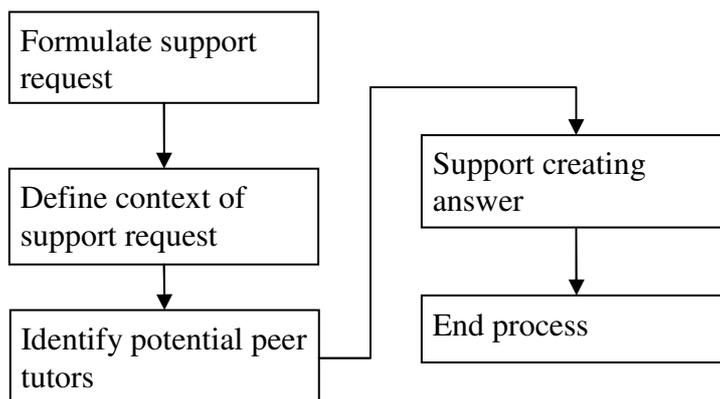


## Usage profile Social Help

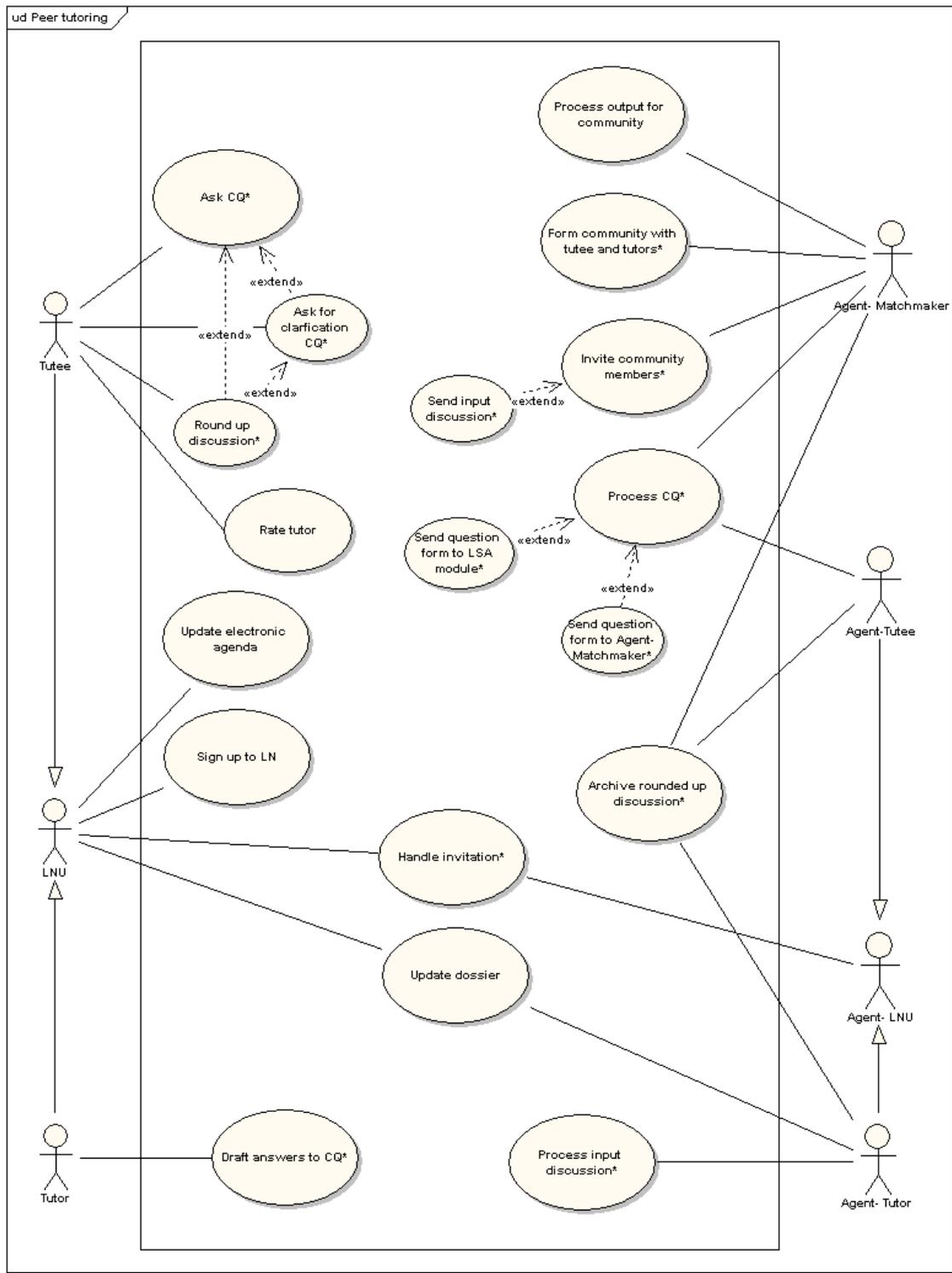
In any learning network for lifelong competence development, providing proper learner support services is of paramount importance. And as we illustrated in our model, turning a learning network into an effective and efficient communities relies on strengthening the social ties in the network. So, there is a major role for learner support services that involve other people that provide, part of, the support. In that, the social support serves a double purpose. First of all, it solves the immediate need of a learner who has a question or request for support. Secondly, because this is brought about by involving other people, it works towards strengthening social ties. There are several possibilities to supply a social support system. A major distinction can be made by whether the learner looks around for suitable peers (either from his personal contact lists or for others in the network) and contact them directly or whether the learning network provides a services to recommend suitable peers. The system then either presents the recommended peers and the learner decides whom to contact or the system sets up a facility for learner and peers to communicate and connect. For both approaches it evolves around being able to find the most suitable persons. Keywords here are *finding*, *suitable* and *connect*. To enable this we need different kind of data. First of all we require information of all people in the network; this entails personal information, profile information, as well as eportfolio information like competences, proficiency level, interests, and actions taken in the learning network (i.e. the relationships between users and between users and objects). This information then has to be visualised in such manner to the network users that they can use this to decide whom to contact or made available to the system in order to be able to select suitable peers. The system than either can present this as a list of recommended people and allow the learner to initiate contact, or the system can use this list to set up an ad hoc transient community. This means that there is a high interdependence between the Social help usage profile, the Overview usage profile and the ePortfolio usage profile, not only in data used, but also in functionality offered. And at a slightly lower lever, the profile is linked to the Follow course. CDP, and Personal development planning usage profiles, mainly in data used.



**Figure 1: Generic social support model**

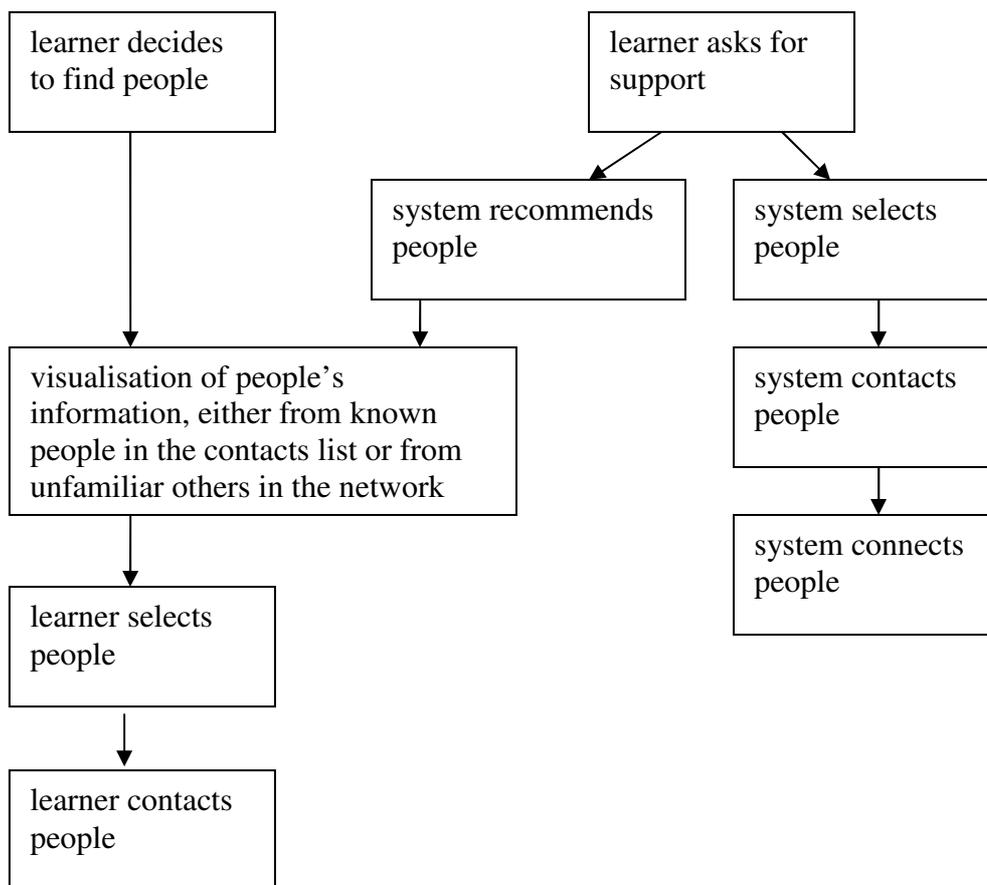
### **Scenarios**

A generic use case diagram for the generic social support model is provided in Figure 2.



**Figure 2: A generic use case diagram**

There are however, alternate flows possible, as depicted in Figure 3.



**Figure 3: Alternative flows**

In the use case below we also describe some events that are prerequisites for the social help usage profile to operate, but factually do not belong to the social help usage profile. Some of these steps should be taken care of by the ePortfolio and the CDP usage profiles.

### **Scenario 1: Ad hoc transient community for support to a content related question**

#### **Description**

Suppose we have a Community on Psychology with a competence profile for Junior W&O psychology. The CP covers 3 competences: Identifying client needs, Individual assessment and Work place analysis. As this is a profile for a junior function, required competence levels are set in the CP to 4, 3, and 2 respectively. User Philip has registered for this community and selected this CP. He performed a self-assessment, and has set the current levels for each of the competences. As he is a novice, he assessed his competence level for 'Identifying client needs' at 2, and the others at 1. For those competences that are not yet at the required level, he has created a personal development plan (PDP). This PDP is based on the CDPs for each of the three competences in the CP. Philip might even add other activities to the PDP. The PDP shows the activities Philip has to complete to attain the competences for which the target level has not yet been reached. It turns out he has to study A1, A2, A3, A6, A7, A9 and A10. Next, we know that Philip already has started with the CP some time ago and in the meantime has completed A3, A6 and has started with A7. Finally, let's assume that Philip while studying

A1 Quantitative data analysis, runs into problems. He has a problem understanding the relations between a number of concepts and as a consequence he is not able to complete an assignment. He studies some additional literature and searches the web, to no avail though. Philip is studying on his own and thus out of touch with any peer students decides to pose a question to the 'on-line tutor'; he describes the general problem and his question.

Below we outline the most extensive flow of events for such a scenario, but omit from the flow those events that factually should be dealt with by the ePortfolio, follow course, or PDP usage profiles, even when those events include functionality and not just data.

This scenario could also be followed for any other type of question or request for support and is not restricted to content-related questions.

**Actors:** Learners and peers, system

**Primary Actors:** Learner, system

#### **Flow of Events**

1. While working for action A1, Philip has difficulty understanding some concepts. The resources in the action do not provide sufficient detail or are of the wrong level to help Philip in finding the answer himself. He decides to look for support.
2. Philip accesses the support form that is available from the action or the community and poses his question in sufficient detail indicating which action sprouted the question.
3. The form provides detailed information on how to phrase his question with sufficient detail to allow the system to select suitable peers.
4. The system determine to which action the question belongs, searches for related resources, selects the most suitable peers and invites them to assist Philip in finding an answer to his question.
5. The peers can accept or decline this invitation, giving a reason for this decision.
6. When the peers accept the invitation they indicate how competent they perceive themselves.
7. When the required number of peers has accepted the invitation, the system sets up an ad hoc transient community (e.g., forum or wiki) that can be accessed only by Philip and the selected peers. The ad hoc community contains the question, related documents and a guideline.
8. The system notifies Philip and the peers that a sufficient number of people have accepted and ask them to join, providing access to the ad hoc community.
9. Philip and peers can discuss the question, using the related documents as starting point, and jointly reach a solution or answer to the question.
10. When Philip is satisfied with the answer he can close the discussion, rating the answer and the contribution of the peers.
11. Philip also has the possibility to add the peers to his contact list.
12. The system archives the ad hoc community.

#### **Model for content related questions:**

*Precondition:* A community with a competence profile, competence development plan, set of actions and a set of users with their profiles indicating their progress with regard to the actions and competence proficiency level.

*Main steps:*

1. *Philip* poses a question
2. The *system* determines
  - a. the most relevant text fragments

- b. the appropriate actions
  - c. the most suitable peers
3. The *system* sets up a collaboration space (wiki/forum) containing the question, the text fragments and guidelines.
  4. The *system* sends invitations to the selected peers to assist.
  5. Philip and the *peers* discuss and formulate an answer in the collaboration space.
  6. If answered (or after a given period of time) *Philip* closes the discussion and rates the answer.

*Postcondition:* The answer is stored.

### **Alternate flow I**

An alternate flow is possible. At step 4 above, the system selects the most suitable peers, but in stead of inviting the peers on behalf of Philip, the system present Philip with the list of selected peers, together with additional information (profile, eportfolio, etc) to allow Philip to choose peers himself.

The flow of events can stop here, or continue with alternate flow II.

### **Alternate flow II**

When step 4 is partly replaced by alternate flow I, the system can continue setting up the technical infrastructure for the ad hoc transient community and make them available to Philip and the peers he selects.

## **Scenario 2: Finding people**

For the scenario described above a different approach can be taken. It still involves setting up an ad hoc transient community, but more initiative is left to the user and system involvement is less.

When a learner has a question, the learner can choose whether to contact people they already know or look for support by somebody else. Again, there is a choice; the learner browses the learning network for other people. Here the user depends on availability of user profiles and visualisation of profile relative to the question. Or the learner asks the system to choose for him (like described in the first scenario) or asks the system to support him in the selection process. In the latter case, either the system assist in providing access to users' s profiles like in the Overview usage profile or presents visualisation of users' profiles related to the support request.

## **Scenario 3: Community formation**

- increase participating by actively connecting persons and creating shared experiences and therewith stepwise promoting community formation -

A well-engineer at a small specialised consultancy company is following a series of online courses to acquire the required competences on topics such as 'safety measurements: legal and technical', 'soil conditions', 'drill angle and techniques' and alike.

Unfortunately, being from a small company he does not know any peers in the network. Nevertheless while studying he is regularly confronted with the need to find peers to discuss problems and to work on specific assignments e.g.:

- Who can help me with the following question: "while studying the allowed combinations of type of soil and drill technique, I have arrived at –at least to my

understanding- an inconsistency in the applicable legislation and the optimal technique.  
Who can help me to answer this?

- For the course 'safety measurements: legal and technical' I have to do a small research project and to write an essay together with a peer. Who can help me?

**Typical aim:** Establish a community.

**Typical users:** Individual user trying to establish a community of peers with a shared interest.

**Actors:** learner, peers, system

**Workflow:**

1. The user opens the social help and launches the 'ask-us' and formulates his question.
2. 'Ask-us' reacts with the choice to contact one of e.g. (1) a list of known contacts for this person, (2) a list of last contacted by this person; (3) a list with users with matching profiles related to this person (4) a network visualization of ongoing related contacts (4) automatically contact the "best" peer.
3. The user selects one or more of the people from the list and browses their profiles. When you found a suitable person, he can contact them, either by using one of the communication facilities provided by the system, or via the contact details provided in the portfolio (email, telephone, street address).
4. The user sets up a communication facility (or request the system to do that) and invites his contacted persons to participate in the community.

**Most important activities in this usage profile + related actions**

<b>Activity</b>	<b>Relation actions</b>
Ask question	Access support form Complete support form
Select suitable peers	Determine action Determine support context Select relevant peers, using selecting criteria relevant for the support context Retrieve relevant documents
Invite suitable peers	Send out invitation Accept/decline Notify user and peers
Set up ad hoc transient community	Set up wiki Provide access to wiki to selected peers Add relevant documents to wiki Add question to wiki Add guidelines to wiki
Discussing problem	Create entries in forum/wiki Formulate answer Discuss answer Rate contributions Rate peers
Socialising	Add peers to list of contact or friends

In particular some important activities from the ePortfolio usage profile are mentioned below. Part of the data required is supplied by eportfolio, PDP and Follow course. Without these data the Social help usage profile is hard to implement.

activity	Related actions
Describing oneself	Create profile Update profile
Update portfolio	Add evidence to eportfolio, both by system as user. Define public and private areas and data in eportfolio.

## ***Dependency on other usage profiles***

The social help usage profile depends on several of the other usage profiles, because these usage profiles generate the data that are required for the social help usage profile. Not only the data of the current user is important, but of all users in registered to the CP and the community

- eportfolio. This usage profile aggregates personal data across the other profiles, in particular personal development plan and follow course.
  - to allow the user to create a personal profile for the community, consisting of at least name and contact details (email address).
  - to allow the user to decide whether contact details are private or public
  - to retrieve evidence (current and target competence levels, goal, current proficiency level, completion status actions) for competence of CPs other than the current selected one.
- follow course. Preferably the SH usage profile operates on data of users of the same CP. That is not always possible. In that case the SH usage profile retrieves the data on the competences in the community.
  - to determine which users have registered for the activity or course
  - to determine which user has started the activity or course
  - to determine which user has completed the activity or course
  - to determine when (date) the users have started the activity or course
  - to determine when (date) the users have completed the activity or course
- personal development plan. This is both relevant for the CP as well as the community (so, all competence profiles in the community). The latter is taken from the eportfolio usage profile. It is not necessary that the user of the social help usage profile actually has created the CP, but the social help usage profile requires data on competence and competence levels.
  - to retrieve competences (as part of the CP)
  - to retrieve people with the same competence but from another CP
  - to retrieve target competence levels for competences in the CP
  - to retrieve registered users for the CP
  - to retrieve the completion status of the actions/courses that are part of the CDPs of every competence in the CP
  - to retrieve users' goal (i.e. the CP with the competences with required level)
  - to retrieve users' current competence levels
  - to retrieve the users' development plan (i.e. competences not attained)
  - to retrieve users' progress
  - to retrieve users' completed actions
  - to retrieve users' current competence levels
  - to retrieve the evidence provided in the self-assessment. This can be used to do a more advanced selection of suitable peers.
- knowledge management. The resources of actions can be used to determine the scope of support requests.
  - to retrieve the resources used in individual actions or resources related to specific competences
- overview/exploring network

- to retrieve additional data on people in the network for more advanced selection algorithms, based on actions people take when exploring the network
- competence assessment
  - rating of assessor of supplied evidence
  - judgment of assessor

**Importance of PCM services in this usage profile**

This usage profile requires the retrieve services of Community, (Competence Development Plan), Competence profile, User, List Communities, List Competence Profiles, List Competence Development Plans, List Competences, List Users, Common Types attainedLevelType, competenceLevelType, planForType, Forum, Messages, Personal Development Plan, Learning Activity, Assessment Activity, List Resources, Resource.

The existing services however, return only the data pertinent to a certain user, not for all users registered to that object. In addition, the services do not return all required data.

The SH usage profile also requires data from the eportfolio usage profile to retrieve personal data (at least full name, email address, contact details), and overview of competence proficiency over multiple CPs. And to add people to one's contact list and list of friends.