A pedagogical evaluation of school activities in SMILE

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Introduction

This report is a short pedagogical evaluation of the those activities which two participating schools, Liceo Scientifico A.Romita, Campobasso, Italy, and Ies Albayezin, Granada, Spain, have conducted. The material of the evaluation consists of the presentations in SMILE Facebook group and the presentations in the final meeting 25.-26.10.2017. The initiative of this evaluation report came during the last meeting: when schools presented their activities, it was so inspiring that we decided to "conceptualize" the activities and outcomes into a form of a pedagogical evaluation. One important note have to say about the data: the interpretations of this evaluation are based on second order material, videos and presentations. It would have been good to have also some interviews or comments from the students but because of time limitations it is not possible. We have anyway asked comments from the participating teachers to avoid misunderstandings.

The previous report about school-level cases consists also of pedagogical practices but because they are already reported, they were not anymore included in the data of this report.

The framework for the pedagogical evaluations

In this report, pedagogical evaluation means that through a pedagogical research framework I have tried to understand the activities conducted in schools and to conceptualize these activities and student outcomes. The pedagogical framework is based on sociocultural approach, and in this study I focus especially on the following theoretical concepts and issues which arise from the material:

1) **Shared object** means that students goal for working (and learning) is to create something together; a presentation, a plan, an artistic product etc. For a shared object, students´ collaboration is

needed, and also versioning, improving, commenting and reflecting. These processes are longitudinal (it is, e.g., impossible to create a video within 2 x 45 mins) and they demand different phases, such as planning, a draft version, commenting, improving, second version etc. (Paavola, Lakkala, Muukkonen, Kosonen, & Karlgren, 2011).

2) **Collaboration** connected to creation of a shared object is intentional social process for doing something together. It is not only a set of individual activities loosely connected together but a demanding process of negotiations and decision making for common goal. Collaboration is also sharing: participants have their own expertise which they bring in the joint outcome. Sharing helps to co-create the joint object by giving various ideas, understanding and knowledge for common good. However, collaboration is also a skill, or merely a set of skills which will be learnt during a collaborative process. (Brown, Collins, & Duguid, 1989; Brown ym., 1993; Paavola, Lakkala, Muukkonen, Kosonen, & Karlgren, 2011.)
3) **Ownership** means the learner´s perception and feeling that both the working (learning) process and the outcomes are important to him or her. The learner is proud of the work, contributes voluntarily and in an active way. He or she has the feeling of being able to regulate the situation and the process. The individual´s and the group´s interests are intertwined. Ownership decreases the feeling of alienation and it stretches beyond the traditional "school learning". Ownership is developed through activities in which the learner(s) make the essential decisions (in contrast to teacher-centered activities) and the activities are on appropriate level of challenge. (Jonassen & Rohrer-Murphy, 1999; Rajala, Martin & Kumpulainen, 2016.)
4) **Agency** is closely related to ownership: a learner want to be active and work for reaching a goal, e.g. to finalise a work. A learner who has agency, feels him or herself free, initiative, responsible and willing. Agency id supported by giving learners these opportunities: to be responsible and active in a situation which is highly motivating. (For this text, a working paper by Ilomäki, Siklander, & Lakkala, 2017 was used.)
5) **Creativity** means a mental, social and emotional process which leads to a concrete or abstract outcome. The outcome is original and new, at least to those who created it. Creativity is basically thinking and often interactive. For creativity, it is essential to have s safe atmosphere in which mistakes and failures are accepted. (For this text, a working paper by Ilomäki, Siklander, & Lakkala, 2017 was used.)
6) **Conceptualization** of the phenomenon "Drop out" is a way to raise the level of experience and emotions to a cognitive level where it can be discussed as an issue among others. Conceptualization gives an abstract model to be investigated.
7) **Digital competence and multimodality** are essential tools for learning future skills. Digitalization is not anymore just a tool but an overall cultural practice, especially in the world of young people. School has, however, an essential role to teach all students to use digital technology for thinking, learning and creativity, which they usually do not learn through informal learning, with their friends. Multimodality means to use not only text but all kind of means for making presentations, as learning materials and for sources of information. (Ilomäki, Paavola, Lakkala, & Kantosalo, 2016.)
8) **Development of general competencies**. The necessary future skills and competencies have been widely discussed among policy makers, educational researchers and practitioners: what kind of competence is needed for future, how students should be educated for these, and what kind of teaching and learning supports the development of the future competencies. There are several definitions and lists of necessary competencies; one definition of the competencies is by OECD (2013): the competencies consist of *cognitive* c:s (communication, information processing, problem solving, learning, mathematics); *interpersonal* c:s (team work, cultural sensitivity); *individual* c:s

(self-leadership, creativity, entrepreneurship), and *technological* c:s. (OECD, 2013) The development of competencies is a longitudinal process, taking several phases and years. Competencies are, however, something to be learnt but they should be taught embedded in meaningful and authentic activities, students should get guidance when needed, and learning should consist of reflective practices.

These concepts described above are closely related to each other and intertwined. That means, e.g., that high level collaboration increases ownership and agency or development of competencies are related to longitudinal working processes with digital technology for creating a shared object.

Pedagogical characteristics of the activities

I will make my interpretations on how well the SMILE activities in the two schools represented the theory-based concepts.

Many of the outcomes were true **shared objects**, created by a team of students during longitudinal processes. Besides creating the object, students also presented their outcomes. It is easy to see that **collaboration** was an essential way of working (and learning). I did not see a single example of an individual outcome! It was nice to notice that the collaboration did not at all look like traditional collaboration in school tasks in which the participation is not voluntary and in which the various levels or quality of participation is an ordinary reason for problems. In these reported activities students collaborated for their own motivation and they seem to enjoy that. Collaboration in these processes is related to creating something together in which everyone's participation is needed.

In the processes, many of the reported (as videoclips) activities supported the feeling of **ownership**. The activities were open and challenging; students made the basic decisions of the contents and e.g., the visual outlook, but, as the videos e.g., in computer lab show, they had also support and guidance when they needed. Ownership in the activities and outcomes is obvious; it is touching how well the students did the presentations and other outcomes, and there were no passive students. These were processes of their own.

Many of the student outcomes were **creative** processes, even artistic ones. Creating presentations for the visits, making videos of various topics or photos (or making music and singing in a choir as presented in the cases reported previously) were highly creative. To create the outcomes the atmosphere must have been joyful and positive, but these activities also themselves supported the emergence of such an atmosphere. Participating in creative activities supports ownership and engagement.

For many of the activities and outcomes students used **digital technology** and various types of applications, such as text, videos, photos, animations supporting **multimodality**. Students were also guided how to use these applications (see e.g. nice video clips in a computer lab) and students learnt to use many kinds of applications. Digital technology was not the topic to be learnt but a tool for creativity, group expressions and knowledge-based presentations.

Conceptualization of the phenomenon "Drop out" was one of the clear topics in many of the video clips. Students participated in panel discussions and meeting and they themselves prepared posters and presentations about the phenomenon of dropping out. This kind of activity, directly focusing in the problems of the students, gave students conceptual tools to understand the phenomenon on cognitive level and thus they got "tools" to process it. They were not only objects of adults talk but actors themselves. This was a very important activity, and especially because it was processed in so many ways.

The activities have nicely supported the **development of general competencies** but also domain-related competencies, such as English language which was an ordinary tool for collaboration, not only a school subject. Students learnt such general competencies as making presentations and presentation (even for local TV or large audiencies!), argumentation and discussion, group work, social interaction, cultural awareness, problem solving, and digital competence. These competencies were learnt embedded in meaningful activities and situated. These learning processes followed well the research evidence about how the general competencies should be taught and learnt.

Conclusions

For a pedagogical researcher as the author it was inspiring to see how nicely the well-succeeded activities were in line with the new research evidence of "good learning". It was even more promising because often on practice level in schools, open and challenging, student-centered activities are regarded as something that only "talent" or "good" students can manage. Research evidence has shown, however, that such kind of activities as SMILE-teachers conducted support all kinds of students and that they promote not only content-related or general competencies but also such aims as school motivation, self-confidence and interest in academic achievements. For future, it would be good if these practices would be disseminated to all teaching and learning, to various educational levels and to various types of students.

What else should have been done with or for the students? I have to admit that all these activities and outcomes are really excellent from pedagogical point of view. Adding something is always possible but as such, these already form a really exciting repository of advanced pedagogical practices to be used everywhere.

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