Young Worker Safety and Health Curriculum Development and Dissemination

2008-XH-00017

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The University of Washington Department of Environmental & Occupational Health Sciences is solely responsible for the content of and views expressed in this report and related materials unless they have been formally endorsed by the Washington State Department of Labor and Industries.

PART I

Final Report Narrative

Organization Profile	For awarded organizations, to include partners and collaborators, provide a brief description of each organization. Mission, vision, and purpose of the organizations may be valuable to include.

University of Washington Department of Environmental & Occupational Health Sciences, Continuing Education Program: UW DEOHS is the major training institution in the Pacific Northwest for occupational health and safety professionals. Housing the Region 10 NIOSH Education and Research Center, the department, along with collaborating departments in medicine and nursing, trains industrial hygienists, occupational medicine physicians, occupational health nurses, and ergonomists. The continuing education unit provides educational outreach to workers, managers, and OHS professionals through 3 specific CE programs, including the Region 10 OSHA Education Center.

Governor's Industrial Safety and Health Advisory Board (GISHAB): GISHAB is a labor-management organization representing all major sectors of Washington industry whose mission is to promote safe and healthy working environments for the people of Washington State by providing education and outreach programs. One of GISHAB's major goals is to implement workplace safety and health curriculum in all Washington State schools. GISHAB also sponsors the Washington Governor's Industrial Safety and Health Conference in conjunction with Labor & Industries

Abstract	Present a short overview of the nature and scope of the project and major findings (less than half a page)

The aims of this project were to produce new and revise existing young worker safety and health curriculum and to disseminate these products to secondary and career and technical educators and students throughout the state of Washington. A new *OSHA's 11* youth-oriented version of the OSHA 10 general industry course was produced and piloted with 27 Washington teachers, leading to 443 OSHA 10 cards being earned by students. Existing health and safety curricula for teens were updated. All new and updated materials are posted for download on a redesigned website. A statewide Young Worker Safety and Health Advisory network was established with excellent participation from education, apprenticeship, business and labor representatives. The network meets regularly to share materials and notice

of events and to generate new ideas for dissemination. GISHAB members were provided orientation to the curricular materials and the structure of secondary education. Several board members performed outreach to high schools and skills centers around the state, but the number of contacts fell below expectations. Contacts were made with 50 schools through the *OSHA's 11* course and project staff presence at career and technical teacher conferences, but the proactive dissemination efforts through statewide GISHAB members numbered only about six.

Purpose of Project	Describe what the project was intended to accomplish.

1. Update the existing Health and Safety Awareness for Working Teens (HSAWT) general employment safety curriculum originally developed by the UW DEOHS, including new assessment tools for each unit, multi-media slides to accompany each of the lesson activities, and more information about worker rights.
2. Complete and pilot-test the *OSHA's 11* basic safety and health course for youth with a group of 20 Washington vocational-technical teachers from across the state. This will include both formative (developmental) evaluation of the curriculum to guide the final graphic design process for the OSHA 11 curriculum document as well as providing an OSHA 511/501 training class for participating teachers so they can award OSHA 10-hour cards to their students who complete the *OSHA's 11* training.
3. Complete the layout and graphic design of the new UW DEOHS teen worker ergonomics curriculum module so this module can be included in the dissemination campaign and be made available on the website.
4. Establish a dissemination network reaching all regions of the state. Key organizational members of this network will be the Governor's Industrial Safety and Health Advisory Board, WA Association for Career and Technical Education, WA Office of the Superintendent of Public Instruction (OSPI), WA Schools Risk Management Pool, WA State Parent Teacher Association (PTA), and other organizations with an interest in young worker safety.
    a. Specific contacts and curriculum introduction with 50 secondary schools by the end of the 2008-09 school year. Enhance existing ties with trade apprenticeship programs, the Washington Apprenticeship and Training Council, and the Washington State Skills Centers
    b. Lay the groundwork for an ongoing infrastructure for promotion, dissemination, and updating of curricula. This will be integrated with Board activities, the annual Governor's Safety Conference, and L&I's young worker programs.

Statement of the Results	Provide a clear statement of the results of the project include major findings and outcomes

1. Curriculum development and revision: HSAWT curriculum was revised and enhanced with assessment tools and slide sets. *OSHA's 11* curriculum was completed and modules and slides have been published. Ergonomics module was incorporated into *OSHA's 11*.
2. Website was redesigned and updated. All curriculum materials including OSHA's 11 have been published on website, and all are downloadable. Website collects basic information to capture number of downloads and location of people accessing curriculum materials. The URL is http://www.uwworksafe.com/
3. 27 Washington career and technical teachers received OSHA 511 and 501 training using pilot version of OSHA's 11 as teaching material. In the following school year 12 teachers taught 21 classes and issued 443 OSHA 10 cards to their students.
4. Young Worker Safety Advisory Network was established with 20 members from unions, industries and associations, PTA, community colleges, and government agencies including Apprenticeship, Superintendent of Public Instruction, DOSH, Workforce Training, and OSHA.
5. Three GISHAB members made outreach visits with six high schools, career and technical schools, and skills centers. Contacts with an additional 17 career and technical teachers were made at the August 2009 Career and Technical Education Summer Conference in Yakima. Project staff met skills center instructors at career days in Seattle and Tacoma and visited two additional skills centers.

Evidence of the results	Demonstrate evidence of how well the results met or fulfilled the intended objectives of the project.

1. The project was highly successful in meeting the curriculum development goals. New and enhanced curriculum products are now widely available through www.uwworksafe.com/. The OSHA's 11 curriculum went through many iterations and revisions based on input from experts in instructional design, school safety, safety and health training, and secondary teachers themselves. The final product looks good and has high usability demonstrated in pilot classes.
2. Progress toward the dissemination goals was mixed, particularly with regard to contacts with secondary schools and introduction of the curricula into high school classes. GISHAB members made far fewer contacts than anticipated so that opportunities for introducing the curriculum to teachers and schools were limited. The project was more successful with career and technical teachers and skills centers. Full use of the *OSHA's 11* was limited by changes in OSHA Training Institute policies which now make it very

difficult for school teachers to become authorized OSHA Outreach Instructors. The 5-year safety experience requirement and the time and expense of taking the OSHA 511 and 501 courses mean that few career and technical or academic high school teachers will become authorized. While the *OSHA's 11* has value in itself, without the ability to award OSHA 10-hour cards to students, the appeal of the curriculum is reduced.

However, the formation and development of the Young Worker Safety Advisory Network is strong evidence of wide interest in this issue and the commitment of numerous stakeholders to assist with broader dissemination of curriculum. Many network members saw this as a necessary new forum to share activities and materials and develop further strategies for reaching greater numbers of youth and educators.

Project's promotion of prevention	Explain how the results or outcomes of this project promote the prevention of workplace injuries, illnesses, and fatalities?
There is no direct way to measure the prevention impact of the curriculum published or the classes taught. However, a cadre of 27 career and technical teachers received intensive training in DOSH regulations and hazard prevention. The 443 students who took the OSHA 10 course now have a baseline knowledge of safety and health to carry into their current work and future careers. The topical curriculum material and the problem-solving orientation of the modules are designed to enhance preventive behaviors in many types of work. The process by which the modules was developed, particularly the pilot training with career and technical teachers, brought many realistic hazard situations to light and allowed exercises and case studies to be designed based on these realistic situations. This also should add to the prevention potential of these materials.	

Relevant processes	Specify all relevant processes, impact or other evaluation information which would be useful to others seeking to replicate, implement, or build on previous work.
Formative evaluation of OSHA's 11 curriculum included written and verbal evaluation of individual modules and overall curriculum by participants in pilot training session. This feedback was incorporated into final curriculum, but additional evaluation comments would be relevant to further development, e.g. creation of construction version of curriculum.	

Lessons Learned	Provide information on lessons learned through the implementation of your project. Include both positive

	and negative lessons. This may be helpful to other organizations interested in implementing a similar project. *Lessons outlined should not relate to SHIP grant processes.*
1. Design realistic time lines for curriculum development to include sufficient time for multiple iterations, piloting, feedback, and graphic design. Design your pilot curriculum so that it's clear and useable by the target audience but not so complete as to create barriers to revision. 2. If you design in volunteer efforts as part of the project development and delivery, be very specific about what those volunteer tasks entail, how the volunteers will be recruited, and what the back-up plan will be if the volunteers do not come through. 3. Many Advisory Network members advocated that reaching school-age youth with safety and health training needed to be a joint effort of industry and schools. The initial design of this project focused almost entirely on outreach to schools and teachers to insert curriculum, even knowing the historical challenges to penetrating high school curriculum. Subsequent efforts in this area should work closely with industry and labor. The ProStart culinary safety and health curriculum project, with which our project staff collaborated, is a promising model is this respect. 4. The Advisory Network is an extremely valuable outcome of this project. If anything we should have started the process to establish it even earlier. The project timeline was somewhat dictated by the school year, which determined which activities had to be prioritized while school was in session or while teachers were on summer break.	

Measures to judge success	If relevant, state what measures or procedures were taken to judge whether/how well the objectives were met and whether the project or some other qualified outside specialist conducted an evaluation.
The project did not use an outside evaluator. The *OSHA's 11* curriculum development team included outside experts in young worker pedagogy and curriculum, and these two consultants played some of that role, but it was not a formal outside evaluation process. We are able to track through our OSHA Education Center database the OSHA 10 cards issued by teachers trained under this project and will continue to do so. The website requires visitors wishing to download curriculum to provide a limited amount of demographic information so that we can track hits, downloads, and where the visitors are from.	

Uses	How might the products of your project be used within the target industry at the end of your project? Is there potential for the products of the project to be used in other industries or with different target audiences?
The products have wide applicability to young workers and trainees in a variety of industries. The modules of the *OSHA's 11* can be used in any OSHA 10-hour general industry course for workers of any age and will provide a much more interactive pedagogy than is generally found in such courses. There is significant demand for a construction version of the *OSHA's 11* curriculum. As it stands now a number of the modules could be used for the construction industry, but new modules would need to be developed for the focus four hazards and other construction-specific hazards.	

Product Dissemination	Outline of how the products of the project have been shared or made transferrable.
The website is fully operational and is publicized through a new brochure that advertises all the young worker safety products (http://www.uwworksafe.com/). All materials are downloadable. We have followed up with the teachers from the August 2008 course to update their materials. The project has exhibited materials at Career and Technical Education conference, Construction Safety Day, numerous construction and other career days around the state, and the Governor's Safety and Health conference. The material has been piloted in other states beyond Washington, including Oregon and Alaska, using non-SHIP funding sources. There is great interest in this product among similar programs around the U.S.	

Feedback	Provide feedback from relevant professionals, stakeholder groups, participants, and/or independent evaluator on the project.
Evaluation summary from career and technical teacher pilot workshop is attached.	

PART II

SAFETY AND HEALTH INVESTMENT PROJECTS
SHIP Final Expenditure Report
Budget Summary

Project Title:	Young Worker Safety and Health Curriculum Development and Dissemination		
Project # :	**2008-XH-00017**	**Report Date:**	January 19, 2010
Contact Person:	**Steven Hecker**	**Contact #:**	206-543-9540
Start Date:	**June 30, 2008**	**Project Completion Date:**	December 31, 2009

1.	**Total budget for the project**		**$ 164,451**
2.	**Total SHIP Grant Award**		**$ 164,451**
3.	**Total of SHIP Funds Used**		**$ 164,451**
4.	**Budget Modifications (if applicable)**		**$_____**
5.	**Total In-kind contributions**		**$_____**
6.	**Total Expenditures (Lines 3 + 4 + 5)**		**$ 164,451**

Instructions:

- Complete the Supplemental Schedule (Budget) form first (on the next page).
- The final report must include all expenditures from date of completion of interim report through termination date of grant
- Indicate period covered by report by specifying the inclusive dates
- Report and itemize all expenditures during specified reporting period per the attached supplemental schedules
- Forms must be signed by authorized persons (see last page)
- Forward one copy of the report to (**Name), SHIP Project Manager, PO Box 44612, Olympia, WA 98504-4612**.

SAFETY AND HEALTH INVESTMENT PROJECTS
SHIP Final Expenditure Report
Supplemental Schedules (Budget)

Project Title:	Young Worker Safety and Health Curriculum Development and Dissemination		
Project # :	**2008-XH-00017**	**Report Date:**	
Contact Person:	**Steven Hecker**	**Contact #:**	206-543-9540
Total Award $:	**$164,451**		

ITEMIZED BUDGET -- How were SHIP award funds used to achieve the purpose or your project?

	Budgeted for Project	Amount Paid Out	Difference
A. PERSONNEL	$53,988	$84,128	($30,140)

Explanation for Difference and other relevant information:
See Modification to reduce subcontract amount for GISHAB and the Modification to move the Graphic Artist subcontract to the Personnel category of the UW budget. The first six months were largely spent in curriculum development and pilot delivery therefore GISHAB did not have the predicted workload. This move was to cover additional FTE for Steven Hecker who has spent well over the 10 percent budgeted. The Graphic Artist subcontract work ended up being done by a UW Staff member so that amount was moved into the Personnel category.

	Budgeted for Project	Amount Paid Out	Difference
B. SUBCONTRACTOR	$61,818	$19,185	$42,633

Explanation for Difference and other relevant information:
Same as explanation in A. Personnel.

	Budgeted for Project	Amount Paid Out	Difference
C. TRAVEL	$6,045	$3,403	$2,642

Explanation for Difference and other relevant information:
Not as much UW travel as initially predicted.

	Budgeted for Project	Amount Paid Out	Difference
D. SUPPLIES	$3,725	$2,895	$830

Explanation for Difference and other relevant information:
Supplies came in less expensive than initially predicted.

	Budgeted for Project	Amount Paid Out	Difference
E. PUBLICATIONS	$2,675	$14,081	($11,406)

Explanation for Difference and other relevant information:
There were more attendees to the pilot meeting than initially predicted, which required additional printing costs for materials. This category also covered a few different UW object coding or categories. The UW has different coding for Printing and brochure production.

	Budgeted for Project	Amount Paid Out	Difference
F. OTHER 1. Stipends for OSHA 11 pilot attendees 2. Travel expenses for OSHA 11 pilot attendees	 $10,000 $11,250	 $13,500 $12,309	 ($3,500) ($1,059)

Explanation for Difference and other relevant information:
There were more attendees to the pilot meeting than initially predicted which required additional stipend payments and travel reimbursements.

	Budgeted for Project	Amount Paid Out	Difference
TOTAL DIRECT COSTS	$149,501	$149,501	$0

	Budgeted for Project	Amount Paid Out	Difference
INDIRECT COSTS	$14,950	$14,950	$0

	Budgeted for Project	Amount Paid Out	Difference
TOTAL SHIP BUDGET	$164,451	$164,451	$0

	Budgeted for Project	Amount Paid Out	Difference
F. IN-KIND 1. Mary Miller, L&I 2. Board volunteers	$0	$0	$0

Explanation for Difference:

PART III

Attachments:

Provide resources such as written material, training packages, or video/audio tapes, curriculum information, etc produced under the grant.

Also include copies of publications, papers given at conferences, etc.

This information should also be provided on a CD or DVD for inclusion in the file.

REMINDER!!: All products produced, whether by the grantee or a subcontractor to the grantee, as a result of a SHIP grant are in the public domain and can not be copyrighted, patented, claimed as trade secrets, or otherwise restricted in any way.