Fostering Knowledge Sharing in Ad Hoc Transient Communities

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TENCompetence

- competence development
- in loosely organised communities
- for life-long learning (formal, informal, non-formal)
Our work package

• emphasises the social structures that are needed for learning
• looks at how these may emerge on top of a technical infrastructure
• so that life-long learners may develop their own preferred modes of interaction
Problem
Problem

• ‘Learners in a TENCompetence community ‘want to learn something’ through the infrastructure provided

• Broadly speaking, we provide learning opportunities by providing learning resources
Problem (2)

• But you learn with, through and from other people!
• Unfortunately, the learners don’t know each other, each others’ current competencies, competence development needs, etc.
Our answer

- use Ad Hoc Transient Communities
Communities
Communities

• There is a large literature on communities, on how they function, should be set up and managed (policies), etc.

• However, most of it is focused on communities with shared, long-term goals and a division of labour
Learning Network
Learning Network

learner with question

learner with possible answer
Typical questions

• Content related
  – I don’t understand why ...
  – I don’t understand how ...

• Process related
  – How do I best study this material?
  – What module should I do after this one?
  – What’s the exam like?
Communities (continued)

- there are about as many goals as there are users
- the goal is sort-lived
- there is no division of labour, only role taking
- the community (as a consequence) is asymmetric: the question asker profits, the answer providers contribute
Ad Hoc Transient Communities

• are temporary alliances of small numbers of learners
• are meant to help solve some learner’s problem (their ad hoc-ness)
• disappear once the problem has been solved (their transience)
How do we make them work?
Background theories
Community-level policies needed

• Ad hoc transient communities face the prisoners’ dilemma: people optimise their own profit rather than the collective good

• However, the iterated version allows us to get the desired behaviour: help now, be rewarded later
To prevent cheating

• disallow anonymity in the learning network (persistent ‘pseudonymity’ is ok)
• maintain clear boundaries of the learning network (who’s in, who’s out)
• make it technically possible to keep track of others (FOAF - friends-of-friends)
Cold-start problem

• set good examples
• particularly by ‘veterans’ in the network
• (Bandura’s social learning theory)
Build ‘swift’ trust

• small teams that need to carry out a difficult task instantly develop a trust relation
• to what extent do ad hoc transient communities resemble such communities?
• (Starr Roxane Hiltz)
Case: Peer tutoring

- System has been built
- Simulations for fine-tuning have been done
- Empirical tests are planned
- Ultimate goal: incorporation in TENCompetence infrastructure
www.tencompetence.org
www.open.ou.nl/psl

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