CAN REFLECTING TEAMS HELP DRIVING TEACHERS TO BE BETTER AT REFLECTING THEMSELVES?

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Working with road safety in Norway concerns working with all areas, like the vehicle, roads, environment, and human beings. Our focus is on the human being. Or more to the point: the focus is on those who will be educating drivers in Norway: driving teacher students. The education of driving teachers was extended from one to two years, and lifted from upper secondary level to two years at university college level from 2004. The aim is to develop different competences in these students, like professional competence, educational competence, social competence, professional ethics competence and change and development competence. What about the competence of critical self-evaluation and good self-awareness. This is the competence that we are looking at in our project.

The focus on our project (master in knowledge management) is to try out an additional way to help driving teacher students to be more aware of how they can use reflection on and in action. This may help them to teach learner drivers to be a bit more aware of their own limitations and possibilities. How can a driver instructor teach a learner driver to reflect if they are uncertain about how to do it themselves? Our focus has been on reflection concerning how and what students are thinking, how they are feeling and what they actually do/did (action).
Introduction
We wanted to try out an additional way to help driving teachers to improve their ability to reflect on their own teaching skills, by sharing knowledge and experiences, and to work on self-awareness. Our choice of reflecting teams is because it appealed to us. Both by being exposed to it ourselves and by trying it out on others. We will explain a bit about what we did, theoretical support, methodology and results in this paper. We are not yet quite finished with our project, so we have not analyzed and ‘concluded’ everything so far.

Usually in the practical part educating driving teachers, in the car there is one real learner driver, one student being the driving teacher, one fellow-student in the back seat and one teacher for guidance. Students are not allowed to go out on a driving lesson alone without a fellow-student in the back seat. And this student in the back seat evaluates the lesson together with the one being a driving teacher, at the same time she is present for safety reasons. Our point is to try out being two students in the back seat acting as a reflecting team. A reflecting team is a group of persons communicating with each other about something they have seen or experienced in action. The one or those who have been in action are present in the room but they are not allowed to participate in the communication, only to listen

Theoretical framework
Our main focus is on knowledge and learning, different learning models, reflection, reflecting teams, care; mutual trust, active empathy, access to help, go-ahead-spirit and no condemnation. We think these are important criteria to consider helping to make reflecting teams to work as they are supposed to.

Knowledge and experience seems important to change the way we look at things. Defining knowledge is not easy, but we have found some definitions which fits into our own way of seeing it. A lot of literature is based on Polanyi’s work (1962, in Newell et. Al 2002), where we can find Plato’s original definition: “Justified true belief” Anette Baches definition is (Nordhaug 2006:249): “Viden er en sammenblanding af erfaring, værdier, kontekst information, og ekspertinsigt, der gør det mulig at vurdere og inkorporere nye erfaringer og informasjoner.” (Knowledge is a mix of experiences, values, context information and expert insight, in which makes it possible to assess and incorporate new experiences and information). In literature we often find knowledge divided in two: tacit and explicit knowledge (Newell et. al 2002). Tacit knowledge resides within the individual, and is not
easy to articulate or communicate. This is often referred to as ‘know-how’. It is in our heads, in our practical skills and in our actions. Explicit knowledge is easier to grasp, it can be codified and communicated to others. In our reflecting teams we want to focus on both of these aspects, but it seems easier to reflect on explicit knowledge than tacit knowledge. It is more ‘safe’. Some of our aims are to make the tacit knowledge explicit.

Gottschalk (Gottschalk 2004) explains the difference between data, information, knowledge and wisdom. Information is interpreted data and when this information combines with experience, context, understanding and reflection it transforms into knowledge. Knowledge starts action or no action; this is what Gottschalk calls wisdom. We also want to look at the difference between different strategies of action built upon exposed theory and theory in use (Argyris, Putnam and Smith 1985, in Rennemo 2006). This is important for the reflecting team since it shows the possible difference between what the driving teacher says he plans on doing and what he actually did in the driving lesson.

As a student you can accept new knowledge in different ways. A couple of ways to explain this is: ‘single loop’ learning by Argyris and Schön and ‘assimilasjon’ by Jean Piaget. (Rennemo 2006). These two ways of handling new knowledge does not change our knowledge, it just confirms and adds knowledge to old existing knowledge. Some times we need a change in our basic assumption. This will be looked upon as ‘double loop learning’ (Argyris and Schön) or ‘akkomodasjon’ (Piaget) (Rennemo 2006). In this way new knowledge changes our existing knowledge.

By focusing on the learning process we also want to bring in Kolb’s process of learning. The model illustrates the dynamics in the learning process. (Rennemo 2006)
This model shows a good picture of the process you are in as a reflected student in learning. "Reflection is the critical link between the concrete experience, the interpretation and taking new action" (Coghlan & Brannick, 2006:35)

Another way of seeing it is like Tom Tiller does (Tiller, 1999). He is using ‘the stairs of learning’:

- Experiences connected to theory
- Connecting experiences
- Getting experiences in order
- Idle talk about experiences

These are the steps the student has to walk to learn out of experience, if he stops at first, second or third step he will not connect theory to his experiences. What about a fifth step containing development of new theory and/or change of practice?

Reflection means throwing something back or to mirror something. Reflection is essential in our project. We can divide reflection in: in-action and on-action. Reflection in-action is what you do during action, and reflection on-action is what you do after action. To reflect during or after action you need time, space and motivation. We also need a ‘tool box’ to help us reflect. Possible ‘tools’ are: reflection book, a permitting ball or a reflecting team (Rennemo 2006). In
our project we were using reflecting-notes after each session for us, the driving teacher (student) and reflecting team (students). According to Rennemo (2006) the aim for the reflecting team is to return information to someone, and this time it is to the driving teacher student. The reflecting team is different because it gives the student time to listen and think about how others have experienced her action, without spending time defending what she has done.

We will split reflection in three different elements: Thought, Action and Feelings (Sewerin 1996). Reflection often concerns action and thoughts, but we also want to focus on feelings and emotions. It is often more ‘safe’ to reflect on action and thoughts, while telling others about our feelings may make us vulnerable, that is why a safe and caring environment is called for.

Developing knowledge requires good relations in an organization (Krogh et al. 2005), and the same caring environment is just as important for our project. Those students we were following on their learning path, had to know their fellow students well, and they did. We also had to work on the new environment, bringing our self into the group, focusing on mutual trust, active empathy, access to help, go-ahead spirit and no condemnation (Krogh et al. 2005).

Trust is about handling uncertainty and accepting vulnerability (Newell et al. 2002). A high degree of trust is necessary to get to a level of communication that makes it possible to share tacit knowledge. But trust is not easy to gain, there are different sources of trust and different processes of establishing trust. Different reasons for developing trust are: a contractual agreement that binds the parties in the relationship, belief in competence among participants and a belief in the “good will” of those involved. (Sako, 1992, in Newell et al. 2002). Mixing students from different parts of Norway together in small groups will require quite a bit of work and time to create real trust in the group. There are different types of trust, but some are fragile; easily built and maybe easily broken down and some are resilient; takes time to build and not that easy to break down.

Another important issue we want to look at is empathy in the group of informants. What is actually empathy? Again there is an ambiguous conception, but it is about being able to enter into somebody’s feelings and ideas in situations they are exposed to, in other words to
understand the situation through the other person. In Krogh, Ichijo og Nonaka (2005) we find active empathy as one of five dimensions of care, and it has been used to proactively understand the other person. Active empathy is to try to understand someone else through observation and communication. Communication is supposed to be like a conversation, and it is quite close to being ‘an active listener’. The main focus is on the other person, not on your self. Using a reflecting team may help both the reflecting team and the driving teacher student towards being aware of their own emphatic quality and maybe to develop this quality. If it is possible!

**Methodology**

We selected our informants by asking them ourselves if they wanted to participate in a project. We had a choice between those who were almost fully educated driving teachers (two years) and those who had one more year left. We chose those who were half way towards being a driving teacher. This was because we had easier access to these students concerning time and motivation to be involved in our project. We asked nine students to be in our project, out of 84 possible informants. There were seven male students and 2 female students.

Our students are working in groups during the two years driving teacher programme. These groups consist of four and five students. We asked two of such groups to be a part of our project. This was voluntarily. We wanted these already established groups because we did not have time or place to build new groups. These group members had worked together for a year, and they trusted each other, and felt safe accompanying each other on driving lessons.

Our methodological approach was live driving lessons with driving teacher students and learner drivers. We were using nine students in seven driving lessons, including a pilot driving lesson in the beginning. Two of the students were the reflecting team, asking the driving teacher student in advance about his/her plans and reflecting together in the driving lesson. After the lesson, the reflecting team discussed the lesson while the driving teacher student only listened to their reflections. Our presumption is that this “tool”, reflecting team, can be an additional pedagogical help for students to reach the goal of self awareness themselves, and finally more self aware drivers.
At first we did a pilot, and then we did six diving lessons built up like this:

Group 1 (first session)

<table>
<thead>
<tr>
<th>Time Schedule (about two hours)</th>
<th>What</th>
<th>Who</th>
<th>Where</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 min</td>
<td>Pre guidance before driving lesson</td>
<td>Reflecting team (2 students) and driving teacher (1 student)</td>
<td>Classroom</td>
</tr>
<tr>
<td>50 min</td>
<td>Driving lesson, 45 min, in the middle of the lesson the reflecting team gets 5 min outside the car to talk.</td>
<td>Learner driver and driving teacher stays in the car. Reflecting team talks about if there is anything they need to clarify between themselves</td>
<td>In car, 7-seats</td>
</tr>
<tr>
<td>20 min</td>
<td>Reflection talk after driving lesson</td>
<td>Between reflecting team. Driving teacher is not allowed to talk, only listen.</td>
<td>Classroom</td>
</tr>
<tr>
<td>5 min</td>
<td>Driving teacher is allowed to shortly tell about her/his driving lesson and how she/he has felt the situation.</td>
<td>Driving teacher in focus, but reflecting team is allowed to answer and ask questions.</td>
<td>Classroom</td>
</tr>
<tr>
<td>15 min</td>
<td>Writing a reflection note (some wrote a page, some wrote a couple of sentences)</td>
<td>All three students: driving teacher and reflecting team</td>
<td>Classroom (no master-students in the room)</td>
</tr>
</tbody>
</table>

During each session the two of us master-students were observing and making notes. After each session, we wrote a reflection note ourselves, since we chose not to do a video recording.

**Results and analyzes**

We focused on what students thought was the difference between using a reflecting team and doing an ordinary driving lesson at HiNT. We also asked them what they had learned throughout each lesson. We have gathered all data and now we are analyzing it. This is where we are in July (08), but in August (08) we will be able to give more of the results in this master-project.
Literature
Statens vegvesen, 2005, *Føreropplæring i Norge*, Vegdirektoratet