
LEARNING PROCESSES & MULTIMODAL REPRESENTATIONS

Helena Danielsson & Lena Åström, Dalarna University, Sweden

Students have shown an increased preference for net-based learning over the last decade at Dalarna University, Sweden. Transmitting campus-based courses by distance has allowed for innovation. The challenges for university teachers as well as the affordance of creative tools are both on the agenda in our teacher education. From the students' perspective, different means of acquiring knowledge are necessary in which theory studies and performance work can be used complementary.

The aim of our demonstration session is to present our experiences of how different forms of knowledge appear both in the learning process as well as in students' project-work; the focus is on varieties of multimodal representation and presentation.

In our demonstration, we discuss how different forms of knowledge appear, and how they can be expressed and represented in student interaction with different media texts. This particular construction of knowledge is especially important for those contemporary teacher-training programs that are based on socio-cultural pedagogical theory. In our work, we take inspiration from both visual literacy and media literacy. The usage of multimodal representations has been developed to extend and deepen the students' theoretical knowledge of the content of a variety of educational courses. We address the following questions: What happens when these different areas work together in the creation of new knowledge? What kinds of representations can be used to express scientific knowledge? When talking about representations here, we mean representations that concern students' research results as well as students' knowledge and learning processes. Through these combined processes, students gain knowledge of different theories as well as learn about different tools for developing multimodal representations. Our demonstration is based on material which students (net-based) produced as part of three different components of their ordinary program and courses at Dalarna University:

I Education Science (Pedagogiskt arbete) – a foundation course in the teacher-training program – all levels of student (pre-school, compulsory school, upper-secondary school). In this course, students are given assignments that have them examine different theories while using multimodal processes to present knowledge through representations. Specific areas of focus are, for example, overviews of international curricula, and fundamental values and ethical discussions based on the Swedish curriculum.

II The Communicative Individual (Den språkande människan) – a course in the specific program Languages, Play Activity and Learning (Språk, lek och lärande) for students who will work in pre-school or compulsory school. From an extended textual concept, the course focuses on esthetical learning processes; fantasy; and creativity. Students work with multimodal productions, their area of focus being literacy skills and knowledge of languages (Swedish, Swedish as a Second Language, multilingualism).

III Exercises carried out with students by using different media, performance and digital tools both to inspire and to inform. Here, we emphasize short exercises that introduce students to multimedia and multimodal work processes.

By means of our demonstration session, we will discuss concepts such as esthetical learning processes, performance, creativity and extended textual concept. We will also examine the use of traditional scientific concepts when using an extended textual concept that includes written and spoken words; pictures; and movies. Our focus is to examine how net-based studies might offer new and interesting affordances and developmental tasks in this pedagogical field.