

Student communities of practice: the role of extra-curricular projects to make informal learning experiences a part of higher education

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Abstract

This proposal presents a study that inquires into student communities of practice and the informal learning experiences they facilitate in the context of higher education. First we illustrate what is meant by these informal groups of students that engage in extra-curricular project activities at their universities. After defining characteristics of those project groups we show that these groups are barely covered by current literature. To understand the life-cycle of these communities and the problems they face more fully, we interviewed the participants of different projects groups at our university and produced “learning histories” that capture the formation of these communities and the problems they have faced. Based on Grounded Theory we analyzed these interviews and developed a model of these communities life-cycle as well as the influences onto their development over time. This model then gets linked to the common literature on communities of practice and group theory and the role of motivation of the participants and the organizational structures that support these communities are elaborated. Finally it is shown how these findings inform a design research project that aims at building a learning infrastructure that enables extra-curricular project activities and the resulting educational experiences to become an integral part of higher education.

Extended Summary

In our work we research student communities of practice that develop at the boundaries of universities in the form of extra-curricular project groups. Such informal project groups usually are independent of study courses and are self-organized by students who share a common interest in a certain activity (e.g. community work, media production, political movements). We address this phenomenon with a design research approach. We inquire into the life-cycle of these communities and the problems they face to build an infrastructure that supports the communities. Our project therefore has a **twofold aim**: We try to understand these communities and the kinds of educational experiences they facilitate better on the one hand. On the other hand we use this understanding to build an infrastructure that fosters informal communities of students and self-organized project work via a co-curricular study program.

Our **research process** started with a literature review: We found a much literature on communities of practice that focus on informal contexts rather than formal education. Besides, we found articles on communities of learners which address the integration of more cooperative and collaborative learning scenarios into classrooms. Finally, there is another huge body of literature dealing with group theory, project work and educational technology. Even though our literature review led to interesting insights concerning certain aspects of the phenomenon, some of our questions remained unanswered. To further investigate the formation of the communities and develop a model of their life-cycle as well as the factors that influence their development we

decided to study the project groups empirically. Thus, we interviewed the core members of some of these project groups and produced “learning histories” that document the process of each project’s formation and its specific context.

So far we interviewed four project groups that differed in their tasks and goals. They were selected according to their group structure and the role of the mentor of these projects: Two projects groups showed a more formal group structure (“Campus Radio” and “Print Magazine”), the other two were more informally organized (“Peer Mediation” and “Educational Podcast”). Additionally, two project groups consciously experienced the support of a mentor (“Peer Mediation” and “Print Magazine”), whereas the other two groups did not perceive a mentoring figure even though one was present (“Campus Radio” and “Educational Podcast”). At the beginning we conducted narrative interviews with each head of the project. These interviews outlined the history of these projects. Afterwards, we interviewed the rest of the group’s core members (between 3 and 7 people) in a semi-structured style using the history outlines as guidelines for the interviews.

For the analysis of these interviews the **methodology** of Grounded Theory was employed: During the stage of open coding the main categories of the model were identified and labeled. The transcripts of all interviews were organized along these categories as well as the project’s timeline. During the stage of axial coding the causal relationships between the tentative categories were elaborated and the interaction of the main and subcategories was explained. This led to a rearrangement of the learning histories according to the “paradigm model”. During the stage of selective coding we then defined a core category for each project group and produced four narrative accounts that illustrate different aspects of the resulting model as case studies. This model is now being refined by a document analysis of the participant’s project reports.

We have been able to achieve interesting some **findings**: 1.) The motivations of the project participants vary considerably and change over time: Among the members of the project groups the motivation can originate from intrinsic interest in the tasks and goals of the project, from the expectation that the experience or the results of the project are helpful in regard to a certain career as well as a positive atmosphere in the group itself. Over time the participants start to identify themselves with the practice of their community and the motivations turn into care for the project group and its respective goals. 2.) The project groups’ organizational structures change depending on the contextual factors of the university environment: We discovered that in the start-up phases of the project groups the organizational structure is quite informal and closely resembles the formation of communities of practice as described by Wenger. As the project groups mature they establish more formal organizational structures with subgroups that rather resemble the development of small groups as described by Tuckmann. 3.) However, whether or not the project groups can sustain themselves beyond a critical phase, which is usually between the first and third generation of project participants, relies on the way the groups deal with internal as well as external problems. In this regard the project group’s mentor, the access to technical and financial resources and the integration of the project work into the course of study play important roles.

The **educational significance** of our findings lies in exploring the possibilities of self-organized project groups to foster open and collaborative learning environments in

higher education. Theoretically we propose a model that links students' extra-curricular project activities with the current literature on group theory, communities of practice and open learning environments in higher education. As outlined in this extended abstract, this tentative model is empirically grounded in the analysis of the "learning histories" of four project groups and will continually be refined by further studies. Our findings practically contribute to our design research project that aims at building an organizational infrastructure at our university that integrates such self-organized project groups into higher education without formalizing them.