

Ad Hoc Transient Communities to Enhance Social Interaction and Spread Tutor Responsibilities

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Ad Hoc Transient Communities To Enhance Social Interaction and Spread Tutor Responsibilities

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Identification of critical time-consuming student support activities in e-learning

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Open University of The Netherlands

Higher education staff involved in e-learning often struggle with organising their student support activities. To a large extent this is due to the high workload involved with such activities. We distinguish support related to learning content, learning processes and student products. At two different educational institutions, surveys were conducted to identify the most critical support activities, using the Nominal Group Method. The results are discussed and brought to bear on the distinction between content-related, process-related and product-related support activities.

Main findings

- Teachers find giving process support important
- To avoid the 'teacher bandwidth' problem, also provide support through fellow student: peers

AD HOC TRANSIENT COMMUNITIES TO ENHANCE SOCIAL INTERACTION AND SPREAD TUTOR RESPONSIBILITIES

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ABSTRACT

A Learning Network is an ensemble of individual users, institutions and learning resources which are mutually connected through and supported by information and communication technologies. Learning Networks are particularly attractive to self-directed learners, who themselves decide on their learning programme as well as on the timing, pace and place of their studies. Such learners may easily become isolated, which is detrimental to their studies. Supporting them, furthermore, may rapidly lead to staff overload. This paper proposes that setting up *peer support* in *ad hoc, transient communities* helps tackle both problems. An overview of pertinent literature is presented to substantiate this proposal.

other domains show that bottom-up created organizations can be at least as effective and efficient as top-down designed ones ([5], [6]).

In our conception of a Learning Network, the self-directedness of the learner is taken as the starting point, rather than as an element in a design based on particular instructional principles ([7]). A Learning Network thus offers learners opportunities to act that are on a par with the opportunities staff have in traditional, less learner-centred educational approaches. Learners are allowed to create their own learning activities, build their own learning plans, and share their learning activities and plans with peers and institutions. Learner self-directedness, however, may rapidly degrade into learner isolation. Learners who do not feel socially embedded in a

Essence of the approach

- analyse student questions with Latent Semantic Analysis (LSA)
- find suitable peers
- set up a wiki and create an *ad hoc, transient* community
- seed the wiki with proto-answers that the Latent Semantic Analysis has found

LNLU

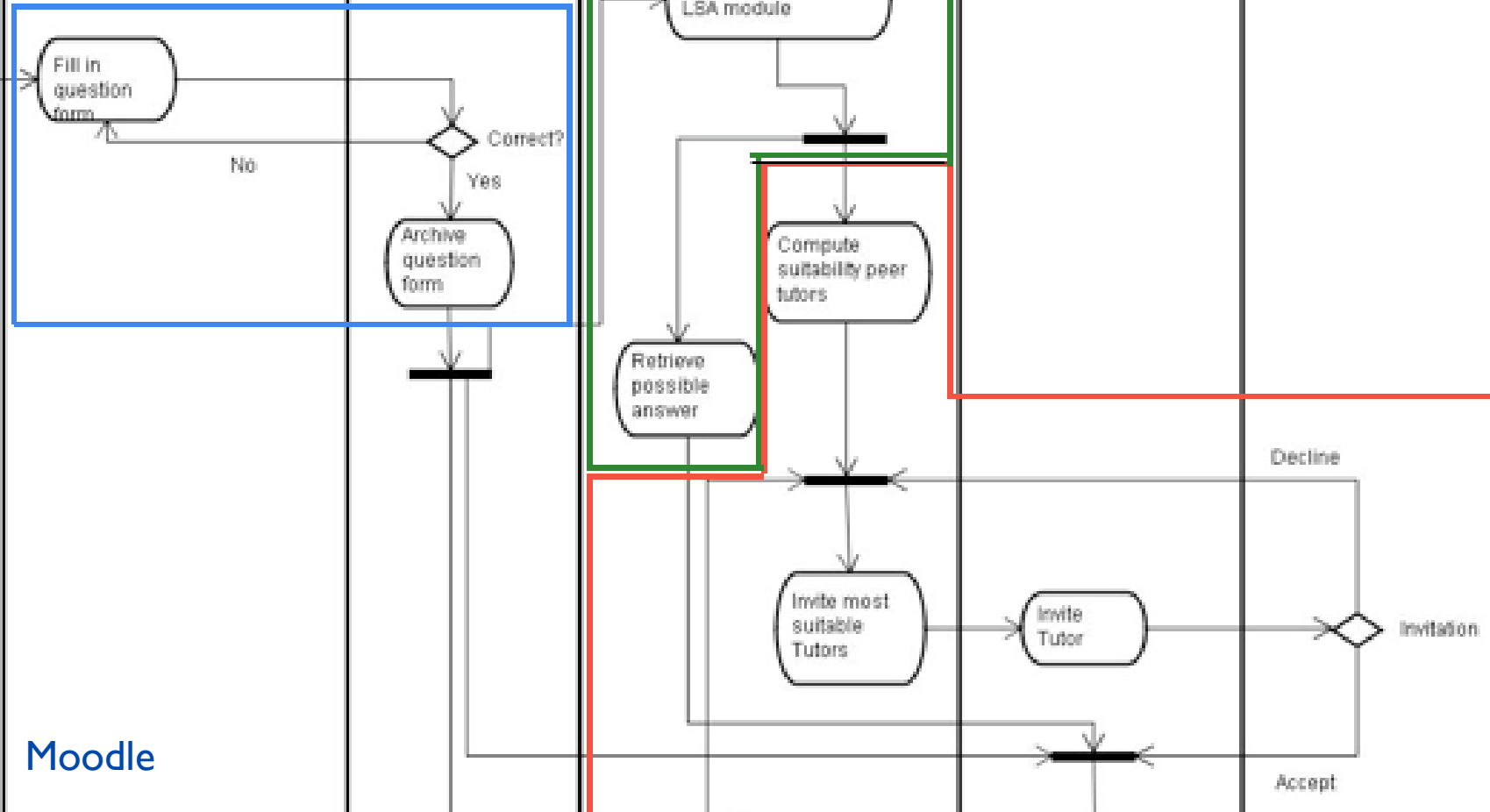
Tutee

Agent Tutee

Agent Matchmaker

Agent Tutor

Tutor



Moodle



LSA module



Tutor locator

LNLU

Tutee

Agent Tutee

Agent Matchmaker

Agent Tutor

Tutor

ask question

Fill in question form

Correct?

No

Yes

Archive question form

Communicate with LSA module

Compute suitability peer tutors

Retrieve possible answer

Invite most suitable Tutors

invite Tutor

Decline

invitation

Accept



Moodle



LSA module



Tutor locator

LNLU

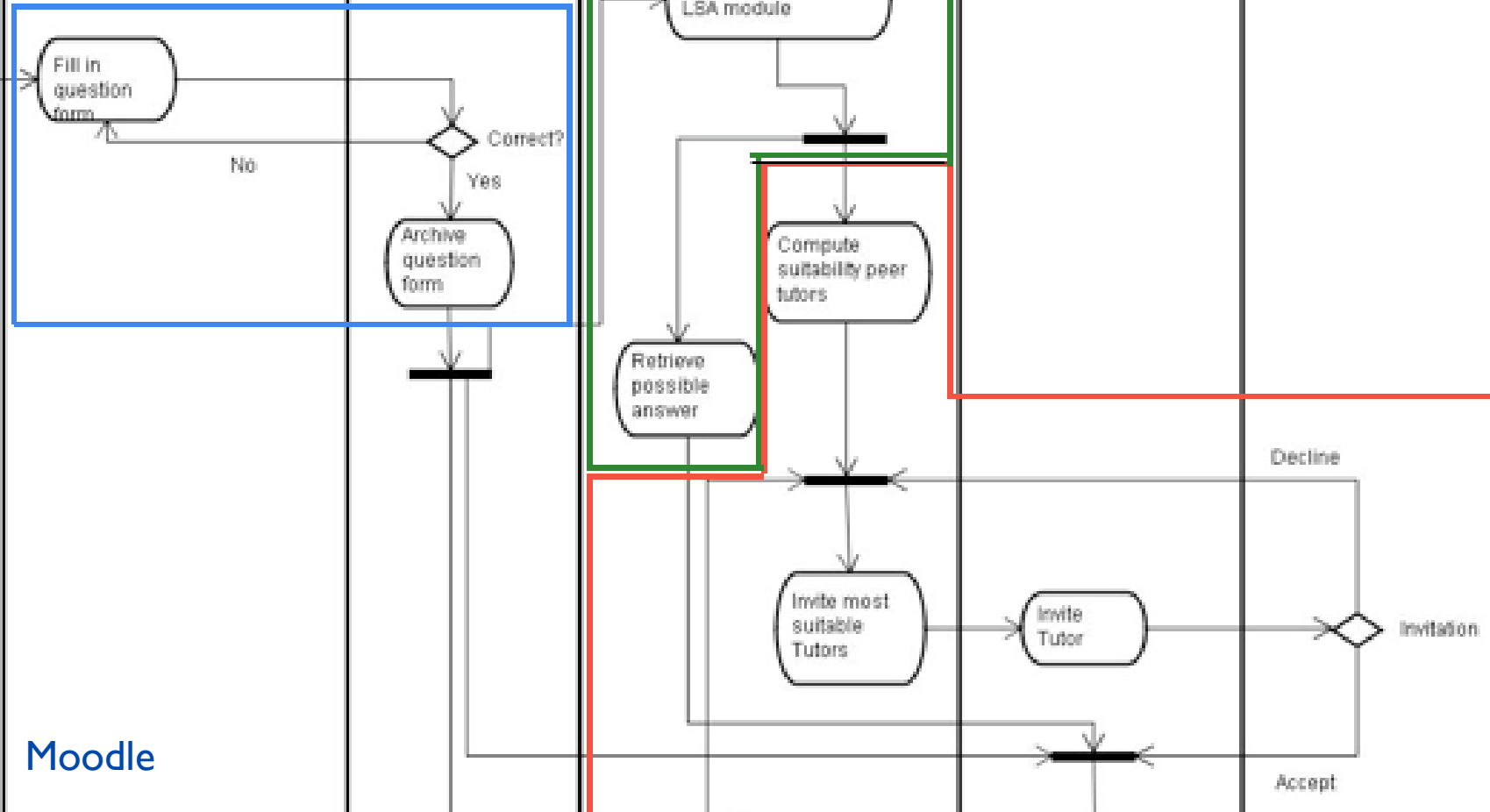
Tutee

Agent Tutee

Agent Matchmaker

Agent Tutor

Tutor



Moodle



LSA module



Tutor locator

LNLU

Tutee

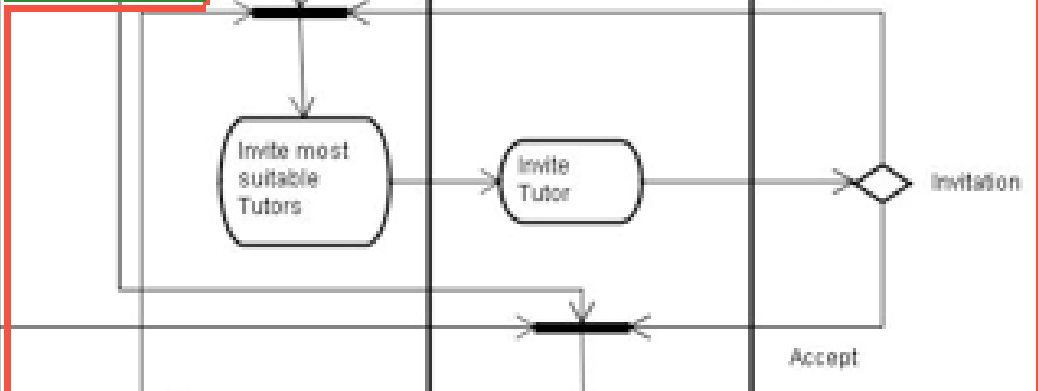
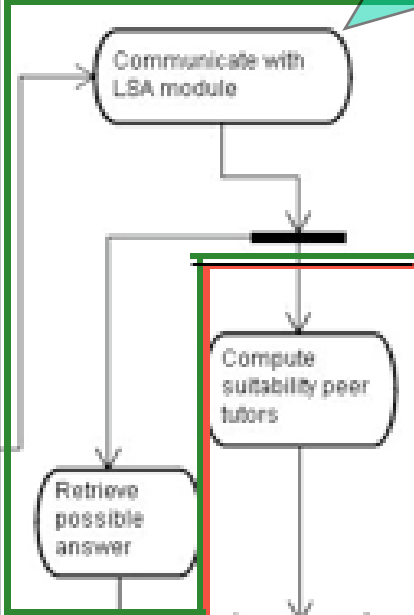
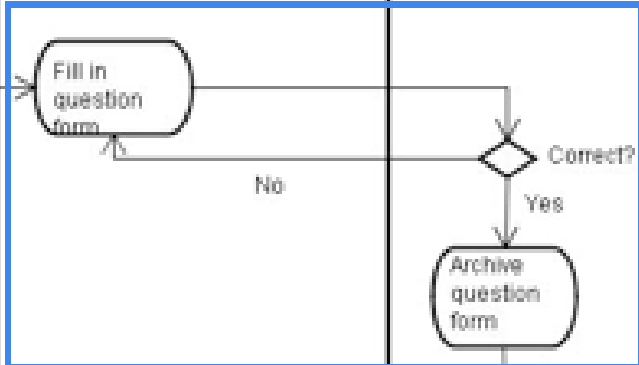
Agent Tutee

Agent Matchmaker

Agent Tutor

Tutor

compute similarity



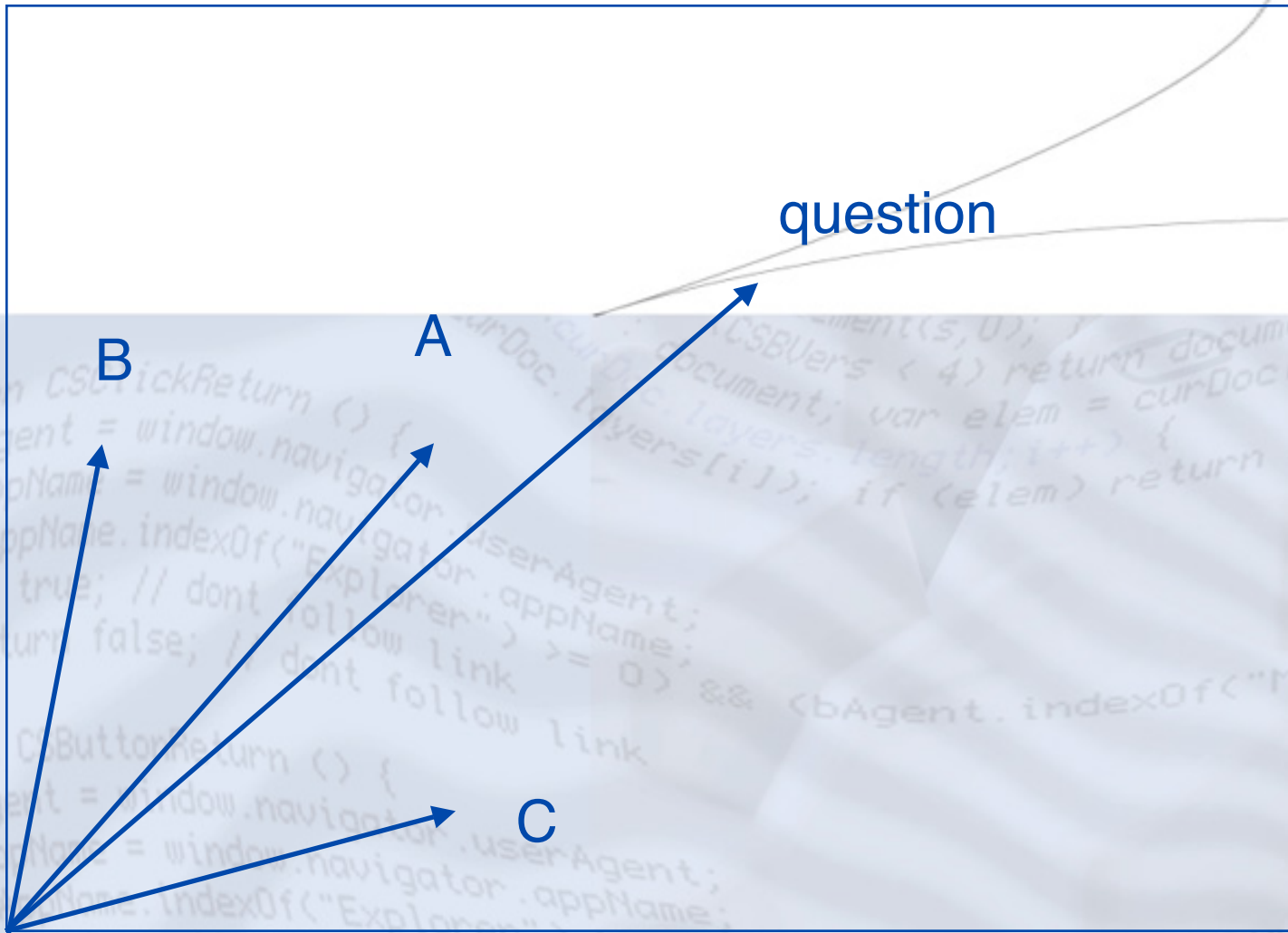
Moodle



LSA module



Tutor locator



question

B

A

C



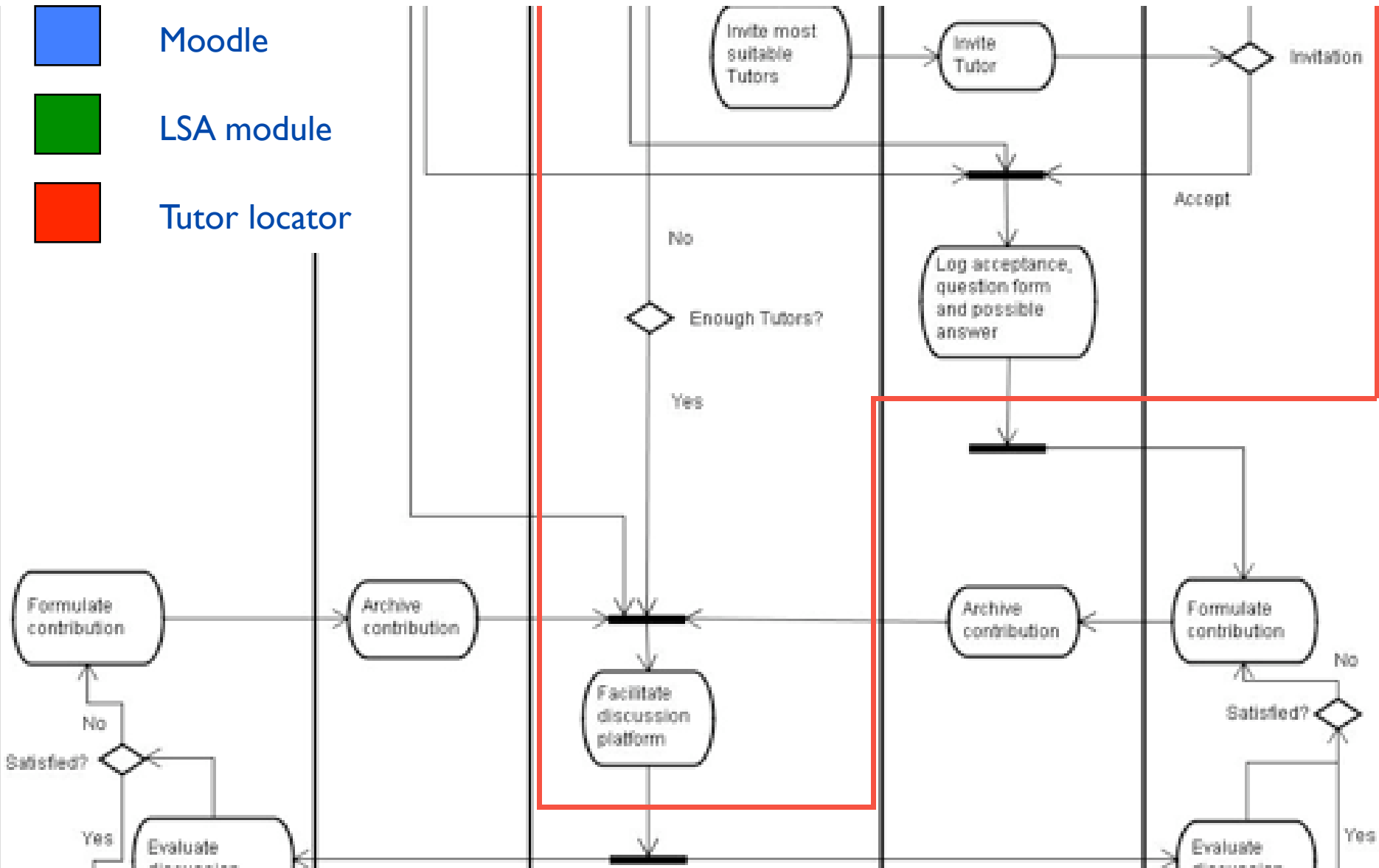
Moodle



LSA module



Tutor locator



```

if (bAppName.indexOf("Explorer") >= 0) && (bAgent.indexOf("Moz")
return false; // follow link
else return true; // follow link
}
  
```



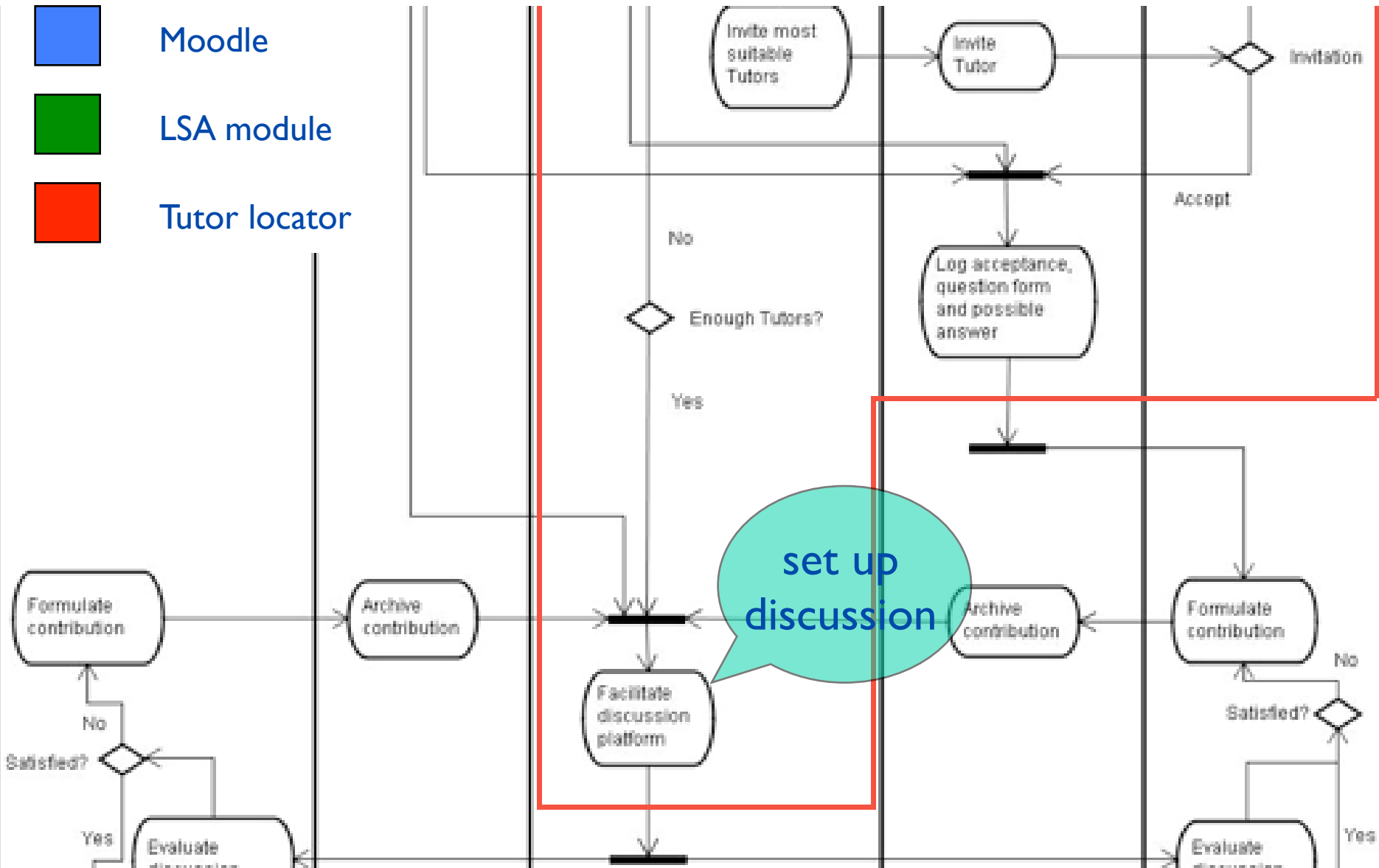
Moodle



LSA module



Tutor locator



set up discussion

```

if (bAppName.indexOf("Explorer") >= 0) && (bAgent.indexOf("Moz")
return false; // follow link
else return true; // follow link
}
  
```

Collaboration

- Suitable peers are selected, based on
 - content competence (completed unit in question?)
 - availability (e.g. workload)
 - eligibility (similar peer group)
- They are invited to join a wiki with their question asking peer
- This group we call an 'ad hoc, transient community'

Maak je geen zorgen over de opmaak. Die kan later nog altijd aangepast worden.



The temperature is a measure for the average kinetic energy of molecules. Energy is needed to increase their speed and hence the temperature. How much energy is needed per degree depends on the molecular mass (their number) and their kind (metal need little, water needs a lot).

Pad: [body](#)

Bewaar

Voorbeeld

Negeer

Did we achieve what we set out to achieve?

```
function CSClickReturn () {  
  var bAgent = window.navigator.userAgent;  
  var bAppName = window.navigator.appName;  
  if ((bAppName.indexOf("Explorer") >= 0) && (bAgent.indexOf("Moz") < 0)) {  
    return true; // dont follow link  
  } else {  
    return false; // dont follow link  
  }  
}  
  
function CSButtonReturn () {  
  var bAgent = window.navigator.userAgent;  
  var bAppName = window.navigator.appName;  
  if ((bAppName.indexOf("Explorer") >= 0) && (bAgent.indexOf("Moz") < 0)) {  
    return false; // follow link  
  } else {  
    return true; // follow link  
  }  
}
```

In conclusion

- Yes
 - LSA and wiki enhanced peer tutoring jointly provide a way to overcome the support problem identified in the survey
 - Moreover, providing peer support is a valuable learning experience in itself (Fantuzzo et al., Gyanni & Pahuja, King et al., Wong et al.)
- But ...

In conclusion

- Experimental evidence is needed
 - on student satisfaction
 - on teacher workload
 - but first on and the effectiveness of LSA versus random peer allotment - next two months

Further questions

- Can we use ad hoc transient communities to create a social structure in online communities?
 - by connecting erstwhile community members to approach each other directly henceforth
 - by connecting recommending erstwhile community members to friends (FOAF)
- Do we need incentive structures, if so, which?
 - altruistic behaviour is easily destroyed (MacLure)



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