



# **Generation Y** 2004-2005 Evaluation Data

Prepared for **Generation YES** by the **Northwest Regional Educational Laboratory** 

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This report includes data from the following schools:

### Kamehameha Schools - Hawaii Campus

Kamehameha High School, Kamehameha Schools - Hawaii Campus

#### **Generation Y Evaluation Results**

On the following pages you will find a report containing data from the Generation Y classes in your area. Depending on how your Generation Y classes are funded, the data may be from a single school, an entire district or state, or some other grouping of schools. These data have been prepared for you by the Evaluation Program of the Northwest Regional Educational Laboratory (www.nwrel.org/evaluation), as part of the service provided to your schools by Generation YES.

The information in this report comes from several sources, all collected online through the Generation Y web site. The report contains tabulations of results from the following online data collection forms:

- Surveys of participating students at the beginning and end of each class
- Project descriptions completed by participating students during each class
- Reports from Generation Y Coordinating Teachers at the end of each class
- Note: Surveys completed by Gen Y teachers at the end of each class are normally included in this report. These surveys were not available for 2004-2005 because of a problem with a new database system; they will be back next year.

We hope you find this information interesting and useful. Generation Y is aimed at helping you integrate technology in your classrooms, while engaging students in meaningful educational activities that support teachers, other students, administrators, and your community. The data presented here should give you a snapshot of what your students and teachers have been doing in their Generation Y classes and projects, and how well these activities are supporting technology integration and student engagement in your schools.

An additional report summarizing data on Generation Y classes across the nation is also available. By comparing national data to the information from your area, you may be able to notice differences, strengths, or weaknesses in your local schools that are of interest.

#### Overview of Generation Y

Generation Y is a program which uses partnerships between students and teachers to integrate modern computer technologies into the classroom. The program promotes the effective use of educational technology in schools, develops opportunities for student leadership, and fosters a collaborative, learning community atmosphere in schools. Rather than teaching technology skills to teachers and hoping they will use these skills to improve their students' learning, Generation Y trains students to form working partnerships with teachers in order to improve teaching and learning in their schools. Students become agents of change, assuming responsibility for helping to improve the educational resources available to themselves and their classmates.

GenY students learn technology skills with an emphasis on applying these skills to a real-world problem: helping teachers use technology to deliver more effective lessons. Students and partner teachers learn how telecommunications tools, the Internet, digital imaging and presentation tools, and other technologies can enhance lesson plans and curriculum units. Many Generation Y students

and partner teachers also learn about their state academic standards and learning goals, and the process of aligning classroom activities with these goals. Each GenY student is paired with a partner teacher (or an administrator, librarian, counselor or other educator), who decides what lesson plan, curriculum unit, or other school need will be addressed by a collaborative, technology-enriched curriculum project, which the partner teacher and the GenY student produce together. These projects are then used in the partner teacher's regular classroom, or in the library, administrative offices, etc. Through this model, participating educators receive individualized support as they strengthen their use and integration of new technologies. Students learn technology, communication, collaboration, and project management skills in an authentic, personally meaningful context, and many go on to further extend their skills through advanced school or community service projects.

The program was developed in the Olympia, Washington School District, with a five-year award in 1996 from the U.S. Department of Education's Technology Innovation Challenge Grant program. Numerous state and local grants as well as corporate sponsorships have also supported the development of the instructional model and materials, as well as dissemination of the model to schools outside Olympia. Currently, Generation Y classes are provided through the Generation YES organization to schools nationwide. The program provides a model which can be customized to fit a wide range of grade levels, technology infrastructures, scheduling requirements, interests, and skill levels of participants. In the summer of 2000, the program was awarded "Exemplary" status by the department's Expert Panel on Educational Technology, a distinction given to only two of 134 programs.

Data from the nationwide project indicate that the program can be an effective alternative for schools wishing to integrate technology into their regular curriculum and increase their use of project-based, student-centered learning practices. The model provides individualized support for educators who wish to increase their use of technology without becoming distracted from the essence of their jobs --building and delivering effective curriculum units and lesson plans. Generation Y achieves this by giving students experience with educational technology, communication skills, and information literacy, then allowing students to act as responsible partners with their teachers in building new curriculum materials and new teaching and learning practices.

Participating teachers and students have consistently reported that their involvement in Generation Y afforded them an excellent opportunity to improve their basic technology skills, and to develop more advanced abilities to integrate technology in standards-based lessons, projects and curriculum units. Both teachers and students have reported that they gained meaningful, authentic experience developing skills in technology use, collaboration, project management, and information literacy, while contributing to the improvement of their schools. Most have found the Generation Y model to be an effective professional development strategy for teachers, as well as an effective approach to increasing student engagement, student learning, and student leadership.

For those unfamiliar with the program, the term "partner-teacher" is used to refer to the classroom teachers who are each paired with a Generation Y student. These teams collaborate in the production and delivery of a lesson plan or unit, using modern telecommunications technology, to the teacher's

class. The term "Generation Y teacher" or "Generation Y coordinating teacher" refers to the teacher who works with all Generation Y students in a school, as they learn skills and knowledge through the course activities and design their projects with partner teachers. The GenY teacher also helps coordinate the relationships between the Generation Y students and their partner teachers, and facilitates the process of developing the collaborative projects. The core of the model is the Generation Y class and the process of developing the collaborative projects. The core of the model is the Generation Y class and the collaborative projects which GenY students and their partner teachers produce for students in the partner teachers' class, as depicted in Figure 1.

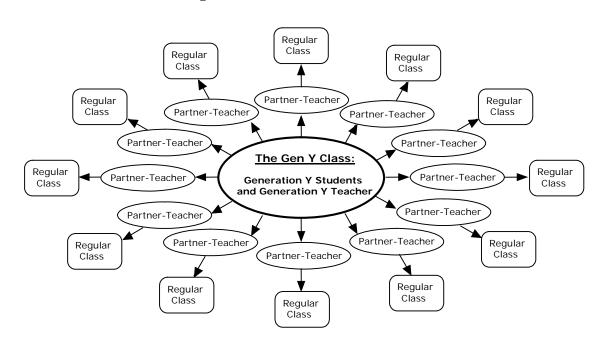


Figure 1. The Generation Y Class

Generation YES provides fully participating schools with the following:

- A training workshop for the Generation Y teacher(s) and selected students
- Course materials, including curriculum guides, student resources, videos, CDs, etc.
- Access to online resources and consultants for the development of student projects
- Access to the searchable database of previous student projects
- Data collection and reporting services to monitor program outcomes

The program includes a series of online surveys and online project documentation facilities for Generation Y teachers, Generation Y students, and the Partner Teachers who work with the Generation Y students. Data from these sources, collected during the 2004-2005 school year, are presented in the tables on the following pages.

## **Student Preliminary Survey Results**

Students complete a preliminary survey when they register for the the Generation Y class. The survey includes demographics as well as questions about access to computers and the internet, current skill levels and prior use of digital tools. This information is summarized in the next set of tables.

Table 1
Participating Generation Y Students by Gender

| Gender | Percentage of Students (of 8 reporting) |
|--------|---|
| Male   | 62.5                                    |
| Female | 37.5                                    |

Table 2
Participating Generation Y Students by Ethnicity

| Ethnicity                      | Percentage of Students (of 8 reporting) |
|--------------------------------|---|
| Caucasian                      | 0.0                                     |
| African American               | 0.0                                     |
| Hispanic                       | 0.0                                     |
| Asian                          | 0.0                                     |
| Pacific Islander               | 100.0                                   |
| Native American/Native Alaskan | 0.0                                     |
| Other                          | 0.0                                     |

Table 3
Computer Access at Home by Generation Y Students

| At home do you have access to: | Yes  | No   |
|--------------------------------|------|------|
| A computer                     | 87.5 | 12.5 |
| The Internet                   | 62.5 | 37.5 |
| Send and receive email         | 62.5 | 37.5 |

(percentages of approximately 8 reporting)

Table 4
Frequency of Computer Use by Generation Y Students at Home and School

| How often do you use a computer? | Almost<br>every<br>day | At least<br>once a<br>week | Once or<br>twice a<br>month | Once or<br>twice a<br>semester | Never or don't have access |
|----------------------------------|------------------------|----------------------------|-----------------------------|--------------------------------|----------------------------|
| At home                          | 50.0                   | 25.0                       | 12.5                        | 0.0                            | 12.5                       |
| At school                        | 100.0                  | 0.0                        | 0.0                         | 0.0                            | 0.0                        |

(percentages of approximately 8 reporting)

Table 5
Student Experience With Computer and Technology Prior to Participating in Generation Y

| How much experience have you had with the following: | None | Just a<br>little | Some | A lot |
|--|------|------------------|------|-------|
| Use word processing software                         | 0.0  | 0.0              | 37.5 | 62.5  |
| Search the Internet                                  | 0.0  | 0.0              | 0.0  | 100.0 |
| Send and receive email                               | 0.0  | 12.5             | 12.5 | 75.0  |
| Use PowerPoint or other presentation software        | 0.0  | 0.0              | 25.0 | 75.0  |
| Troubleshoot basic computer problems                 | 12.5 | 25.0             | 50.0 | 12.5  |
| Use a scanner to digitize a picture                  | 0.0  | 12.5             | 25.0 | 62.5  |
| Use a digital camera                                 | 0.0  | 0.0              | 37.5 | 62.5  |
| Create a web page or web site                        | 12.5 | 50.0             | 12.5 | 25.0  |
| Touch-typing at least 15 words/minute                | 0.0  | 0.0              | 25.0 | 75.0  |

(percentages of approximately 8 reporting)

Table 6
Frequency of Computer Use in Classes

| In the classes you took last<br>semester/quarter, how often were<br>computers used by you or your<br>teachers? | Computers<br>were never<br>used | Computers<br>were used<br>once | Computers<br>were used a<br>few times | Computers<br>were used<br>about once<br>per week | Computers<br>were used<br>several<br>times per<br>week |
|--|---------------------------------|--------------------------------|---------------------------------------|--|--|
| Math   | 0.0                             | 37.5                           | 50.0                                  | 0.0  | 12.5   |
| Language Arts, Reading or English  | 0.0                             | 0.0                            | 25.0                                  | 37.5   | 37.5   |
| Science  | 0.0                             | 12.5                           | 62.5                                  | 12.5   | 12.5   |
| Social Studies, Geography or<br>History  | 0.0                             | 0.0                            | 62.5                                  | 12.5   | 25.0   |

(percentages of approximately 8 reporting)

### **Student Outcomes**

Just before the class is over, students are prompted to complete a second online survey. Questions include how much practice students gained in various skill areas, what kind of collaborative projects were built, and how students rated their projects on several dimensions. The tables below summarize the outcomes reported by students.

Table 7
Practice Gained in Computing Skills by Generation Y Students

| During your work this semester as a<br>Generation Y student, how much<br>practice and experience did you get: | None, I<br>didn't<br>do this<br>at all | Just a<br>little; 2<br>hours or<br>less | Some;<br>2 to 10<br>hours | Quite a<br>bit; 10 to<br>20 hours<br>total | A lot;<br>more than<br>20 hours<br>total |
|---|--|---|---------------------------|--|--|
| Using a keyboard to touch-type at least 15 words/min  | 0.0                                    | 0.0                                     | 0.0                       | 50.0                                       | 50.0                                     |
| Using word processing software  | 0.0                                    | 0.0                                     | 0.0                       | 0.0  | 50.0                                     |
| Searching the Internet  | 0.0                                    | 0.0                                     | 0.0                       | 50.0                                       | 50.0                                     |
| Sending and receiving e-mail  | 25.0                                   | 0.0                                     | 25.0                      | 50.0                                       | 0.0                                      |
| Using PowerPoint or other presentation software   | 0.0                                    | 25.0                                    | 0.0                       | 50.0                                       | 25.0                                     |
| Troubleshooting basic computer problems   | 0.0                                    | 25.0                                    | 25.0                      | 50.0                                       | 0.0                                      |
| Using a scanner to digitize a picture   | 50.0                                   | 25.0                                    | 0.0                       | 25.0                                       | 0.0                                      |
| Using a digital camera  | 50.0                                   | 0.0                                     | 0.0                       | 50.0                                       | 0.0                                      |
| Creating a Web page or Web site   | 50.0                                   | 25.0                                    | 0.0                       | 0.0  | 25.0                                     |

(percentages of approximately 8 reporting)

Table 8
Types of Collaborative Projects Built By Students and Partner Teachers

| Project Type  | Percentage of projects that included this component: | Percentage of projects that were mainly focused on this component: |
|---|--|--|
| GenY student created or updated a Web page that was used by my partner teacher's class              | 25.0   | 0.0  |
| GenY student helped other students search the Web for information on a class topic                  | 50.0   | 0.0  |
| GenY student developed an educational presentation using PowerPoint, HyperStudio, or other software | 75.0   | 25.0   |
| GenY student taught technology skills to a teacher  | 100.0  | 75.0   |
| GenY student taught technology skills to other students   | 50.0   | 0.0  |
| Other   | 0.0  | 0.0  |

(percentages of approximately 4 reporting)

Table 9
Delivery of Collaborative Projects

|   | Only Me | Only my<br>Partner<br>Teacher | Both of<br>Us<br>Together |
|---|---------|-------------------------------|---------------------------|
| When the lesson was delivered to your partner-teacher's class, who taught the class that day? | 0.0     | 100.0                         | 0.0                       |

(percentages of approximately 4 reporting)

Table 10 Student Self-Assessments of Their Collaborative Projects

| Mark the answer that best describes your experience in Generation Y:                                  | Strongly<br>Agree | Agree | Disagree | Strongly<br>Disagree | Not sure,<br>N/A |
|---|-------------------|-------|----------|----------------------|------------------|
| I completed my project.   | 25.0              | 75.0  | 0.0      | 0.0                  | 0.0              |
| I am proud of my project.   | 50.0              | 50.0  | 0.0      | 0.0                  | 0.0              |
| As a result of my project, other students learned about technology.                                   | 25.0              | 25.0  | 0.0      | 0.0                  | 50.0             |
| As a result of my project, other students learned about a subject (e.g. history, math, English, etc.) | 25.0              | 25.0  | 25.0     | 0.0                  | 25.0             |
| The feedback about my project proposal I got online was helpful.                                      | 0.0               | 100.0 | 0.0      | 0.0                  | 0.0              |
| My partner-teacher's expectations of me were clear and realistic.                                     | 50.0              | 50.0  | 0.0      | 0.0                  | 0.0              |
| My partner-teacher was able to meet with me regularly.  | 25.0              | 75.0  | 0.0      | 0.0                  | 0.0              |
| My partner-teacher and I worked together well as a team.  | 25.0              | 75.0  | 0.0      | 0.0                  | 0.0              |
| Overall, Generation Y was a good experience.  | 50.0              | 25.0  | 25.0     | 0.0                  | 0.0              |

(percentages of approximately 4 reporting)

### **Partner-Teacher Outcomes**

At the end of each Generation Y class, participating Partner Teachers are asked to complete a survey about their experiences working with a GenY student on a collaborative, curriculum-building project. Partner teachers are asked about changes in their attitudes and use of technology, the amount of time spent on their projects, and their ratings of a number of dimensions related to the new curriculum units or lesson plans. Their responses are summarized in the tables below, along with a listing of the project titles.

Table 11 Self-Assessed Change In Computer Use by GenY Partner Teachers

| How has the frequency of the following changed as a result of your involvement with Generation Y? | More<br>Frequently | Same<br>Frequency | Less<br>Frequently |
|---|--------------------|-------------------|--------------------|
| You use computers to prepare for class, maintain  |                    |                   |                    |
| class records, or do other school-related work.   |                    |                   |                    |
| You use computers for personal business,  |                    |                   |                    |
| learning, or fun.   |                    |                   |                    |
| You use e-mail.   |                    |                   |                    |
| You use the World Wide Web.   |                    |                   |                    |
| Your students use computers during your classes.  |                    |                   |                    |
| Your students use computers outside of class to   |                    |                   |                    |
| complete assignments for your class.  |                    |                   |                    |

(percentages of approximately 0 reporting)

Table 12 Self-Assessed Change In Partner Teachers' Comfort Using Technology

| How has your comfort level with the following changed as a result of your involvement with Generation Y? | More<br>comfortable | Same level of comfort | Less<br>comfortable |
|--|---------------------|-----------------------|---------------------|
| Using computers  |                     |                       |                     |
| Integrating computers into the curriculum  |                     |                       |                     |
| Helping students use computers   |                     |                       |                     |
| Using e-mail   |                     |                       |                     |
| Using the World Wide Web   |                     |                       |                     |

(percentages of approximately 0 reporting)

Table 13
Time Spent by Partner Teachers on Collaborative Projects

|  | 2 hrs or | 3-5   | 5-8   | > 8   |
|--|----------|-------|-------|-------|
|  | less     | hours | hours | hours |
| Partner Teachers: How much time, in total, did you spend working with your GenY student this semester? |          |       |       |       |

(percentages of approximately 0 reporting)

Table 14
Partner Teacher Evaluations of the Generation Y Experience

| Please indicate your level of agreement with each of the following:   | Strongly<br>Agree | Agree | Disagree | Strongly<br>Disagree |
|---|-------------------|-------|----------|----------------------|
| My student-partner completed his or her project.  |                   |       |          |                      |
| My student-partner's project was of high quality.   |                   |       |          |                      |
| I will use the lesson/Web page/presentation with which my student-partner helped in the future.                                 |                   |       |          |                      |
| I would like to continue developing or refining this project in the future.   |                   |       |          |                      |
| Choosing a project was relatively easy.   |                   |       |          |                      |
| My role as a partner-teacher was clear to me.   |                   |       |          |                      |
| As a consequence of Generation Y, I learned more about technology.  |                   |       |          |                      |
| As a consequence of Generation Y, my students learned about technology.   |                   |       |          |                      |
| As a consequence of Generation Y, my students learned about some content area.  |                   |       |          |                      |
| Generation Y is a good method for providing support and assistance to teachers as they integrate technology into their classes. |                   |       |          |                      |
| My experience in Generation Y this semester will change the way I teach some lessons in the future.                             |                   |       |          |                      |
| I would like to work with another Generation Y student in the coming year.  |                   |       |          |                      |
| I will continue rebuilding my lesson plans to make more use of educational technology.  |                   |       |          |                      |

(percentages of approximately 0 reporting)

Table 15
Partner Teacher Attitudes Toward Educational Computing

| Please rate your  |                      |                                 |                                 |                            | Due to my experience with Generation Y, I: |  |  |
|---|----------------------|---------------------------------|---------------------------------|----------------------------|--|--|--|
|   | Strongly<br>Disagree | Agree<br>more<br>than<br>before | Agree<br>less<br>than<br>before | Haven't changed my opinion |  |  |  |
| I see definite benefits to students from integrating technology into education.       |                      |                                 |                                 |                            |  |  |  |
| Technology facilitates positive changes in classroom teaching and learning practices. |                      |                                 |                                 |                            |  |  |  |
| I want to learn more about using new technologies.                                    |                      |                                 |                                 |                            |  |  |  |

(percentages of approximately 0 reporting)

# **Project List**

### Table 17 Archived Collaborative Projects

| School                 | Partner-Teacher | Project Name   |
|------------------------|-----------------|--|
| Kamehameha High School | Darlene Wolff   | Learning Center Teachers Learn the Computer Skills           |
| Kamehameha High School | Kumu Pau        | Ways of the Tech   |
| Kamehameha High School | Luisa Oldmen    | Bienvenidos a Espanol - Website                              |
| Kamehameha High School | Mario Patino    | Weird Science: PowerPointing Students in the Right Direction |
| Kamehameha High School | Mrs. Enanoria   | PowerPoint Demonstration                                     |
| Kamehameha High School | Ms. Bumatay     | Set Up and Use of the Smartboard                             |