

VCE for WoSCR

- Whole of Society Crisis Response Community
- Cognitive Work Analysis of Requirements and Technologies
- Virtual Collaboration Environment:
 - Web-based portal
 - Virtual interaction space
 - Community tools
 - Collaboration protocols
- OpenVCE.net

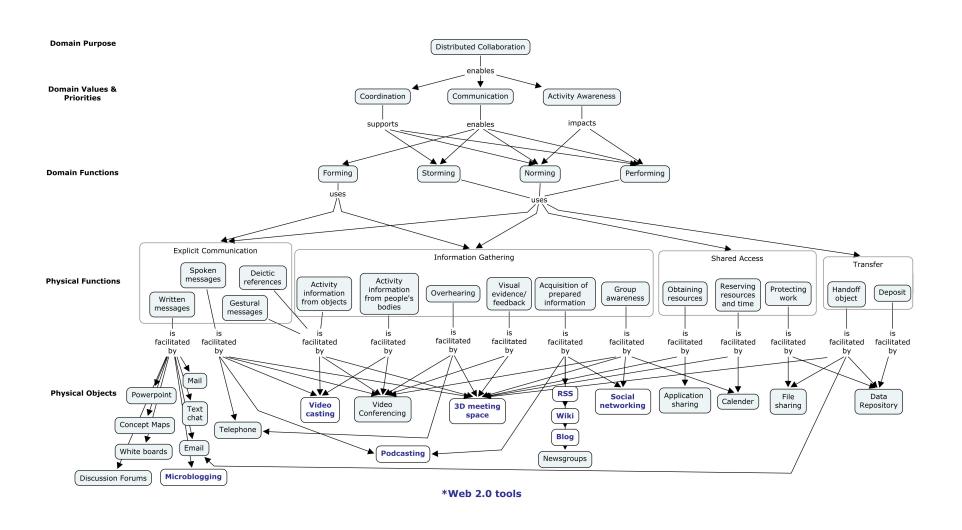


WoSCR

- Whole of Society Crisis Response Community
- The Whole of Society Crises Response (WoSCR) community takes a "whole of society" approach to complex problems seeking to input PMESII factors into the analysis and decision support when a crisis occurs. It seeks a global comprehensive approach to crises response
- PMESII stands for the "Political, Military, Economic, Social, Infrastructure, and Information" considerations involved in crisis and emergency response



Cognitive Work Analysis - Phase I



Cognitive Work Analysis – Phase I

The first phase of the Cognitive Work Analysis involves identifying the activity-independent constraints of the work domain:

- <u>Domain purpose</u>: the overarching goal to be achieved in this case, distributed collaboration.
- <u>Domain values and priorities</u>: principles or qualities on which work in the domain is founded in this case, we can identify coordination, communication and activity awareness as essential components of distributed collaboration.
- <u>Domain functions</u>: the realization of the domain values and priorities (and fulfillment of the domain purpose) as abstract functions within the domain.
- <u>Physical functions</u>: the realization of the domain functions in terms of techniques.
- <u>Physical objects</u>: artifacts that provide some aspect of the identified physical functionality, with particular reference to novel "Web 2.0"-type technologies that may be exploited alongside common existing technologies.

By pinpointing specific tools and providing a clear functional rationale for their use, the resulting analysis provides a roadmap for the development of a VCE that meets the functional objectives of the domain.

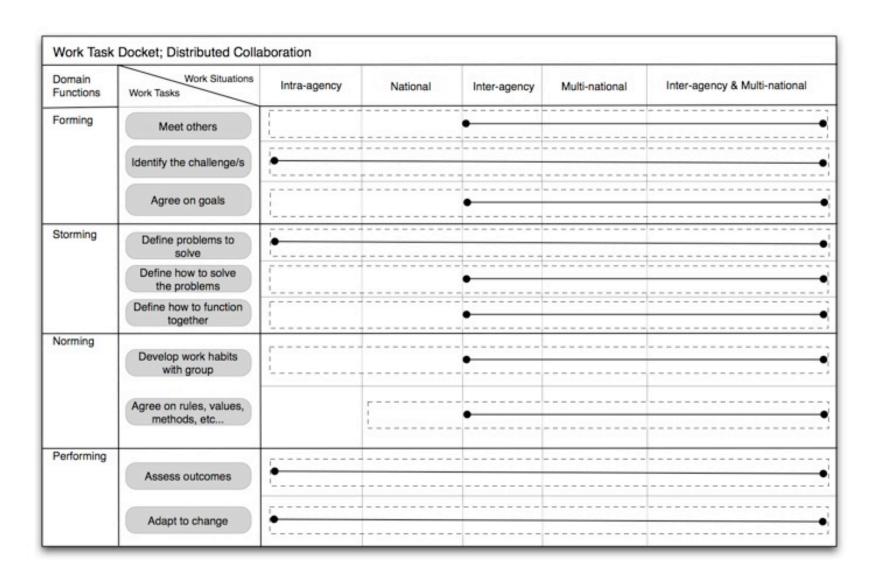
Work Organizational Analysis – Phase II

The second phase of the Cognitive Work Analysis situates tasks at the appropriate organizational level according to the actors involved.

One dimension of this is based on the domain functions identified in the CWA, each now elaborated according to specific work tasks.

The second dimension reflects increasing geographical and organizational dispersal – from local and intra-agency through national inter-agency and on to multi-national and involving civil and military participants.

Work Organizational Analysis - Phase II



Open Virtual Collaboration Environment

- Web-based Collaboration Portal
 - Drupal CMS
 - Also explored Facebook, Google Groups, Yahoo Groups, Ning Groups, Grou.ps, Joomla CMS
 - Linkups to external web services and gadgets
- Virtual World 3D Space
 - Second Life
 - Opensim (potentially behind a firewall)
- Virtual Collaboration Protocol
 - Standard Operating Procedures
 - FAQ and Tips
 - Protocol (Rob Cross, University of Virginia)
- Community Tools
 - AIAI I-Room a Room for Intelligent Interaction
 - CMU Catalyst Community Knowledge base
 - Concept Maps, and Experimental 3D Model Visualizations





Austin Tate

- Home
- Messages
- □ Blogs
- Forums
- Wiki
- Events
- □ Files
- Images
- Videos
- More content
- Create content
- FAQ
- Links
- My profile
- Log out

3D space

teleport now

Access: Chat, Wave, HW, QT [Setup/Help, Register avatar] [Terminals, Presenter, Blogger]

Event calendar

«	April »					
S	M	Т	W	Т	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	



Welcome to the OpenVCE community portal. All content is community-created, so become a registered user and start contributing!

Forthcoming events

Federal Consortium for Virtual Worlds Conference 2010	2 weeks 5 days from now	contact: Austin Tate
WoSCR Community - Possible Virtual Iterative Workshop Series - VIWS-4	5 weeks 2 days from	contact: Austin Tate

Current discussions



OpenVCE envisioned site structure started by Jeff Hansberger, last reply by Austin Tate 28 weeks ago



ac, last reply by erapisardi 4 weeks ago



The weakest link started by Expt Case 0 H1N1 Forum started by Austin Tate, last reply by Jeff Hansberger 18 weeks ago

more

What are you doing?

Austin Tate Meeting Ken Anderson of Project EPIC - see http://sn.im/tweakt max 140 characters Send



Austin Tate Meeting Ken Anderson of Project EPIC - see http://sn.im/tweakthetweet 1 day ago Edit Delete



Austin Tate Writing paper on OpenVCE support to WoSCR for KSCO-2010 http://ksco.info/ksco-2010.html 2 days ago Edit Delete

Ifuentes Preparing a presentation to the Virginia Local Government IT Executives (VALGITE) for Apr 26 on VOICCE 3 days ago

Search this site:

Search

Search the Wiki:

Search

I-Room Concept Maps Second Life QOC Shared Media I-Zone QOCTale Lounge

Who's online

There are currently 1 user and 6 quests online.



Austin Tate

Latest wiki updates

PMESII-Tools 3 weeks 6 days ago PMESII-Tools 3 weeks 6 days ago PMESII-Tools 4 weeks 1 day ago VOICCE 6 weeks 2 days ago Main Page 6 weeks 3 days ago

more

What's happening





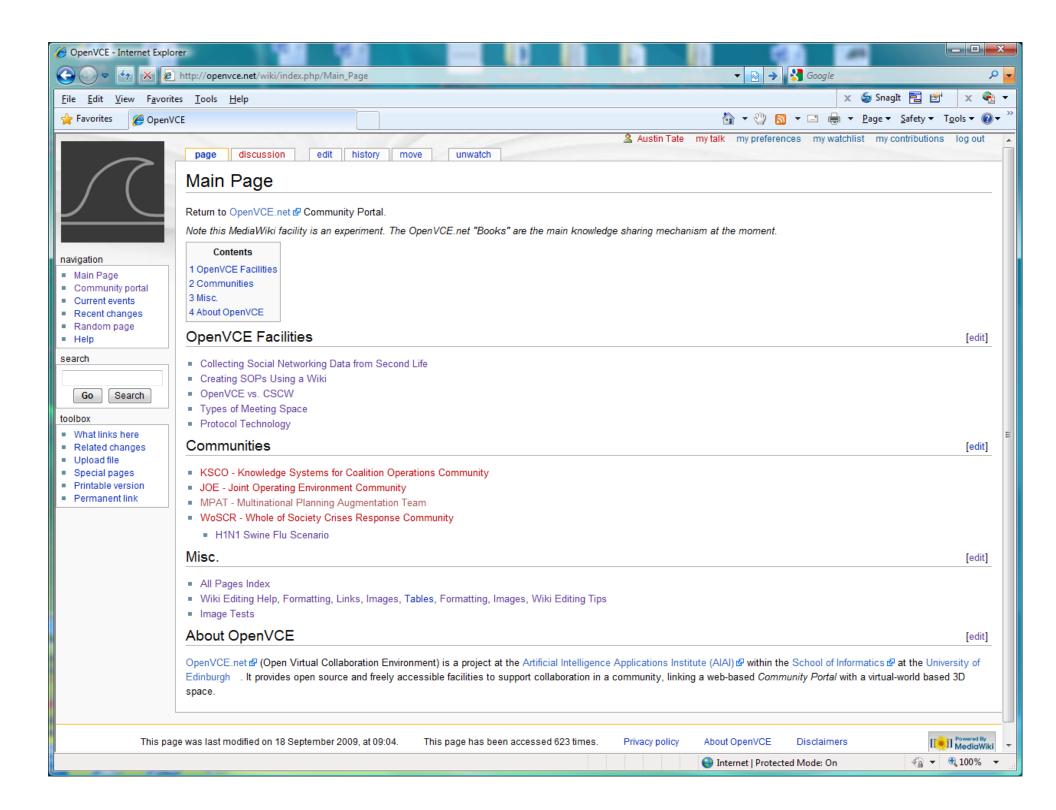




OpenVCE Portal – Roles of Elements

- Blog personal web log
- Forum threaded discussion within community
- Wiki community knowledge creation and refinement
- Book Pages edited content and index pages (change by admins and group leaders only)
- Comment can be added to most elements















Links between Web Collaboration Portal and 3D Space

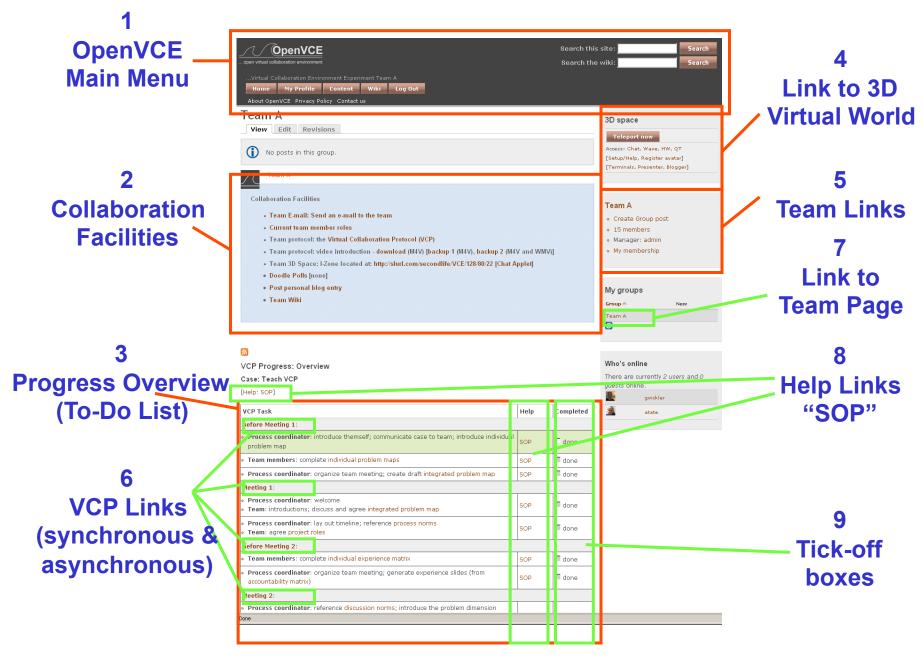


Virtual Collaboration Protocol

- 7 main phases of the VCP (Rob Cross):
 - identify problem dimensions (asynchronous)
 - agree problem dimensions (synchronous)
 - describe relevant experience per dimension (asynchronous)
 - discuss experience and decide on sub-teams addressing different problem dimensions (synchronous)
 - subgroup work on different dimensions (asynchronous)
 - presentation of solutions (synchronous)
 - solution integration (asynchronous)
- OpenVCE Web Portal supports asynchronous work
- OpenVCE I-Room supports synchronous work



OpenVCE Portal - Team Home Page

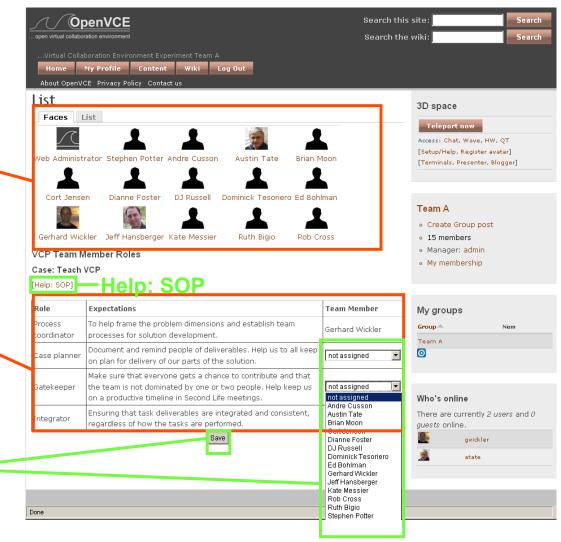


OpenVCE Portal – Team & Roles

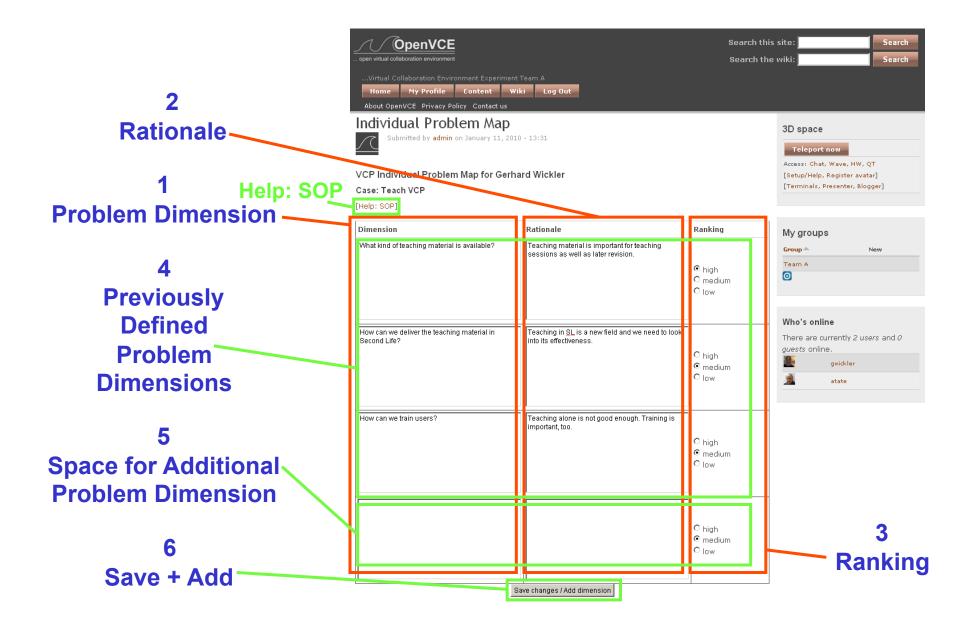
Team members with links to their OpenVCE profile pages

Team members filling VCP roles

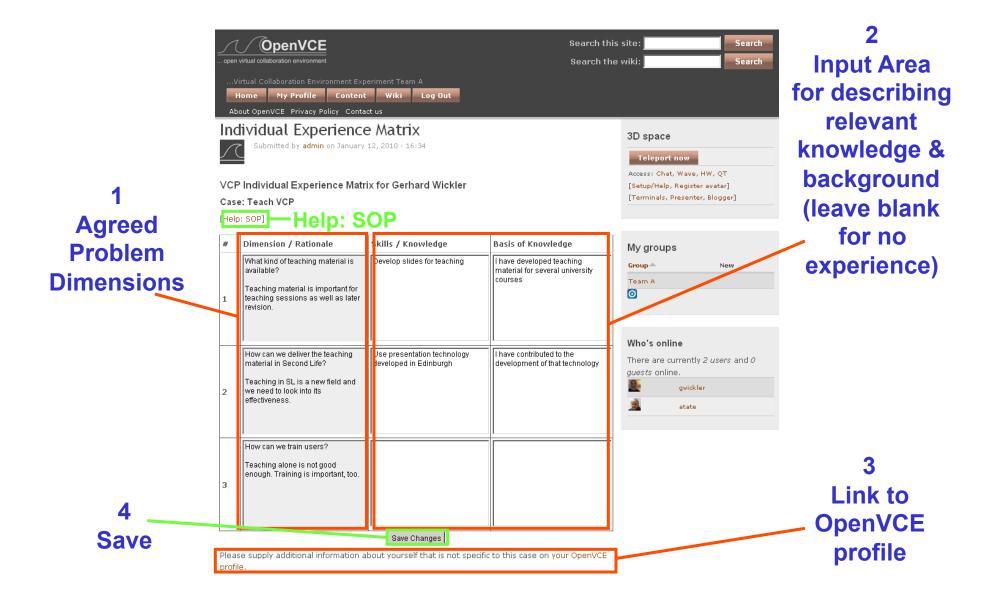
Process coordinator can update (at appropriate stage)



OpenVCE Portal – Problem Map Completion



OpenVCE Portal – Individual Experience



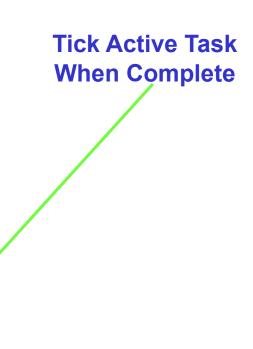
OpenVCE Portal – VCP Support

VCP Progress: Overview

Case: Teach VCP

[Help: SOP]

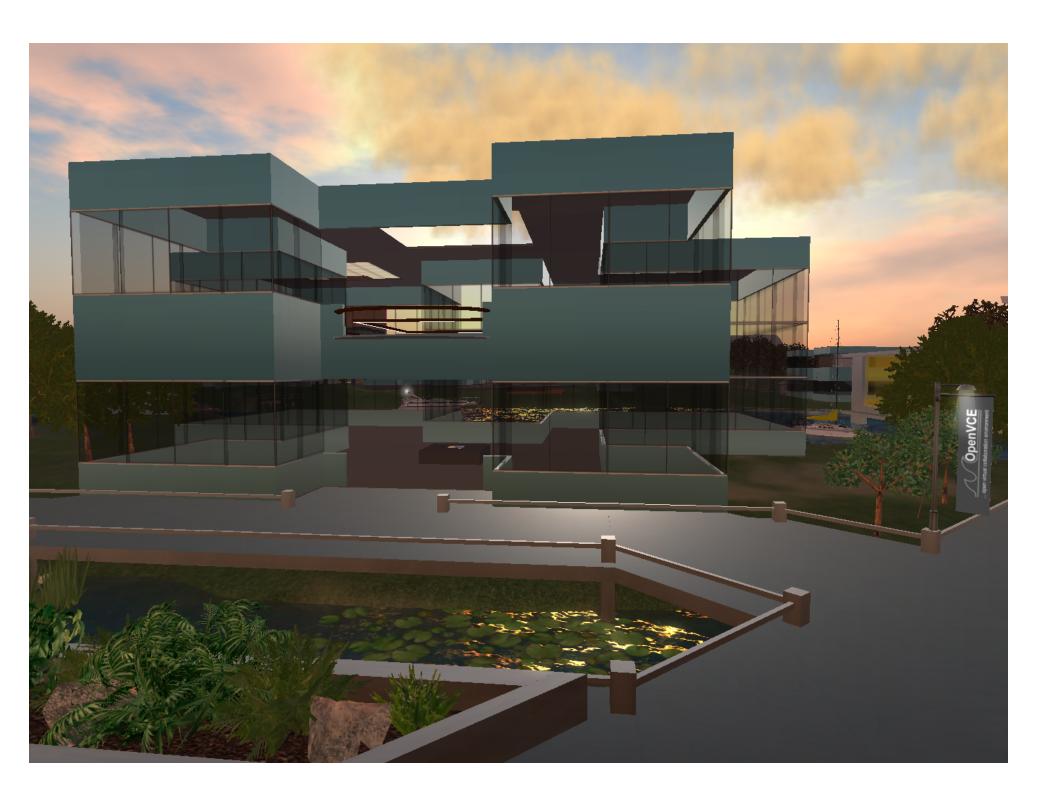
VCP Task	Help	Completed
Before Meeting 1:		
Process coordinator: introduce themself; communicate case to team; introduce individual problem map	SOP	✓ done
• Team members: complete individual problem maps	SOP	☑ done
Process coordinator: organize team meeting; create draft integrated problem map	SOP	✓ done
Meeting 1:	'	
Process coordinator: welcome Team: introductions; discuss and agree integrated problem map	SOP	™ done
Process coordinator: lay out timeline; reference process norms Team: agree project roles	SOP	☑ done
Before Meeting 2:	'	<u>'</u>
Team members: complete individual experience matrix	SOP	✓ done
 Process coordinator: organize team meeting; generate experience slides (from accountability matrix) 	SOP	☑ done
Meeting 2:	<u>'</u>	
 Process coordinator: reference discussion norms; introduce the problem dimension solution template Team: discuss individual experiences (by dimension) 	-	✓ done
Team: discuss and agree subteams Case planner: complete accountability matrix	SOP	✓ done
Case planner: generate empty solution pages (from accountability matrix)	SOP	✓ done
Before Meeting 3:	'	
Gatekeeper: monitor progress Subteams: develop solutions Team members: comment on others solutions	SOP	™ done
Subteams: create solution presentations Integrator: begin integration	SOP	™ done
Meeting 3:		
Subteams: present solutions and discuss	SOP	✓ done
After Meeting 2:		
• Integrator: integrate and deliver final solution	-	□ done
Save		'



OpenVCE – Community Tools

- I-Room Space for Intelligent Interaction
- Catalyst Community Knowledge Base
- Cmaps Concept Mapping
- Modelling Experimental 3D Visualizations
- Collaborative Shared Media



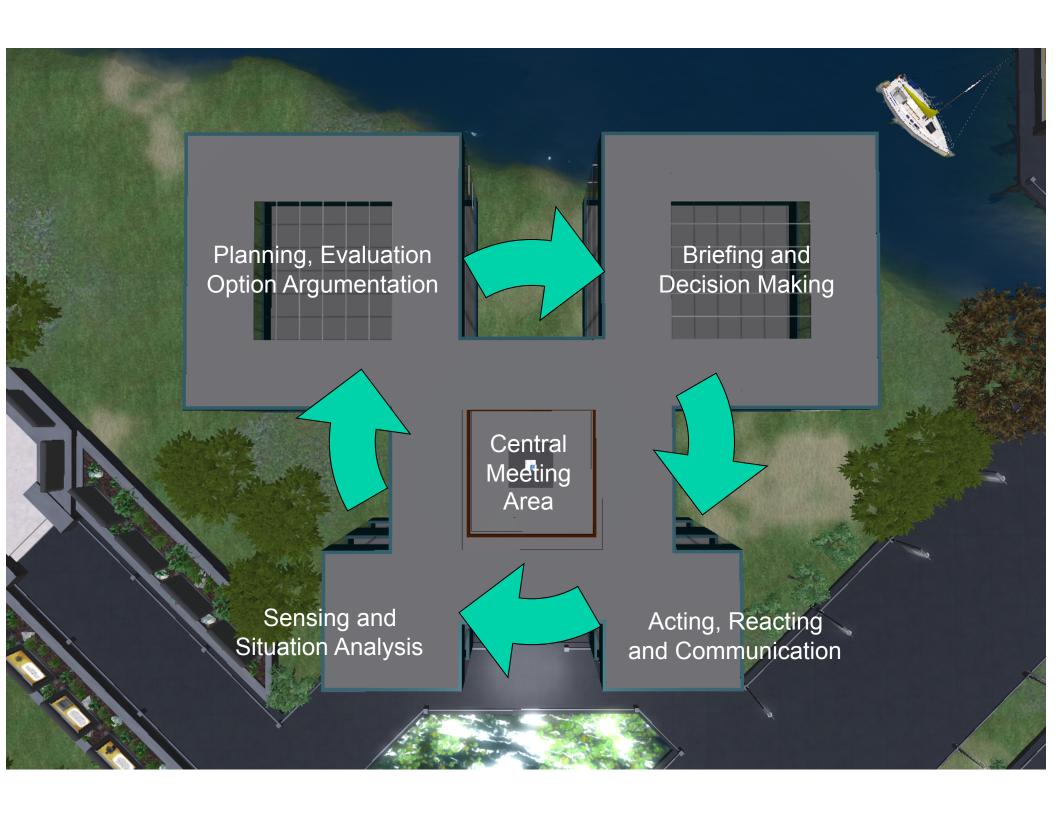




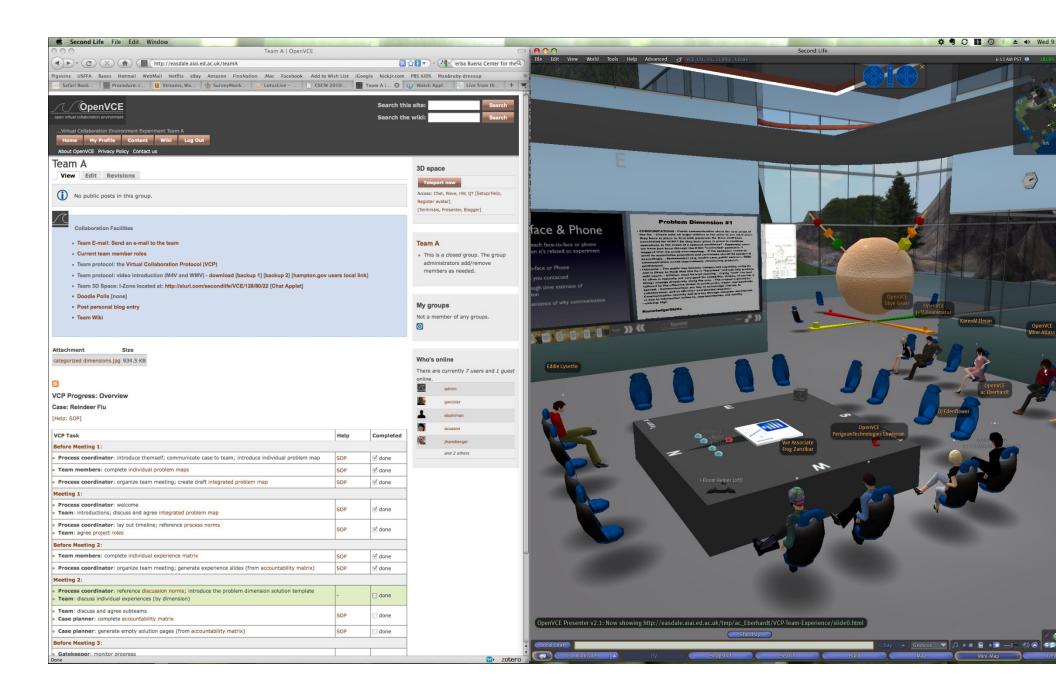
I-Room: Mixed-initiative Collaboration

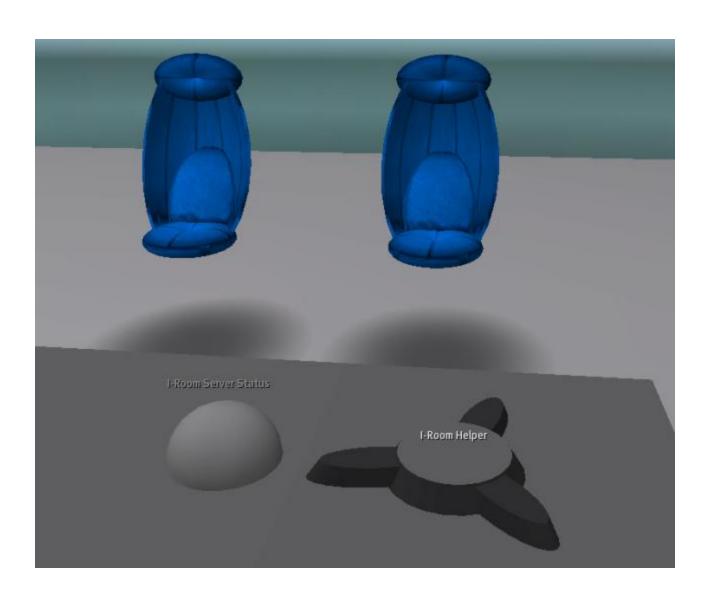
Truly distributed mixed initiative collaboration and task support is the focus of the I-Room, allowing for the following tasks:

- situation monitoring
- sense-making
- analysis and simulation
- planning
- option analysis
- briefing
- decision making
- responsive enactment











File New Edit Tools Help Issues Description Annotations Priority Action Consider how to handle newcomers Normal

Activities

Description	Annotations	Priority	Action
▽hold-meeting I-Room-Demo	v k	¬ Normal	▼Refine using hold-meeting
start-meeting I-Room-Demo		→ Normal	▼ Refine using start-meeting
welcome-participants I-Room-Demo	is No		▼ Done
note-apologies I-Room-Demo		─ Normal	▼ Done
agree-end I-Room-Demo			▼ Done
agree-previous-minutes I-Room-Demo	6 2	→ Normal	▼ Done
▼ address-action-items I-Room-Demo		→ Normal	▼ Refine using address-action-items
discuss-action "Davie Munro" "Obtain Security Service Input"		▼ Normal	▼
discuss-action "Ai Austin" "Read Ops Pineapple Briefing"	ë V	▼ Normal	▼
address-agenda-items I-Room-Demo		▼ Normal	▼
discuss-any-other-business I-Room-Demo): 	▼ Normal	▼
finish-meeting I-Room-Demo		▼ Normal	▼
setup-next-meeting		▼ Normal	▼

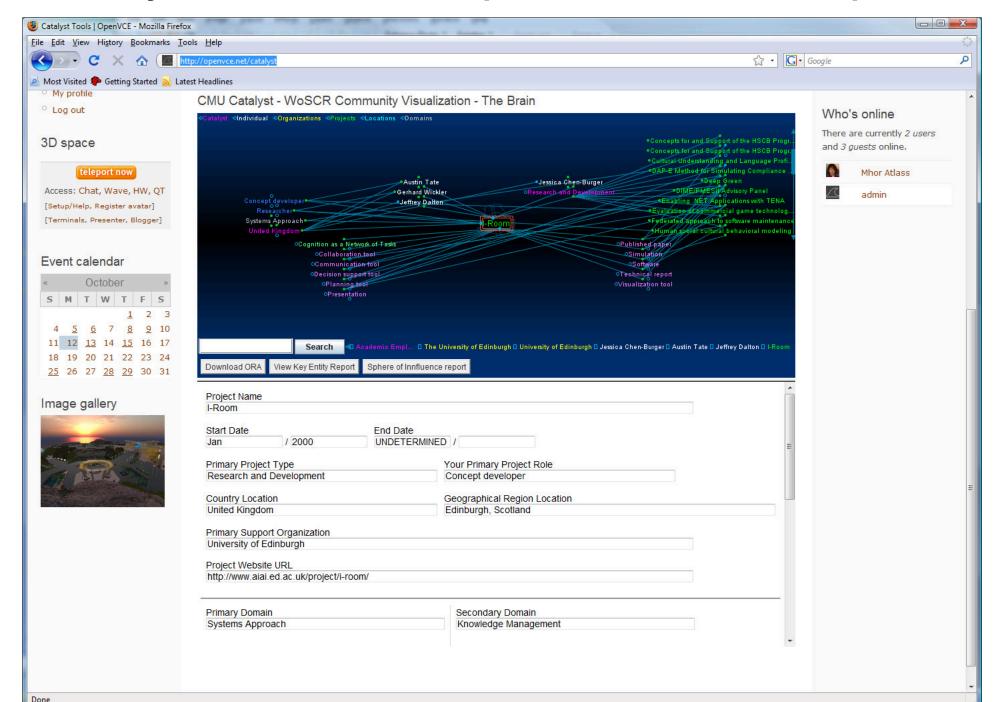
JOC |-Room Process Panel | Based on I-X Technology



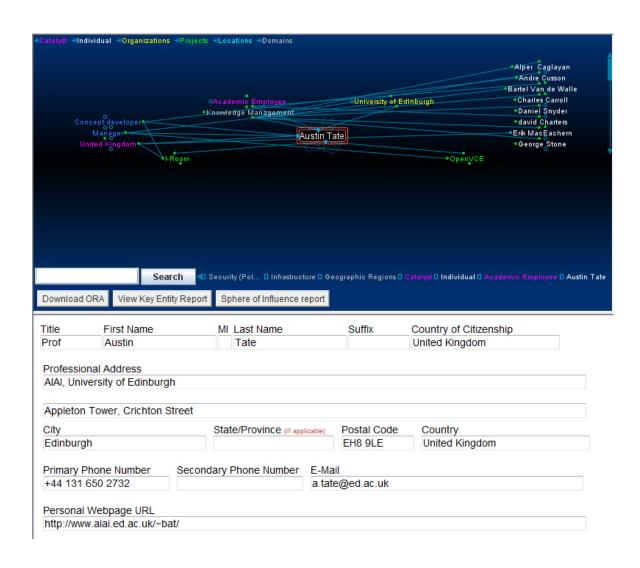


Home Office JOC				
File New Edit Tools Help			Te	
50 (C) \$15 (C)			16.	
Issues				
Description	Annotations Priority		Action	
Consider how to handle newcomers	▼ Normal		▼	
Activities				
Description	Annotations	Priority	Action	
hold-meeting I-Room-Demo		→ Normal	Refine using hold-meeting	
start-meeting I-Room-Demo		→ Normal	✓ Refine using start-meeting	
welcome-participants I-Room-Demo	No. No.	¬ Normal	✓ Done	
note-apologies I-Room-Demo		¬ Normal	✓ Done	
agree-end I-Room-Demo			✓ Done	
agree-previous-minutes I-Room-Demo	✓ Normal		▼ Done	
address-action-items I-Room-Demo		→ Normal	¬ Refine using address-action-items	
discuss-action "Davie Munro" "Obtain Security Service Input"	▼ Normal		▼	
discuss-action "Ai Austin" "Read Ops Pineapple Briefing"	▼ Normal			
	dress-agenda-items I-Room-Demo ▼ Normal		Done	
discuss-any-other-business I-Room-Demo	▼ Normal		20110	
finish-meeting I-Room-Demo	▼ Normal		N/A	
setup-next-meeting ▼ Normal			Escalate to Cabinet Office	
			Pass to MoD	
			Pass to OGD	
			Delegate to Local Government	
			Delegate to Emergency Services	
			Delegate to Security Service	
I-Room Process Panel	Carry to next meeting			
OC Based on I-X Technology				

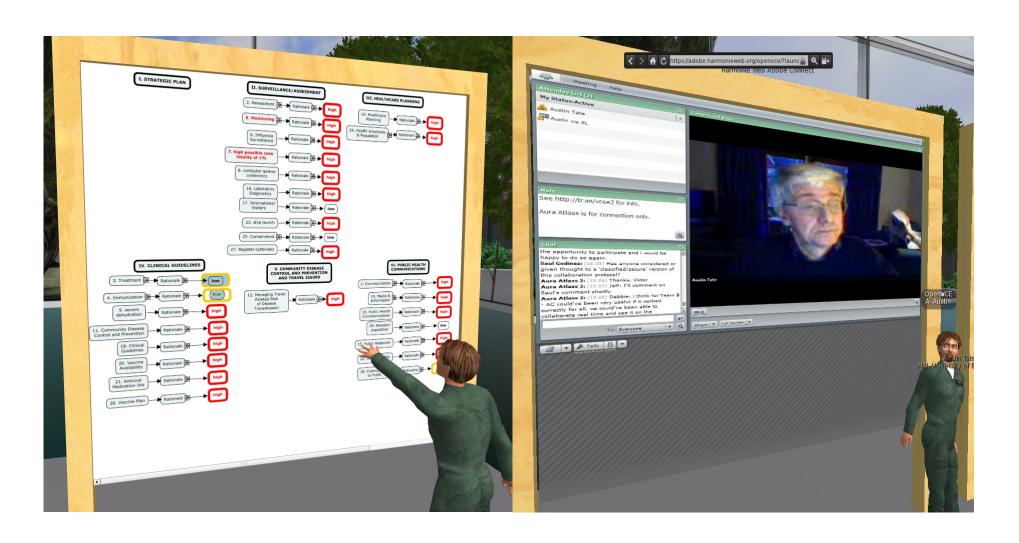
Catalyst – Links between OpenVCE Portal and 3D Space

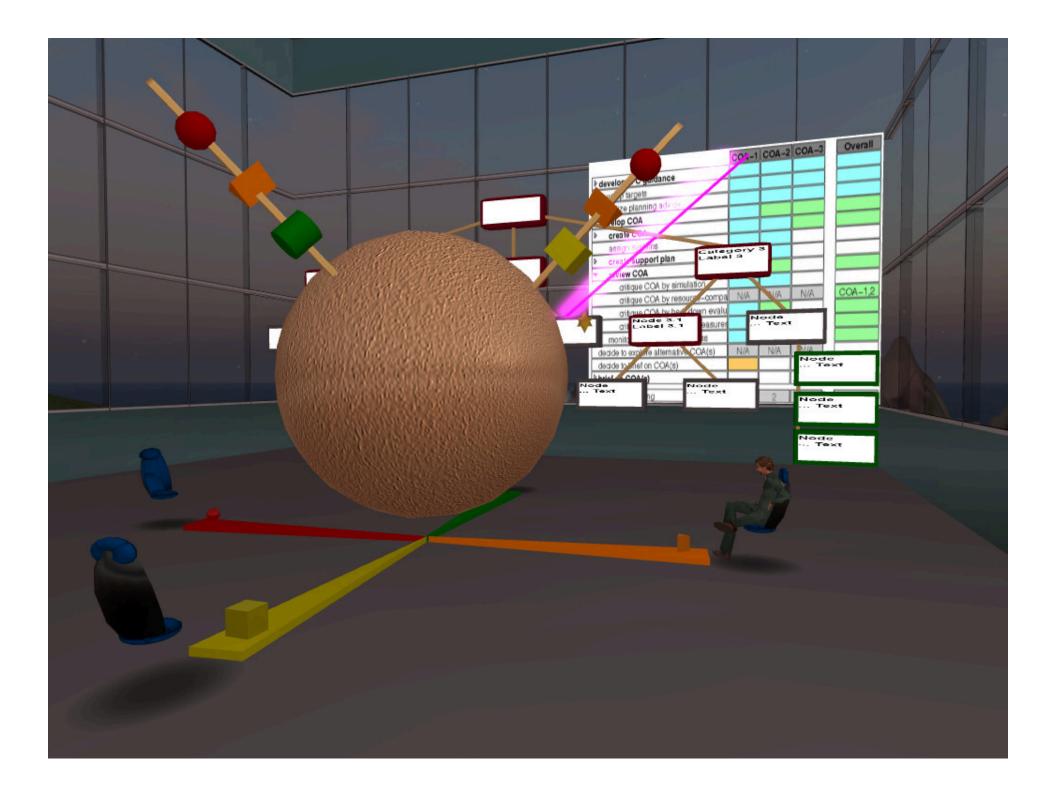


Catalyst – Links between OpenVCE Portal and 3D Space



Shared Media – E.g. Concept Maps & Adobe Connect





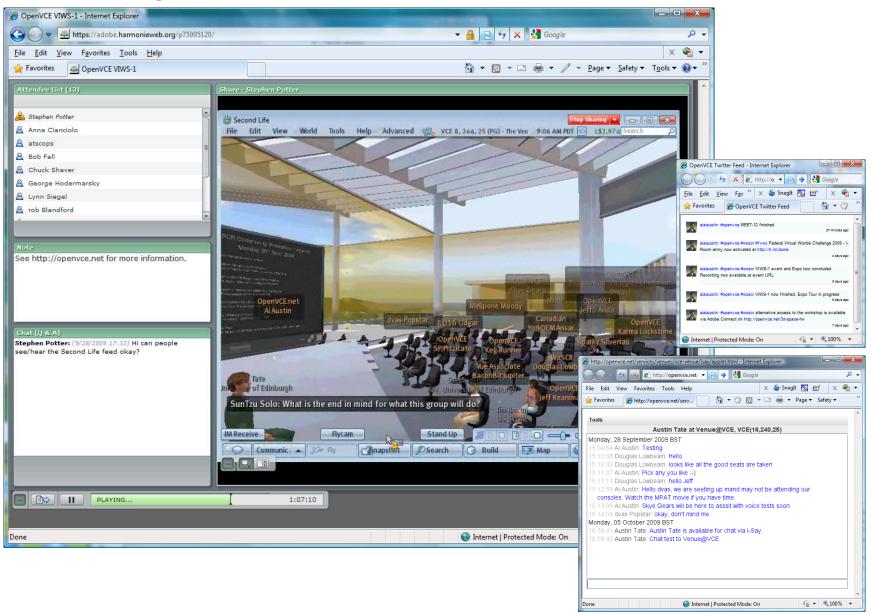
OpenVCE – Event Participants

Real Participant in Physical Meeting Space

- Virtual Participant
 - Second Life
 - Opensim
- Web Observer
 - Adobe Connect
 - Video Stream (H.264) in Web Page



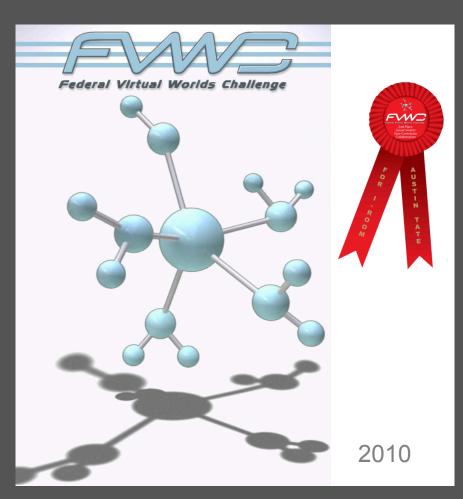
3D Space via Adobe Connect for Web Observers



OpenVCE and I-Room

More information and papers at http://openvce.net/iroom

YouTube video at http://openvce.net/iroom-tour







... open virtual collaboration environment

http://openvce.net