



CCL Literature Review: Best Practice In Community Knowledge Mobilization

**Presentation to Ottawa YALLE Workshop
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Summary

- Community collaboration issues
- Community research partnerships
- Community technology collaboration
- Technical issues
- Collaboration Capability Maturity Model
- Questions to consider

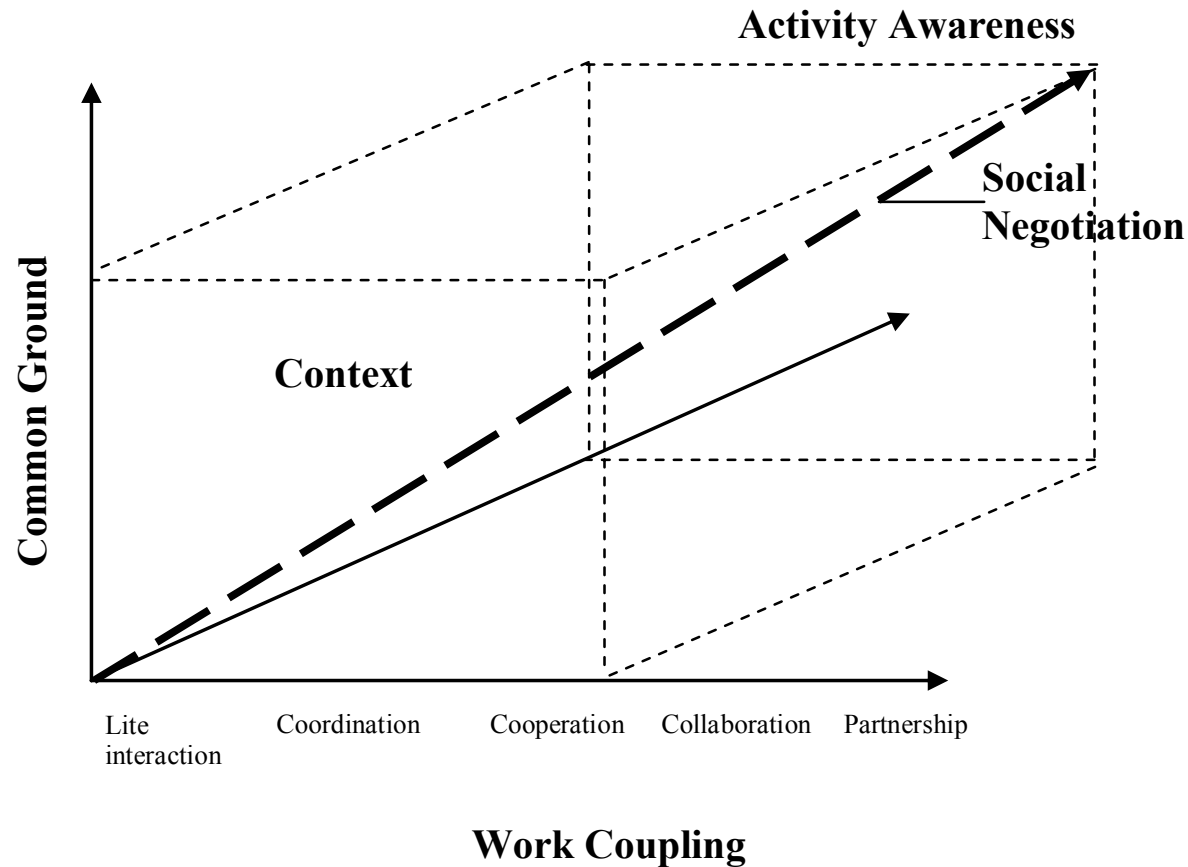
Community collaboration issues

- the more rigorous and demanding the work to coordinate, the more we **must pay attention to each other to remain coordinated**
- Effective collaborations adopt the ***trust-and-verify attitudes*** of contingent cooperation
- Need for ***endogenous feedback***, the verbal and non-verbal cues to the other partner's internal motivations

Community collaboration issues

- **Shared context is essential** to collaboration but distributed systems tend to fracture background contextual information
- The more closely collaboration is coupled the more **social negotiation** is required, mostly through non-technical channels
 - Potential need for more direct social interaction

Activity Awareness Model



Adapted from NEALE, D. C.; J. M. Carroll, & M. Beth Rosson. "Evaluating Computer-Supported Cooperative Work: Models and Frameworks", in MANTEL, M. & BAECKER, R.(eds.): *CSCW'04: Proceedings of the ACM conference on Computer supported cooperative work, Chicago, November 6-10, 2004*, ACM Press, New York, 2004:112-121

Community research partnerships

- Contributions of researchers:
 - **informing** the community of relevant theory;
 - establish and **monitor** conditions that facilitate community learning and identifying future research;
 - offering **consulting** and other types of services; and
 - **integrating** the community and the university
- Common community – researcher problems
 - poor communication,
 - lack of common identity,
 - resource allocation, and
 - lack of mutual respect

Community research partnerships

- Principles of community-researcher collaboration
 - Community partners should be involved at the earliest stages of the research,
 - **Community partners should have real influence on research** direction
 - Research processes and outcomes should benefit the community
 - Community members should be part of the analysis and interpretation of data, and should have input into how the results are distributed
 - Productive partnerships should be encouraged to last beyond the life of the project
 - Community members should be empowered to initiate their own research projects
 - Research should be concrete and be useful to practitioners

Community technology collaboration

- Each community evolves its own **unique solution** as “a social experiment”,
 - An armistice of interests
- Collaboration around technology projects is “**fragile**”
 - issue of discordant interests and motives due to changing understandings, values, resources and priorities
- The more group members have global **context information**, the more cohesive and effective the group is
- Sustainable community technologies are based on **effective processes**; they are not products

Community technology collaboration

- The fundamental problem: the initial formulation of the community's need and the specifications for the system
 - The articulation of community **need** should be consistent
 - System **specifications** should match partner **capabilities**
 - Partner **expectations** should be clear & align w/ system **capacities**
 - The **benefits** to partners should **exceed** their (all inclusive) **costs**
- Factors to consider in the development of community technology tool
 - Individual cognitive, cooperative and collaborative factors; usability factors; the social and organizational impacts; and the environmental context

Community technology collaboration

- “think of them not as just technology projects but as **‘community building’ projects**”
 - This puts emphasis on elements of social negotiation
- The system will be shaped by the uses, goals, interests, and ideologies of ***those who participate*** in its development and ***those who use*** it following development
- Caution against **modifying artifacts of collaboration**
- Three areas of focus to improve design and contribute to more sustainable collaborative information systems -- ***incentive structures, workflow, and awareness***

Community technology collaboration

- Incentive structures
 - How can we mechanisms to **motivate users to properly use** a technology?
 - Do incentive structures span the range of political, institutional, organizational, small group, and individual interests?
 - What are the incentive structures that can motivate a critical mass of users to contribute to and use the technology appropriately?
 - Is there **alignment between those who do the work and those who receive the benefits?**

Community technology collaboration

○ Workflow

- How does the technology **fit into the work process of its users?**
- Success can be strongly affected by different work norms, organizational standards, small group norms & behaviors, & individual user preferences among partners
- Are there standards of work practice among the users / partners?
 - automate existing business practices, or
 - Is the business process is standardized and routine?
 - reshape those practices
 - Does the work require the handling of many exceptions?

Community technology collaboration

○ Awareness

- What mechanisms can be used to help people become more aware of each other to improve work coordination?
- Two classes of information content:
 - subject-matter information, and
 - Context & subject matter data, research papers, news, events, policy documents, and other related content such as images, video clips, web links, etc.
 - collaboration support information
 - historical records; MOUs and agreements about plans, procedures, and schedules for joint work; overhead data, session transcripts; as well as contact information

Technical issues

- **Organizations should see themselves in the website, & have their contributions directed at clear goals.**
- The design should reflect the type of feedback / knowledge exchange partners wish to obtain
- Since distributed systems fracture background contextual information, additional attention is needed to provide online & offline opportunities to share partner contexts. The more contextual information the better
- Establish & **build-in mechanisms for measuring progress**
- Two classes of information:
 - subject-matter information, and
 - collaboration support information
- Design systems w/ support for learning in mind

Technical issues

- Partners should be able to modify both content & representation
- Partners should be able to preserve their identity
- **Few specialized functions should be built in**
 - those functions not built in but desired must be identified and sourced
- Sometimes even the most basic activities can require constant monitoring & attention
 - Who will do this?
- Identify any **issues of data compatibility**

Collaboration Questions

Assuming a need for an online, YALLE-focused tool:

- What is the rationale for this collaborative enterprise? Why will people work together?
 - Is the purpose initially outlined sufficient for you & your organization? Does it need modification?
- **What will distinguish** this cooperative work from work of individual organizations, and what support requirements derive from those characteristics?
- What are the individual needs of partner organizations that may be helped through this collaboration?
 - Can those needs be prioritized?
- For each organization, how might an online solution help?
 - **Define benefits**
- What do the identified requirements imply for the development of system architectures and services?

Collaboration Questions

- What are the business processes of partners the system would interface with?
- What are work norms, organizational standards & user norms that might apply? What are the context pieces for each organization that would be helpful to know about?
- Who will use it (partners, other stakeholders, YALLE?) & should the design accommodate all potential users?
- What are user/ organizational incentives?
- Where do we start?
 - **What are the minimum aspects** of a web-based tool that would engage you
- **Where do we want to go?**
 - What would you like to see in the long run?



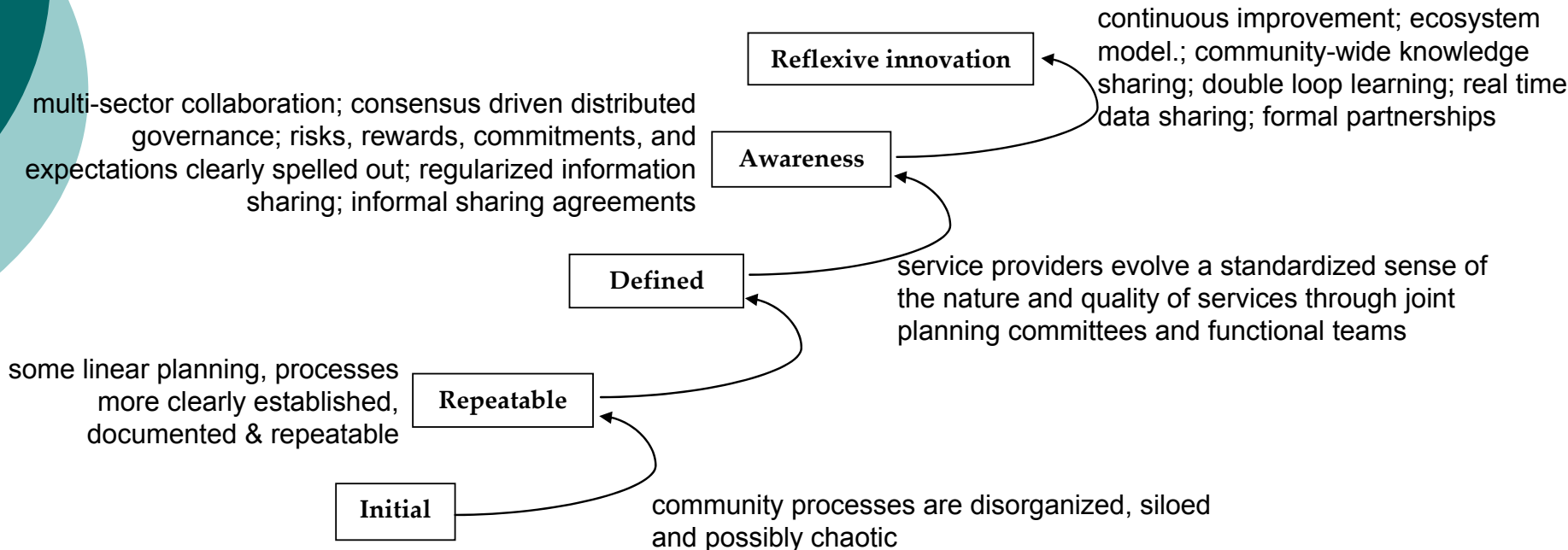
Collaboration Questions

- What are the processes that would make this collaborative project sustainable?
- If this project takes another 9 months to complete and another 6 months to become established, will there be issues regarding succession planning?

Performance Outcome Questions

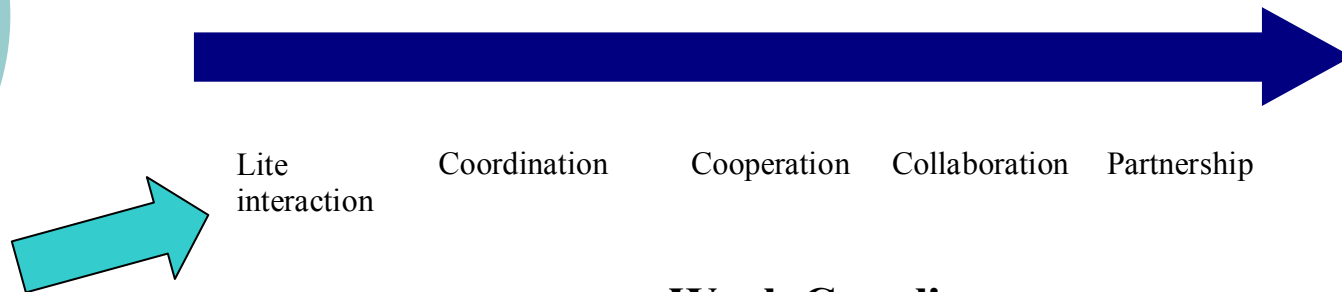
- What constitutes progress / success?
 - Where are you today & where would like to be tomorrow?
 - Are there milestones indicative of progress?
 - What would be critical mass of content?
- Are group characteristics of interest (eg. nature of participating organizations & individual user characteristics)?
- Given context factors are important, are task properties, group process, task and group outcomes also important?
- Are certain behaviours of interest like communication effectiveness, awareness, or trust?
- Do we need to identify community outcomes?
 - To what degree was the community mobilized?
 - What changes in partner practice and behaviour resulted?
 - Are there reports of changed behaviour among the targeted YALLE group?
 - Are there reported changes within the community in general?

Collaboration Capability Maturity Model



- The model depicts the increasing contributions by stakeholders in terms of knowledge & data sharing, and their capacity to entertain collaboration.
- groups can move up the “maturity ladder” over time, but this requires sustained commitment.

Where are we today?



Work Coupling

- Need to understand each other's context & develop more common ground
- Where are we on maturity model?

Based on Literature Review: Next Steps

- Getting agreement on rationale (the 'one win') and identifying individual expectations
- Need to participate in a process that can create 'awareness' and begin shaping a web tool that can help us all to better understand and serve the YALLE group in Ottawa
 - Identifying context information
 - Identifying incentives
 - Identifying & sharing business processes & norms
 - Identifying technical issues
 - Identifying elements of performance measurement



Thank You

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