“WebGuide: Encouraging & Supporting Collaborative Knowledge-Building”

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knowledge-building as multiple perspectives interacting
Communities support & restrict collaboration
Technology: confined by social practices, subject to negotiation
Models of knowledge-building as process, as activity in context, as mediation:

a framework for computer support of discussion, perspectives, negotiation, group knowledge management
activities contributing to social knowledge-building

**Personal activities & understanding**
- Conducting actions in the world
- Understanding things tacitly (personal perspective)
  - Past experience
  - Goals & expectations
- Meaning structures
- Articulating one’s understanding

**Group discussions**
- Experiencing breakdowns of understanding
- Communicating publicly
- Writing down shared understanding

**Exchange of rationale & argumentation**
- Designing cultural artifacts
- Clarification of meanings
- Formally representing knowledge
- Externally storing knowledge

**Artifacts: the physical context**
- Personal external memory devices
- Public statements
- Cultural artifacts
- Organizational memory systems

**the community’s cultural context**
- Community roles
- Accepted practices
- Cultural norms
- Shared jargon

**the societal context**
- Social rules
- Social interests & motivations
- Power relations
- Shared language
- Social structures
The mediation of social knowledge building

Personal perspective
- Tacit understanding of the social lived world
- Experiencing breakdowns of understanding
- Reinterpreting meaning structures
- Articulating one’s understanding
- Formally structuring knowledge

Mediating tools and systems
- Discussion: verbal statements & visual cues
- Representations in communication media
- Artifacts: physical, symbolic, cultural
- Personal external memory devices
- Organizational memory systems

Synergistic group understanding
- Sharing perspectives
- Exchanging arguments & rationale
- Clarifying meanings
- Negotiating conflicts
- Formally structuring knowledge

Artifacts: physical, symbolic, cultural
Personal external memory devices
Organizational memory systems
## Technology components of knowledge-building environments

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<th>Knowledge-building activities</th>
<th>Forms of computer support</th>
<th>Prototype systems</th>
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<tr>
<td>A articulate in words</td>
<td>discussion forum</td>
<td>DynaClass</td>
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<tr>
<td>B discuss alternatives</td>
<td>personal &amp; group perspectives</td>
<td>WebGuide</td>
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<td>C argumentation &amp; rationale</td>
<td>argumentation graph</td>
<td>InfoMap</td>
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<td>D clarify meanings</td>
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<td>E negotiate perspectives</td>
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<td>F formalize &amp; objectify</td>
<td>interactive bibliography</td>
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WebGuide: supporting discussion, reflection, negotiation, knowledge management, in perspectives
1. Switching from Title View to Content View doesn't work properly.
   - *comment: Do not forget to "refresh" the display. (by: Gerry in: group on: 03/21/2000)

2. Group project on WebGuide negotiation
   - (by: Gerry in: group on: 03/21/2000)

3. Other new features
   - Student project in Dortmund (by: Gerry in: group on: 03/23/2000)
   - Group project on WebGuide negotiation (by: Gerry in: group on: 03/21/2000)

4. New components
   - Persona component (by: Group in: group on: 03/21/2000)
   - Glossary component (by: Group in: group on: 03/21/2000)
   - Bibliography component (by: Group in: group on: 03/21/2000)
   - Perspectives component (by: Group in: group on: 03/21/2000)

5. New functionality
   - Email (by: Group in: group on: 03/21/2000)
   - Printing (by: Group in: group on: 03/21/2000)
   - User Manual (by: Group in: group on: 03/21/2000)
Web of Perspectives: a flexible hierarchy of computational sharing among groups & individuals