

D 4.5.3-v1 Gender Action Plan and Public Engagement Activities

Coordinator: Carole Goble (UoM)

Contributions from Yeliz Yesilada (UoM), Asunción Gómez-Pérez (UPM), York Sure (UKARL), Jörg Diederich (L3S)

Abstract.

EU-IST Network of Excellence (NoE) IST-2004-507482 KWEB Deliverable D4.5.3v1 (WP4.5)

An assessment of the gender and public engagement considerations of Knowledge Web is made. Statistics have been gathered on gender ratios over a range of metrics and public engagement activities. Revised recommendations for monitoring gender issues and public engagement activities are proposed.

Document Identifier:	KWEB/2007/D4.5.3/v1.0
Class Deliverable:	KWEB EU-IST-2004-507482
Version:	V1.0
Date:	January 26 2007
State:	Final
Distribution:	Public

Knowledge Web Consortium

This document is part of a research project funded by the IST Programme of the Commission of the European Communities as project number IST-2004-507482.

University of Innsbruck (UIBK) – Coordinator

Institute of Computer Science, Technikerstrasse 13 A-6020 Innsbruck Austria Contact person: Dieter Fensel E-mail address: dieter.fensel@uibk.ac.at

France Telecom (FT)

4 Rue du Clos Courtel 35512 Cesson Sévigné France. PO Box 91226 Contact person : Alain Leger E-mail address: alain.leger@rd.francetelecom.com

Free University of Bozen-Bolzano (FUB)

Piazza Domenicani 3 39100 Bolzano Italy Contact person: Enrico Franconi E-mail address: franconi@inf.unibz.it

Centre for Research and Technology Hellas / Informatics and Telematics Institute (ITI-CERTH)

1st km Thermi – Panorama road 57001 Thermi-Thessaloniki Greece. Po Box 361 Contact person: Michael G. Strintzis E-mail address: strintzi@iti.gr

National University of Ireland Galway (NUIG)

National University of Ireland Science and Technology Building University Road Galway Ireland Contact person: Christoph Bussler E-mail address: chris.bussler@deri.ie

Universidad Politécnica de Madrid (UPM)

Campus de Montegancedo sn 28660 Boadilla del Monte Spain Contact person: Asunción Gómez Pérez E-mail address: asun@fi.upm.es

École Polythechnique Fédérale de Lausanne (EPFL)

Computer Science Department Swiss Federal Institute of Technology IN (Ecublens), CH-1015 Lausanne. Switzerland Contact person: Boi Faltings E-mail address: boi.faltings@epfl.ch

Freie Universität Berlin (FU Berlin)

Takustrasse, 9 14195 Berlin Germany Contact person: Robert Tolksdorf E-mail address: tolk@inf.fu-berlin.de

Institut National de Recherche en Informatique et en Automatique (INRIA)

ZIRST - 655 avenue de l'Europe - Montbonnot Saint Martin 38334 Saint-Ismier France Contact person: Jérôme Euzenat E-mail address: Jerome.Euzenat@inrialpes.fr

Learning Lab Lower Saxony (L3S)

Expo Plaza 1 30539 Hannover Germany Contact person: Wolfgang Nejdl E-mail address: nejdl@learninglab.de

The Open University (OU)

Knowledge Media Institute The Open University Milton Keynes, MK7 6AA United Kingdom. Contact person: Enrico Motta E-mail address: e.motta@open.ac.uk

University of Karlsruhe (UKARL)

Institut für Angewandte Informatik und Formale Beschreibungsverfahren – AIFB Universität Karlsruhe D-76128 Karlsruhe Germany

University of Liverpool (UniLiv)

Chadwick Building, Peach Street L697ZF Liverpool United Kingdom Contact person: Michael Wooldridge E-mail address: M.J.Wooldridge@csc.liv.ac.uk

University of Sheffield (USFD)

Regent Court, 211 Portobello street S14DP Sheffield United Kingdom Contact person: Hamish Cunningham E-mail address: Hamish@dcs.shef.ac.uk

Vrije Universiteit Amsterdam (VUA)

De Boelelaan 1081a 1081HV. Amsterdam The Netherlands Contact person: Frank van Harmelen E-mail address: Frank.van.Harmelen@cs.vu.nl Contact person: Rudi Studer E-mail address: studer@aifb.uni-karlsruhe.de

University of Manchester (UoM)

Room 2.32. Kilburn Building, Department of Computer Science, University of Manchester, Oxford Road Manchester, M13 9PL United Kingdom Contact person: Carole Goble E-mail address: carole@cs.man.ac.uk

University of Trento (UniTn)

Via Sommarive 14 38050 Trento Italy Contact person: Fausto Giunchiglia E-mail address: fausto@dit.unitn.it

Vrije Universiteit Brussel (VUB)

Pleinlaan 2, Building G10 1050 Brussels Belgium Contact person: Robert Meersman E-mail address: robert.meersman@vub.ac.be

Work package participants

The following partners have taken an active part in the work leading to the elaboration of this document, even if they might not have directly contributed writing parts of this document:

University of Karlsruhe (UKARL) University of Manchester (UoM) Universidad Politécnica de Madrid (UPM) University of Innsbruck (UIBK) France Telecom (FT) Institut National de Recherche en Informatique et en Automatique (INRIA) Learning Lab Lower Saxony (L3S) The Open University (OU) University of Liverpool (UniLiv) Vrije Universiteit Brussel (VUB)

Changes

Version	Date	Author	Changes		
0.1	15-12-2006	Yeliz Yesilada	Initial Draft		
0.2	03-02-2007	Carole Goble	Revisions to Draft		
0.3	16-01-2007	Asun Gómez-Pérez	Q.A Comments		
0.4	19-01-2007	Yeliz Yesilada	Q.A Changes		
0.5	24-01-2007	Yeliz Yesilada	Changes to SSSW2006 data		

Executive Summary

This report consists of the following two parts:

PART 1 – Gender Action Plan

Knowledge Web is not a gender specific project. However, gender is a relevant issue for the project since it will: contribute on different levels to an enhanced understanding of gender issues; promote the participation of women in scientific research, education and outreach to industry; and include gender expertise in its scientific team and management.

We observed the gender issues involved in Knowledge Web, gathered statistics on gender ratios over a range of metrics, and surveyed organisations, networks, and projects concerned with gender and ICT. Here we summarise achievements in 2005 and 2006 and propose plans for 2007. We have been successful in our management of resources and sponsoring, less so on mentoring.

• Resources

The network continues to allocate 0.7% of the Knowledge Web budget to support financial incentives for women to attend women and ICT conferences etc. In 2006, we sponsored two events: BCSWomen and Women@CL career development workshop and the crèche facility at the 15th International World Wide Web Conference (WWW2006). Hoppers@KWeb also provided scholarships to individuals to attend a number of events, which include: The Doctoral Consortium at ISWC 2006 and the Knowledge Web PhD Symposium 2006 (KWEPSY2006). In 2007, we plan to continue funding similar events. We have already agreed to sponsor the KnowledgeWeb PhD Symposium (KWEPSY2007) and the application forms have been made available at the Hoppers@KWeb portal.

• Targets for Participation

- Partners of the network are asked to aim for 30% participation of women in their organisations and make plans for this. This is on-going.
- At least one woman should participate in the decision making and management of the main goals related to the education, industry and research area. This is ongoing.
- Each area should aim for 30% participation in the work package business. The areas that still need special attention are Research and Education.
- The T-Rex exchange programme should positively discriminate in favour of women. Disappointingly, the number of female participants declined in 2005 and 2006. This needs attention in 2007.
- Every effort should be made to ensure an appropriate and representative gender balance in the organizing and programme committees of the meetings sponsored and supported by Knowledge Web. This is on-going.

• Information and Support

- Knowledge Web should forge links with relevant women's networks and projects, and attend or support women and IT events such as the Grace Hopper conferences. Therefore in 2006, we sponsored the career development workshop

that accompanies WWW2006. In 2007, we plan to continue to support similar activities.

- In 2006, a *Hoppers@KWeb portal* was created by the University of Manchester and regularly updated and maintained. This portal was set up specifically for disseminating information, funding opportunities, networks, events, etc. A mailing list was also created for similar purposes. In 2007, we plan to continue to update the portal regularly and use the mailing list to disseminate relevant information to the female Knowledge Web participants.
- Monitoring and Advice
 - A Knowledge Web *Gender Observatory*, made up of Knowledge Web partners and external experts, has stalled, partly as it hasn't been seen as a high priority and the work package has been monitoring activities. In 2007 we must carefully reflect on the realities of making the Observatory active, and if it is necessary given our limited resources.
 - In 2006, the University of Manchester initiated the collaboration with the UK Resource Center for Women in Science, Engineering and Technology (UKRC) to set up a mentoring scheme. Relevant resources were published on the Hoppers@KWeb portal. This has faltered due to operational difficulties and priorities. In 2007, we plan to arrange a meeting at one of the plenary meetings to disseminate information about this mentoring scheme to all Knowledge Web members.
 - The *Gender Review* and audit plenary by external experts from the Sociology Department at Warwick University, UK has been difficult to organize, as it has been hard to get a commitment from our external advisors. We therefore propose to try again for one of the 2007 plenary meetings.

PART 2 – Public Engagement Activities

In this report we first present results of the email survey conducted in 2005 and 2006 among the Knowledge Web members. We then propose a number of suggestions to improve the information dissemination to public which include:

- Using the general public's vocabulary for communication
- Publishing articles and blogging for general public
- Supporting/sponsoring events targeting general public
- A complete revision of the Knowledge Web web site to reveal the outcomes and results
- Engaging professional PR services through strategic alliances with other organizations such as WSRI and the SemTech Symposium.

Contents

<u>CON</u>	TENTS	8
<u>PAR</u>	T 1 - GENDER ACTION PLAN	1
1.1	BACKGROUND AND OVERVIEW	1
1.2	KNOWLEDGE WEB GENDER OBSERVATORY	2
1.2.1	HOPPERS@KWEB PORTAL	2
1.2.2	STATISTICAL MONITORING	2
1.2.3	EXTERNAL OBSERVATORY	3
1.2.4	OBSERVATORY OVERSIGHT BOARD	4
1.3	KNOWLEDGE WEB MEMBERS PARTICIPATION	4
1.3.1	ENABLING AND ENCOURAGING PARTICIPATION	4
1.3.2	PERSONAL FUNDING	5
1.3.3	SPONSORING GENDER ISSUES RELATED CONFERENCES AND WORKSHOPS	7
1.3.4	MIXED MANAGEMENT TEAMS AND DECISION MAKING	7
1.3.5	NEW PARTNERS	8
1.4	KNOWLEDGE WEB MEMBERS SUPPORT	8
1.4.1	MEETINGS AND EVENTS	8
1.5	MENTORING	8
1.5.1	WHAT IS MENTORING?	9
1.5.2	ROLES OF A MENTOR & MENTEE	9
1.5.3	PHASES OF THE MENTORING RELATIONSHIP	10
1.6	PROMOTION OF GENDER AWARENESS	10
1.7	RELEVANCE OF KNOWLEDGE WEB TO WOMEN	10
1.8	OBSERVATORY STATISTICS	10
1.9	ORGANISATIONS AND NETWORKS	18
1.10	INTERNATIONAL EVENTS	20
PAR	T 2 - PUBLIC ENGAGEMENT ACTIVITIES	20
1.1	SURVEY OF PUBLIC ENGAGEMENT ACTIVITIES	20
1.1 .1		20 20
1.1.1		20
1.1.2		22
1.1.3	COMMUNICATIONS TO GENERAL PUBLIC	23
1.1.4 1.2	RECOMMENDATIONS IN A NUTSHELL	23 24
1.2.1	USING THE GENERAL PUBLICS' VOCABULARY FOR COMMUNICATION	24 24
1.2.2 1.2.3		26 26
1.2.3		26 26
1.2.4		26 26
1.2.5		26 26
1.2.0		26 26
1.4./	FROFESSIONAL FR AND STRATEOU ALLIANCES	20

PART 1 - Gender Action Plan

1.1 Background and Overview

Knowledge Web is not a gender specific project. However, gender is a relevant issue for the project since it should:

- contribute on different levels to an enhanced understanding of gender issues;
- promote the participation of women in scientific research, education and outreach to industry; and
- include gender expertise in its scientific team and management.

According to a study by the Research Foundation for Improving the Representation of Women in the Technology Workforce, the number of women obtaining Bachelor's and Master's degrees in computer science is declining since 1996. However, according to Nielsen NetRatings, 51.7 percent of active US Internet users are women. The figures for Europe vary between 30% and 50%, and are still climbing.

Despite established systems of democracy and liberal doctrines of equality of opportunity, educational and professional fields in the West remain highly genderoriented. 1999-2000 data from the UK shows that women were 62% of university graduates in arts and humanities subjects, but made up only 25% of computer science, 22% of physics and 13% of engineering graduates during this period^{1 2}.

We identify four aspects relevant to Knowledge Web:

- **1. Support of the women in the Knowledge Web** network in their career development (recruitment, retention, participation, progression and promotion) within their home institutions or organisations. Chief mechanisms by these means we hope to create a mutually supportive community of women in Knowledge Web include:
 - a. the promotion of opportunities and information through a dedicated portal Hoppers@KWeb (<u>http://hoppers-kweb.cs.manchester.ac.uk/</u>);
 - b. encouraging women to participate in the T-Rex exchange programme and the Summer School;
 - c. enabling women to participate in national and international women and Information and Communication Technology (ICT) meetings; and
 - d. the instigation of a women's mentoring scheme across the network.
- **2. Participation by women in Knowledge Web**: monitoring and enabling participation by women (postgraduates, researchers, industrialists and faculty academics) in Knowledge Web management, meetings, and deliverables; and in ensuring an inclusive and positive environment for women, for example by adopting gender-neutral language in deliverables and selecting gender-neutral case studies.

¹ Source: Gender, Science and Technology for Sustainable Development (GenSciTech)

² Source: Promoting Science Engineering and Technology for Women Unit (SET), Department of Trade and Industry, UK.

- **3. Promotion of gender awareness** across the Knowledge Web network thorough quantitative and qualitative monitoring and gender awareness and career development workshops organised by specialists in the area. Gender awareness should propagate to the home institutions and organisations.
- **4. Relevance of Knowledge Web to women** as it affects their working, social and family lives. Mechanisms include forging links with women's networks, and presentations at relevant meetings.

The chief means of building and disseminating statistical evidence, know-how and information is through a Knowledge Web Gender Observatory. *The network allocates* 0.7% of the Knowledge Web budget to support other financial incentives for women. Incentives include: to fund participation in network activities and events that the network sponsors; to fund participation in women events such as the Grace Hopper Conferences; and to fund the participation of external advisors in the Observatory subject to their availability.

1.2 Knowledge Web Gender Observatory

In D4.5.1 (version 1 and 2) we proposed the establishment of a Knowledge Web Gender Observatory as a means of gathering a wide view of Knowledge Web and its surroundings with respect to the impact on women. The Observatory will be made up of a number of information dissemination and gathering activities, an oversight group and external observation by invited experts. The Observatory's four activities – Support, Participation, Promotion and Relevance – were outlined in Section 1.

1.2.1 Hoppers@KWeb Portal³

In 2006, an independent portal was created dedicated to the Hopper which comes from the "Hoppers" networks of women in ICT in the UK and USA. This portal was created, and revised and maintained by the University of Manchester. The name is a tribute to Grace Hopper, a female pioneer of computing. The Hoppers@KWeb portal carries announcements of events, and specific references to: women's groups and networks; relevant initiatives and projects; funding opportunities for women; relevant publications; scientific and technological careers; and any other information the network thinks useful. Figure 1 shows a screenshot of the home page of this portal.

1.2.2 Statistical monitoring

A range of statistics for quantitative monitoring contribute to the Network's metrics, and will inform the Observatory. These statistics are collected and published through the portal (<u>http://hoppers-kweb.cs.manchester.ac.uk/statistics.html</u>). Metrics include the gender ratios of:

- network members;
- exchanged network members;
- educational trainers and trainees at Summer Schools and similar events;
- educational trainees and trainees at Summer School and similar events;

³ Hoppers@KWeb can be accessed at: <u>http://hoppers-kweb.cs.manchester.ac.uk/</u>.

- organizers and invited speakers for meetings (e.g., conferences and workshops) sponsored by Knowledge Web;
- participants in area meetings;
- authors' of each deliverable.

The statistics of the network at 36 months are given in Section 1.8.

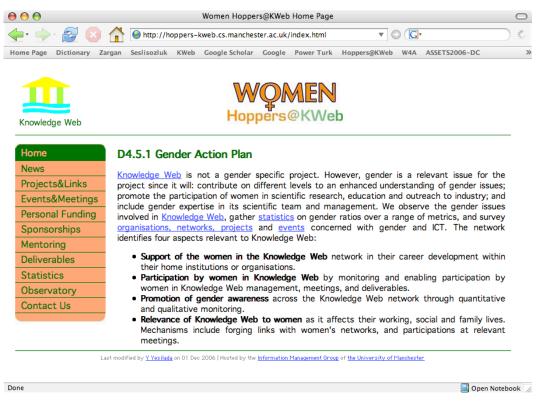


Figure 1 The home page of Hoppers@KWeb.

1.2.3 External observatory

To enhance the understanding and the relevance of Knowledge Web, the network would benefit from external observation from a gender perspective by invited experts. In D4.5.1v1 we identified experts from the Sociology Department, University of Warwick. The department has close links with the Centre for the Study of Women and Gender at the University of Warwick⁴. The network commenced discussions with Elaine Welsh in early 2005, with plans to develop a long-term relationship with Dr Welsh to aid qualitative evaluation, and to develop the network's gender strategies. One possibility explored was to set-up a PhD studentship, supervised by Welsh to examine the wider gender dynamics among members of the group.

We had hoped that Dr Welsh would be able to attend the summer plenary meeting in Crete, 2005. However, her prior commitments and the unavailability of the coordinator,

⁴ http://www2.warwick.ac.uk/fac/soc/sociology/gender/

meant this plan faltered, and the contact has been neglected. In 2006, she was also unable to attend any of the plenary meetings and in 2007, we hope to revive the contact, and get an external observe to attend one of the plenary meetings in 2007.

During the plenary, the experts would:

- review research case studies, benchmarks and ontologies for gender bias and gender impact;
- review teaching materials and the Summer School programme for gender bias and gender impact;
- observe interaction practices during the discussions in work package breakouts;
- audit the current practices with regard to gender awareness;
- report on their observations and recommend strategies to improve participation, support, promotion, and relevance by and to women.

1.2.4 Observatory Oversight Board

To ensure that the issues are properly monitored and developed, it was planned that a small oversight committee will meet at plenary meetings every 6 months, supplemented by telecons. The committee is proposed to be composed of:

- Technical Director Guus Schreiber,
- Deputy Director Asunción Gómez-Pérez,
- Network administrator Alice Carpentier,
- Carole Goble,
- Yeliz Yesilada,
- External member.

In reality, this hasn't happened – chiefly because Carole Goble hasn't attended as many plenaries as in the past since she gave up the Research Directorship and took on other onerous commitments. Thus this Observatory Oversight Board needs to be revitalized or responsibility to just lie with the work package team.

1.3 Knowledge Web Members Participation

The issues regarding gender, and the action plans pertaining to gender, apply equally to all Work Packages and Areas.

1.3.1 Enabling and encouraging participation

- The Observatory monitors partners to ensure that the listed female participates of the network have attended meetings or have been given the opportunity to attend meetings.
- The T-Rex exchange programme of WP2.6 aims to achieve 30% participation in exchanges by women in the network. Figures for 2004, 2005 and 2006 are given in Table 7.2.
- The Hoppers@KWeb portal lists funding and networking opportunities for women (see http://hoppers-kweb.cs.manchester.ac.uk/funding.html).

- In 2006, two mailing lists were established within the Knowledge Web network: (1) for management (<u>kweb-hoppers-mng@lists.manchester.ac.uk</u>) which is used for receiving sponsorships and funding applications, particularly it is used for receiving applications for funding Doctoral Consortium for ISWC2006, KWEPSY2006 and for other sponsorships; (2) for communication among female members (<u>kweb-hoppers@lists.manchester.ac.uk</u>), this list currently has 29 female members and has been used to announce information about the Website, gender issue related surveys and information about current events and activities. The latter mailing list was used and will be used to encourage participation and better communication between the women within the network.
- Work packages are encouraged to use modern virtual meeting technologies such as the Access Grid (<u>http://www.accessgrid.org</u>) and video conferencing for face-to-face meetings to limit the travel required and enable women (and men) with family commitments to fully participate. WP2.5 has used of the Access Grid technology for WP meetings.

1.3.2 Personal funding

To ensure the participation in Knowledge Web meetings of women who do not belong to partner institutes with funding, the project management team provides financial support for travel. We provide three types of funding:

1. Meetings and Events Funding for KWeb Members:

The network proposes to enable members to participate in national and international women and Information and Communication Technology (ICT) meetings. Meetings are advertised on the Hoppers@KWeb events and meetings section (<u>http://hoppers-kweb.cs.manchester.ac.uk/events.html</u>) and members in the network are encouraged to apply for funds from their home institutions to attend these meetings. However, if they cannot get funding to attend these meetings from their home institution, Hoppers@KWeb aims to support their travel. Relevant application forms are available on the Hoppers@KWeb portal and applications are reviewed by our Observatory Oversight.

2. Meetings and Events Funding for Non-Members

To ensure the participation in Knowledge Web meetings of women who do not belong to partner institutes with funding, the project management team provides financial support for travel. Relevant application forms are available on the Hoppers@KWeb portal and the Observatory Oversight Board assesses the applications by all participants. A positive discrimination policy for female applicants is practiced.

3. Funded Events and Activities

Hoppers@KWeb also provides special funding to some particular events. In 2006, special funding were provided for the following two events:

• The Knowledge Web PhD Symposium 2006 (KWEPSY2006)

(<u>http://www.l3s.de/kweb/kwepsy2006/</u>) Hoppers@KWeb funded seven female students to attend the KWEBSY2006. Table 1.1 shows the details of the provided funding. Three students were given partial funding as they were from an institution which is part of the KWEB network of excellence and they could also get funding from their own institution. Other four female students were given full funding and they were not from a member institution.

• The Doctoral Consortium

(http://iswc2006.semanticweb.org/submissions/symposium.htm) at ISWC 2006 (http://iswc2006.semanticweb.org/), Hoppers@KWeb funded five students to attend the KWEBSY2006. Table 1.2 shows the details of this funding. Two students were given partial funding and three students were given full funding.

		Kweb	
Name	Affiliation	Member	Туре
Loredana Laera	University of Liverpool	Yes	Partial
Maria (Marjike)	Free University of Bozen -		
Keet	Bolzano	Yes	Partial
Malgorzata Mochol	Free University of Berlin	Yes	Partial
Miriam Fernandez	Universidad Autonoma de Madrid	No	Full
Agnieszka			
Lawrynowicz	Poznan University of Technology	No	Full
	Babes-Bolyai University of Cluj-		
Muresan Ana-Maria	Napoca, Romani	No	Full
	Ege University & Poitiers		
Dilek Tapucu	University (France)	No	Full

Table 1.1 Scholarship Details for the KWEPSYS2006

Name	Affiliation	Kweb member	Туре
Harry Halpin	University of Edinburgh, UK	No	Partial
Cuii Tao	Brigham Young University, USA	No	Partial
Esther	University of Zurich, Department		
Kaufmann	of Informatics, Switzerland	No	Full
Ozgu Can	Computer Engineering Department of Ege University, Turkey	No	full
Carolina Felicissimo	Pontifical Catholic University of Rio de Janeiro (PUC-Rio), Brazil	No	Full

Table 1.2 Scholarship Details for the DC at ISWC2006

Applications for all these personal funding are enabled through the portal and assessed by the Observatory Oversight Board. A positive discrimination policy for female applicants is practised. Since the European Commission funds the Knowledge Web project, students from European Union member countries also have higher priorities for this funding.

1.3.3 Sponsoring Gender Issues Related Conferences and Workshops

Hoppers@KWeb also supports events and activities that are related to gender issues (e.g., career development events, etc. – for more examples see <u>http://hoppers-kweb.cs.manchester.ac.uk/events.html</u>). Although Knowledge Web sponsors a range of technical meetings, conferences, workshops and events, we believe sponsoring events related to gender issues is important to increase the awareness of gender issues. Sponsorship applications are widely advertised on the Hoppers@KWeb portal (<u>http://hoppers-kweb.cs.manchester.ac.uk/sponsorship.html</u>). In 2006 Hoppers@KWeb successfully sponsored the following events:

- BCSWomen and Women@CL Career Development Workshop 2006 (http://www.bcs.org.uk/bcswomen/www2006workshop.htm), this workshop was organised in conjunction with the International WWW2006 Conference and Hoppers@KWeb sponsored the best poster award.
- The crèche facility at the 15th International World Wide Web Conference 2006 (WWW2006 <u>http://www2006.org/</u>), this facility was fully sponsored by Hoppers@KWeb.

1.3.4 Mixed management teams and decision making

The network aims to ensure that a least one woman will participate in the decision making and management of the main goals related to the education, industry and research area, and that each area should aim for 30% participation in the work package business. In the first 36 months of Knowledge Web, the status is as follows.

- **Industry Area**: Two area directors: 100:0 male: female ratio. Six work packages: leaders 33:66 male:female ratio.
- **Research Area**: Two area directors: 100:0 male:female ratio. Six work packages: leaders 100:0 male:female ratio.
- Education Area: Two area directors: 100:0 male: female ratio. Three work packages: leaders 100:0 male:female ratio.
- **Management Area**: Two scientific vice directors: 50:50 male:female ratio. The scientific director and the project coordinator are male. Two of the three managing directors are female. Six work packages: leadership 50:50 male:female ratio.

We must improve the gender ratio of work package leadership across the network. The majority of the Research work package participants are male. It is this area needs particular attention by the Observatory. Further statistics for 2004-2006 are given in Table 7.1. - 7.8.

1.3.5 New partners

New partners to the network are required to show that they will aim for 30% participation of women in their organisations. Partners that show a commitment to redressing the gender balance of the network will be given greater priority than those that do not.

1.4 Knowledge Web Members Support

The network aims to create a mutually supportive community of women in Knowledge Web. In addition to the promotion of opportunities and information through the Hoppers@KWeb portal, further specific actions are proposed.

1.4.1 Meetings and events

The network proposes to encourage women to participate in the T-Rex exchange programme and the Summer School. Disappointingly, the number of female participants in T-Rex declined in 2006; this needs attention in 2007. Although the numbers of female trainers decreased in 2006, the number of female trainees increased (see Table 7.3 and 7.4).

1.5 Mentoring

We are collaborating with the UK Resource Center for Women in Science, Engineering and Technology (UKRC) (<u>http://www.mentorset.org.uk/</u>) to set up a mentoring scheme. UKRC is funded by the DTI and European Social Fund since 2004. Its main mission is to promote the participation and position of women in science, engineering and technology, and it provides a range of services including networking, mentoring support, good practice guides for employers and media projects.

The main aim of Hoppers@KWeb Mentoring is to offer support and encouragement to women establishing their careers in Semantic Web. A mentor is a guide who can point you in the right direction, advise on career matters, and help you to overcome problems. Having a good mentor can be a short cut to success. A mentor should help you to believe in yourself and boost your confidence, should ask questions and challenge you, while providing guidance and encouragement. Mentoring is acknowledged as a key tool in personal development and empowerment.

We aim to connect women in Knowledge Web with mentors either within Knowledge Web or without who can offer advice and guidance about the issues important to them; mentors who can help with self-development, suggest networking opportunities and empower mentees to make their own decisions and turn these into actions.

In the process of setting up the mentoring scheme for KWeb, we started to create a number of resources for the Knowledge Web participants with the considerable help given to us by Samantha Haynes and Rachel Tobbell from UKRC.

This has proved to be hard to set in place for a number of reasons, including: cultural differences across the network; commitments from busy members of the network; and frankly, low prioritisation of the activity. In 2007 we should reflect on the need and desire for mentoring had how it can be realistically developed.

1.5.1 What is mentoring?

Mentoring could be described as follows:

- Off-line help by one person to another in making significant transitions in knowledge, work or thinking (David Clutterbuck & David Megginson, Techniques for Coaching and Mentoring, 2004).
- To support and encourage people to manage their own learning in order that they may maximise their potential, develop their skills, improve their performance and become the person they want to be (Eric Parsloe Oxford School of Coaching and Mentoring).
- "I have learned what mentoring actually is: professional friend, partnership, a person who guides, listens and supports to enable you to get where you want to be" (A mentor on a UK Resource Centre Mentoring Programme).

1.5.2 Roles of a Mentor & Mentee

The following keywords could be used to describe Mentor: "Coach, Facilitator, Role model, Sounding board" and Mentee "Develops skills, Self-managed learner, Develops vision for career, Seeks advice & ideas"

What's in it for the mentor?

- Develops own skills;
- Satisfaction at seeing someone else grow;
- Opportunity to be challenged;
- Opportunity for reflection and validation of own experience/decisions;
- But not status, financial reward or ego-massage.

What's in it for the mentee?

- Source of advice and guidance;
- Reassurance / confidence;
- Personal reflective space;
- Source of challenge;
- Access to networks;
- Greater knowledge of sector;
- Career planning.

1.5.3 Phases of the Mentoring Relationship

Mentoring phases typically include the following which are illustrated in Figure 3: Building rapport, setting direction, prograssion, maturation

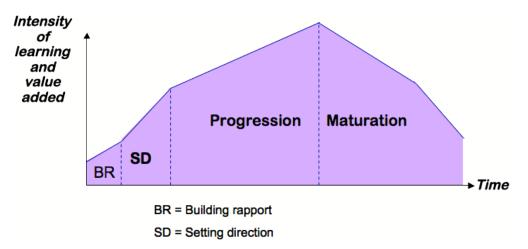


Figure 2 Diagram taken from Mentoring in Action, Megginson, Clutterbuck et al, 2nd Edition, Page 20, Kogan Page, 2006.

1.6 Promotion of Gender Awareness

Quantitative and qualitative monitoring by the Observatory will contribute to gender awareness throughout the network.

1.7 Relevance of Knowledge Web to Women

We encourage women to pursue a scientific, engineering or technological career by giving them access to the necessary resources, through linking them up to inspiring female scientific and technological networks, and in providing them with gender neutral tools and languages.

In the dissemination of Knowledge Web, we will ensure that part of the effort will be directed towards a female public and presented at several international women in computing organizations such as the Grace Hopper conference and workshops and conferences of the most relevant organizations of women and technology in Europe and the USA such as the ones mentioned above. Further suggestions will be made by the Observatory.

1.8 Observatory Statistics

Table 7.1 Gender distribution network partners of active participants as given on the Knowledge Web portal, Dec 2004-2006. Only 4 currently reach the target of 30% or more female participation.

Participant	Male	Female	% Female
UIBK	8	4	36%
ITI-CERTH	7	1	13%
FT	8	0	0%
EPFL	8	0	0%

LivUni	3	2	40%
FUB	7	1	13%
FU Berlin	5	2	29%
INRIA	8	2	20%
L3S	4	2	33%
NUIG	10	0	0%
UPM	9	3	25%
OU	4	0	0%
UKARL	9	0	0%
VUA	11	3	21%
UniTn	10	2	17%
UoM	12	5	29%
VUB	3	0	0%
USFD	3	2	40%
Total	129	29	18%

Table 7.2 T-Rex Exchanges between network partners in 2004, 2005 and 2006, as given on the Knowledge Web Portal December 2006. The table shows %11 female ratio. Thus the target of 30% exchanges to be female has not been achieved.

Start	End	Person	Sender	Host	Торіс	Gen
16.01.2004	30.01.2004	Ilya Zaihrayeu	UniTn	UIBK	Semantic heterogeneity	М
25.02.2004	16.04.2004	M. Carmen Suarez-Figueroa			Ontology Evaluation	F
04.06.2004	09.07.2004	Angel Lopez Cima	Lopez UPM OU K		Kweb portal and MagPie integration	М
20.07.2004	20.08.2004	Wolfgang Nejdl	L3S	EPFL	Semantic Web Query Evaluation in Distributed Environments	М
21.07.2004	15.09.2004	Axel Polleres	UIBK	NUIG	Reasoning for Semantic Web Services in WSMO WSML	М
22.07.2004	30.09.2004	Ruben Lara	UIBK NUIG		Semantic Web Service discovery in WSMO	М
23.08.2004	03.09.2004	Wolf Siberski	L3S	EPFL	Semantic Web Query Evaluation in Distributed Environments	М
30.08.2004	11.09.2004	Holger Wache	VUA	UniTn	Ontology Modules and Contexts for Ontologies	М
13.09.2004	15.10.2004	Marta Sabou	VUA	USFD	Extracting web- service ontologies using Natural Language Technologie	F
24.09.2004	15.10.2004	Rafael Gonzalez Cabero	UPM	USouth	Adequacy of the SW technology for developing the AgentLink III portal	М
27.09.2004	27.01.2005	Davide Guidi	FUB	OU	Web services and ontologies development and Integration of the Sesame architecture into OCML language	М
27.09.2004	1.10.2004	Klaus Schild	FU Berlin	NUIG	RDF Model Theory	М

04.10.2004 06.10.2004 Marta Sabou		VUA	UoM	Evaluation of Extracting web- service ontologies using Natural	F	
					Language	
06.10.2004	3.11.2004	Pavel Shvaiko	UniTn	INRIA	Technologies Ontology Alignment	М
01.11.2004	31.12.2004	Wolf Winkler	NUIG	UKARL	Ontology Versioning	M
22.11.2004	11.02.2005	Christoph Tempich	UKARL	INESC-ID Lisabon	Ontology Engineering methodology	М
17.01.2005	11.02.2005	Heiner Stuckenschmidt	UoM	L3S	Combining Semantic Web and Peer-to-peer Technologies to support inter- organizational information sharing	М
31.01.2005	13.02.2005	Jeff Z. Pan	VUM	FUB	Querying databases with ontologies	М
16.02.2005	11.03.2005	Wolf Siberski	L3S	VUA	Combining knowledge representation and information sharing infrastructures	М
14.03.2005	14.04.2006	Raul Palma	UPM	UKARL	Oyster + Ontology Repository	М
04.04.2005	29.04.2005	Knud Moller	NUIG	USFD	Scalability of Annotation Services	М
17.04.2005	30.04.2005	Jeff Z. Pan	UoM	FUB	Querying ontologies and datatypes	М
25.04.2005	27.05.2005	Marc Ehrig	UKARL	INRIA	Ontology Alignment	М
09.05.2005	27.05.2005	Lyndon JB Nixon	FU Berlin ITI- CERTH Multimedia and Semantic Web technologies			М
22.05.2005	30.05.2005	Jeff Z. Pan	UoM	ITI- CERTH	f-SI and f-SWRL	М
28.06.2005	08.07.2005	Jos de Brujin	UIBK	FUB	Logical reconstruction of RDF	М
04.07.2005	16.07.2005	Jeff Z. Pan	UoM	VUA	Anytime DL reasoning	М
25.07.2005	19.08.2005	Jörg Diederich	L3S	OU	ASPL-2: The next version of the Advanced Platform for Learning	М
01.08.2005	19.08.2005	Elena Paslaru Bontas	FUB	UKARL	Ontology Cost Estimation	F
24.08.2005	30.09.2005	Mustafa Jarrar	VUB	FUB	Ontology Modularization	М
01.09.2005	30.09.2005	Stefano Spaccapietra	EPFL	FUB	Temporal Logic and Conceptual Modeling of Temporal Data	М
03.11.2005	20.02.2006	Max Völkel	UKARL	Deri Galway	SemVersion, Semantic Wikis for Personal KM	М
16.11.2005	16.11.2005	Jeff Pan	Aberdeen UoM Integrating and Querying Parallel Leaf Shape		Integrating and Querying Parallel	М
27.03.2006	02.04.2006	Wolf Siberski	L3S	Aberdeen		
25.04.2006	24.05.2006	Raúl Palma	UPM	UKARL	OMV/Oyster	М
16.6.2006	24.07.2006	Andrei Tamilin	UniTn	Mannheim	Improving Automatically	М

19.06.2006	20.08.2006	Mikalai Yatskevich	UniTn	IBM	Created Mappings using Logical Reasoning Information integration	М
					Overall %F	11

 Table 7.3 Educational trainers at the 2004, 2005 and 2006 European Summer School on Ontological Engineering and the Semantic Web, Cercedilla, Spain.

Summer	Dates	Tutors		Invited Speakers			Directors			
School		Μ	F	%Female	Μ	F	%Female	Μ	F	%Female
SSSW'04	19/07/2004-4/07/2004	5	1	17	5	0	0	2	1	33
SSSW'05	10/07/2005-6/07/2005	5	2	29	5	1	17	2	1	33
SSSW'06	15/07/2006-9/07/2006	5	1	17	5	0	0	3	1	25

Table 7.4 Educational trainees at the 2004, 2005 and 2006 European Summer School on Ontological Engineering andthe Semantic Web, Cercedilla, Spain.

Summer School	Male	Female	%Female
SSSW'04	41	15	27
SSSW'05	40	16	29
SSSW'06	33	17	34

Table 7.5 Organization committee and invited speakers of the workshops organised by Knowledge Web in 2004-2006 (? means figures are unavailable and – means there were no keynote or invited speakers).

Acronym	Title	Organization Committee		Invited/ Keynote Speakers			
		M F %F	Μ	F	%F		
EON2006	Evaluation of Ontologies for the Web (http://km.aifb.uni- karlsruhe.de/ws/eon2006)	3	1	25	-	-	-
DL2006	International Workshop on Description Logics (http://dl.kr.org/dl2006/)	2	1	33	2	0	0
KWEPSY2006	KnowledgeWeb PhD Symposium 2006 (http://www.l3s.de/kweb/kwepsy2006)	2	1	33	-	-	-
STICA 06	Semantic Technologies in Collaborative Applications (http://www.inf.fu-berlin.de/inst/ag-nbi/conf/STICA06/)	2	1	33	-	-	-
C&O-2006	Contexts and Ontologies: Theory, Practice and Applications (http://www.c-and-o.net/)	4	1	20	1	1	50
OnToContent06	Workshop on Ontology content and evaluation in Enterprise (http://www.starlab.vub.ac.be/staff/mustafa/OnToContent06)	4	0	0	-	-	-

			1		1	1	
OM2006	The ISWC'06 International Workshop on Ontology Matching (http://www.om2006.ontologymatching.org/)	5	1	17	2	0	0
	OWL: Experiences and Directions Workshop (http://owl-						
OWL-ED2006	workshop.man.ac.uk/OWLWorkshop06.html)	4	0	0	-	-	-
SEMPS2006	Semantic Enhanced Multimedia Presentation Systems (http://mmit.informatik.uni-oldenburg.de/SEMPS2006/)	2	2	50	1	0	0
MTW2006	Models of Trust for the Web (www.l3s.de/~olmedilla/events/MTW06_Workshop.html)	2	1	33			
BAOSW2005	Building and Applying Ontologies for the Semantic Web (http://baosw.epia05.di.ubi.pt/)	2	2	50	1	0	0
	Semantic Web Case Studies and Best Practices for eBusiness		2		1	0	
SWCASE2005	(http://nbi.inf.fu-berlin.de/conf/SWCASE05)	3	0	0	-	-	-
SWESE2005	Semantic Web Enabled Software Engineering (http://www.mel.nist.gov/msid/conferences/SWESE/)	3	1	25	-	-	-
OWLED2005	OWL Experiences and Directions (http://www.mindswap.org/2005/OWLWorkshop/)	4	0	0	_	-	
	Integrating Ontologies (http://km.aifb.uni-						-
IntOnt2005	karlsruhe.de/ws/intont2005) Foundational Aspects of Ontologies (http://www.aifb.uni-	4	0	0	-	-	-
Font2005	karlsruhe.de/WBS/phi/FOnt2005/)	3	0	0	1	0	0
WORM 2005	The 3rd International Workshop on Regulatory Ontologies (http://www.starlab.vub.ac.be/staff/mustafa/WORM 2005.htm)	5	0	0	-	-	-
LWS2005	Learning in Web Search (http://cosco.hiit.fi/search/learninginsearch05/)	3	0	0	2	1	33
C&O2005	Contexts and Ontologies: Theory, Practice and Applications (http://dit.unitn.it/~pavel/cando/)	3	1	25	2	0	0
	Ontologies in P2P Communities (http://www.kde.cs.uni-			0			
OntoP2P2005	kassel.de/ws/ontop2p2005) Scripting for the Semantic Web	3	0		-	-	-
SFSW2005	(http://www.semanticscripting.org/SFSW2005/) Workshop on End User Aspects of the Semantic Web	2	1	33	-	-	-
UserSWeb	(http://kmi.open.ac.uk/events/usersweb)	2	1	33	-	-	-
ESWC05_MSW	Multimedia and the Semantic Web (http://www.acemedia.org/ESWC2005_MSW)	4	0	0	1	1	50
	Interoperability of Web-Based Educational Systems at the WWW 2005						
	(http://www.l3s.de/~olmedilla/events/interoperability.html)	3	0	0	-	-	-
IKMTOOLS2005	Workshop on Intelligent IT Tools for Knowledge Management Systems: Applicability, Usability, and Benefits (http://wm2005.iese.fraunhofer.de/workshop11-en.html)	4	1	20	_		
	Corporate Education Course Content				-	-	-
CECC 2005	(http://www.l3s.de/~diederich/cecc)	1	1	50	-	-	-
SWop2005	Semantic Web Interoperability Workshop (http://kmi.open.ac.uk/events/SWOp)	1	1	50	-	-	-
OMAC2005	Workshop on Ontology Modularization and Context (http://www.starlab.vub.ac.be/staff/mustafa/OMAC.htm)	1	0	0	-	-	-
ONS 2004	Ontologies for Networked Systems (http://km.aifb.uni- karlsruhe.de/ws/ons2004)	2	1	33	-	-	1
EON 2004	Evaluation of Ontology-based Tools (http://km.aifb.uni- karlsruhe.de/ws/eon2004)	4	0	0	-	-	-
MCN2004	Meaning Coordination and Negotiation (http://dit.unitn.it/~bouquet/ISWC-04-MCN/)	7	0	0	_	_	_
	Semantic Web Services						_
SWS2004	(http://www.ai.sri.com/SWS2004/organization.html) Workshop on Regulatory Ontologies	3	0	0	-	-	-
WORM 2004	(http://www.starlab.vub.ac.be/staff/mustafa/WORM_2004.htm)	2	0	0	1	0	0
OMAC2004	Workshop On Ontology Modularization and Context (http://www.starlab.vub.ac.be/staff/mustafa/OMAC.htm)	1	0	0	-	-	-
SWEB 2004	Semantic Web technologies in Electronic Business (http://sweb.xml-clearinghouse.de)	3	0	0	?	?	?
SWSDN 2004	Semantic Web Services and Dynamic Networks (http://km.aifb.uni-karlsruhe.de/ws/swsdn2004)	3	0	0	-	-	_

SIM2004	Semantic Intelligent Middleware for the Weband the Grid (http://www.intelligence.tuc.gr/sim2004)	4	2	33	-	-	-
SWWC2004	Workshop on Application of Semantic Web Technologies to Web Communities (http://www.deri.at/events/meetings/swpECAI04/)	5	1	17	1	0	0
OLP2004	Ontology Learning and Population (http://olp.dfki.de/ecai04/cfp.htm)	3	0	0	-	-	•
MSW2004	Mining for and from the Semantic Web (http://km.aifb.uni- karlsruhe.de/ws/msmw2004)	2	1	33	?	?	?
P2PKM2004	Peer-to-Peer Knowledge Management (http://www.p2pkm.org)	2	0	0	2	0	0

Table 7.6 Organization committee and invited speakers of the conferences organised by Knowledge Web in 2004-2006

 (? means figures are unavailable and – means there were no keynote or invited speakers).

Acronym	Title	Organisation Committee		Invited Speakers			
		Μ	F	%F	Μ	F	%F
ESWS 2004	1st European Semantic Web Symposium (http://www.esws2004.org/)	5	0	0	1	0	0
ISWC 2004	3rd International Semantic Web Conference (http://iswc2004.semanticweb.org/)	15	2	12	2	1	33
EKAW 2004	14th International Conference on Knowledge Engineering and Knowledge Management (http://kmi.open.ac.uk/ekaw)	46	9	16	3	0	0
ESWC 2005	2nd European Semantic Web Conference (http://www.eswc2005.org/)	12	3	20	2	0	0
ISWC 2005	4th International Semantic Web Conference (iswc2005.semanticweb.org/)	15	3	17	2	1	33
	Semantic Web Days 2005 (http://semantic.web-days.net)	3	4	57	2	0	0
	Berliner XML Tage 2005 (http://www.xml- clearinghouse.de/ws/BXML2005)	2	0	0	?	?	?
KR2006	International Conference on Principles of Knowledge Representation and Reasoning (http://kr.org/KR2006/)	6	0	0	2	0	0

 Table 7.7 Participants in Knowledge Web Meetings 2004-2006.

Area	Work Package Meetings	Dates	D	elegat	es
Alta		Dates	Μ	F	%F
	OOA-HR Kickoff workshop	Oct 11 2006	?	?	?
	GA Heraklion	Jun 2005	15	5	25
Ŷ	GA Hanover	Jan 2005	8	6	43
Industry	Berlin Industrial Meeting	Nov 17-19 2004	11	6	35
npu	Trento Industrial Meeting	Sept 9-10 2004	12	8	40
II	Heraklion Industrial Meeting	May 13-14 2004	34	9	21
	Paris Industrial Meeting	Mar 5 2004	10	4	29
	Madrid Industrial Meeting	Feb 4 2004	17	4	19
.ch	Manchester Meeting	Sept 27-29 2004	29	6	17
Research	Crete Research Area Meeting	May 13-14 2004	35	5	13
Re	Amsterdam Meeting	Mar 3-4 2004	31	6	16
Education	SSSW`06: The Fourth Summer School on Ontological Engineering and the Semantic Web	July 9-15 2006	33	17	34
luc	Education Area Meeting, Budva	June 16 2006	?	?	?
Ed	Budva Education Area / WP3.2	June 16 2006	?	?	?

			-		1.5
	EASE Founding Assembly	June 16 2006	5	1	17
	Crete Education Area / WP3.1	Jun 6 2005	8	2	20
	Crete Education Area / WP3.2	Jun 6 2005	5	1	17
	Crete Education Area / WP3.3	Jun 6 2006	7	0	0
	Hannover Education Area / WP3.1	Jan 24-25 2005	10	0	0
	Hannover Education Area / WP3.2	Jan 24-25 2005	5	0	0
	Hannover Education Area / WP3.3	Jan 24-25 2005	4	0	0
	Manchester Education Area	Sept 27-29 2004	12	2	14
	Madrid Education Area Kick-off	Feb 3-4 2004	15	2	12
	PMB Audiconference	Nov 30 2006	7	3	30
	PMB Audiconference	Oct 26 2006	7	1	13
	PMB Audiconference	Sept 28 2006	10	1	9
	PMB Audiconference	Augt 31 2006	8	1	11
	PMB Audiconference	July 27 2006	2	2	50
	PMB F2F Metting	June 15 2006	9	1	10
	PMB Audiconference	May 18 2006	8	2	20
	PMB Audiconference	April 27 2006	9	1	10
	PMB Audiconference	Mar 30 2006	8	2	20
nt	Second Knowledge Web Review	Mar 9-10 2006	22	6	21
me	PMB Audiconference	Feb 23 2006	6	3	33
Management	F2F Meeting Trento	Jan 16 2006	15	3	17
ans	PMB Audiconference	Jan 16 2006	15	3	17
Ň	PMB Meeting	Nov 24 2005	9	3	25
	PMB Meeting	Oct 27 2005	7	2	22
	PMB Meeting	Sep 29 2005	6	2	25
	PMB Meeting	Sep 08 2005	10	3	23
	PMB Meeting	Jun 30 2005	8	3	27
	PMB Meeting	Jun 2 2005	12	2	14
	PMB Meeting	April 28 2005	5	2	29
	PMB Meeting	Mar 31 2005	7	3	30
	PMB Meeting	Feb 24 2005	8	3	27
	PMB Meeting	Jan 24 2005	11	4	27

Table 7.8 Authors of delivered deliverables, from the Knowledge Web Portal December 2006.

Deliverable	Title	(Geno	ler
		Μ	F	%
Industrial D	eliverable			
D1.1.1v2	Industry board members and Economic Sector	2	0	0
D1.1.2v1	Prototypical business use cases	4	2	23
D1.1.3	Typology of ontology-based processing tasks and high level components needed to fulfil the propotypical application requirements	5	2	29
D1.1.4v1	System and knowledge technology components for prototypical applications and business cases	2	0	0
D1.1.4v2	System and knowledge technology components for prototypical applications and business cases	2	0	0
D1.1.5v1	Communication Channel with IB and Industry	1	0	0
D1.2.10	Ontology repository	0	1	100
D1.2.2.1.1	Evaluation of interoperability of ontology development tools for different types of industrial application needs: Interoperability through RDF(S)	4	2	33

D1.2.2	Report on Semantic Web Framework requirements analysis	4	2	33
D1.2.2	Methods for ontology evaluation	3	3	50
D1.3.2	Identification of standards on metadata for ontologies	4	3	43
D1.3.3	Report on requirements of OOA	4	3	43
D1.4.1v1	Technology roadmap Skeleton	2	2	50
D1.4.1v2	Technology RoadMap	10	3	23
D1.4.2	Success Stories and Best Practices	2	1	33
D1.4.3	Report on first international technology show	1	0	0
D1.4.3v2	Report on second international technology show	1	0	0
D1.5.1	Project presentation and project showcase	1	1	50
D1.5.2	Report on joint education and training activities with cooperating networks	0	1	100
D1.5.4	Report on education and training progress and agreements	4	3	43
D1.6.1	Portal requirements analysis and system design	2	1	33
D1.6.2	Portal ontology	1	2	67
D1.6.3	Portal versions	0	2	100
D1.6.4	Portal contents releases	1	1	50
E-D2	Co-operation with Knowledge Web/EASE on graduate education	2	0	0
T-D2	Co-operation with Knowledge Web and other NoE on industrial competence	3	1	25
	centres and EASE			
Research D	eliverables			
D2.1.1	State of the art on the scalability of ontology-based technology	2	0	0
D2.1.2	Report on methods for approximate reasoning using knowledge compilation,	3	0	0
	language weakening and approximate deduction			
D2.1.3.1	Report on modularization of ontologies	9	0	0
D2.1.4	Definition of a methodology, general criteria, and benchmark suites for	4	1	20
	benchmarking ontology tools			
D2.1.5	Prototypes of tools and test suites for benchmarking ontology building tools	1	0	0
D2.2.1v1	Specification of a common framework for characterizing alignment	9	0	0
D2.2.1v2	Specification of a common framework for characterizing alignment	9	0	0
D2.2.2	Specification of a benchmarking methodology for alignment techniques	3	0	0
D2.2.3	State of the art on current alignment techniques	1	2	15
D2.2.4		1	0	0
D2.2.4	Description of alignment implementation and benchmarking results	7	0	0
D2.2.5	Integrated view and comparison of alignment semantics	6	0	0
D2.2.6	Specification of delivery alignment format	3	0	0
D2.3.1	Specification of a methodology for ontology syntactic and semantic versioning	1 2	0	0
D2.3.3v1	Full RDF versioning system	3	0	0
D2.3.3v2	Full RDF versioning system	5	0	0
D2.3.5v1	Integration of Consessus Making Environment with RDF versioning system	4	1	20
D2.3.5v2	Consensus Making Environment	4	1	20
D2.3.6	Prototypes of language dependent tools for ontology evaluation	0	1	100
D2.3.7	Report on negotiation/argumentation techniques among agents complying to different ontologie	1	1	50
D2.4.1	Semantic requirements for web services description	8	0	0
D2.4.2	Definition of semantics for web service discovery and composition	6	0	0
D2.4.3	State of the art on agent-based services	2	0	0
D2.4.4	Guidelines for the integration of agent-based services and web-based services	7	0	0
D2.4.5	A Conceptual and Formal Framework for Semantic Web Services	2	0	0
D2.4.5v2	A Conceptual and Formal Framework for Semantic Web Services	3	0	0
D2.4.6.1v1	Theoretical Integration of Web Service Discovery and Composition	8	0	0
D2.4.7.1v1	Web Service Invocation and Interoperation	3	1	25
D2.4.8.1v1	Technical and ontological infrastructure for Triple Space Computing	2	1	33
D2.4.6.1v2	Theoretical Integration of Web Service Discovery and Composition	8	0	0
	Reputation Mechanism	3	0	0

D2.4.9v2	Reputation Mechanism	3	0	0
D2.4.ID1	State of the art of current Semantic Web Services initiatives	1	1	50
D2.5.1	Specification of coordination of rule and ontology languages	0	1	100
D2.5.2	Report on query language design and standardization	2	1	33
D2.5.3	Report on Implementation and Optimization Techniques for Ontology Query Systems	7	0	0
D2.5.4	Analysis of Requirements for Further Language Extensions	1 1	0	0
D2.5.5	OWL 1.1	5	1	17
D2.6.2a T- REX	Topic-oriented Researcher EXchange in Knowledge Web	2	0	0
D2.6.3	Report on workshop and conference organization	2	0	0
D2.6.4	Report on research advance	2	1	33
D2.6.5v2	Report on research exchange and collaboration	1	0	0
D2.6.6v2	Report on workshop and conference organization	1	0	0
Educationa	l Deliverables			
D3.1.1	Specification of VISWE tasks and goals (as result of a requirements analysis)	3	1	25
D3.1.2	Document on organizational structure and legal form of VISWE to which all participating partners have agreed	5	0	0
D3.1.3	First version of the EASE association statutes	7	2	22
D3.1.4	Requirements for a joint e-learning infrastructure	3	1	25
D3.1.5	Published learning resources, quality guidelines and procedure, and usage of learning resources	4	1	20
D3.2.10	Summer School 2006	1	0	0
D3.2.1v1	Learning unit collection available	3	0	0
D3.2.2	Report on educational events	6	1	14
D3.2.3	Report on core curricula in Ontology and Semantic Web	2	0	0
D3.2.4	Joint curriculum for a shared masters programm	5	1	17
D3.2.5	Procedure for the shared masters programm, version 1	1	0	0
D3.2.5v2	Procedure for the shared masters programm, version 2	1	0	0
D3.2.6	Summer school 2005	1	0	0
D3.2.8	Report on PhD student network activity	1	2	67
D3.2.9	Report on Industry-education cooperation	3	0	0
D3.3.1	Report on the agreed metadata standard for learning units	2	1	33
D3.3.2v1	Basic infrastructure available, provides initial learning unit collection from task 3.2.3	2	1	33
D3.3.2v2	Basic infrastructure available, provides initial learning unit collection from task 3.2.3	4	0	0
D3.3.3	Prototype of advanced learning platform (ASPL-v1)	2	0	0
D3.3.4	Report on collaboration with IMS consortium and ProLEARN	1	0	0
D3.3.5	Evaluation of prototype(ASPL-1)	4	1	20

1.9 Organisations and Networks

This information appears on the Hoppers@KWeb Portal – projects and links pages (<u>http://hoppers-kweb.cs.manchester.ac.uk/projects.html</u>). We present and publicize some national organisations, networks and links of partner countries (UK, Belgium, Germany, France, Ireland, Netherlands and Switzerland) and international projects and links (USA, Canada). Here we include an example organization to each member country to give an idea of what is presented on these pages:

In United Kingdom

• Women@cl (<u>http://www.cl.cam.ac.uk/women</u>) Provides local, national and international activities for women engaged in computing research and academic leadership. Only 1 in 4 computing PhDs, 1 in 8 computing academic staff and 1 in 20 computing professors are females yet 33% of academic women, as opposed to 22% of men, aspire to leadership positions.

In Belgium

• **Belgian Women in Science (BeWiSe)** (<u>http://bewise.naturalsciences.be/</u>) BeWiSe is dedicated to achieving the equal and full participation of women in all scientific disciplines and at all levels.

In Germany

• Women in the Information Society and in Technology (<u>http://www.kompetenzz.de/</u>) This Centre of Excellence ties together nationwide equal opportunities measures and aims to raise the proportion of women in IT and engineering. The website is available in German and partly in English.

In France

• Ministry of Research and New Technologies (<u>http://www.recherche.gouv.fr/parite/default.htm</u>) These pages describe the French Ministry for Research and New Technologies' policy in favour of a well-balanced mix in research and education. This site is available in French.

In Ireland

• Women in Technology & Science (WITS) (<u>http://www.witsireland.com/</u>) WITS actively promotes women's involvement in science in Ireland. The association has members from a broad range of scientific, engineering and technological backgrounds including teachers, computer experts, technicians and journalists.

In the Netherlands

• Emancipatie

(http://www.emancipatie.nl/home/dossiers/dossiers op alfabet/Dossiers W/Wete nschap en hoger onderwijs - vrouwen in/) This webpage contains links to emancipation-related organisations, documents and websites on women in higher education and science in the Netherlands. Information is only available in Dutch.

In Switzerland

• Femdat (<u>http://www.femdat.ch/</u>) Femdat is a comprehensive Swiss database of women scientists and experts from various fields. The website is available in French, German and English.

1.10 International Events

On the Hoppers@KWeb Portal we also announce information about the national and international events, meetings, awards and scholarship. The following list presents some example events announced on the portal.

- 4 May 2006: Internet Computing BCS Equalitec Career Workshops (London, UK)
- 22 May 2006: Career development workshop (Edinburgh) organised by Women@CL (<u>http://www.bcs.org.uk/bcswomen/www2006workshop.htm</u>)
- 11-15 Sept 2006: Career development workshop (London) organised by Women@CL (<u>http://www.cl.cam.ac.uk/women/NatMeetings.html</u>)
- 4-7 October 2006: Grace Hopper Celebration of Women in Computing (San Diego, CA) 11 October 2006: Women in Technology Event: Positive Impact and Influencing Tools (London) (<u>http://www.gracehopper.org/call_for_participation.html</u>)

And the following list presents some example awards:

- MSc funding for women on career breaks (Queen Mary University of London) (<u>http://anitaborg.org/awards/2006/change_agent_06.html</u>)
- BlackBerry BlackBerry Women and Technology Awards 2006 (<u>http://www.blackberrywomentechnologyawards.com</u>)
- GNOME Women's Summer Outreach Program 2006 (<u>http://www.gnome.org/projects/wsop/</u>)

For a complete list, please refer to: <u>http://hoppers-kweb.cs.manchester.ac.uk/events.html</u>.

PART 2 - PUBLIC ENGAGEMENT ACTIVITIES

1.1 Survey of Public Engagement Activities

In 2005 and 2006, we conducted email surveys among Knowledge Web members to investigate the quality and quantity of the public engagement activities of the Knowledge Web members and participants. The results of these surveys are summarized in the following sections.

1.1.1 Communications to other Computer Science communities

Here we present some articles, invited talks, tutorials, etc, that were given by the Knowledge Web participants targeted to other Computer Science communities:

 Frank Van Harmelen (Vrije Universiteit Amsterdam) wrote a column in IEEE Distributed Systems, March 2004, "The Semantic Web: What, Why, How, and When" (<u>http://www.cs.vu.nl/~frankh/postscript/IEEE-DS04.pdf</u>);

- Frank Van Harmelen (Vrije Universiteit Amsterdam) gave a lecture to the MultiMedia Society of Amsterdam in The Waag on Semantic Web technologies, September 2004;
- The interview with Frank van Harmelen (Vrije Universiteit Amsterdam) was published in the third page of Avvenire, a national (catholic) newspaper (<u>http://www.cs.vu.nl/~frankh/popularising/avvenire-webversion.jpg</u>);
- Guus Schreiber (Free University Amsterdam) gave an invited Talk "OWL: The W3C Web Ontology Language", Australian W3C Day, EVOLVE Conference, Brisbane, Australia, December 2004;
- Guus Schreiber (Free University Amsterdam) gave an invited talk to German XML crowd, "The Semantic Web: From Theory to Applications", Berliner XML Tage. Berlin, October 2004;
- Asunción Gómez-Pérez (Universidad Politécnica de Madrid) gave an invited talk in CSIC-SEDIC Seminar: "Uso de lenguajes documentales en la web semántica", Madrid, December 2005;
- Asunción Gómez-Pérez (Universidad Politécnica de Madrid) gave an invited talk "Web Semántica (Semantic Web)" as part of "Ciclo de Conferencias de Ibercaja Zentrum";
- Antoine Issac talked at the Digital Erfoed conference about "Accessing Cultural Heritage Collections using Semantic Web Techniques", 2005, (http://www.den.nl/conferentie/index.html);
- Guus Schreiber (Free University Amsterdam) gave an invited talk at the International ISO meeting, "OWL: The Web Ontology Language", Berlin Open Forum, April 2005;
- Paolo Bouquet (University of Trento) wrote a paper on the Semantic Web (mainly on philosophical issues underlying semantic interoperability) in a book targeted for philosophers (<u>http://www.dif.unige.it/epi/con/mental05.htm</u>);
- Pavel Shvaiko and Jerome Euzenat (INRIA) had an article in D-Lib Magazine called "Ontology Matching", vol. 11, No. 12, In Brief, 2005 (<u>http://www.dlib.org/dlib/december05/12inbrief.html#PAVEL</u>);
- Press coverage DERI, WSMO, WSML,WSMX, Computer Zeitung Nr. 26 / 27. Juni 2005;
- Guus Schreiber (Free University Amsterdam) gave an invited talk to Japanese audience interested in Semantic Web technology, WWW'05 Workshop "Activities on Semantic Web Technologies in Japan", Tokyo, May 2005;
- Sean Bechhofer (The University of Manchester) talk on the Semantic Web at the British Computer Society North Wales and Chester Branch, Thursday 9th February 2006;
- Ronny Siebes has an article "Routeringsalgoritme moet zoekmachines in toom houden" in De Automatiseringsgids, vol. 28 year 2006 page 13, SDU uitgevers, The Hague, Amsterdam;
- Asunción Gómez-Pérez (Universidad Politécnica de Madrid) gave an invited talk entitled "Web Semántica (Semantic Web)" as part of "Ciclo de Conferencias de Ibercaja Zentrum", Zaragoza, Spain, December 2006.

- Enrico Franconi (Free University of Bozen-Bolzano) gave an invited tutorial on the Semantic Web at the most important database venue organised by the ACM (SIGMOD/PODS), held in Chicago, USA, June 2006.
- Carole Goble (the University of Manchester) continues to promote the Semantic Web technologies to the e-Science and Grid Community, and gave a series of invited talks and keynotes to the Grid computing and e-Science communities including:
 - The Third International Life Science Grid Workshop 2006 (LSGrid2006), <u>http://www.lsgrid.org/2006</u>, 13-14 October 2006, RIKEN Institute, Yokohama, Japan,
 - The Ninth International Conference on Discovery Science (DS-2006), Barcelona, Spain, 7-10 October 2006, http://www-ai.ijs.si/~ds06/ e-Science and the Semantic Web: a Symbiotic Relationship,
 - e-Social Science Second International Conference on e-Social Science 28-30 June 2006, Manchester, UK Workshop on A Semantic Grid for Social Science <u>http://www.ncess.ac.uk/events/conference/2006/workshops/details/semanti</u>
 - <u>cs/</u> 28 June 2006 Semantic Web & Web 2.0 are at least FOAF
 Adaptive Hypermedia 2006 Adaptive Hypermedia and Adaptive Web-Based Systems, June 20th - June 23rd, 2006, <u>http://www.ah2006.org/</u> Web + Semantic Web enables Adaptive Hypermedia?
 - E-Science 2005, 1st IEEE Intl Conf on e-Science and Grid Technologies, Melbourne, Australia, 5-8 December 2005
 - European Grid Conference EGC2005, Amsterdam, The Netherlands 14-16 Feb 2005 (Semantic Grid) Services and Semantic (Grid Services)
 - OECD Global Science Forum on Grid Computing, Sydney, Australia 25-27 September 2005, part of UK delegation. *The Semantic Grid*

1.1.2 Communications to Professional User Communities

Here we present some of the publications, presentations and invited talks that were targeted to professional communities, for example business, pharma community, etc.

- Guus Schreiber (Free University Amsterdam) attended a panel at the EU cultureheritage meeting, Conference 'Towards a Continuum of Digital Heritage-Strategies for a European Area of Digital Cultural Resources', Kurhaus, The Hague, September 2004;
- Press coverage DERI, NUIG researches new web technology, May 23, 2004, RTE Business;
- Guus Schreiber (Free University Amsterdam) gave an invited talk for Business people in Austria, "Semantic Web Best Practices", Semantics 2005, Vienna, November 2005;
- Guus Schreiber (Free University Amsterdam) gave an invited talk for Library/archive managers in The Netherlands, Annual Meeting Association of Information Professionals, Hilton hotel, Amsterdam, January 2005;

• Carole Goble (The University of Manchester) was commissioned to review article for Drug Discovery Today on the Semantic Web and Knowledge Grids, to explain the technologies to the Life Science and Pharma community.

1.1.3 Lectures to Public

Here we list a number of lectures that were targeted to general public.

- Frank Van Harmelen (Vrije Universiteit Amsterdam), May 2005, Lecture for Vrije Universiteit Amsterdam alumni on Semantic Web;
- Frank Van Harmelen (Vrije Universiteit Amsterdam), October 2005, Lecture for staff of general public libraries;
- Frank Van Harmelen (Vrije Universiteit Amsterdam), April 2005, Lecture for parents and family of VU students;
- M. Carmen Suarez-Figueroa (Universidad Politécnica de Madrid) gave the talk "Technology based on ontologies applied to synthetic environment" in the NATO workshop "Simulation reusability challenge within NATO", at The Hague (Netherlands). 10-12/05/2005.
- Carole Goble (The University of Manchester) gave talk at a Cafe Scientifique in May 2004, on e-Science, which included some material on knowledge management. A Cafe Scientifique (http://www.cafescientifique.org/);
- Ian Horrocks (The University of Manchester) talk on the Semantic Web at the Royal Society when he received the Roger Needham Award (http://www.isg.org.uk/reviews/2005 Roger Needham memorial lecture.htm);
- Carole Goble (The University of Manchester) was a keynote speaker at the Career Development Workshop 2006 at WWW2006 (http://www.bcs.org.uk/bcswomen/www2006workshop.htm).

1.1.4 Communications to general Public

In this section we summarize some activities that involve general public:

- Press coverage DERI, Talking? Not so easy PC..., December 12, 2004, Ireland on Sunday;
- Press coverage DERI, The first female bachelors of Computer Science at the University of Innsbruck, Tiroler Tageszeitung, 19th of May 2005;
- Press coverage DERI, the Semantic Web Services Week 2005 in Innsbruck, Tiroler Tageszeitung, 9th of June 2005;
- Press coverage Galway project weaves meaning into the Web by Karlin Lillington, Irish Times;
- Press coverage DERI, Web future lies in semantics by Matthew Magee, Sunday Tribune.
- Press coverage DERI, Irish Times article on Bebo.com with John Breslin, March 21, 2006;
- Asunción Gómez-Pérez (Universidad Politécnica de Madrid) was interviewed by the newspaper "El Heraldo de ragón". The interview was published on 07/03/2006;

1.2 Recommendations in a Nutshell

From the data summarized in the previous section, we can summarise the following:

- 1. The response to gathering the data was patchy and disappointing. We are sure that more goes on than was reported;
- 2. A few key leaders do the promotion;
- 3. We are quite good at disseminating information about Semantic Web to other Computer Science communities. This is very important for the exploitation and dissemination of Semantic Web technologies by other Computer Science communities.
- 4. There are a very few activities that could be classified as "general public engagement activities" (i.e., people that do not have Computer Science background). Therefore, general public dissemination needs significant improvement. In this section, we propose some suggestions that could improve the Knowledge Web's general public engagement.

1.2.1 Using the General Publics' vocabulary for Communication

For Knowledge Web the main information dissemination component is the portal. Although this portal is good for presenting the overall project achievements, currently it is not in a format that somebody from general public could understand the presented material. In the University of Manchester, there is an activity that aims to create a Web site that will present the scientific materials to children called "the children's university of Manchester" (http://www.childrensuniversity.manchester.ac.uk/). Here we use that activity as a case study to demonstrate what could be done in the Knowledge Web for improving public engagement. For example, Figure 4 and 5 show screenshots from the original University of Manchester page and also from the children's university of Manchester.

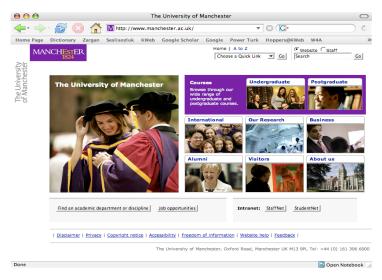


Figure 3 The home page of the University of Manchester

← → 22 (S) ↑ ● http://www.childrensuniversity.manchester.ac.uk/ ▼ () ○ □. Home Page Dictionary Zargan Sesilsozluk KWeb Google Scholar Google Power Turk Hoppers@KWeb W4A	
	- All
	:
	/
Welcome to the Children's University of Manchester Interactive, online learning for key stage 2 from The University of Manchester. Choose a subject from the menu below to start learning now!	
What's Now? The Earth and Beyond Science of	
Solar system loses planet Astronomers double Pluio la no longer a planet. Stience Tooth and Esting	
Telking Textiles)
Get idear harel # Micro-organisms Stiener	
Click here to Find Out+	

Figure 4 The children's University of Manchester

These two pages (Figure 3 and 4) clearly show how same kind of information could be rewritten for different user groups. If we would like to explain children what is Semantic Web then similar material has to be created and made publicly available.

Another area that we could look at is the dissemination of health information to public, for example we can look at how Health organizations explain infectious diseases to general public (see Figure 5). They particularly pay attention to the format and language used in the materials presented to general public. For example, scientific terms are simplified and simpler formatting is used for presenting complex data. Based on these case studies, a similar approach could be used on the Web portal. A subportal could be created to disseminate the information on the Knowledge Web portal to the general public.

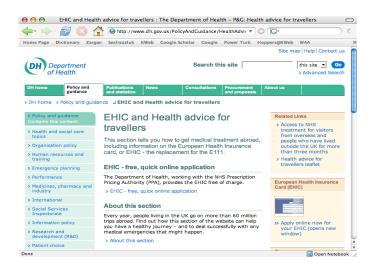


Figure 5 UK Department of Health

1.2.2 Publishing Articles for General Public

It is important that published materials are in journals or magazines that public could easily reach. Professional writers could be employed to write for local or national newspapers etc. The members of the network do not have the necessary skills to write for the general public.

1.2.3 A web site for the Computing Public

The web site of the project <u>http://knowledgeweb.semanticweb.org</u> is a project portal, not a dissemination site for our results. Attempting to find ANY results from the network is impossible unless you know the deliverable and work package structure, and even then it is difficult. Anyone wishing to use our results falls at the first hurdle. The whole site needs to be completely revised so that the results of the network are prominent and in a digestible form, that is: pithy web pages; succinct white papers and summaries; academic papers.

1.2.4 Supporting/Sponsoring Events Targeting General Public

As part of Gender Action plan, Hoppers@KWeb has sponsored the Career Development Workshop 2006. Events and activities like this are important for reaching the public. Knowledge Web could sponsor events like this to play important role in organizing these events and spreading information about Knowledge Web to the general public. In 2007 we need to do an audit of what public events we should be targeting.

1.2.5 Blogging the General Public and Computer Public

People read blogs. And plenty of people in the industry blog about the Semantic Web. For example:

- Dave Beckett's WebLog page: http://journal.dajobe.org/journal/2003/07/semblogs/
- David McComb: <u>http://semantic-conference.blogs.com/semtech06/</u>
- Dan Zambonini:
- <u>http://www.oreillynet.com/xml/blog/2006/06/the_7_flaws_of_the_semantic_we.html</u>

Yet no Knowledge Web member actively blogs and we have no Knowledge Web blog. We recommend setting up RSS feeds and blogs for disseminating the articles we have written (see 1.4.2 and 1.4.3).

1.2.6 Organising Events that Involve General Public

Events could be organized in local schools, charities, and organizations to lecture general public about Semantic Web. However, this can be a great effort drain with potentially little impact, or only localized impact. We do not recommend this action.

1.2.7 Professional PR and Strategic Alliances

The WWW2006 conference demonstrated that it is possible to get the Semantic Web into the news and onto the pages of magazines, and hence to the general public. This was achieved by focusing around a significant event and significant professional public relations activity. Professional PR people know how to feed news stories. Given that Knowledge Web neither has the resources nor the know-how to engage with the media we recommend that it feeds organizations that do, and hence engages at "one step remove" from the public. Obvious alliances are:

- SemTech 2007 *THE place to learn about the commercialization of the Semantic Web* May 20-24, 2007, in San Jose, California http://www.semantic-conference.com/. This is a major industry activity and would attract media interest. In the past we have had little engagement.
- The Web Science Research Initiative (WSRI) <u>http://www.webscience.org/</u> The Web Science Research Initiative (WSRI) is a joint endeavour between the Computer Science and Artificial Intelligence Laboratory (CSAIL) at MIT and the School of Electronics and Computer Science (ECS) at the University of Southampton. The goal of WSRI is to facilitate and produce the fundamental scientific advances necessary to inform the future design and use of the World Wide Web. It has a PR activity behind it we could leverage.