

Tech Wizards

Abstract

Tech Wizards is a bilingual, family-supported, after school program capitalizing on youth interest in technology as a way to engage low-income Latino youth in learning basic life and workforce skills and aspiring to post-secondary education, productive jobs and careers, and community engagement. High-tech professionals specializing in emerging technologies connect with youth in a group mentoring setting. Youth are in cohorts of 10-12, with 3-5 mentors per group. The curriculum has three skill levels delivered over 3 years. Youth develop skills in website development, video and podcast production, GIS/GPS technologies, Lego robotics, and newer technologies through real-world situations. Youth also volunteer 15 hours annually in technology-related service learning benefiting the larger community. Home visits and other culturally appropriate methods are key elements in the program design. Major program collaborators include Extension 4-H, local schools, a local Latino community center, and Intel Corporation. In the program's 8 years of delivery, about 95% of participating youth have completed the program, 95% have demonstrated mastery of all skill level competencies, 85% have annually completed 15 hours of service learning, 95% have graduated, and 70% have pursued post-secondary education.

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Program of Distinction Category

Leadership, Citizenship and Life Skills

- Diversity and Inclusive Environment
- Workforce Preparation
- Leadership

Science, Engineering and Technology Literacy

- Science Engineering and Technology

Youth in Governance

- Youth and Adult Partnerships
- Community Engagement

Sources of funding that support this program

Tech Wizards originated with major funding support from a CYFAR (Children, Youth, and Families at Risk) State-Strengthening grant awarded to the Department of 4-H Youth Development at Oregon State University for the purpose of engaging Latinos in youth development programming. Funding in subsequent years has been provided through a combination of local, state, and national grants and donations, including a 2-year CTC (Community Technology Center) grant from the U.S. Department of Education. Intel Corporation has provided significant funding since the beginning of the program, as well as donations of technological equipment. United Way and County Title 3 forestry education dollars support instructor salaries. The Washington County Leaders Association has provided the salary for the program coordinator. Additionally, ESRI, the City of Hillsboro, and the Washington County Commission provide instructors and funding for all GIS projects.

Program Content

Knowledge and Research Base

In recent years, many U.S. communities have experienced a dramatic increase in the number of Latinos in the local population. According to the 2000 U.S. Census, the Hispanic population of the country increased more than 50% over the previous decade, with immigration and high birth rates primary factors. This trend has continued into the current decade, with the U.S. Census office reporting in 2005 that Latino population growth accounted for nearly one-half of the nation's population increase in 2004-2005 alone. While most immigrants in previous decades characteristically clustered in the same geographic areas, recent immigrants have been drawn to nontraditional urban and rural "receiving communities" that tend to have little experience or infrastructure for responding to the economic, language, and cultural challenges of the new arrivals. This situation has often led to serious impacts on existing community resources including education, health care, and other human services, as well as complications for immigrants as they navigate a new culture (National Conference of State Legislatures, 2007).

In Oregon, for example, the rapidly increasing Latino population tends to lag significantly behind the general population in terms of social and economic well being. Where children and youth are concerned, about 30% of Latino children in Oregon live in poverty (Annie E. Casey Foundation, 2003), consistent with national

figures showing that 28% of Latino children live in poor families, mostly headed by foreign-born parents (Fass & Cauthen, 2006). Schools with new immigrant populations have been affected by an ever-growing number of Latino students who have sporadic educational backgrounds, need assistance in learning English language skills, and drop out of high school at a rate of 9 to 10% (Railsback, 2004), about double the rate of all Oregon students combined (Oregon Department of Education, 2007). Parents of these students are often from environments where educational opportunities were severely limited, a circumstance that can lead to differences in life experiences and perspectives that affect relationships with schools in their new communities (Comer, 1998; Moles, 1993). At the same time, most foreign-born parents have no prior experience with youth development organizations and lack an understanding of the educational and other benefits such organizations can offer in helping families prepare their children for a successful future (National Collaboration for Youth, 2007).

By definition, youth development provides opportunities for all young people to develop a sense of competence, usefulness, belonging, and empowerment (National Collaboration for Youth, 2007). Every year large numbers of youth across the U.S. participate in and benefit from community-based activities and programs that support positive youth development. However, it is apparent from enrollment figures and anecdotal evidence that some groups of youth—including Latino youth in particular—are less likely to be involved in these opportunities (Perkins et al., 2007). When this pattern was acknowledged in an analysis of the Oregon 4-H enrollment data in the late 1990s, staff responded by undertaking efforts to identify factors that limited 4-H in its access to Latino communities and the supports needed to address those factors. The findings led to the development of the Oregon 4-H Latino Outreach initiative.

The Outreach initiative is focused on increasing the ability of Oregon 4-H to connect with and involve Latino communities in designing, implementing, and evaluating educational programs for Latino youth. The state level of the initiative provides leadership, training, and technical assistance and serves as a central point of contact for all county 4-H staff engaged in outreach. Local staff work in partnership with Latino communities to design and implement culturally appropriate programs, form community coalitions to support the programs, and develop a base of Latino adult volunteers. Underpinning the design of the local programs are key findings generated by the research on successful programming for Latino youth. These findings indicate that successful programs . . .

- Respect and reinforce the cultural identity of youth by incorporating activities that broaden cultural awareness and develop cultural pride (Koss-Chionio & Vargas, 1999).
- Reflect the context of youth's lives, the interactions they face daily, and an environment that "fits" who they are (Koss-Chionio & Vargas, 1999).
- Set high expectations for youth and help them achieve expected outcomes (Rumbaut & Portes, 2001).

- Reinforce the existing social capital of youth, as evidenced in their families and ethnic communities, and expand it by strengthening youth ties to networks and resources in the greater community (Stein, 2002).
- Involve youth in active learning, with opportunities to make real contributions to their communities (Pitman, 2002).
- Provide an opportunity for youth to learn in an affinity group based on culture, but at the same time take steps to participate in multicultural contexts (Cortes, 1999).
- Involve parents to adequately support youth learning as well as the serious consideration of education and careers (Tomas Rivera Policy Institute, 2002; Vasquez, 1998).

As Outreach efforts have become more fully implemented, project staff have reported their own experiences and observations. Examples include the following peer-reviewed materials: (a) a northwest regional Extension publication on recruiting and supporting Latino volunteers (Hobbs, 2000); (b) a commentary in the Journal of Extension relating to Latino outreach programs and why they need to be different from traditional programs (Hobbs, 2004); (c) a feature article on the National Diversity Center website listing keys to effective Extension programs with Latino audiences (Hobbs, 2006); (d) a paper presented at a national conference of the American Evaluation Association and focusing on culturally responsive strategies for evaluating community-based educational programs for Latino youth (Sawer, 2006); and (e) a chapter on Tech Wizards appearing in The Webbook of IT Innovation in Extension (Baggott, Conroy, Mitchell, Giron, & Cañas, 2002). Oregon Outreach also has an extensive website that documents program experiences and includes useful resources (www.oregonstate.edu/extension/4h/oregonoutreach).

Implementation of the initiative began in 1997 when Oregon Outreach was awarded a 5-year CYFAR State-Strengthening grant that supported the introduction of four local demonstration sites. The initiative continues today through a CYFAR New Communities grant and a combination of other funding. Tech Wizards, the program described in the following pages, was developed in Washington County, Oregon, as one of the first Oregon Outreach demonstration sites.

Needs Assessment

In Washington County, Oregon, Latinos comprise nearly 12% of the county's population, but do not share in local economic prosperity. Most are Mexican, have recently immigrated, and tend to work in low-wage agricultural, retail, and service occupations rather than the high-tech industries that have boosted local incomes and housing prices. Report Cards for high schools in western Washington County show that Latino students have yet to meet Adequate Yearly Progress (AYP) standards for the No Child Left Behind Act as well as AYP standards in Student Achievement, Student Participation, and Graduation (Oregon Department of Education, 2005). Nearly all are taking ELL (English Language Learning) classes and about 75% are on the Free/Reduced Lunch program.

The Tech Wizards program developed out of local concerns expressed in an extensive community needs assessment coordinated in Washington County,

Oregon, by the Rockefeller Foundation Three Valleys Project (Baggott et al., 2002). Although this assessment, conducted in the late 1990s, did not specifically address youth, it revealed local concerns with emerging youth-related issues such as the rapidly growing number of Latino students in local schools and the high rate of school dropouts. About this same time, the Washington County 4-H Leaders Association, recognizing that 4-H membership was not adequately reflecting the ethnic diversity of the local population, placed a high priority on outreach efforts to increase the involvement of Latino youth. The county 4-H staff, who had participated in the Three Valleys Project, conducted a series of focus groups, individual interviews, and group conversations with Latino youth and parents, teachers and school administrators, representatives of various agencies and organizations working with Latinos, juvenile justice counselors, and Latino and other community opinion leaders. The purpose was to explore thoughts and opinions about what would be "the most desired method" (an approach suggested by Weisbord, 1992) for engaging Latino youth in youth development programming. Feedback indicated strong support for a mentoring approach, although it was acknowledged that a number of youth mentoring programs currently existed but had not been successful in attracting Latino participation.

A strategy was devised to build relationships with Latino youth to discover their specific interests and how these might be addressed using culturally appropriate methods in a mentoring environment. The 4-H staff arranged for a young adult (a Latina respected in the local Latino community) to interact with Latino youth as a school volunteer. She visited local schools several times a week over a 3-month period, informally engaging Latino youth in conversation about their interests and listening to their responses. Teachers assisted in identifying low-income Latino students considered to be at risk of dropping out of school.

The resulting information and insights were shared in dialogue with the 4-H staff throughout this process and informed the eventual development of "4-H Web Wizards" (the program's original name). Youth confirmed the choice of mentoring as a desirable delivery method and were most excited about opportunities to learn about technology, particularly Internet access and video production. School administrators were enthusiastic about the possibilities for academic improvement, stronger motivation to stay in school, and increased student access to technological equipment in a climate of diminishing school funding. 4-H staff incorporated technology-related elements of career exploration, leadership, service learning, and preparation for higher education into the curriculum design as part of the developmental experience. Intel Corporation, with the largest of its 15 U.S. locations in Washington County (Hillsboro), embraced the opportunity to provide high tech mentors from the company's Latino network and was generous in providing new technological equipment. Parents reacted to their children's excitement about technology by agreeing to support their after-school learning.

Program Goals and Objectives

The overall purpose of the Tech Wizards program is to engage Latino youth interest, participation, and achievement in high quality IT (Information Technology)

and related STEM (Science, Technology, Engineering, and Math) learning that will help prepare them for a bright future.

Program goals include the following:

- Create and deliver high quality experiential learning opportunities that enable Latino youth to develop IT/STEM competencies and life skills through involvement in real-world projects.
- Support Latino youth as they become resources to the larger community through their involvement in technology-related service learning projects.
- Encourage Latino youth to stay in school, graduate, and prepare for post-secondary education, particularly in IT/STEM areas.

Key program objectives include the following, to be accomplished annually:

- 90% of participating youth will acquire, develop, and apply basic and advanced technological competencies in real-world learning projects.
- 80% of participating youth will engage in 15 hours of technology-related community service, with the support of mentors.
- 90% of participating youth will stay in school and graduate.
- 70% of graduating youth will pursue post-secondary education in areas related to IT/STEM careers.

Target Audience

Tech Wizards targets low-income Latino youth in grades 9-12 who are at risk of dropping out of school due to academic failure or other risk factors such as economic pressures, family priorities, or lack of interest. The youth are recruited using a culturally appropriate process. Latino program staff with credibility in the community spend 2-4 weeks in the target schools, building relationships and trust with at-risk Latino youth through informal interactions as school volunteers. School counselors, administrators, and teachers take note of youth that fit the targeted profile and identify them to program staff, who informally “interview” the youth to assess their interest in the program. Program staff make home visits to parents of interested students to secure support for their children’s participation. The program setting is a small town with a population of 10,000 to 50,000.

Type of Program

Tech Wizards is a bilingual, bi-cultural after school, small-group mentoring program that capitalizes on youth interest in emerging technology as a way of involving Latino youth in learning basic life and workforce skills and aspiring to post-secondary education, productive jobs and careers, and community engagement.

Delivery Methods

Participating youth are in cohorts of 10-12, with 3-5 mentors per group, to form a supportive, interactive, bilingual learning environment. Participants enter the basic level of the program when they are in the 9th or 10th grade, then go on to the advanced levels each year thereafter, until graduation. The mentors/teachers are professionals who specialize in emerging technologies and are trained for their role by Tech Wizards staff. Each cohort group meets 2 days a week, 1-2 hours per

day, during the school year. The number of cohort groups may vary from year to year, depending on the number of schools involved and the resources available. Supplemental activities, some of which may be offered in the summer as well as the school year, include various conferences, camps, competitions, research projects, internships, and field-based experiences that involve technological learning and application. Opportunities for self-study and practice are available through the use of school and community computer labs and home computers (the program provides loaner laptops to families without a computer at home). Community engagement and leadership activities are an integral part of the program. Tech Wizards are required to annually contribute 15 hours of community service each year in real-world situations where they can apply their technological learning, enhance their sense of community responsibility, and serve as positive cultural role models in the larger community. Mentors support the Tech Wizards in these experiences; examples include assisting Latino families in learning how to access resources through computers at local libraries, teaching senior citizens computer literacy through the Cyber Seniors/Cyber Teens program, teaching children at technology day camps, and using GIS/GPS spatial technologies to help map trails at a local wildlife preserve.

Throughout the school year, bilingual, bi-cultural program staff conduct home visits as well as call parents frequently to keep them updated and to assure that family support continues. These contacts are designed to make sure that parents, particularly fathers, are fully comfortable and informed about the program and are therefore better able to support their children's participation. Staff also partner with the schools and Centro Cultural (a Latino community center), through Bienestar Familiar workshops, to reinforce with parents the importance of their children finishing high school, preparing for college and careers, and taking college prep courses. Other culturally responsive program elements include the bilingual learning environment, the bilingual program staff serving in key positions, the many Latino mentors and staff members who are also positive same-culture role models, the inter-generational aspect of tiered mentoring, an orientation to group learning and interaction rather than individual efforts and achievement, and the in-school recruiting process described earlier.

Curricula and Educational Materials

The program curriculum has 3 years of progressively complex and developmentally designed IT/STEM project work organized into three skill levels of hands-on learning supported by high-tech mentors. Integrated throughout all three levels are aspects of communication, decision-making, teamwork, leadership development, and workplace standards. In Level 1, participants acquire fundamental IT skills and gain real-world experience by working as a team to build a web site for a community organization or business. Participants are also able to build personal web sites. Level 2 focuses on media literacy, with participants producing podcasts and digital video for streaming on the program website (www.4-HTechWizards.org/), as well as learning advanced video editing techniques for complex professional grade projects. In Level 3, youth build robots and meet challenge requirements in Lego-Robotics VEX competition, learn and apply GIS/GPS spatial technologies to community mapping projects, and apply science inquiry

methods to watershed management in a service learning project. Timely curriculum revisions are made to incorporate emerging technology.

The IT/STEM curriculum content is aligned with the National Educational Technology Standards (National Technology Foundation, 2002). The curriculum is also aligned with Career-Related Learning Standards (Oregon Department of Education, 2005) that are required in Oregon schools. The CRLS are consistent with the critical workplace skills described in the SCANS Report for America 2000 (U.S. Department of Labor, 1991) and include the development of abilities related to understanding and using technology, working on teams, and applying decision making techniques.

Curriculum is available and presented in printed notebooks and through the Internet. Printed curriculum is provided bilingually in some cases. Predominantly curriculum is printed in English, but presented bilingually. This approach allows for quick response to emerging technology and immediacy in incorporating new teaching and learning resources as they become available.

Teamwork and Collaboration

The notion that communities support what they have had a part in creating has been particularly true with the Tech Wizards program. The breadth and depth of community partners have grown on a nearly exponential basis beginning with the original needs assessment. About 30 community partners are currently involved (a full listing is on the program website, www.4-HTechWizards.org/). The major collaborating partners are:

- **Washington County 4-H:** Provides the Tech Wizards project, coordinates the informal youth education component of the program, supervises the selection of youth participants and program staff, delivers training for mentors and staff working with youth, and takes the lead on reporting program results
- **Centro Cultural:** Serves as a link to Latino families as the local community and technology center for recent immigrants and other Latinos families, offers advice and feedback concerning cultural appropriateness related to youth and family programming, and provides its community computer lab
- **Hillsboro, Forest Grove, and Sunset High Schools:** Provides computer labs, after-school busing, meeting space (classrooms), teams to identify potential Tech Wizards, and access to enrollment data and transcripts
- **Intel Corporation:** Provides volunteer mentors (technology professionals) through the Intel Latino Network and Intel Community Affairs Office, is a major partner in developing program curriculum and identifying new technologies to incorporate, and also provides major support for program funding and technological equipment
- **ESRI, the City of Hillsboro, and the Washington County Commission:** Provides instructors and funding for all GIS projects

Program Evaluation

a. Methods

The original program model was developed in a phased implementation process informed by community assessments, focus groups, and youth input. As it has evolved, the program has built in opportunities for process feedback and evaluation. These include scrutiny of existing records, as well as feedback from staff, teachers, parents, and participants. Gender representation and dropout rates are documented annually using registration and attendance records. School transcripts and teacher input are examined each term to be sure that participants stay on track for graduation. Program staff make frequent home visits and write field notes that are reviewed by the program coordinator to determine if family support is being maintained for program participants. Program staff meet weekly during the school year to discuss program implementation plans, issues, and successes. The overall program is reviewed each term to be sure that various curriculum components (technology skills and application, career exploration, industry awareness, and targeted life skills) are successfully incorporated, that instructional strategies are effective, that new technology is introduced as it emerges, that stakeholders and community partners are kept informed, and that sustainability is insured.

Outcome evaluation begins with pre-assessments of participant skills conducted through introductory immersion activities when participants enter the program. As the participants advance through the program, proficiency in technology is measured using skills assessment logs, with mentors recording competencies gained by each individual. A log is available for each of the program's three skill levels. In 2006-2007, for example, 30 competencies were listed for basic foundation work involving use of the Internet, e-mail and web instruction (Skill Level 1); 45 competencies were identified for video production (Skill Level 2); and 12 competencies related to GPS/GIS spatial technologies (Skill Level 3). (The Skill Level 1 log is included in the Appendix as an example). Academic achievement is measured by examining grades recorded on student transcripts for each school term, as well as noting whether or not students are promoted with their class to the next grade level. Graduation information is documented by school officials, while pursuit of post-secondary education is recorded by program staff. Hours of service learning involvement are logged for each participant by the mentors supervising the service activities.

b. Process Evaluation

Process evaluation has provided valuable information as each year of the program has been implemented and delivered. The recruiting method has been very effective in identifying and engaging targeted youth. The ratio of males to females has averaged about 55% to 45%. The overall attrition rate has been very low since the program began (all but 5% of the participants have completed all three skill levels) and ongoing attendance of Tech Wizard sessions is about 95%. Participating families without computers at home continue to be thrilled to receive loaner computers and very little tech support has been needed. The small-group mentoring format has allowed for individual attention as well as teamwork.

Mentors and staff have been of excellent quality and very committed to their responsibilities. Community partnerships have been highly effective and have grown into strong and supportive networks. Participating youth have impressed program staff and supporters with their energy and enthusiasm and inspired with their efforts and successes. Youth have reported that they are attracted to the program and motivated to continue their participation because of the opportunities to work with cutting edge technology, the high-tech mentors, the bilingual bi-cultural learning environment, the opportunity to meet with others who share the same interests, the loaner computers, and the scheduled field trips and other travel.

c. Outcome Evaluation

Over 560 youth have completed at least 2 years of the Tech Wizards program, since it began in 1999. Through the years, pre-assessments have shown that at entry-level (Skill Level 1) nearly all of these youth were ELL students with no computers at home, no family history of technology use or access, no experience with keyboarding, and little awareness of the relevance of technology to their lives, communities, and future jobs or careers.

In terms of outcomes, the program's defined objectives for participating youth have been met or exceeded. In each year of delivery:

- About 95% of Tech Wizards demonstrated mastery of all (100%) of the technological competencies outlined for their program skill level.
- At least 85% of Tech Wizards individually volunteered 15 hours of technology-related service to the larger community during each year of their participation.
- About 95% of Tech Wizard seniors graduated from high school and received a standard (non-ELL) diploma, nearly double the graduation rate of Latino students statewide.
- About 70% of graduating Tech Wizards pursued post-high school education and careers in science, technology, engineering, or math.

Additionally, the Tech Wizards program has been locally and nationally recognized for its quality and effectiveness. In 2001, it was among the Oregon Outreach programs that were recognized with the National Association of Extension 4-H Agents (NAE4-HA) Diversity Award. In 2002 it received the top National Technology Program Award from NAE4-HA as well as a U.S. Congressional Award for Youth Service. In 2003 the program was given an Achievement and Excellence Award from the Hillsboro School Board and a Business Education Compact Achievement Award from Portland/Metro businesses. In 2004 the Hillsboro Chamber of Commerce presented the program with its Youth Achievement Award. Intel recognized the program through its international "Innovation Odyssey" distinction and ESRI has twice featured the Tech Wizards during their International and Caribbean GIS-users conference opening plenary sessions.

d. Communication to Stakeholders

Participating youth, with the support of program staff, have made presentations at eight state and national conferences, including CYFAR, NAE4-HA, ESRI, OSU Summer Conference, and N4-HYTL (National 4-H Youth Technology Leadership Conferences). Program staff have also reported to grant providers, other program supporters, and future stakeholders, often with the participation of Tech Wizards. Intel has featured Tech Wizards on its national Innovation Odyssey website as an innovative program of distinction. Locally, the program has often been featured in a variety of media—newspapers, radio, TV—both in English and Spanish. Feedback is provided monthly to the Washington County 4-H Leaders Association Board of Directors. Staff, volunteers, and participating youth meet three times a year for whole family celebrations to explain and showcase work the youth have been doing in the program. Additionally, online web-based information and materials are included on both the 4-H Tech Wizard website (www.4-HTechWizards.org) and the statewide Oregon 4-H Outreach website (oregon.4h.oregonstate.edu/oregonoutreach). The program has also been featured three times in the Oregon State University President's annual report and prominently included in Intel's annual report.

Evidence of Sustainability

The Tech Wizards program has been successfully conducted for eight years with continued support from community partners, area schools, volunteer mentors, and Latino families. All local partnering organizations contribute significant in-kind resources, institutionalize as many aspects as possible, and utilize grants to support the balance of the resource needs. The Washington County 4-H Leaders Association Board of Directors, guided by a strategic and comprehensive fund development plan, is in its third year of conducting fundraising efforts to support Tech Wizards, which is its top strategic priority. Board members identify and arrange presentations to two local businesses quarterly to seek financial and volunteer support. In 2007 Intel made a strategic decision to recognize its partnership with Tech Wizards more formally and extend its financial support for sustaining operations by becoming its presenting sponsor. Centro Cultural has a 30-year history of fund development and is embarking on an ambitious development program to generate funding from individuals and businesses to expand and sustain its support to Latino families, including those involved in Tech Wizards.

Replicability

Most recently, the Oregon 4-H State Program Leader has secured and dedicated funds to replicate the Tech Wizards model throughout Oregon beginning with four identified sites over the next two years. Overall, the program model offers several avenues for replication. Not only can it be replicated as described here for targeting Latino youth, but the core design and content can be used with any audience. These include components relating to needs assessment, technical skills acquisition, small group mentoring, real-world projects, and service learning. Additionally, a number of Tech Wizard design elements can be incorporated into other (non-technology) programs for underrepresented audiences—examples include culturally appropriate considerations, recruitment and retention methodologies, and whole family involvement techniques.

Rationale and Importance of Program

As Latino populations continue to grow throughout the country, so does the potential for significant Latino youth contributions to schools, communities, and other places of positive leadership and involvement. Tech Wizards addresses this underrepresented audience by providing access to youth development opportunities that engage and retain the interest of Latino students at risk of school dropout. Participating youth acquire IT/STEM competencies in real-world projects and enhance their academic and life skills in a culturally responsive environment where they are supported by their families. The high graduation rate of Tech Wizards and their pursuance of post-secondary education bodes well for their futures as productive, contributing, and participating adults.

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Appendix

Tech Wizards, 2007

Skills Acquisition Log for Individual Participants, Skill Level 1, Web Development

The 4-H Tech Wizard Project – Level 1, Web Development, consists of five learning areas:

1. Computer technology
2. Internet technology
3. Web site development
4. Individual development and community service learning
5. Industry Awareness/Small business management

For each skill level, there is a variety of activities/skills to be acquired in each learning area. Mentors or Teacher/advisors rate each participant's skill acquisition in the five learning areas on a scale of 1-5 (1=minimal, 5=mastery).

Skill Level 1				
Learning areas	Skill/Activity	Date Accomplished	Approved By:	Scale: 1-5
Computer technology	Explain CPU Label parts of the computer and their use. What is OS Explain terminology: Hardware/software, Base or Motherboard Microprocessor, processor speed and power, memory, peripherals Set up your personal file			
Internet Technology	Explain "the Internet", who owns it, how to get connected Explain "appropriate use" and give examples Terminology/definitions: server, URL, http, tcp/ip ftp, search engine, browser Locate information about Internet safety on the web for teens, children and parents – write an email of what you would say to each audience about Internet safety and send to Lisa: lisa.conroy@oregonstate.edu Find 4-H Web sites and share the URLs with the club			

Skill Level 1				
Learning areas	Skill/Activity	Date Accomplished	Approved By:	Scale: 1-5
Web Site development	Explain "the Internet" Start MS Front page Create your own web page with text and hyperlinks Insert files and links Reposition objects Design a photo gallery Create a web structure Create a bilingual web site *extra credit for more languages Add borders and navigation bars Apply a theme Customize a theme Organize files and folders Check spelling across all pages in the web site Evaluate Web Sites using WW/Intel Criteria			

Skill Level 1				
Learning areas	Skills/Activity	Date Accomplished	Approved By:	Scale: 1-5
Individual development/ community service	<p>15 hours of community service</p> <p>Set a goal with your Mentor for yourself in Skill level 1 and email to Lisa: Lisa.conroy@oregonstate.edu</p> <p>Give a presentation during Web Wizards using combined technologies (LCD, Internet, PP, etc)</p> <p>Present at Annual recognition event using technology (list topic)</p> <p>Use Internet Technology in accomplishing a homework assignment for school (list class and topic)</p> <p>Use Internet for research giving topic, method, results/findings</p> <p>Explain how technology can be used in the service of leadership (give situation and technology used)</p> <p>Set goal for post high school education/training with Mentor and email to Lisa: lisa.conroy@oregonstate.edu</p> <p>Perfect attendance in school</p> <p>Perfect attendance at Web Wizards</p> <p>All web wizard assignments completed on time</p>			
Industry Awareness/Small Business Management	<p>Attend Intel field trip</p> <p>Project management: topics will deal with goal statement, plan, timeline, budget, deliverables, evaluation</p>			