The academic “talking head” and the hair-raising narrative can both be potential tools for meaningful learning, depending on the special pedagogical goals which they are used for and the practices which they are integrated. The pedagogical value of a video can be evaluated on the basis of how it is used and what the learning outcomes of this use are. (Hakkarainen, 2007.) To make learning meaningful entails the choice of information and its careful structuring. In a student’s learning the emphasis lies both on understanding and evaluating the knowledge and on criticality. When understanding takes place in interaction, it leads to approaching issues and phenomena in different contexts through common language, discussion, listening and participation. The consensus about the phenomenon to be learnt will arise through dialogue in which different views will be integrated and merged into a new interpretation about the target of understanding. Different viewpoints meet in dialogue and create links between views. The phenomena will be given shared meanings (Valleala, 2006; Gadamer, 2004; Gallaher, 1992).

**KEYWORDS:** well-being at work, video-based learning, inquiry-based learning, experiential learning, vocational teacher education
1. The aim and context of the research

The action of a vocational teacher is guided by various strategies, beliefs, values and substance competences concerning teaching and learning. Recognizing, studying and reflecting on pedagogical beliefs and preconceptions are the central tasks in a teacher’s development at work and the promotion of well-being. It refers to the teacher’s skill and sensitivity to observe their action, reflect critically on their work, ways of thinking and practices. Learning to be a teacher is not only developing knowledge, skills and competences, but essentially it is becoming a teacher (Aarnio, 2010; Garrison & Kanuka, 2004). Learning outcomes of a learner can be confirmed by learner-centered evaluation methods as well as by availing of learning environments that comprise community of practice and practical wisdom.

The context of the research is Oulu University of Applied Sciences, the School of Vocational Teacher Education. Multi-subject teacher programs are meant for academic, 2nd or 3rd career teacher students. A course “Self-management and occupational well-being” was given in 2012 for 19 students. They were the study subjects.

The aim of the project was to find out how to make a teaching video (Kepanen & Koukkari, 2013) from the idea stage through various choices and practices to a ready-made product. The planning phase started with defining the contents of the issues that were important for studying the phenomena connected to self-management and well-being at work. The study set out from the students’ everyday conceptions and today’s general understanding of the above contents and proceeded to deepen, apply and analyze the knowledge cooperatively. We designed a teaching video concerning the phenomena which according to Reeves, Harrington and Oliver (2002) are called cognitively realistic, i.e. the situations are connected to everyday reality and also correspond to real situations. The contents of the assignments were planned to be challenging and connected to the core questions of the course plan. Dealing with the assignments through dialogue was the focus of the pedagogical aim. According to Hartikainen (2007) only a certain kind of discussion will lead to the formation of shared knowledge required by inquiry-based learning. Bakhtin (1981) describes people as dialogic in essence and also able to engage in dialogue. John-Steiner (2000) introduces an interesting view of a ladder that people have to build for each other to be able to accomplish together something that is not possible alone. Our aim is to offer our students a conceptual ladder to help them study the core issue from different angles, for instance conceptually, socially, socio-emotionally or physically.

The video (Kepanen & Koukkari, 2013) was constructed to emphasize the conceptions that are central from the viewpoint of the targets of our course. The conceptions concern work community and student-teacher interaction. They are self-management, encountering in work communities, early intervention, bringing up the teacher’s worries and teachers’ attitudes towards students. From the pedagogical point of view, the question is about experiential learning which uses
various preferences of sensory paths, emotions, experiences and mental images. In problem solving the student’s performance is strengthened, participation promoted and the joy of learning activated and supported. Video-based pedagogy is actually an active, analytic, reflective and critically oriented learning process. Watching and analyzing a moving picture promotes learning, when it is supported with pedagogically reasonable assignments. The principles of inquiry-based learning are also realized: learning stresses problem solving, but also finding and defining problems. Inquiring and developing learning is social and cooperative by nature. It embodies the vocational-pedagogical way of understanding the knowledge and learning (Nissilä, 2007; Nissilä et al., 2012). Inquiring and developing learning processes aim at finding solutions to the challenging needs of work life. At its best the process brings about new understanding and new knowledge to every participant.

The aim of the research is first to describe how the process of making a pedagogically planned and realized learning video in a course on well-being at work took place. Secondly, connected to the process of making the video, the aim is to evaluate the benefits of the video to the course of well-being at work. Thirdly, an important purpose is to examine how the video supported student teachers in attaining personal and general learning outcomes. The fourth purpose is to examine the authors’ own pedagogical action on the video and in discussions after showing it.

2. The research questions, data collection and method of the research

The research questions were:

1. What features characterize the making of a pedagogically planned and realized learning video in a course on well-being at work?
2. What were student teachers’ personal aims during the course on well-being at work?
3. How did the themes presented on the video including assignments promote the achievement of the aims that the student teachers had set?

The research material consists of the learning video (Kepanen & Koukkari, 2013) made for the course and the course feedbacks from 19 student teachers. The feedback statements were analyzed by using a qualitative content analysis. Accordingly, the research material was examined through analyses, looking for similarities and differences and trying to form a holistic description of the research phenomenon in relation to a wider context and earlier research results. The aim of the analysis is to create a literal and clear description of the phenomenon. (Hsieh & Shannon, 2005).

In the production of pedagogical video material the leading principles are needs, learner knowledge and curriculum. The material producer can be an internal production team, but high-quality material is difficult to produce as a hobby and
without professional help. The action of production team is characterized by planning, cost-effectiveness, technical skills and cooperation with pedagogical experts. (Ursin, Karjalainen & Välikoski, 2009).

In this project the material was produced by the authors/teachers themselves, including script writing, acting and editing. In the actual implementation the help and participation of colleagues were needed. In editing the guidance was received from a professional, and the English text was checked by a native. As teachers and implementers we are pedagogical experts. Since the video was meant for our course, we were also aware of the aims, curriculum and the participants of the course.

3. Findings

In the following the research questions will be answered one by one, question 1 separately and questions 2 and 3 integrated.

3.1. Principles of video-based learning and teaching

It is of significant importance in video-based learning to understand the pedagogical background factors of video production to be able to make the learning process of the student individual and active. In today’s media pedagogy a video camera can be called a pen which acts as the recorder and transmitter of knowledge. The pedagogy based on camera-pen thinking promotes a student’s personal audiovisual thinking, creativity and media handwriting. From the learning point of view it is important to understand that the camera acts as a vehicle of learning, i.e. the camera in itself is not the target of teaching, but it is a way of acting which promotes learning and reaching learning goals. In video-based learning the camera-pen thinking represents the pedagogy of possibilities in which the learning outcomes cannot be predicted but the learners are allowed to express themselves creatively and observe the phenomena and issues by reflecting them in their personal worlds of experiences. Consequently, self-reflection and knowledge renewal appear as central in learning in which the meanings of certain experiences are interpreted once again or the interpretations are reviewed so that a new interpretation will guide later understanding, evaluation, action and conceptualization (Mezirow, 1995; Nissilä, 2007; Nevala & Kiesiläinen, 2011).

The camera–pen is a tool in cinematic used writing to produce an interpretation of reality by transforming it into a presentation in the form of moving picture. When talking about observing reality by the means of a camera, the attention should be paid to the process of transformation. The reality cannot be reached as such, but on a video it is filtered through the authors’ interpretation. The resulting audiovisual presentation is thus an interpretation of the observed things. How they are filmed shows if communication works between the authors and the audience. The meaning of the work is built in this interaction (Haanpää & Oravala, 2011).
Producing a video about the target phenomenon can act in problem-based learning (PBL) both as a starting point and an effective way of information acquisition as well as a form of presenting one’s understanding. What is important in learning is the preparation for watching the video, watching it and the tasks after it. However, a video offers learning only the starting point or context of learning. In using the video many pedagogical decisions must be made. They will promote the dialogue between the tool and the theoretical views of the target phenomenon including the concerns of what is done in different phases, what kind of cognitive and social actions are connected to it, what learners do before watching the video, during it and how these actions are integrated (Hakkarainen & Kumpulainen, 2011). Using a video as part of teaching must thus be justified pedagogically.

Video-based teaching and learning involves pedagogically sustainable views. Planning a teaching video is a pedagogical teaching act which must be thought about thoroughly. The teacher’s action is directed by theoretical premises, models which abound in video-based methods.

Pedagogical models refer to a theory-oriented tool for planning and implementing e-learning. The models are based on understanding the character of learning. Although there are various pedagogical models, they still carry out some shared pedagogical principles, like e.g. problem orientation, efforts to raise cognitive conflicts (according to Piaget), proximal zone of learning, i.e. “widening already learnt issues to new ones” (according to Vygotsky) and social interaction as a factor in the renewal of thinking (Salomon, 1993). According to Collis and Moonen (2001) the pedagogical model must always be in relation to teaching and learning processes. In video-based learning and teaching the pedagogical framework is composed of e.g. case work, anchored learning, PBL, discovery learning, cooperative learning and transformative learning.

_Anchored learning_ means that activities are tied to the situations of the real world (anchors), problem situations are solved by a group and learners are encouraged to see knowledge as a tool which can be used in new situations instead of studying only facts as knowledge.

_Discovery learning_ takes efforts to make learners learn by examining and finding the targets of learning themselves and direct their learning by setting problems, creating their own conceptions of the issues and looking for more and deeper information themselves (Hakkarainen, 2007; Lonka & Lipponen, 2008).

_Problem-based learning_ (PBL) encourages learners to learn while solving authentic real world problems in a group guided by the steps of the problem solving process.

_Active learning_ methods are based on moving the responsibility of learning to learners themselves and making learning an activating and motivating experience to the learner. A central idea is to support the growth of a learner’s expertise and help the learner develop functional mental models concerning the target issues and phenomena. Writing is considered a central element to promote learning.
Case work methods stem from the ideas of cognitive apprenticeship model, the problem-oriented approach of learning and the significance of social interaction in learning. The target conceptions are used in this model to explain various problems or phenomena rising from real life. In a session each participant (or group) introduces an imaginary or lived experience, a case which will then be worked on through common (net) discussion. The aim of the discussion is to make the participants create explanations to the descriptions and promote the learning in social interaction (Gergely & György, 2006).

Virtual case work usually proceeds through the following phases:

1. Forming a virtual community e.g. through getting-to-know discussion or contact meeting;
2. Presenting one’s own case description in the net discussion;
3. Construing the theme connected to the case description, working on the problem in the net discussion;
4. Focusing the problem and re-defining it;
5. Creating theoretical explanations to the case description;
6. Repeating the explanatory cycles;
7. Conclusion of the case description;

Case work has proved to be a good model especially in the educational fields whose challenges are integrating theory and practice. An example is teacher education which can well avail of collaborative knowledge construction. For this the case work in the net is necessary to be supported by contact meetings to bring forth the feelings of sharing and belonging and maintain them. Contact meetings also involve the mentor of the group who will help in modeling and conceptualizing the case description processes and support the participants (Gergely & György, 2006; Bossewitch & Preston, 2011).

Transformative learning concerns a learner’s new or different way of dealing with the target of learning or phenomenon attained by self-reflection. The aim of our teaching video is to raise the learner’s motivation through everyday situations that are familiar as phenomena and ethically connected to a teacher’s work. A case situation intends to start the inquiry of a learner’s own situation, questioning the justifications of the premises taken for granted and understanding the meaning of their own action.

In transformative learning the dialogue has a central role. The present teaching video contains assignments with the aim of raising a dialogical discussion on the phenomenon that is dealt with in the main theme of the video. The dialogue helps the learners analyze the conceptions and experiences of other learners as well as create the right perspective in comparison to their own contexts. This kind of reflection leads to rational thinking which is one of the core competences aimed at in adult education. Rational thinking brings forth critical self-reflection on one’s action, develops new practices and renews learning in situations of change. It is important for a teacher to be aware of the demands of critical self-
reflection: it presupposes awareness, pausing in order to re-evaluate the meaning perspectives and change them, if necessary (Mezirow 1991; 1995). In the realization of the teaching video there was a pause after each theme for reflection and discussion about the thoughts raised by the contents, about the ways of understanding and about the contextual connection of the case example to the work of a vocational teacher.

As an educational theoretical frame of reference in learning and teaching there is constructivist conception of human information acquisition and information processing. In video-based learning and teaching the theoretical approach is focused on the principles of experiential learning. Thus it results in experience-based learning, (EBL) which is based on a set of assumptions about learning from experience. These have been identified by Boud, Cohen and Walker (1993) as:

- Experience is the foundation of, and the stimulus for, learning;
- Learners actively construct their experiences;
- Learning is a holistic process;
- Learning is socially and culturally constructed;
- Learning is influenced by the socio-emotional context in which it occurs (Griff, 2001).

One consistent feature in this literature is the central place of reflection. Boud and Walker (1990) developed a model of three stages of reflection associated with experiential learning activities. The model draws attention to the preparation for experiential events, where it is important to focus on the learner, the learning milieu and the skills and strategies employed in reflection; reflection during an experiential activity, with its phases of noticing and intervening; and reflection after the event, involving the individual in returning to experience, attending to feelings, and re-evaluating the experience.

The many forms of experience-based learning (EBL) used in vocational and professional education include internships, work placements, on-the-job training, excursions, adventure and wilderness trips, studios, laboratories, workshops, clinical environments, practicums, case study approaches, action research, role plays, hypotheticals, and simulations. Other more subtle, less easily recognizable methods include active learning in lectures, computer simulations, use of realistic models, video-based activities, group discussions and syndicate methods, autobiographical writing, problem-based learning, group work, use of reflective journals and self-directed projects. Action research and action learning are workplace examples of experiential learning in operation.

Recent learning research has indicated two major challenges with which teaching in higher education is concerned. First, working life requires increasingly specific expertise and second, constantly changing responsibilities and circumstances at work necessitate flexibility, mobility and the continuous improvement of one’s competencies. In addition to this, students need transferable generic skills, such as critical and abstract thinking, the ability to use and produce information, and the ability to recognize, identify and solve problems. They also need cooperation
and communication skills, as well as technical skills such as the use of information and communication technologies. The challenge is to develop teaching practices that integrate the study of knowledge with practice in transferable and generic skills. (Hakkarainen, 2007.)

3.2. Students as video watchers: their aims, reflections and understanding

The students’ aims were to control their skills of working methods connected to well-being at work and to find resources to promote and develop coping at work. The core outcomes were understanding the significance of welfare plan as well as understanding the central conceptions of well-being. The video demonstrated the phenomena in question, made learning easier and brought up concrete problem situations in work life. It led to finding individual solutions through revealing problems in various situations. The results revealed various conceptions about well-being at work depending on the students’ personal experiences. In group work the themes were widened to concern other respective situations in work life.

Learners produced assignments of their own experiences concerning the themes of the video. Through dialogue they formed shared conceptions about a vocational teacher’s coping at work. As the learning outcome there appeared reflections on the five video-originated phenomena connected to well-being at work: self-management, encountering, early intervention, bringing up the teacher’s worries and attitudes. In what follows the findings from the student teachers’ reflective statements are presented in the form of descriptions.

**Self-management**

The video describes the phenomenon which deals with the human skills of self-management. Self-management will provide answers to the three basic questions: *Who am I? Where am I? Where am I going?*

Self-management refers to the employees’ reflection and understanding of their self, their motivation to work, as well as the identification of their resources, competencies and developmental needs. The employees’ working-life responsibilities include the areas of well-being and the ability to work thus incorporating self-management. Self-management takes place continuously-consciously or unconsciously. People are constantly choosing their activities and where to direct their interests.

Taking responsibility of one’s life is one of the most important objectives in self-management. Every person writes her/his own script of life. It is essential to be able to understand life as an opportunity to change, to learn, to unlearn the old and to question prevailing practices and beliefs. In self-management the focal areas are holistic self-care and the possibility to use personal resources in a suitable, individual way. The things that are considered personally important will be valuable throughout the person’s life.
Encountering

The video describes what happens in people’s encounters, how people are valued, respected, and how they listen to other people. New pedagogical studies show that the way with which the students are encountered is the most important aspect of enhancing learning and attaining the learning outcomes. A genuine human presence will motivate the students and inspire positive emotions.

Meeting another person means dialogical interaction, taking others into account and giving time to another person. It also means receiving time from the other person. Whenever two people meet, something new begins. In encounters no one is totally ignorant or completely wise. There are only people who strive together to learn more, to exceed their present level of knowledge.

In human encounters the important elements are the messages that are carried by the human voice, expressions, gestures, attitudes and feelings. A successful encounter will empower the employees and promote well-being at work. If one is left unnoticed in an encounter, it will result in uncertainty and social exclusion.

Early intervention

Early intervention in vocational education means providing support to the student as early as possible and as openly as possible. It is a process which starts from small observations and leads to action which supports the student. Early intervention should be a part of the toolkit in every school. It is preventive as well as remedial action (Happo, 2012).

Bringing up the teacher’s worries

This is connected to early intervention. When the teacher’s concerns come up, he/she will bring it up with a student. The reason of the concern might be the one we’ll see on the video (alcohol abuse), non-attendance to school, concern for the student’s life, his/her life management, dejection or something else that disturbs the studies. When a teacher (or another school worker) becomes conscious of his/her concern, s/he must decide when to bring it up. To do this, the teacher must know the student and be interested in him/her. The teacher must also meet the student often enough (Arnkil & Eriksson, 2009).

Attitudes

The video refers to the ethical principles, values and attitudes guiding a teacher’s work. The teacher’s pedagogical activity is guided by human and learning conceptions. Our view of human life directs our thoughts, actions, and choices. Our attitudes are mirrored in our professional behaviors, and show how we respect our friends and act ethically and morally in work communities. As teachers we can use our attitudes to either help students or hinder them from achieving their learning outcomes and goals.
The students reflected on the contents of the video in groups. Collective reflection is important in learning. All can learn as individuals, but in a dialogical peer learning process there is also a shared learning zone: everybody knows which issues have been shared together. They have become shared experiences (Koskimies, Pyhäjoki, Arnkil, 2012). Watching the video was a joint experience which was mirrored in different ways on people’s real experiences. Based on them common thinking was created, life world was widened and new aspects were learnt.

4. Discussion

Video-based pedagogy refers to an active, analytical, reflective and critically oriented learning process. Watching and analyzing a moving picture promotes learning, when supported by instructions that are pedagogically justified. Video-based pedagogy realizes the principles of inquiry-based learning: solving problems is emphasized, but also finding and setting problems are significant. Inquiry-based learning is social and collaborative by nature, and it emphasizes the principle of vocational pedagogy: understanding the contents of learning. From the pedagogical point of view, the examined video-based learning project was connected to experiential learning which makes good use of different senses, feelings, experiences and mental images. In solving the problems the student’s functional abilities strengthened, inclusion promoted and the joy of learning activated and preserved.

The research clearly indicates that both designing and producing, as well as solving the video supported cases, promoted especially the active and contextual aspects of the student’s meaningful learning as well as the students’ positive emotional involvement in the learning process. With the help of the video the learners were given action models for the real life situations of teachers and work community members.

The research results can be availed of in curriculum development work in vocational teacher education as well as in recognizing teachers’ work life competences and in developing them. The availability of the video material will be evaluated and developed according to the conclusions based on the student teachers’ learning outcomes.

Work has become demanding and teachers feel deficient in controlling their resources amidst continuous haste and lack of time. The present situation often leads to stress and problems in coping at work. Recognizing the phenomena connected to the well-being at work is important in identifying both the community’s and the teacher’s work. Coping at work and well-being must be paid special attention, because the problems in the staff atmosphere will be repeated in the learners’ well-being and the quality of teaching.
References


