

Resources for equipment and supplies. Access to resource materials such as books, magazines, DVD's, videos (VHS), audio CD's (license-free music), digital images, etc.

- parent/youth commitment to attendance
- tech support for media studio to run smoothly w/out eating into staff time
- more outside volunteer opportunities
- more exchangees w/other youth programs

7. Please use this space for any comments, suggestions, or concerns that you may have.

Yes, we rock. We each had our own contributions and that made us strong all around. We rock.

- assist and support Jessica in coordinating the youth programs of the CDM. This entails coordinating educational activities, facilitating fun games, and researching volunteer opportunities for students in the Saturday program. During the week was mostly helping coordinate and prepare for the weekday program by helping brainstorm new ideas and achieve goals and project outline by each session.

This program achieve at creating so much wonderful things.

The program is ahead of its time – delivering media literacy instruction that touches on CA state language arts educational standards.

I think we can be proud of DY this year, especially all that the kids accomplished in so short a time. Suggestions for improvements and changes for next year are very welcome, though.