

# Body talk. Students' science learning and identity construction

## Aim

One aim with this paper is to explore discourse orders in students' discussions about a socio-scientific issue (SSI) concerning body and health. Another aim is to understand how students' use these discourses as a part of their ongoing identity construction in relation to available subject-positions.

## Rationale

In this paper we are departing from the idea that learning and identity construction are interdependent on each other. Sadler (2009) describes school science as a community of practice (CoP) where identities and discourses are expressed. He brings forward SSI as a way to open up for CoP where students' identities can be expressed and they can use already appropriated discourses.

SSI, as well as other pedagogical models, are however excluding particular students from participation. Popkewitz (2004) emphasize the need to problematize what subjectivities those are possible and not possible in the work with SSI. In other words, we would like to add a "power-perspective" to the theory of CoP by discussing possibilities and limitations for available *subject-positions* (Paechter, 2007).

## Method

This paper is built on focus group discussions from two classes at lower secondary school in Sweden. The classes had been working with a SSI on body and health and the focus groups were conducted right after this classroom work. Two groups were from a monoethnic school in a suburban, middle class area. The other two groups were from a school, located in a multiethnic urban area with low socio-economic status.

## Research questions and analysis

a) What discourses dominate the discussions about a SSI and how does this dominance relation fabricate certain subject-positions as available and other as impossible? b) How can the use of discourses be understood from the perspectives of gender, social class and ethnicity? What identities are performed when talking about the SSI?

Discourse analysis (Potter & Wetherell, 1987) was used to explore the questions above. The first step was to identify what discourses the students used in their discussions about body and health. The next step was to explore how the students' use of these discourses contributed to their identity constructions.

## Results

When the students discussed the task about body and health they were switching between different discourses, in this case School science discourse, Body discourse and General school

discourse. These discourses were used in different ways depending on how the students constructed their identities in relation to available subject-positions. The data show that the members of different focus group took different subject-positions when discussing the SSI.

## **Conclusions and implications**

One conclusion is that the availability of subject-positions in science classroom depends on how students do gender, social class and ethnicity. Some positions might threaten the students' identities in terms of these social categories. To sum up, we need to understand more about how students engagement in science is related to "who they are and who they want to be" (Brickhouse, 2001). We need to know a lot more about the students' identities, both inside and outside school.

## **References**

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