

Mass sociocultural learning: socio-technical and socio-material considerations

Phil Tubman

2nd Year PT Traditional Route PhD



Sociocultural approach

“It is through others that we develop into ourselves”

Vygotsky, 1991

- All learning/ human development is social
- Language is the essential tool for learning
- Ideas are socialised in the ‘intermental’ and then internalised into the ‘intramental’
- Zone of Proximal Development: the area of optimal learning between the intermental and the intramental

Sociocultural approach

- Is Vygotsky referring to this type of ZPD?



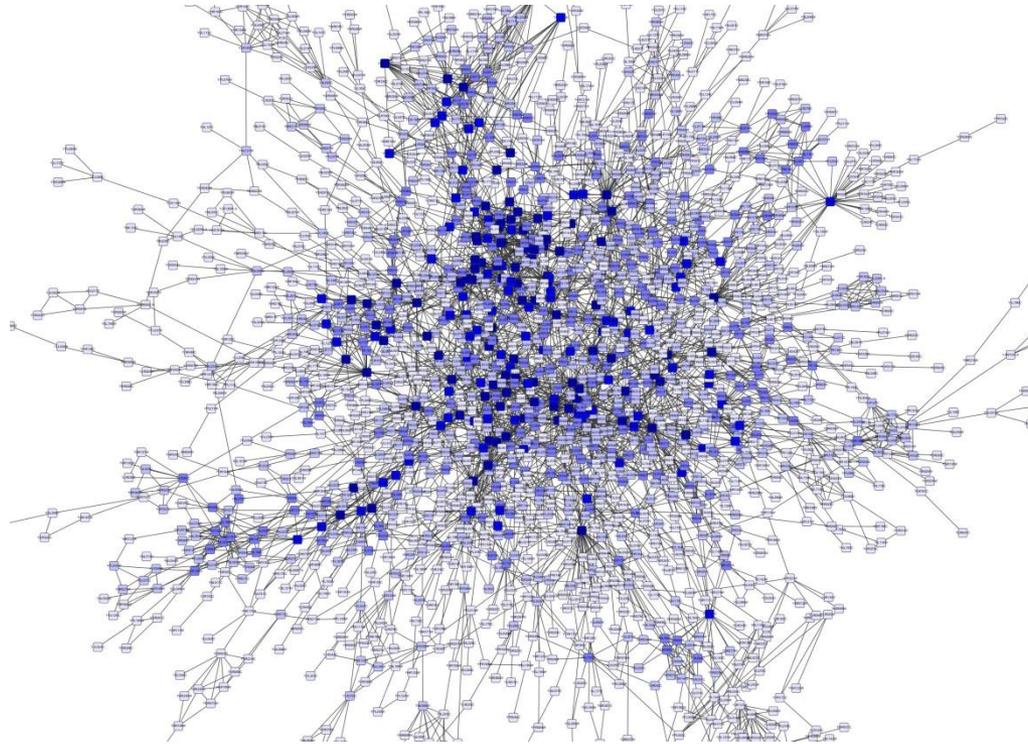
Sociocultural approach

- Or this type of ZPD?



Sociocultural approach

- What is required for a ZPD on this scale?



Conversational Framework

-
- “a conversation at the level of actions where discussion is directed towards interpreting the learning materials”
Ferguson, R., Sharples, M., 2014. Innovative Pedagogy at Massive Scale: Teaching and Learning in MOOCs
 - “a continuing dialogue between teacher and student, which reveals participants’ conceptions and the variations between them”

<https://johnmill.wordpress.com/2008/05/26/laurillards-conversational-framework-1/>

Teaching as Design

Teaching is a design activity with 3 dimensions:

1. Worthwhile tasks (epistemic structures)
2. ***Appropriate tools and physical resources (structures of place)***
3. Divisions of labour (social structures)

Mass Collaboration: Theoretical questions

- How do individuals behave in a mass?
- Is a mass more than the sum of its parts?
- How does the mass shape the behaviour?
- Is the context one of cooperation, or collaboration?
- ***How can a mass organise itself?***
- ***How can we foster intentional learning experiences on this massive scale?***

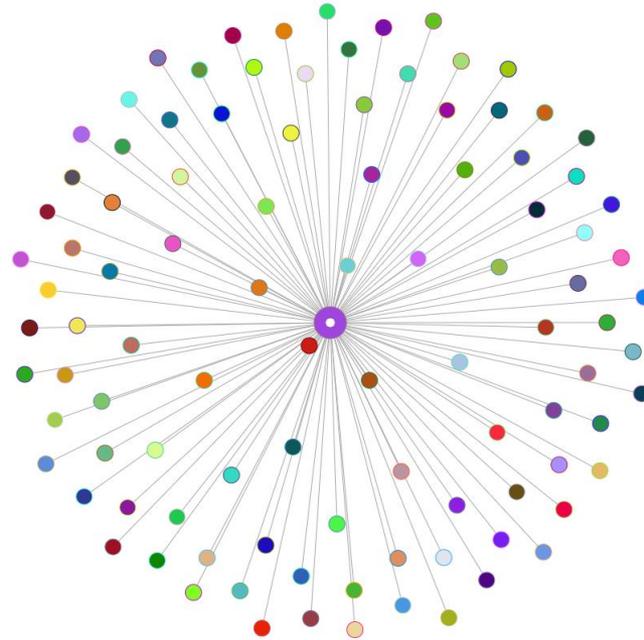
Mass Collaboration: Cultures of Participation

- MOOCs are a ‘model-democratic’ system of participation = many contributions, lesser role for ‘experts’
- Opposed to ‘model-authoritarian’ = fewer posts, but more review
- Levels of participation in a mass:
 1. Participation – reading, ‘liking’ (e.g. stackoverflow)
 2. Contribution – adding comments (e.g. wikipedia)
 3. Coordination – align activity for mutual benefit without disturbing others (e.g. torrenting/ file sharing)
 4. Cooperation – division of labour for mutual benefit (e.g. iSpot Nature, GalaxyZoo)
 5. Collaboration – common goals, joint problem solving, shared understanding of the task (e.g. de.li.cious, **MOOCs?**)

Sociomateriality

-
- The physical properties of technology has profound impact on decision making in learning
 - What type of intentional learning experience are we trying to foster in a MOOC and how can the physical properties of the platform impact this?
 - Sociocultural approach: enable discourse/ collaboration = encourage articulation; encourage participation for the benefit of the community (ie collaboration)

MOOC Toolkit: Visualisation 2



MOOC Toolkit: Pedagogical techniques

- Foster collaboration by social tagging of posts (encourage users to tag their own and other posts with #pedagogical_hashtags)
- #agree
- #disagree
- #real_experience
- #synthesis
- #summary/ clarification
- #question
- #further_reading
- ...or users could be challenged to come up with their own tags (user generated tagging)

...and then create a wordcloud of just tags.....

p.tubman@lancaster.ac.uk

@philtubman

