

Conneting Practice to Theory - Teaching Students to Reflect on their Qualities (the Netherlands)

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Introduction

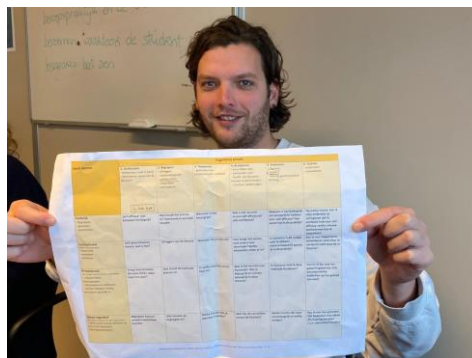
At two Landstede locations, we designed and respectively redesigned a lesson. We worked together from different courses, landscapes and backgrounds. The purpose of the study was that we worked together from different vocational schools to improve teaching practice and quality by going through a research cycle (LS4VET Model).

The main objective of our research lesson was: The student is able to name the connection between professional practice and theory during the lesson which makes the student demonstrate active learning behavior. We chose this goal because we all come from professional practice. In our teaching practice, we experience that students have very variable motivation and are easily distracted. We want to investigate the effect on active learning behavior by linking to professional practice in class.

Context

The Lesson Study consisted of a number of phases and the course was planned in eight meetings.

Preparing a research lesson, observing this lesson on site and then reviewing and modifying this lesson. The improved lesson was taught to another class, with students taking a different vocational course at a higher level of education. Evaluating the Lesson Study project was the final phase. Each phase provided learning moments for us. As we prepared, we reflected on our lessons and those of colleagues which increased our frame of reference.



Focus and process

The LS team consisted of six teachers from various fields (education, nursing, agriculture, social care, hospitality, trade and commerce), a facilitator and a KO.

At the beginning of the cycle, we scheduled eight meetings, including two class visits. It was a logistical puzzle to meet bi-weekly in a three-month time frame. During our meetings, reporting took place via minutes in MS-Teams. We created a folder structure according to the LS4VET model.

A complicating factor was organizing the research lessons. We would like to explain this from the content and context. Regarding the content, we chose to design a citizenship lesson because citizenship is taught within all vocational courses. Regarding the context, the group differed in class size, vocational training, difference in education level, age, time of the lesson.

Two people from the team were able to find space to organise a lesson at their location. Following the LS4VET model, we started by setting the goal, then we started studying, together and alone. Then we prepared and taught the lesson together. We used our observations and interviews from the first research lesson to redesign the lesson. The topic of the lesson remained the same, but the context (target audience and education) changed. Then the second research lesson was taught and we evaluated it.

For the research lesson we had as objectives that students can explain in their own words what reflection on qualities means to them. They can explain how to put their learning (qualities, reflection) into practice. Practically, they can form a top three of qualities of which they are able to explain how these are their own qualities. And students can name at least two qualities they want to develop further and connect these to personal goals. In brief: The objectives of the class were explained, students were presented with possible qualities and hand-outs, and guided with questions to reflect on those together. These were related to their field and future career.

We consulted an educational expert as KO. Theoretical insights gained through this so-called knowledgeable other related to:

- Insights from cognitive neuroscience articulated by neuropsychologist Harold Bekkering (Bekkering & Van der Helden, 2015). Bekkering shows how the brain learns and the importance of human autonomy and social connectedness for optimal learning. The balance between cognitive (language, math, etc.) and social learning (learning from and about others) is crucial.
- Bekkering argues that it is precisely a good mix of these parameters that optimally enriches the student. That optimally enriched student is then much better able to take his/her place in society.
- Acquiring knowledge from books (insights from others) goes hand in hand with learning by doing.
- At school, it should be about learning all kinds of canons that society considers important as well as the things that the student considers important.
- The importance of metacognitive questions to students in secondary school education.
- Speaking the language of the student, understanding his world, social context and ambitions.
- Motivation cannot be read from the behavior they show in the classroom, but the fact that students come to school to learn is a signal we definitely should not ignore. The choice to go to school was already a choice of motivation!
- Modeling has increasingly become a mindset for creative theory development that makes instruction connect to the student's world. It is important to adjust your expectations. Even if as an instructor you think students should be able to understand and complete the assignment, low self-esteem keeps many an MBO student trapped in their development.
- The importance of the Socratic method, through the six steps you can help students think critically.
- Active learning behavior has a lot to do with activating didactics; activating didactics is a collective term for all pedagogical-didactic interventions of a teacher to stimulate the (thinking) activity of his students. The idea behind this is that active students achieve greater learning gains (Geerts & Van Kralingen, 2021). A key premise of activating learning is that students are

responsible for their own learning, with teachers playing a facilitating role to support this. Theoretically, activating learning stems from social constructivism, in which learning is seen as an active process where students construct knowledge and meaning from their own experiences in a social context (Educational Vision Landstede Talentvol Ontwikkelen). Within this approach, therefore, the focus is more on the student's learning process than on the specific subject or lesson.



Response

Our main research findings regarding activating learning are:

- We heard - in class and during the interviews - that a number of students struggle with low self-esteem. This hinders them in naming their own qualities, but they are good at making the link between qualities and professional practice.
- Apparently inactive learning behavior can be purposeful. We had to adjust assumptions: when we saw students busy on their cell phones or chatting, we interpreted this in advance (when drawing up observation criteria) as inactive learning behavior, but this turned out not to be the case.
- We saw that having and expressing high expectations stimulates active learning behavior, especially through the recognition and belief that students have much to offer.
- Follow-up question: how do you differentiate? What do you need to do that? In what way do you do justice to the individual student within the zone of near development but encourage learning from and with each other?
- We spontaneously shared our insights and experiences from Lesson Study in our teams, thinking that Lesson Study is an appropriate method to evaluate your teaching and redesign lessons based on observations.
- We tried different forms of work by using student input in the second lesson, then linking to professional practice and lastly to the person of the individual student. In this way of working we recognise the LS4VET model.
- To stimulate active learning, class arrangement matters! We saw the effect on class management, on student engagement and teacher-class interaction.

The Lesson Study journey

During Lesson Study and specifically with respect to LS, we discovered three important things:

- 1) In our work we are often alone in front of the class and therefore our work has a solitary character. As a teacher you only see a limited piece of the behavior of the student(s), extra eyes broaden your view and that broad perspective does the student much more justice. Through the interviews it became very clear that checking through formative assessments is crucial, there were large differences in interpretation of the concepts in lesson 1. To seamlessly match the student's learning needs, clarifying the initial situation is indispensable. We became aware of the ease with which we as teachers make assumptions. Those assumptions were exposed in our conversations about our observations. For making a professional and honest translation from observations to conclusions, consulting the student, what we know from research and literature and clarifying the context of the classroom is evident!
- 2) If you want to discover something you have to do methodical and frequent research. The LS4VET model has given us valuable tools to do this well. This has contributed to our professionalism when it comes to what conditions a VET teacher needs to be able to teach well: coordination with colleagues and experts, extra eyes in your lesson with a view to quality improvement, evaluating and reflecting.
- 3) We experienced the intensive collaboration and practical exchange in our LS team as learning in a professional learning community. Our conversations were deepening and reflective of knowledge, skills and attitudes. The exchange with an expert in lesson preparation offered new insights on our teaching practice. Lesson Study contributed to our inquisitive attitude. We worked systematically during these weeks. We adjusted our goals, looked back on the lesson together, and looked ahead by adjusting the lesson. We share our experience in our teams as well as the insights on what contributes to active student learning in VET.

Quotes from individual reflections by the teachers:

One:

I expected to learn a lot through collaboration with my fellow colleagues, and have also experienced this as such. Exchanging thoughts, asking questions makes me look more broadly at education with which I fill my backpack with new ideas, knowledge and experiences that I can then put into practice. The objective of our LS research also aligned with my learning needs; how can I get students to engage in active learning behaviour? We quickly came to the conclusion that experiencing (professional) practice plays an important role in this. It was nice that each colleague took responsibility in the process. I did sometimes experience the meetings as chaotic, in this I could notice that we are a pilot group regarding LS, I sometimes missed in this the consultation structure and the goals we wanted to achieve at that moment, often we also just needed more time to design and complete the tasks such as the lesson or observation form. In the end, we were able to teach two lessons. I got to teach the second lesson. I found this exciting, also because I find it exciting anyway when someone is watching me in class. LS made me realise that it is not about my actions but how the student reacts to the lesson we designed.

When I look back at working cyclically through LS, the process has been especially instructive for me rather than the end result. As described above, I learned a lot from my fellow students but also from the KO, through which I came to new insights: the student is always motivated, but the question is how

do I connect to that motivation of the student so that the active learning behaviour becomes visible in the lesson. He also mentioned Feuerstein's method, which I know from my work in disability care. Indeed, Feuerstein looks at people's potential, the development of thinking and learning skills, and there is no ceiling or limit to the student. Every person learns in their own way, and every small step is one. The art for me is to observe how I can connect to those possibilities of the student. During LS, one of the experiences I have had is that observing in the classroom, by the way, is not always easy because there are many students involved in the lesson, and there are various group dynamics at play that make me as a teacher easily distracted. For example, sometimes it seems that a student is not paying attention but turns out to be actively participating, and also vice versa, the student who seems to be actively participating but is secretly shopping on her laptop. Through LS, and the specific observations, these details emerge.

Through LS, I began to look differently at the student's active learning behaviour and learning needs. Every student is different and has different learning needs in this. In teaching, as a teacher you have to be able to differentiate in this, and then I wonder to what extent it is possible to tailor teaching to the different learning needs of the students in the class. In some subjects, I think that would be fine, such as math or English (the generic subjects), but how do you do that, for example, if you give a lesson on 'healthy lifestyle' or 'quality reflection'? How do you adapt the forms of work, assignments and how do you determine who gets to do what. Differences in the class may and should be there, but how do you make sure that every student feels treated equally and seriously, without someone feeling backwards because he is not yet on the same level as his fellow student. Differentiating is therefore definitely a topic I would like to delve further into and in this I think LS can be a great research tool.

Two:

After explaining Lesson Study (LS), I was curious as an VET teacher because I saw this as a great opportunity for collaborative learning. This research has contributed for me as a beginning teacher to my work as an VET teacher. The LS4VET touches on proficiency requirements for VET teachers, and you go through them with the group. Of the proficiency requirements, one or more points came up because you went through a cyclical process. Think Professionalism: we had to organise, plan, communicate, research, work together and learn. Professional competence: relationship to the professional context, reflected in our goal. Didactic competence because we were going to design, implement and evaluate education. Pedagogical competence Development of students social-emotional, moral and (professional) identity. This is reflected in the lesson objectives.

I wanted to experience for myself what it is like to go through an LS4VET cycle and pay attention to input from colleagues and how I myself view this. In order to learn from each other. By seeing where I am confirmed in what I already do and can apply colleagues' best practices in my own teaching.

We went through the LS4VET model in the group. This was something I wanted to participate in and provide input where I could. Attended all the meetings, did the homework and actively participated in the appointments and meetings. I did this by asking questions and answering questions where I could. In the beginning I thought: what have I started with, because it was quite unclear to me. I did not know what was expected of me. As the meetings progressed there was more and more clarity which made it easier for me to participate in the meetings. I myself expected that there would be more guidance from someone who could support me more specifically because, especially in the beginning, I had the feeling that I was drowning. Where I could I tried to provide structure by asking or summarising questions, and asking if what I heard was correct.

In retrospect, I am glad I participated, it enriches your knowledge and experience in teaching in order to professionalise as a VET teacher. Why do you do what you do? For what purpose do you use a form

of work? What form of work do you use? Classroom management? This gives a good feeling and sense that you are on the right track in teaching.

Lesson Study is a whole that you must go/are going through as a group. Now that we have fully gone through the LS4Vet cycle it is easier to say it makes sense than if you had asked me this in meeting 2. You want to give the best lesson and this requires time, sparring with each other and you are constantly polishing to make the lesson even better. Everyone takes input into the lesson from their own experience. It was useful that we agreed on the meetings in advance because it takes quite a lot of time and in addition to all the other work it is sometimes quite puzzling.

It is very valuable to do this together in a group. We are dealing in our Lesson Study with colleagues who are entry-level, teach at different courses, year groups and sites. This brought a lot of expertise and input from different points of view. It gave me experience and knowledge to apply in lessons. What stuck with me most of all as an observer of the lessons given. As a teacher, there is more you don't see happening than what is happening. You don't hear everything that is said, you are short of eyes and ears. Furthermore, it contributed to how I approach my teaching, confirmed in the way that it is valuable to make the link from practice to teaching. Consciously seeing if I can speak in the language of the students. So that you keep testing/ keep asking if you have the same frame of reference/expectations. It helps that you have prepared the lesson well because then you know what you are doing and why you are doing it. What is also important is to evaluate with your students what they thought of the lesson/work format. Because ultimately you want to encourage the student to engage in active learning behavior. I do believe that the link to practice is essential in that based on your own experiences and based on LS.

Alternatives that can be applied next time are a baseline measurement so that you also have the initial situation of a class, which allows you to draw a more concrete conclusion as to whether it is also due to what you have devised in terms of, for example, working methods. We had the following goal: The MBO student can name the connection between the professional practice and the theory during the lesson so that the student shows active learning behavior. We gave the lesson to two different classes (courses) of different levels and years. An alternative next time could be to run this within the team with an LWP writers group or teaching teachers of an LWP. With this you improve the quality of the lesson, cooperation with colleagues is also better in my opinion because you prepare the lesson together. In addition, it can also help with the development of LWPs. It is important that you listen to the student, evaluate work form/lesson. It is important that you do not make assumptions but keep checking with the student. I also found that group dynamics are important. After our last lesson, I had an interview with some students where the group had only just switched and the students indicated that the way this happened was not nice which prevented the students from doing anything else. Like evaluating the lesson we actually came for. Possible disadvantages are that it takes a lot of time especially if you haven't gone through the LS4Vet model yet, scheduling meetings, scheduling classes. This comes down to a lot of replacing each other in a team. It does add up and this can also create resistance from colleagues. You need a facilitator from LS to help the group progress through the different steps.

As far as I am concerned, it would contribute if this were used more widely within Landstede and e.g. within the team. As a teacher you are always trying to improve education. A team often has different goals and wishes e.g. watching each other in class, aligning education and I think if you look further into formative action you can pack a lot together if you do LS within your team with a number of colleagues because you also improve the quality of education and professionalise yourself as a teacher.

As a starting teacher within the PDG, the way we have done this is precisely instructive because you work in different teams, courses, year groups and branches. This gives a lot of input and that broadens your horizon. I will definitely take this input to my own team and will give feedback on this during a team meeting. Furthermore, I myself also took a large part of the LS lesson and gave it to my own coaching students, they had a positive reaction to this.

Three:

During the first meeting, the content of the project was explained and what steps we would take towards the final result. This appealed to me immediately and it seemed very interesting to use this way of research within the mbo. In addition, I realised fairly quickly that the research would fit in very well with the portfolio I will submit for my qualification. In addition, I think that this research will enrich my portfolio and in this way I can demonstrate the competences of an VET teacher. Beforehand, I was very much looking forward to collaborating with colleagues from other subject areas. I was very curious about their experiences and perspective on education. During the second meeting, we searched as a project group for a common goal. The goal emerged very quickly and I found it quite striking that each of us immediately agreed on the common goal. My colleagues' experiences matched mine and was in the area of student motivation. Where did it come from that the student had low motivation and engagement in class, and how could we encourage the student to engage in active learning behaviors? In addition, we unanimously agreed that perhaps engaging the field could increase student engagement and motivation. This was easily employable for us since we all have a lot of experience from the field as lateral entrants. In the subsequent meetings, we started to investigate which professionals matched our goal and could perhaps add value.

I sometimes found the structure of the meetings a bit messy. It was not always clear beforehand what was expected of us during the meetings. It was clearly visible that we were working from a pilot. A point of attention here was perhaps that the mutual coordination of the guidance could be a bit more attuned. During the lessons (given by Job and Jacoline) I found it great to look at the lesson from a different point of view. There is so much going on in the classroom that you can't see when you are in front of the group. This is something I am now aware of during my own lessons. It was also great to attend a lesson of colleagues and this was very instructive. During the process, I noticed that it was sometimes a bit difficult to get together with our LS group. The mutual distance and agendas did sometimes cause a barrier here.

Looking back on the LS project, there is one thing that stood out for me. I myself sometimes saw it in a somewhat negative light when a student was not actively participating in class, but I am coming back to this. This is because I have gained insight that a student comes to class with a purpose. Simply by being present in class, the student shows that there is a certain motivation. To follow up on this, I have become even more aware of the need to respond to the student's needs during the lesson. What does the student want to learn during the lesson and let the student form the learning objectives here. The conversation with the KO really changed this for me and I found this very interesting. Through this experience we might have been able to use these professionals even more. After all, this would have been the perfect opportunity for it. Looking back on my observations, this is very valuable. I will have to do this more often in my classes. However, it is difficult when the group is so large. Perhaps the student could be used for observation here as well.

After LS, my conclusion is that involving the field does add value on student engagement. In some cases a student did participate in the lesson while perhaps as a teacher this was not always perceived that way. My conclusion from this project is that it is very difficult to have different levels of education in the same class. The needs of the students are very far apart and differentiation will have to be used.

The use of differentiation is something I want to work on more for myself. So at times students will have to engage in a form of work, where other students may still be actively participating in instruction from me, as a teacher.

Four:

With this research we wanted to investigate whether you can positively influence students' active learning behavior by very emphatically starting from practice, and then linking theory to it. Very interesting for me because I just started teaching in VET. I noticed from the very beginning that students at the VET emphatically learn differently than children at an elementary school. So I really wanted to participate in this study. I was also very curious about how LS works together and expected it to be very instructive. Learning with and from each other. I especially wanted to pay attention to the process during this research.

We conducted the research by preparing 2 times a lesson together, teaching this lesson, and observing the students' learning behavior. During the process, we also looked at the theory already written on our topic and heard an expert on motivation and its factors. My own goal was also to expand my own knowledge about and experience with the pedagogical and didactic challenges I face, now that I teach in VET. I think it would be great to start doing this in conversations with others.

At the very beginning, I was very motivated to participate in Lesson Study. Since I had no experience at all in working out a study, I thought it would be really nice to do this in a group. So that we could start learning with and from each other. Because: alone you are faster but together you go further! By working together to design a lesson, observe it, discuss it afterwards and redesign it, we could also go through the research cycle together twice.

Periodically, I had to remind myself that the outcome of this research is not the most important thing, although I wanted an answer to our question. I made many other discoveries throughout the process. Together you see much more: things that you don't notice as a teacher simply because you can't see everything that happens while you are teaching, do become visible when you watch with several people. If you observe the behavior of students in a focused way, you can really focus on that. It became very clear to me that you run the risk of interpreting certain behavior as inactive, while it turns out not to be! Also during the preparations I found it very rich to get input from different angles, each participant looking at it from his or her own perspective and/or experiences. By discussing and redesigning the lesson with each other, I learned more about the application of different working methods appropriate for the target group. As probably with any form of collaboration, I ran into a number of issues: How do you work together to ensure that everyone feels involved in the research? Also, the form in which things had to be done was not always the most appropriate for us, and were also often unclear. In this we had to look for alternatives ourselves.

It was an important discovery for me that the motivation in students is there even though sometimes it doesn't seem so: after all, they came into the class! It was up to me to connect with them. By choosing activating work forms but also by addressing the students each at their own level or learning preference. This demands quite a lot from me as a teacher. As a teacher, you have to connect to their abilities. Going through this together has given me many new ideas and has expanded and enriched my repertoire. My own lessons become didactically stronger from this.

Surely the most important discovery for myself was that working together is very effective for me. I enjoy tackling things together and improving each other's skills in pedagogy and didactics in this way. Sometimes I got really confused by the lack of clarity about what exactly was asked of us. Then I lost the overview, and especially the framework within which we could work. I then feel myself becoming

more passive, while that is the last thing I want. I was able to make this clear a number of times, and by asking about it I was able to pick up the thread with the others. A very instructive experience for me.

I really started to look differently at student motivation as I described above. I want to start looking critically at the assumptions I sometimes have about students. Because of the mostly low self-esteem that students have in college, they really need different things from me. They are entitled to an open mind from me.

I am fortunate to be in another coaching group, so we are in the classroom together on a regular basis. I want to scrutinise my students' behaviour more often by making targeted observations during lessons and having conversations with them about their learning behaviour. This can give me more insight into what they need in it. The deepening of differentiation is for me a logical sequel to this. This could very nicely be shaped via an LS round, together with my colleagues from Education.

Five:

Last semester I participated with my fellow students in the pilot of Lesson Study in VET. During Lesson Study research, teachers gain didactic and pedagogical insights by sharing experiences. In this Lesson Study study, our goal was to see if we could increase active learning behaviours in students by linking to their own practice. We chose this because every teacher on the research team noticed that motivation grew when the teacher made a connection to professional practice in their lesson.

We made a lesson about qualities and how to use them on an internship or later in the work field. I gave this lesson to my class. We evaluated the lesson based on observations and feedback from the students. Then we modified and improved the lesson and a fellow student taught the lesson. After the second lesson, we evaluated the lesson again. We went through this cycle twice to improve the lesson.

Even though I and the group started enthusiastically, it has been a chaotic process. The first few meetings we struggled with a research question. That took longer than we had hoped. But that we were going to talk about "using qualities in practice" was clear. Once we had a research question we prepared a lesson. We decided that I should teach the lesson. Because the lesson was going to be observed by my fellow students/colleagues this gave me excitement. Since the lesson is an essential part of the research, I felt the responsibility as a pressure. On the other hand, I liked the idea that I could take charge of an important part of the research.

The research lesson was observed by six colleagues. That way, all students could be watched closely. After discussing the observations, it struck me enormously how many important signals and information you actually miss. As soon as you are the only teacher in front of the class, you cannot distribute your attention properly to the whole group. Certain behaviours or signals from students are often overlooked. While these can be of great importance for the student's learning. For example, it happened to me that I characterised two chatting students as disruptive and called them on it. While they were talking substantively about the material. They were helping each other, thus both were learning. Discussing observations with colleagues makes you look at your actions and lessons with different eyes. Besides trying to answer a research question, I found that observing a colleague's lesson and evaluating it makes you develop as a teacher because you are made aware of shortcomings, and confirmed in what you do well.

Through this research I have become immensely aware that as a teacher you miss many signals. The more signals you catch, the better the student can learn. One teacher can never catch all the signals

and give every student equal attention. It also fails to offer every student what he needs at that moment. But I always remain aware after this research that I need to ask more of the student. Just because I may not have seen or noticed something. Example questions are: "Were you able to follow along?" "Did you understand the assignment?" "How are you sitting? I want to try to ask these questions to everyone. Not just to the students who stand out. Without this Lesson Study process, I was never so aware of them. I have learned the importance of being mindful of the whole class. When you have an eye for the whole class, the whole class can learn.

In the future, I am going to ask more about student experiences in my classes. I want to know how they experience my lessons and if they can follow the material. I tend to focus on the students who demand more attention. The inconspicuous students don't always get enough space. While they deserve the same attention as the students who stand out.

When I ask students about their experiences about the material and the lesson, I can improve my lessons. In addition, differentiating within my lessons is easier. By doing this, my lessons are more in line with the student's learning needs. It may mean that the student needs more of a link to practise, but it doesn't have to. By being more attentive to the student's needs, I am going to improve my lessons.