



Generation Y

2001-2002 Evaluation Data

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



This report includes data from the following schools:

Dublin School District

Dublin Elementary School, Dublin Unified School District
Frederickson Elementary School, Dublin Unified School District
Murray Elementary School, Dublin Unified School District
Nielson Elementary School, Dublin Unified School District
Wells Middle School, Dublin Unified School District

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
- Surveys of Generation Y Partner Teachers at the end of each class

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.

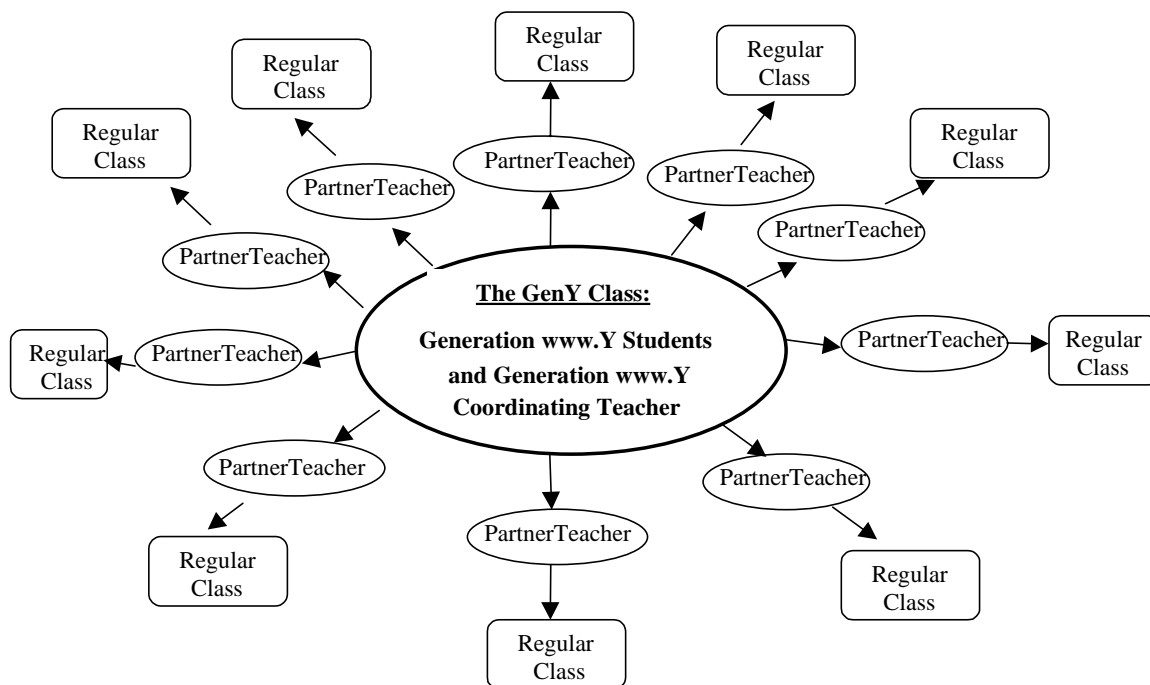
Data from the nationwide project indicate that the program can be an effective alternative for schools wishing to integrate technology into their regular curriculum and increase their use of project-based, student-centered learning practices. The model provides individualized support for educators who 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 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 workbooks, 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 2001-2002 school year, are presented in the tables on the following pages.

Generation Y Coordinating Teacher Reports

At the close of each Generation Y class, teachers are asked to complete an online report that includes questions about the collaborative projects involving their students and partner teachers from their school, the technical and administrative infrastructure in their school, and their ratings of the usefulness of the GenY model, curriculum components, online services, etc. The tables in this section provide a

Table 1
Average Numbers of Generation Y Students and Collaborative Projects

Generation Y Teacher Survey Question	Average in classes
How many students completed your GenY class?	12.0
How many collaborative projects were begun by your students?	11.0
How many projects were completed?	11.0
How many projects were delivered to a partner teacher's class?	7.0

Table 2
Difficulty of Managing Collaborative Partnerships and Projects

	Very Difficult	Difficult	OK	Easy	Very Easy
How difficult was it to find partner teachers interested in participating?	0.0	0.0	100.0	0.0	0.0
How difficult was it to make good matches between those teachers and your Generation Y students?	0.0	0.0	100.0	0.0	0.0
How difficult was it to nurture and manage the working partnerships between your GenY students and their partner teachers?	0.0	100.0	0.0	0.0	0.0
How difficult was it to adjust the class for students and partner teachers with varying levels of expertise with computers?	0.0	0.0	100.0	0.0	0.0

(percentages of approximately 1 reporting)

Table 3
Infrastructure and Administrative Context

	Strongly Agree	Mostly Agree	Mixed	Mostly Disagree	Strongly Disagree
The computer and network infrastructure at our school is adequate.	0.0	0.0	0.0	100.0	0.0
Students have adequate permissions and privileges to use our computer and network resources, e-mail, and the Internet.	0.0	100.0	0.0	0.0	0.0
Our teachers are enthusiastic about the Generation Y model, in which they work in partnership with students to create curriculum and instruction materials and projects for other students to use.	0.0	100.0	0.0	0.0	0.0
The schedule and administrative structure and processes at our school are flexible enough to allow creative and varied collaboration between students and teachers.	0.0	0.0	100.0	0.0	0.0
Generation Y is viewed in our school as a serious professional development and technical support model for teachers who want to integrate technology in their classrooms.	0.0	100.0	0.0	0.0	0.0
Generation Y projects are used to support other special initiatives in our school aimed at technology integration, professional development or curriculum development.	0.0	100.0	0.0	0.0	0.0

(percentages of approximately 1 reporting)

Table 4
Generation Y Teacher Ratings of Success and Impact

	Strongly Agree	Mostly Agree	Mixed	Mostly Disagree	Strongly Disagree	No Opinion
The GenY model is a good way to help teachers integrate technology in their classrooms.	0.0	100.0	0.0	0.0	0.0	0.0
The GenY model is a good way to make school more engaging and meaningful to students.	0.0	100.0	0.0	0.0	0.0	0.0
The GenY model is a good way for students to learn technology skills.	0.0	100.0	0.0	0.0	0.0	0.0
The GenY model is a good way for students to practice solving real-world problems.	0.0	100.0	0.0	0.0	0.0	0.0
The GenY training I received was adequate to prepare me to teach this course.	0.0	100.0	0.0	0.0	0.0	0.0
The GenY central office staff has been responsive and helpful when I have requested assistance.	0.0	0.0	0.0	0.0	0.0	100.0
The GenY Curriculum Guide has been very useful to me in delivering the course.	0.0	0.0	100.0	0.0	0.0	0.0
The GenY Student Workbook has been very useful to me in delivering the course.	0.0	0.0	0.0	0.0	0.0	100.0
The GenY CD has been very useful to me in delivering the course.	0.0	0.0	0.0	0.0	0.0	100.0
The GenY Video has been very useful to me in delivering the course.	0.0	0.0	0.0	0.0	0.0	100.0
The GenY Website has been very useful to me in delivering the course.	0.0	0.0	0.0	100.0	0.0	0.0
The GenY online system for registering schools, teachers, classes and students has been easy to use.	100.0	0.0	0.0	0.0	0.0	0.0
The GenY online Classroom Management tools have been easy to use and helpful to me in delivering the course.	0.0	100.0	0.0	0.0	0.0	0.0
The GenY online Project Proposal, Feedback and Final Report system for students has been easy to use and helpful to me in delivering the course.	0.0	0.0	100.0	0.0	0.0	0.0
The online Archive of GenY collaborative projects has been easy to use and helpful to me in delivering the course.	0.0	0.0	0.0	100.0	0.0	0.0
We will continue to offer Generation Y classes at our school in the future.	0.0	0.0	0.0	0.0	0.0	100.0
I would be willing to serve as a trainer for teachers in my region who want to begin Generation Y programs in their schools.	0.0	0.0	0.0	100.0	0.0	0.0

(percentages of approximately 1 reporting)

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 5
Participating Generation Y Students by Gender

Gender	Percentage of Students (of 68 reporting)
Male	51.5
Female	48.5

Table 6
Participating Generation Y Students by Ethnicity

Ethnicity	Percentage of Students (of 66 reporting)
Caucasian	60.6
African American	3.0
Hispanic	15.2
Asian	15.2
Pacific Islander	3.0
Native American/Native Alaskan	3.0
Other	0.0

Table 7
Computer Access at Home by Generation Y Students

At home do you have access to:	Yes	No
A computer	100.0	0.0
The Internet	91.0	9.0
Send and receive email	77.3	22.7

(percentages of approximately 68 reporting)

Table 8
Frequency of Computer Use by Generation Y Students at Home and School

How often do you use a computer?	Almost every day	At least once a week	Once or twice a month	Once or twice a semester	Never or don't have access
At home	60.3	32.4	4.4	1.5	1.5
At school	39.4	57.6	1.5	0.0	1.5

(percentages of approximately 67 reporting)

Table 9
Student Experience With Computer and Technology Prior to Participating in Generation Y

How much experience have you had with the following:	None	Just a little	Some	A lot
Use word processing software	13.2	29.4	20.6	36.8
Search the Internet	0.0	2.9	10.3	86.8
Send and receive email	8.8	7.4	13.2	70.6
Use PowerPoint or other presentation software	25.0	13.2	17.6	44.1
Troubleshoot basic computer problems	33.8	33.8	20.6	11.8
Use a scanner to digitize a picture	47.1	19.1	13.2	20.6
Use a digital camera	33.8	22.1	13.2	30.9
Create a web page or web site	63.2	8.8	13.2	14.7
Touch-typing at least 15 words/minute	13.4	22.4	19.4	44.8

(percentages of approximately 68 reporting)

Table 10
Frequency of Computer Use in Classes

In the classes you took last semester/quarter, how often were computers used by you or your teachers?	Computers were never used	Computers were used once	Computers were used a few times	Computers were used about once per week	Computers were used several times per week
Math	70.1	4.5	16.4	4.5	4.5
Language Arts, Reading or English	47.1	14.7	20.6	7.4	10.3
Science	66.2	8.8	19.1	1.5	4.4
Social Studies, Geography or History	42.6	16.2	22.1	8.8	10.3

(percentages of approximately 67 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 11
Practice Gained in Computing Skills by Generation Y Students

During your work this semester as a Generation Y student, how much practice and experience did you get:	None, I didn't do this at all	Just a little; 2 hours or less	Some; 2 to 10 hours	Quite a bit; 10 to 20 hours total	A lot; more than 20 hours total
Using a keyboard to touch-type at least 15 words/min	25.0	6.3	18.8	12.5	37.5
Using word processing software	13.3	26.7	6.7	0.0	53.3
Searching the Internet	6.7	13.3	6.7	13.3	60.0
Sending and receiving e-mail	6.3	12.5	31.3	18.8	31.3
Using PowerPoint or other presentation software	6.3	6.3	18.8	12.5	56.3
Troubleshooting basic computer problems	20.0	40.0	20.0	6.7	13.3
Using a scanner to digitize a picture	81.3	6.3	6.3	0.0	6.3
Using a digital camera	75.0	6.3	12.5	0.0	6.3
Creating a Web page or Web site	43.8	12.5	25.0	6.3	12.5

(percentages of approximately 16 reporting)

Table 12
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	26.7	13.3
GenY student helped other students search the Web for information on a class topic	60.0	0.0
GenY student developed an educational presentation using PowerPoint, HyperStudio, or other software	93.3	46.7
GenY student taught technology skills to a teacher	66.7	6.7
GenY student taught technology skills to other students	60.0	20.0
Other	13.3	13.3

(percentages of approximately 15 reporting)

Table 13
Delivery of Collaborative Projects

	Only Me	Only my Partner Teacher	Both of Us Together
When the lesson was delivered to your partner-teacher's class, who taught the class that day?	8.3	41.7	50.0

(percentages of approximately 12 reporting)

Table 14
Student Self-Assessments of Their Collaborative Projects

Mark the answer that best describes your experience in Generation Y:	Strongly Agree	Agree	Disagree	Strongly disagree	Not sure, N/A
I completed my project.	75.0	25.0	0.0	0.0	0.0
I am proud of my project.	62.5	37.5	0.0	0.0	0.0
As a result of my project, other students learned about technology.	43.8	25.0	0.0	0.0	31.3
As a result of my project, other students learned about a subject (e.g. history, math, English, etc.)	50.0	25.0	6.3	0.0	18.8
The feedback about my project proposal I got online was helpful.	6.3	18.8	25.0	18.8	31.3
My partner-teacher's expectations of me were clear and realistic.	56.3	37.5	0.0	0.0	6.3
My partner-teacher was able to meet with me regularly.	18.8	50.0	18.8	12.5	0.0
My partner-teacher and I worked together well as a team.	50.0	31.3	6.3	0.0	12.5
Overall, Generation Y was a good experience.	81.3	12.5	0.0	6.3	0.0

(percentages of approximately 16 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 15
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 Frequently	Same Frequency	Less 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 16
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 comfortable	Same level of comfort	Less 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 17
Time Spent by Partner Teachers on Collaborative Projects

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

(percentages of approximately 0 reporting)

Table 18
Partner Teacher Evaluations of the Generation Y Experience

Please indicate your level of agreement with each of the following:	Strongly Agree	Agree	Disagree	Strongly 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 19
Partner Teacher Attitudes Toward Educational Computing

Please rate your opinions regarding the use of technology in education:	Strongly Agree	Agree	Disagree	Strongly Disagree	Due to my experience with Generation Y, I:		
					Agree more than before	Agree less than 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 20
Archived Collaborative Projects

School	Partner-Teacher	Project Name
Dublin Elementary School	Janice Cargo	My Technologically Savy Dog
Frederickson Elementary Sc	Candi Zabor	Lesson on PowerPoint
Frederickson Elementary Sc	Carla Huntzinger	Wild And Zoo Animals
Frederickson Elementary Sc	Claire Mognaga	Origami
Frederickson Elementary Sc	Denise Nathanson	Dublin History
Frederickson Elementary Sc	Denise Nathanson	Ohlone Indians
Frederickson Elementary Sc	Elizabeth Radding	Easy Math
Frederickson Elementary Sc	Felicia Suminski	Matter
Frederickson Elementary Sc	Jamie Perez	Solving and Calender Help
Frederickson Elementary Sc	Jan Cohen	School News with iMovie2
Frederickson Elementary Sc	Lori Brix	ABC'S
Frederickson Elementary Sc	Lynette Butsuda	The Solar System
Frederickson Elementary Sc	Sue Meierding	California's Capitol
Frederickson Elementary Sc	Teri Kolon	Sea Life Compared to Kids Like You
Murray Elementary School		
Nielson Elementary School		Open House
Nielson Elementary School	Carolyn Ventolier	Rainforest Animals
Nielson Elementary School	Curtis Haar	Native Americans
Nielson Elementary School	Jennifer Jensen	Optical Illusions
Nielson Elementary School	Logan/Mitchell	Accelerated Reader
Nielson Elementary School	Marian Landoline	Cars
Nielson Elementary School	Mrs. Taugher, Mrs. Alttear	Dinosaur Presentation
Nielson Elementary School	Saundra Bauer	Bats - A PowerPoint Presentation
Nielson Elementary School	Troy Franklin	Aggressive Sea Animals
Wells Middle School		Ms. Mcguire's Open House - A PowerPoint Presentation
Wells Middle School		PowerPoint Presentation of Famous French Monuments
Wells Middle School	Elaine Keysor	Greek/Roman Gods - An Interactive Slide Presentation
Wells Middle School	Eric Tarquinio	Medieval Times
Wells Middle School	Eric Tarquinio	The Growth of Islam - a PowerPoint Presentation
Wells Middle School	Erik Bertelson	Music
Wells Middle School	Hattie Lawrence	The Four Parts of a Plot - A PowerPoint Presentation
Wells Middle School	Jeanine Wulfenstein	Science Cells
Wells Middle School	Melissa Silva	Math : Chapter 4
Wells Middle School	Mrs. Messick	Mrs. Messick's Home Page
Wells Middle School	Owen Jackson	Introdution to Mr. Jackson's PowerPoint Presentation for 6th Graders
Wells Middle School	Susan Cofer	Ancient China: A Web Site
Wells Middle School	Yvonne Messick	PowerPoint Presentation on The Louvre