

Software Support for Population Health Intervention

Don Cowan/Paulo Alencar Computer Systems Group University of Waterloo

The Team



Partnership - CSG, CBRPE, WIHIR

- Dominic Covvey (WIHIR)
- Roy Cameron (CBRPE)
- Steve Manske (CBRPE)
- Shirley Fenton (WIHIR/CSG)
- Doug Mulholland (CSG)
- Anthony Robins (CSG)
- Kyle Young (CSG)
- David Chodos (grad student)

Chronic Disease



Chronic Disease

- Cancer
- Cardiovascular
- Diabetes

Causes

- Premature illness
- Premature death
- Drivers of health costs

Largely preventable by changing

- Tobacco use
- Poor eating habits
- Inactivity

Intervention for Change



Individual Change

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Measuring effectiveness?

- Random-control trials
- "Natural experiments"
 - change against time
 - change against place

Population Change

- Large group
- Institute policies and practices
- "Partcipaction"
- "Pictures on cigarettes"
- Volleyball Moncton

Measuring effectiveness



Need for an evidence-base

- measure indicators over time
- measure indicators in comparable locations

School Smoking Profile (SSP)

- Cameron, Manske
- Collect smoking data in the schools periodically
 - across Canada
 - change against time
- Currently 600 schools, 150,000 students
- Statistically valid
- Currently reports sent to school and local public health authorities





School Health Action Planning and Evaluation System

- SHAPES
 - Nutrition
 - Obesity
 - Physical activity
- Under development
- Similar to SSP
- Manske

A need to share



School Smoking Profile (SSP)

- Currently local in scope
- Has value for
 - Researchers, program leaders, policy makers
 - At all levels (federal, provincial, local)
 - Provide the evidence
 - What works and where
 - Example high risk schools ROI is good
 - Also valuable for opinion leaders, media
 - How do we share access to data and other evidence?



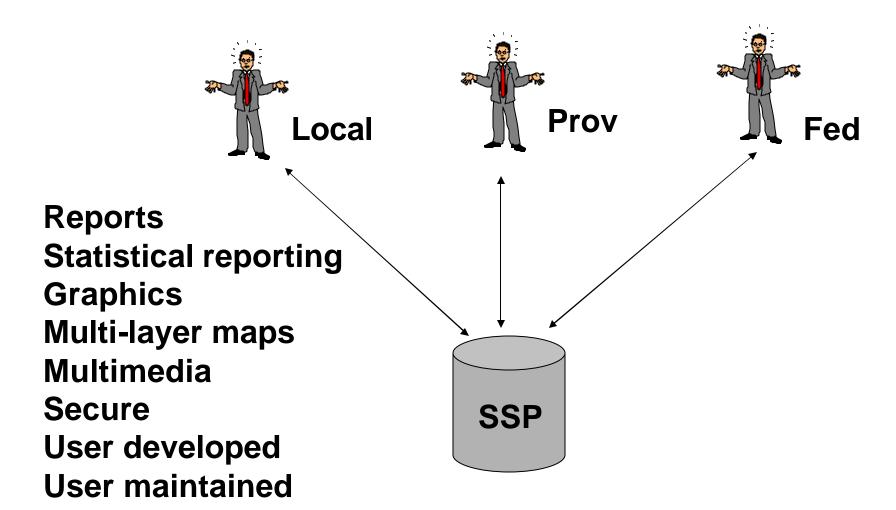


Sharing Evidence and Experience

- Need for an information technology infrastructure
 - A national IT asset to share

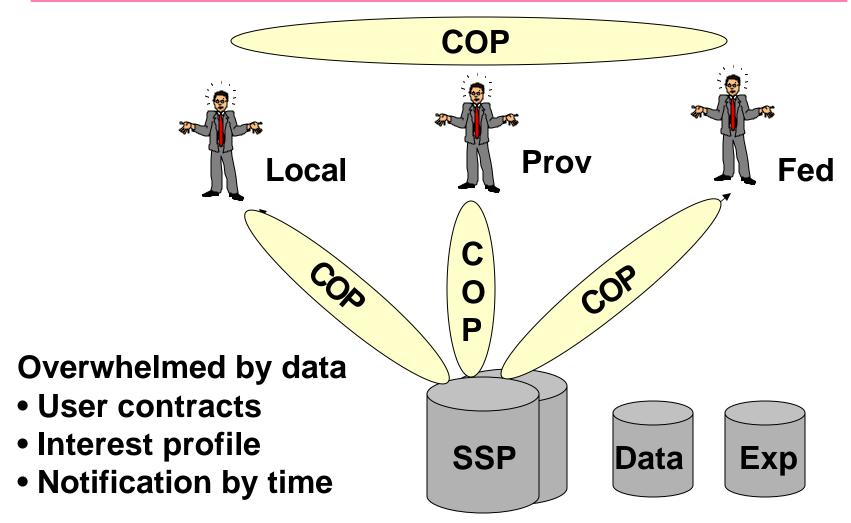
An IT asset





Data/Information overload





What defines a user contract?



Interest profile

- Need for common language
- Ontologies

Time

- Notification
- Push versus Pull
- Housekeeping agents

Our approach



- A Web-based software systems
- Our approach
- Component and Web-based
- Minimizes programming and maintenance
- Systems built primarily through completing forms
- Technology well established based on XML

The WIDE Toolkit



- Web-based database presentation/maintenance
 - Reports and multimedia
- Mapping
 - Show one or more items on a map
 - Search a map (box, circle, polygon)
 - Post to a map (update location, attach content)
- Notifications (e-mail, fax, single, broadcast)
- Agents
- Content indexing, keyword/phrase searching, error checking (spelling, broken links, etc.)
- Education tools (StudySpace online/standalone)
- "Hot" graphs and charts

Projects by Sector



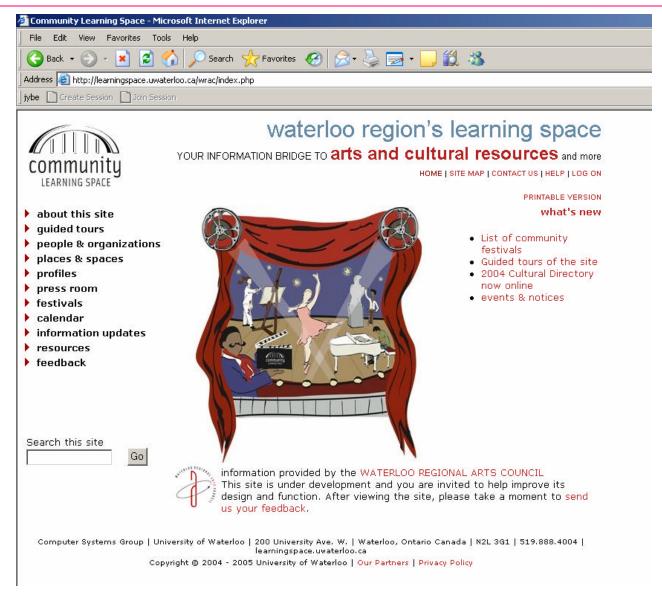
- Over 20 current & recent projects
- Community
 - Arts/Culture, Economic Development, Social Planning and Interaction, Immigration (10)
- Health
 - Overall health system management, Health care delivery, Health system operation, Health education, Public health, Reporting tools (8)
- Environment
 - Public oversight, Water source management
 Water management education (4)

Project Partners



- Community
 - City of Waterloo, CTT, Oxford County, SPCKW,
 VAC, WPL, WRL, WRAC, WWTAB
- Health
 - CBRPE, Dataglider, HPKR, MOHLTC, VON, WIHIR
- Environment
 - CEW, COMWASH (Malawi), Muskoka Lakes
 Association, STORM, UNU











waterloo region's learning space

YOUR INFORMATION BRIDGE TO arts and cultural resources and more

HOME | SITE MAP | CONTACT US | HELP | LOG ON

PRINTABLE VERSION

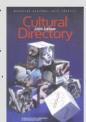
about this site

- guided tours
- people & organizations
 - about the cultural directory
 - dance
 - heritage
 - literary
 - music
 - resources
 - theatre arts
 - visual arts
 - list all
 - · search the directory
 - map search
- places & spaces
- profiles
- press room
- festivals
- calendar
- information updates
- resources
- feedback

people & organizations

Browse the Waterloo Regional Arts Council's **CULTURAL DIRECTORY** to list people and organizations involved in the arts in Waterloo Region. The lists are organized into categories that are designed to help you find a service or individual as easily and quickly as possible.

To browse a category, choose a link from the topic menu to the left. The link displays a list of people and organizations for the selected category. In the list, you can click on a name to view detail about the person or organization



Many of the individuals and organizations listed in this directory appear in more than one category. Select **list all** for a combined index.

Select **search the directory** to find a specific organization or person, or a list for a specific location or specialty.

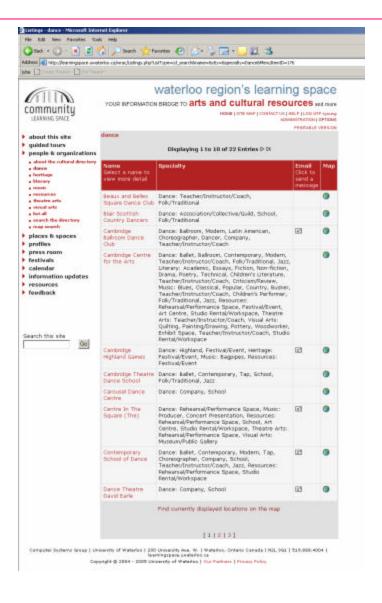
Select map search to find organizations and people in a geographic area.

Follow the instructions outlined in the guided tour of people & organizations to explore the online cultural directory.

Search this site

Go





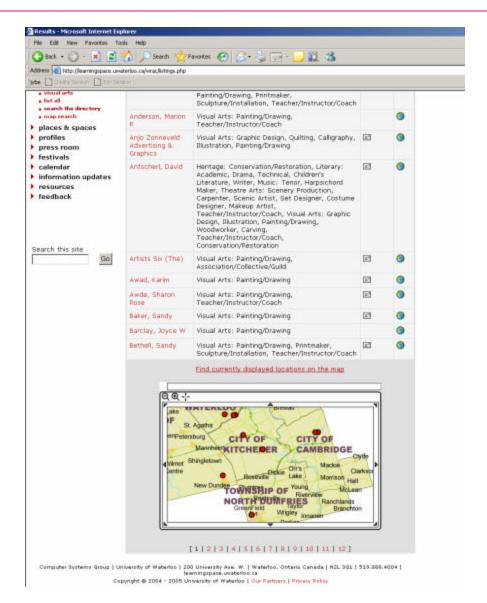




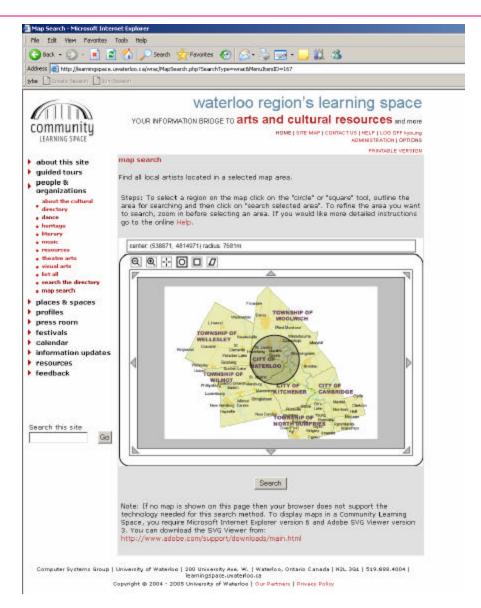


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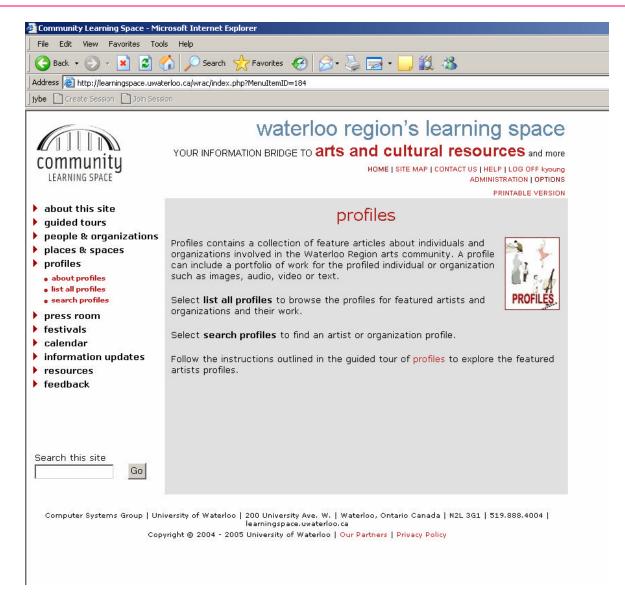








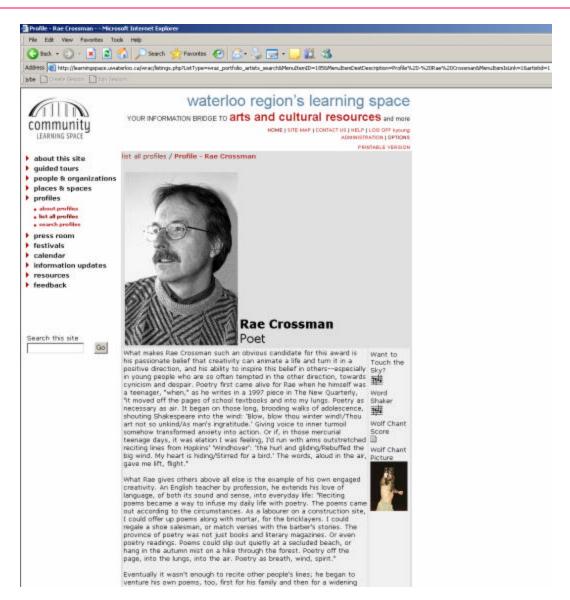




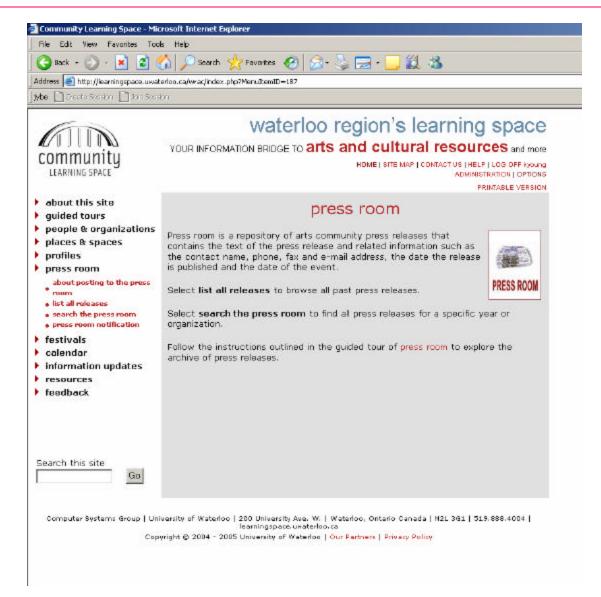




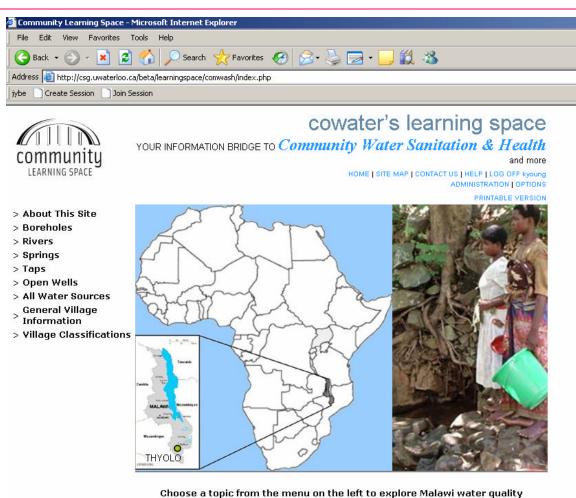








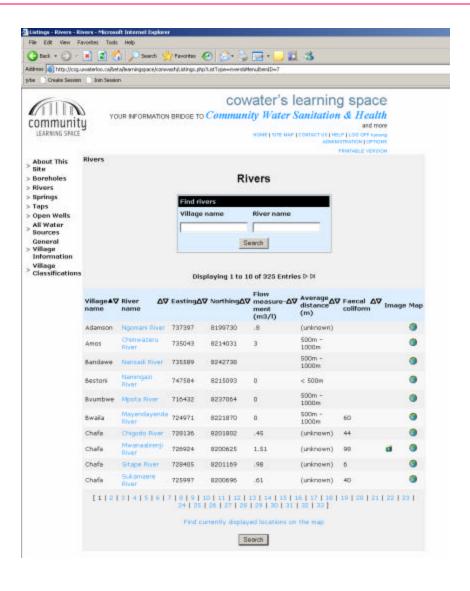




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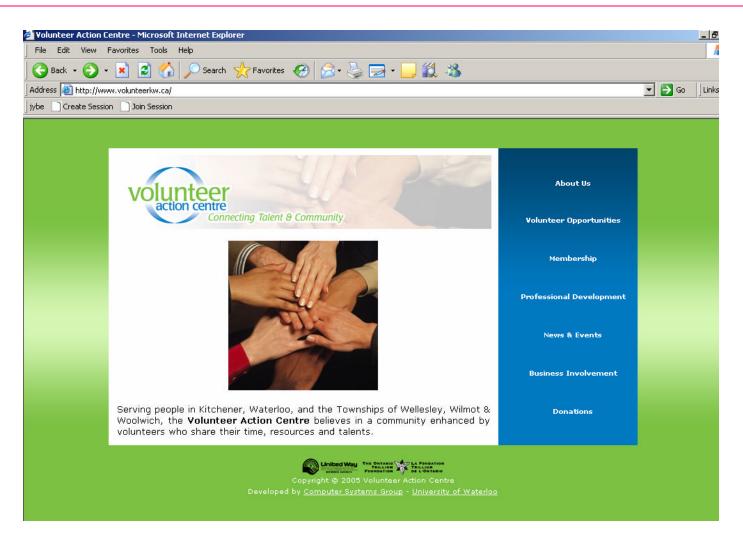




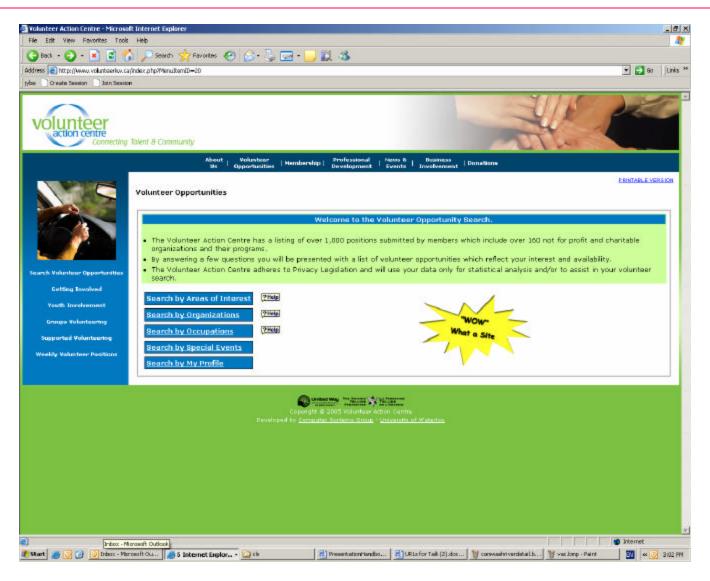


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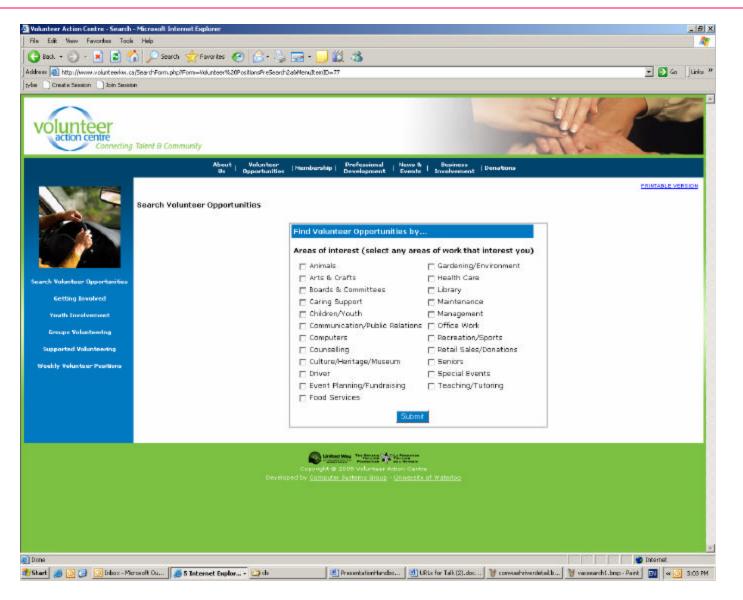








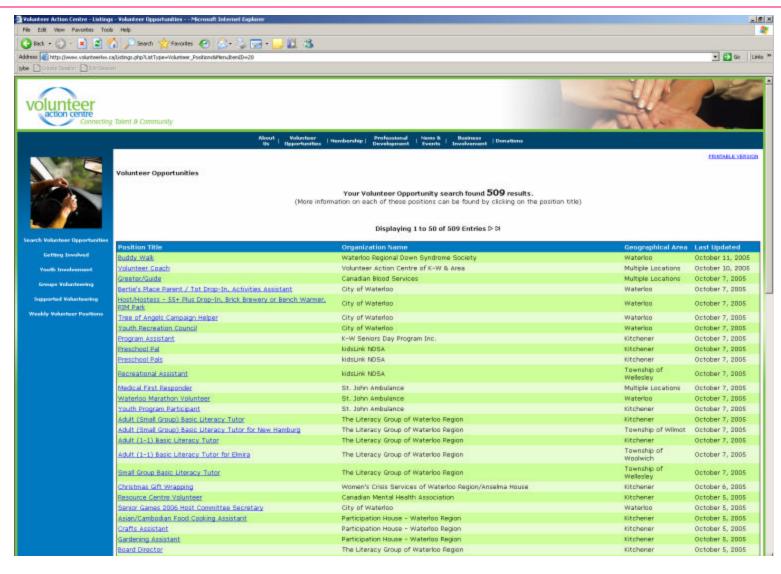






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