FLIPPED AND LIPPED AND OPEN SEMINARS AS A METHOD FOR WORK INTEGRATED LEARNING

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Abstract

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1 INTRODUCTION

Since 2002 University West in Sweden has had a mission from the Swedish government to develop methods for work integrated learning (WIL). WIL is thus a “trademark” of the university and the university is continuously developing teaching models that imply a synergy between theory and practice with the goal to improve education and students’ lifelong learning. While struggling with this development the university is experiencing a decreasing engagement among students to participate in seminars at campus, especially during periods of internship. In the study underlying this paper we therefore explore a new teaching and learning method, based on ideas of flipped classroom and boundary objects, that aims to stimulate students to come to campus and to discuss their experiences with peer students and teachers during their internship.

In an article from INTED2018, the authors Bernhardsson, Gellerstedt and Svensson (2018) describe a structure for developing Work Integrated Learning (WIL) as a pedagogical model. The starting point is that an activity that combines theory and practice at a workplace also creates other experiences that can become knowledge of a student. Often, workplace learning is used as a form where one believes that a specific theoretical knowledge is easiest to learn by performing it practically in concrete situations. A WIL activity can replace a regular activity. But it can also create contextual knowledge. They argue that the "additional" knowledge can also be formulated in goals and when a student conducts several periods of practice, it should also contain a form of progression. They propose a framework for formulating learning outcomes and assessing the understanding of the integration between theory and practice. The proposed framework has been inspired by the so-called RAT model (Replacement, Amplification and Transformation) [(V,2006) and partly the SOLO taxonomy (J, Biggs, and K. Collis, 1982)

How can narrative stories contribute increased engagement among students in higher education?

2 PEDAGOGICAL APPROACH, EMPIRICAL CONTEXT

2.1 Empirical setting

The internship and the seminars, underlying the empirical base in this study, are organized as a ‘WIL course’ in the fifth semester of a candidate program in ‘Digital Media’ at University West. As part of the course the students spend four days a week in a workplace, e.g. an advertising agency, a government or industry communication department, a news agency or a film production firm, where they contribute substantially to the work at the workplace. One day a week they spend at home or at campus to reflect, write and discuss topics related to the work and organization at the workplace e.g. organizational culture, how a work day is organized, how design work is organized, and how the workplace handles professional meetings with its customers. The students and teachers meet once every second week for a seminar when students and teachers discuss the above mentioned themes.

The course has been held for 7 years with little development regarding course design. The teachers have increasingly experienced a lack of engagement from the students’ side to participate in learning activities at campus and if the students come to campus they are often ill prepared. The students are

focused on doing a good job at their workplaces, but less effort is made to participate in the "theoretical" part of the course, hence the seminars on campus. Instead of opportunities for sharing experiences and learning from peer students, the seminars have become sessions for reporting on answers to the theme questions, with little or no interaction with the other students. The students are as such not enabled to learn from each other's different experiences. The teachers believe that, if the students share their experiences with others, they will be able to discuss them and see them from new perspectives. The conversations and reflections at the seminars are therefore, according to the teachers, vital in order to reach the learning goals of the course.

In the autumn 2018 the teachers decided to change the design of the course and work more actively to engage students in each other's workplace experience. The teachers wanted them to work harder with their reflections and stimulate them to come to campus and share and discuss their ideas. The first change the teachers made was to let the students narratively report on their experience of their internship workplaces, based on given themes, one week before the seminar. Importantly, the reflections had to be made in shared online documents so that all students could follow the ongoing writing of all the peer students. To continuously let all students see what all students write has previously showed to be a good method to make student start writing

During the seminar, the students were then to consider similarities and differences between the peer students' reflections and then reflect on arguments for these differences and similarities.

The second development of the course that the teachers made was to ask the students to assess their own internship workplace in relation to different dimensions of organizational culture, based on the discussions with the other students. This was done openly in a shared online four-field diagram or venue diagram shown on the wall with help of a projector. For each seminar during the course the teachers prepared a new four-field diagram or venue diagram with different aspects of organizational culture, organization of work and freedom of the individual worker.

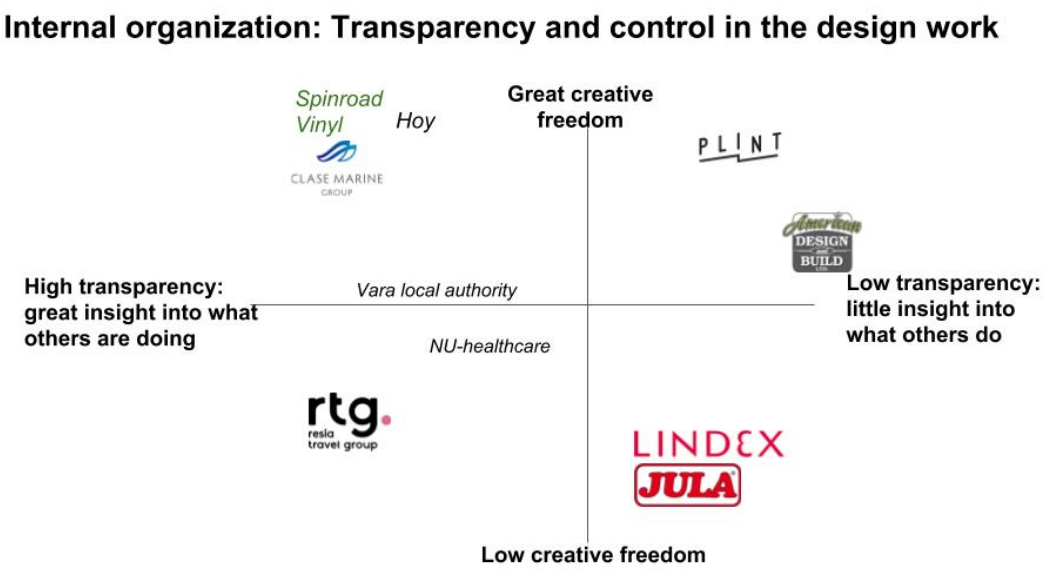

Figure 1. Students' assessment of their internship workplaces, based on perceptions and experiences of creative freedom and transparency of work processes.

During the positioning of the workplaces in the diagram discussions about the variation between different workplaces occurred and the students could during these discussions change the location of their workplaces.

2.2 Flipped classroom

A traditional approach to teaching (and learning) starts with a lecture in class and move forward from that moment. The teacher explains the subject, gives a few examples and answers questions. The lecture becomes the first meeting with the new subject and hence where the students start to understand and perhaps even remember. This type of cognitive work is found in the lower levels according to Blooms revised taxonomy (Anderson LW and Krathwohl D (2001).

A different approach is the idea of "flipped classroom" where the students instead encounter the subject/matter outside of and prior to class. The students prepare for class by reading, watching or listening to pre-recorded lectures. As a result, the first lecture in a classroom is promoted to focus on analysis and applying the new knowledge instead, moving up to mid levels of the taxonomy.

The idea of flipped classroom or the classroom flip is not a new approach and teachers have probably always strived at getting their students to study at home. The term "flipped classroom" is usually attributed to Aaron Sams andJonathan Bergmann who started to record their lectures in 2006 (Barker, 2013). In 1998 Barbara Walvoord and Virginia Johnson Anderson proposed a model in which students gain *first-exposure learning* prior to classroom and to focus on the *processing* part of learning in their book Effective Grading (Brame, 2013). Another pioneer in this field is Eric Mazur (and colleagues) who describes his findings in the article "Farewell Lecture" as an upside down version of the traditional information transfer model in education (Mazur, 2013).

Among the reported benefits of using the flipped classroom approach is improved student engagement and interest, and in the end an increased level of achievement (Fulton, 2012). The same reports also stress the use of a modern and flexible technology and support from learning theory.

Clyde Freeman Herreid and Nancy A. Schiller add more benefits from using the approach in their report *Case Studies and the Flipped Classroom.* The flipped approach promotes thinking inside and outside of the classroom and that students are more actively involved in the learning process (Freeman Herreid, Schiller, 2013).

2.3 Work Integrated Learning (WIL)

The West University in Sweden was one of the first universities in Sweden to launch cooperative education (Co-op) about 25 years ago. Co-op means that theoretical studies are combined with periods of paid work. In 2002, the University of West was commissioned by the Swedish government to develop Work Integrated Learning (WIL) as an educational strategy and various methods for introducing the combination of theory and practice into teaching. Today, WIL is the trademark of University West. (M. Gellerstedt, K. Johansson, and T. Winman, 2015)

Different activities called Work Integrated Learning are commonly used as a pedagogical method. They are equivalent to lectures, seminars or workshops that are different forms that are chosen because those who teach believe that that form is the best for acquiring a certain knowledge. The desired knowledge is stated in a syllabus and the form for acquiring it for the student is usually chosen by the teacher as the optimal way to achieve the goals. Within the framework of WIL it can be internship, guest lecturer, study visit or workplace learning, etc.

WIL can also be seen as and get its own knowledge goal in the syllabus or in the implementation of a course. Through the context of various internships, it is possible to make comparisons, for example, on how to respond to customers, and perhaps put it in relation to corporate and management culture. Through reflection on these phenomena, which are not described as subject-related knowledge goals in the syllabus, the student can create new knowledge that is valuable but that does not directly relate to practical or theoretical subject knowledge. An experience-based reflection that could be formulated as a goal for learning for a WIL activity.

3 BOUNDARY OBJECTS

The interaction between students during the seminar can be viewed as cross-discipline interaction where the shared texts and the matrixes serve as boundary objects. Cross-disciplinary interaction is a collaboration between divers groups such as e.g. people with different expertise, working tasks or different sociocultural background (Nicolini, Mengis, & Swan, 2012), or students with different experience of the internship, as is the case in this study. A boundary object is a working space where different groups meet and interact. They can be either material or symbolic. Characteristics for

boundary objects are that they have a shared identity that is recognizable for all involved groups and that enables cooperation, but at the same time they are flexible enough to give space for different interpretations (Star, 2010; Star & Griesemer, 1989). Star (2010) emphasize the importance of boundary objects as set of arrangements that enable work to be done together but where work does not have to result in consensus among the participants. A fundamental aspect of boundary objects is the concept of "interpretative flexibility" (Star, 2010; Star & Griesemer, 1989) which means that the boundary object can be interpreted and used differently by different users. Further, boundary objects do not exist without the presence of collaboration. "An object is something people (or, in computer science, other objects and programs) act towards and with." (Star, 2010., p 603). An object is therefore something in a constant becoming, hence it can never be static. It can be physical or symbolic but becomes an object only when acted on, by different groups.

Interaction between students in the course can be viewd as boundary crossing acivities for the students. Boundary crossing (Akkerman & Bakker, 2011) or boundary spanning (Levina & Vaast, 2005) is the processes of interaction and negotiation with different groups with the boundary object as a shared working space. In boundary crossing activities learning might occur.

The idea that objects play an important role in collaboration work is not new. Already in the 1950th social scientist scholars analyzed collaboration in workshops and stated that technologies such as different artefacts served as 'socio-technical systems' that supported the organizing processes (Trist & Bamforth, 1951). Contemporary social studies have built on this idea where scholars such as Latour (2005) among others have been strong influencers. Latour argues that the stability of social order is dependent on objects that carry with them the interaction over time and between locations. Humans are dependent on objects to be able to act on distance and make interaction stretch out over time. Collaboration, he argues, is thus not only a matter of 'intersubjectivity., i.e. a shared meaning between different humans. Collaboration is also 'interobjective', i.e. objects are as important agents in social life since they both mediate social interaction and act by themselves and shape the collaboration. In order to collaborate we need to be able to not be present with everyone and everything included in the interaction at the same time. In Latour (1996) words "we need to be able to time shift, dislocate, make lopsided and delegate the present interaction so as to make it rest provisionally on something else, while waiting to take it up again" (p. 234). And for that we need objects.

4 METHODOLOGY

The method has been inspired by Action research methods and especially Action Design research (Sein, 2011) with iterative loops. Each loop has had a question as a starting point, Problem formulation, which are a further development of the previous question and the students' reflections. The answers to the question have been reported in a joint collaboration document, Answer & reflection. Before each seminar, the students have then reflected on similarities and differences between the individual individuals' answers based on their place of practice. At each conclusion of a loop, the result has been discussed and then placed in a chart based on at least three, often four, different perspectives. Based on the relationship between the different locations in the diagrams, the students in groups have once again reasoned about similarities and differences, Seminar & Diagram. At the end of each seminar, the students have evaluated and described what they learned from each other's stories and placements in the chart. These answers have then been the basis for the formulation of perspectives and questions in the subsequent loop.

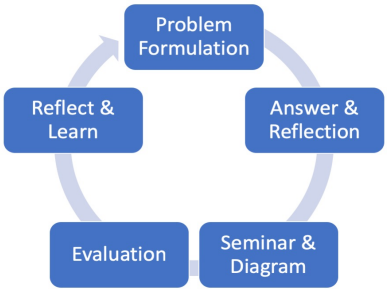

Figure 2. The moments in each loop.

The empirical material is based on 24 hours of participant observations, 10 students' written reflections and the course curricula. The findings show that the flipped and open approach to the seminars has made the students more engaged in reflections about their workplace, not only during the seminar at campus but also during their work at the workplace. The shared document stimulates reflections of differences between workplaces that has not been so clear before, and the matrix has helped the students to take the reflections to a higher level by reflecting over organizational culture and workplace conditions. By comparing each other's experiences from a spectrum of different aspects/themes they get a more nuanced picture of the skills and competences needed in the workplace, and they get more strengthened in their professional role. The recurrent discussions over time during the course therefore contribute to make the students more experienced than they would had been by only having got the experience from their own workplace.

In Figure 3, the different moments between the seminars are visualized in the form of loops. These contain different theme issues. The different loop types are then tied together with new knowledge from a seminar that is included in the next step and the seminar that follows.

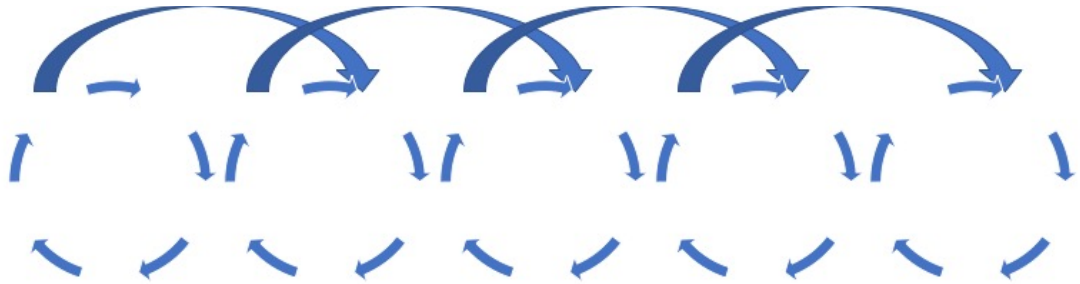

Figure 3. Results from seminar as input to next cycle.

5 RESULTS

5.1 Personas

Based on the conversations between the students and how they reason based on each other's stories, we have created three different personas. Their conversations with each other clearly indicate that they adjust their preferences and clarify them based on how the others describe their workplace, routines and corporate culture.

5.1.1 Personas A:

The individual needs clear instructions in connection with teaching in order to experience that the right things are done correctly. The self-chosen internship is a small advertising agency with a few creative people who have most things in their heads. There is no place to store common work, but everyone has their results in their computer. There is a dynamic work and information exchange in connection with breaks and other conversation moments. They do not use any system or tools to document and save eg agreements. The student experiences the company more unstructured than what even university is. The experience of this creates a personal insight about the need for a clear structure and an explicit policy for how collaboration should take place and how it should be documented. This becomes especially clear when other board members report that at the company they do their practice, such systems and tools are used. At the same time as in other narratives, given work structures become clear.

5.1.2 Personas B:

This student always aims high and performs quite well regardless of subject given. The student is also skilled in digital tools and usually presents artefacts with a certain creative height. The internship is at the office of a minor municipality and consists of production and publication of typical messages that concerns (or should concern) the inhabitants. An important attribute of the student is a drive towards introversion. The narrative contains

strings of criticism towards colleagues and how different matters are handled in the organisation. The student concludes the lessons learned as mostly in the interpersonal field as in communicating and dealing with other people. Regarding skills and knowledge obtained from the internship there is little new to report. The people who eg knows how to edit film were simply assigned to edit film and nothing else.

5.1.3 Personas C:

In a study context, this individual is a relatively agentic and knowledgeable student. The student is creative with regard to digital solutions. The internship is a company that has two different offices where the tasks are clearly shared between the different offices. Assignments given from the second office are very clear in terms of design and appearance. Fundamentals that the student has learned within different courses are not applied and it is difficult to get approved for alternative solution proposals. It becomes clear, through the other students' stories, that assignments are handled differently at other workplaces. At the same time as creative freedom, the student perceives that the structure of the assignments is also waived. The student concludes from the interpretation of his own experience and the others' stories that it is probably best to start their own business.

5.2 Discussion themes

Students write their own narrative stories and take part of other students stories before the seminar. This is done in a shared document online so that everyone can follow the other students' work in progress. The shared workspace becomes a boundary object where the students gather and at the same time have as a common starting point for the seminar conversations. The risk with all the time following the other student's work is that they may copy ideas from the other students. However since they all report stories from different internships the stories are all unique. The differences is as such made visible and a focus is created on some vital aspects of the workplace culture. The narrative stories are examples of the workplace culture and serve as stimulation to reflect further on what certain ways of doing and organizing.

Two different topics have created the most discussion where they find that there are great differences between different workplaces and use the other students' descriptions to set these against their own values. These areas are partly how coffee breaks occur and partly how to meet the customers at the workplace.

5.2.1 Coffee breaks

For instance, when a student report on what coworkers are doing during a coffee break, they reflect upon their own coffee breaks. At the same time they are being aware of for instance if I am seen as an independent co-worker or a member of a team. These stories contribute increased understanding of the culture of the company and how work is organized. At the same time, it became clear to the individuals how they themselves wanted such opportunities to be arranged for their own satisfaction. They clearly recognize the type of corporate culture they want to work in later.

5.2.2 Customer meeting

The companies have very different ways of meeting their customers. Depending on the type of customer, a customer that the company had for a long time or a new customer the handling of customers is different, but there are also differences between the companies. In some companies, it is a salesperson that meets the customers, who then conveys the needs of a project manager who does the creative work and then communicates the tasks to different employees. In other cases, it is a team that meets the customer, dealing with the persons who will also perform both the creative work and the practical implementation.

5.2.3 Narrative creates changes

These two themes on stories are the ones that affected the students the most. They have experienced that in other places there are working methods and culture that they prefer in relation to how it is done at their internship. In some cases, it has also proved to be, from the student's perspective, the way that one prefers is how it is done at their particular internship. Meeting with the customer and the coffee culture and indirectly the corporate culture are the stories that have made clear statements about how I want my future workplace.

6 DISCUSSION

To increase the value and learning for the students, a new approach for better structure and engagement has been introduced, where students in beforehand written reflections on questions about their workplace in relation to the theme of the week. They write in open and shared documents so that all students before the seminar can take part of each other's reflections and as such come to the seminar with a wider perspective on the particular theme. The seminar is then held at the campus where the themes are discussed and workplaces compared with help of a shared matrix where the students can place their workplace regarding level of structure, formality, creativity etc. As such the seminar has a 'flipped' character and the ICT tools for learning used are open and editable over time for all participants.

In addition to the students' experiences that the working method with narrative has improved their understanding of their future workplace, the level of involvement at the seminars has increased. The level of engagement has also increase since students have realized that the own reflections are contributing with new reflections to the peer students, A probable reason why the students experience increased learning also depends on the fact that they have been more prepared for the seminars because of the flippant method.

In connection with the last of the four thematic seminars, the student was commissioned to place himself in a diagram based on the type of knowledge they consider having acquired through participation in the internship. The three parts consist of learning new theoretical knowledge, new practical knowledge and experience, and knowledge of their own workplace (Figure 3). In addition, they described the knowledge and understanding of the other students' workplaces. Overall, it has given them a better understanding of both the type of tasks they want to work with in the future and partly in what context of structure and corporate culture.

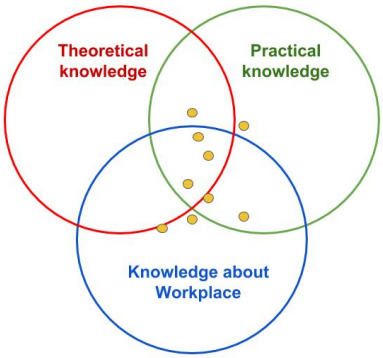

Figure 3. Students' self-perception of learning

The teachers in the course have also gained a better understanding of how knowledge goals in the syllabus can be designed to highlight the WIL knowledge. In future courses there will be clearer and measurable goals that not only take into account theoretical and practical goals for the knowledge gained through the internship, but also defined goals and working methods to highlight knowledge that can only be obtained through WIL activities.

7 FURTHER RESEARCH

The authors want to develop the method of presenting the students to each other's workplaces through visual narrative. A student produces and presents a video film from his internship as part of the theme that the story should convey. The next step can be to use 360 degrees live video and the other students visit the site digitally with glasses for virtual reality.

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