



# CONNECTIONS

## CONNECTING TO CAMPUS, COMMUNITY & CAREERS



Parents and volunteers are vital to Connections Programs

Connections is a collection of short-term programs intended to help connect youth and families to the WSU Vancouver campus, their local communities and explore potential careers and areas of work. Connections includes focused efforts to reach underserved youth and families.

The *Las Conecciones Summer project* was offered in partnership with Sarah J. Anderson Elementary School and the WSU Vancouver Research Unit. This program targeted limited income Hispanic families and was conducted one day per week for eight weeks. The focus was Introduction to Science and featured indoor/outdoor “hands on” experiences.

Connections also conducted a similar eight-week program for limited income families in partnership with A.C.E. (Affordable Communities for Everyone). The focus was on helping middle/high school students improve their skills in basic math, reading and writing. An expanded effort for resident teens will be considered for 2008.

Since it’s beginning, Connections has focused on encouraging youth and families to explore Science, Robotics, Engineering and Technology. Additional disciplines and subjects will be considered for future development.

Connections is the only Center for Youth Workforce Preparation program that includes elementary school age children at this time.

Teens are encouraged to also participate in the 4-H Teen-Works, Do the Math and PaCE Academy programs.



4-H Science Adventures

### FAST FACTS 2006-2007

- Two hundred sixty-nine youth have participated in five separate Connections Programs.
- Programs included:  
4-H Robotics & Science Pilot Project; Science Illusions;  
4-H Science Adventures;  
Las Conecciones; ACE 4-H Connections.
- Programs have been held at WSU Vancouver, WSU Vancouver Research Unit, Affordable Communities For All and five WSU County Extension offices.
- Seventeen professional staff and 49 volunteers provided over 340 hours of direct instruction to youth.

# CONNECTIONS IMPACTS & EVALUATION

## 4-H ROBOTICS & SCIENCE PILOT PROJECT

**Description:** 24 adult volunteers taught basic robotics using free-loan education kits. The program was pilot tested in 2 phases over 18 months in multiple counties using the traditional 4-H club model. CYWP provided free-loan robotics kits and training for volunteer instructors. Impacts below reflect phase 1; data currently being collected for phase 2.

**Phase 1 Impacts:** Clark, Jefferson, King, Pierce and Thurston counties participated. Twenty-four adult volunteers conducted 93 educational sessions totaling approximately 275 hours, for 126 youth. Volunteers rated the first phase 4.5 on a scale of 1-5, 5 being the highest rating. **Strong points noted were:** *“it was engaging and challenging; the hands-on approach appeals to this age group; the project taught them teamwork, spatial skills and measuring; appeals to both boys and girls.”* **Areas to improve:** *“additional kits are needed to lessen the impact on families; we also badly need suitable laptops; more volunteers would allow us to build competition so students could see results of other groups.”* **Additional comments:** *“the project objectives were met; we consistently had full student attendance at meetings; students were interested and enthusiastic; students learned specific skills while having fun; we’ve received encouragement, financial and material support that has made this whole effort come to a successful conclusion; the robot kit we have on loan and the copy of Robolab software has been used constantly; your seminar with ORTOP proved priceless; without your help, I doubt what’s been achieved would have been possible.”*

## SCIENCE & ILLUSIONS

**Description:** 84 youth, children and parents attended this 2-hour program presented by a professional Illusionist at WSU Vancouver. Included were: how basic math and science concepts are used to create illusions, how he selected this career choice, and the importance of education. Following, a question-and-answer session was held with the audience.

**Evaluation:** An audience exit survey was conducted to help gauge areas of interest. Twenty-one topics were listed in the survey and were clustered as Events & Activities, Programs, Resources and Trainings. **A rating scale of 1-5 with 5 being the highest was used. The top areas of interest were:**

Robotics Pilot Curriculum	4.4	Free-Loan Laptop Computers	4.4
Crime Scene Investigation Kits	4.3	Lego Robotics Kits	4.1
Free-Loan VHS Camcorders	4.1	Exploring Science Kits	4.0
Introduction to Computers Curriculum	3.5	Teen Video Festival	3.3
“My Life as a Professional Bicycle Racer”	3.2	WSU Vancouver Teen Conference	3.2

## 4-H SCIENCE ADVENTURES

**Description:** 50 youth, 6 parent volunteers and 3 Teen-Works student helpers participated in this 4-hour program at WSU Vancouver. The program was presented by 4-H State Staff using hands-on experiments to teach basic concepts about energy, heat and light. **Parents expressed strong support for additional short-term STEM programs.** Youth participation profile: 68% male; 32% female; 70% White; 4% Black; 8% Asian; 6% Hispanic; 12% Mixed; 30% fourth grade; 10% fifth grade; 22% sixth grade; 18% seventh grade; 18% eighth grade; 2% eleventh grade.