

The representation of reality in teaching – a ‘mimetic didactic’ perspective on examples in plenary talk

Author:

Ilmi Willbergh

Ilmi Willbergh, University of Agder, Service box 422, NO-4604 Kristiansand, Norway. Tel + 47 38 14 12 46, fax + 47 38 14 10 51. E-mail: ilmi.willbergh@uia.no

Abstract

Using an observation study in Norwegian lower secondary school classrooms this paper explores how subject matter and students' real-world experiences are linked within the use of examples in teaching. The theory of 'mimetic didactics' claims that giving students the possibility to interpret examples as both subject matter and something that is relevant to their own lives becomes a possibility through imaginative 'as-if' experiences. The study finds that 'as-if' experiences in the data are created by identifying with others and through a context-dependent knowledge base. The topics in the examples actualise being human within the political, economic and existential realm and offer possibilities to make knowledge relevant for the students' future. The study's contribution to classroom research comprises new concepts on the content aspects of classroom talk: the questions of knowledge accumulation and purpose.

Keywords

Instruction, didactic theory and practice, classroom research, Bildung

1. Introduction

Learning requires that new knowledge is built on what students already know: their prior understandings of subject matter, as well as their prior real-world experiences (Comenius & Keatinge, 2005; Dewey, 2008; Herbart & Stern, 2002; Klafki, 2001a; Pestalozzi, 1977). The purpose of this paper is to explore the question of students' prior understandings from the perspective of 'mimetic didactics'. Classroom research focuses on teaching being the result of teachers' and students' joint enquiry (Bruner, 1996; Cazden, 1988). The importance of instruction being dialogic, an idea dating back to Socrates, has been revived in modern times through the theories of Freire, Bakhtin and Vygotsky, and reappeared as empirical classroom research around the turn of the millennium as 'dialogic teaching' (Alexander, 2000, 2001; Lefstein & Snell, 2014; Linden & Renshaw, 2004; Littleton & Howe, 2010; Mercer & Littleton, 2007). Dialogic teaching is characterised by classroom talk being collective, reciprocal, supportive, cumulative and purposeful, seeking the 'perfect marriage of pedagogical form and content' (Alexander, 2001). However, the formal aspects of classroom talk seem to dominate the theories of dialogic teaching, and these aspects are further studied as questioning (Chin & Osborne, 2010; Harris, Philips, & Penuel, 2012; Heffernan, 1986) and feedback (Noor, Aman, Mustaffa, & Seong, 2010). According to Alexander (2001), the content aspects of dialogic teaching, teaching being knowledge-accumulative and purposeful, are the most challenging tasks facing dialogic teaching.

The research of Martin et al. investigates the content aspect of classroom talk as knowledge accumulation (Martin, 2012; McNaught, Maton, Martin, & Matruglio, 2013). They find that subject-matter terms are rephrased into common-sense terms to explain them to students, but rarely are the terms explained in relation to a wider perspective on disciplinary knowledge. This is a challenge for knowledge accumulation: it is difficult to link common-

sense words to increased levels of knowledge (semantic waves) (Martin, 2012; McNaught et al., 2013). Martin et al. focus on the learning of the disciplines, as is also the case in other classroom research (Green & Smith, 1983; Loflin, Guyette, Barron, & Marlin, 1972; Todd, 1998). Moreover, in classroom research there is an abundance of studies linking talk to individual learning (Lardner, 1989; Mills, 2009; Staab, 1991), as well as studies of interest and learning (Hoffman, Krapp, Renninger, & Baumert, 1998; Krapp, 2002).

This paper will discuss contributions the field of ‘mimetic didactics’ makes to dealing with the challenges of purpose and knowledge accumulation with respect to the content aspect of classroom research. ‘Mimetic didactics’, developed from a *Bildung*-centred general didactic perspective, offers concepts on how students’ preconceptions can be activated in teaching by imaginative interpretation of examples (Willbergh, 2008, 2010, 2011, 2015a). Example use in teaching is mainly explored through studies of ‘exemplary teaching’ in *Allgemeine Didaktik* theory (Klafki, 2000a; van Dyk, 2006; Wagenschein, 2000). Exemplary teaching focuses on the teacher perspectives of planning and selecting suitable examples. The mimetic perspective, however, focuses primarily on how the examples are expressed here and now during the teaching, in other words, how they appear spontaneously in the ongoing interpretative work of teacher and students. The theory of mimetic didactics claims that giving students the possibility to interpret the examples as both subject matter and something relevant to their own lives is facilitated through imaginative work (Willbergh, 2011, 2015a). This paper will show how this perspective can offer a supplement to classroom research, as the mimetic perspective points out the importance of working with teaching content to improve classroom teaching, as well as the purpose of school knowledge being to understand self, world and society for the sake of democracy (Klafki, 2000b).

The theoretical background of the concept of ‘mimesis’ and the theoretical implications of mimetic didactics have been explored in earlier studies (Willbergh, 2008,

2010, 2011, 2015a). The philosophical foundation of ‘mimetic didactics’ is the Aristotelian tradition where ‘mimesis’ denotes ‘creative imitation’ and concerns the imaginative interpretation of aesthetic objects and communication (Aristotle et al., 1995; Ricoeur, 1984). The purpose of this paper is to explore the mimetic aspects of teaching in practice as found in the data material from an observation study in Norwegian lower secondary schools. The research question is: How, from a mimetic didactic perspective, is subject matter and its relevance to matters of the real world linked through examples in classroom practice? Before exploring the question, mimetic didactic theory and the study’s methodology will be described.

2. Theory: A mimetic perspective on teaching

2.1 Context: The mimetic in-authenticity of schooling

The title of this paper has been inspired by Erich Auerbach’s classical work *Mimesis: The representation of reality in Western literature* (Auerbach & Said, 2003). The mimetic is inherent in the communication of modern Western institutions of culture and art (Aristotle et al., 1995; Gebauer & Wulf, 1995; Walton, 1990), and school is a modern cultural institution. In Germany and Scandinavia, *Bildung* evolved as an educational concept designed as part of teaching in institutionalised settings (Uljens, 2002; Lundgren, 2015; Hopmann, 2007). The basic idea of an institution is that it is separate from the rest of society. When it comes to schools, their institutionalisation is part of the way their meaning construction works. From the mimetic didactic perspective, the separation from the real world is what makes it possible for students to see the world in new ways. Teaching is in-authentic, or artificial, in order to create possibilities for students to learn something about their real world (Willbergh, 2015a).

From the theoretical point of view chosen in this study, the world is not present in the classroom, it is represented by content and communicated by aesthetic objects, such as speech, textbooks, pictures, media and so on (Herbart & Stern, 2002; Menck, 2000;

Pestalozzi, 1977; Willbergh, 2008, 2011). The representations of content can take many forms, but in the following the focus will be on spoken examples. In the classroom, the spoken example is uttered in a new institutionalised context, outside of its ordinary context: the real world. This re-contextualisation of the example makes it possible for students to experience something new about the real world, something that they would not otherwise have seen (Bollnow, 1992). The purpose of teaching is thus to expand the students' own experiences through interpreting the content 'as if' it is both real-world and school knowledge. From the mimetic didactic perspective the spoken examples can thus change the students' views on *their* real world and give them a new perspective on the world that they can use in the future (Willbergh, 2008, 2010, 2011, 2015a).

2.2. Content: View on knowledge

For this to happen, the example must be recognisable and represent something the students know, but at the same time represent new knowledge (Willbergh, 2008, 2011, 2015a). This aspect of *Allgemeine Didaktik* is inherent in the view of knowledge it is based on, explained by the double concept of *matter-meaning* (Hopmann, 2007; Midtsundstad & Willbergh, 2010; Deng, 2015). The general content in the curriculum (matter) has no inherent meaning, but is to be interpreted by the teacher and students to become meaningful (meaning). Meaningful knowledge is internalised and thus part of each individual student's life (Reindal, 2013), but instruction cannot ensure this result (Humboldt, 2000). In the perspective of *Allgemeine Didaktik* instruction is a question of semantics, a question of working with the meaning of curriculum content. The central issue is to bring together the stories of curriculum content and the students' life worlds (Menck, 2010).

In practice, the use of examples is a fruitful way of going about this task because examples are per definition something specific representing a whole, in this case a body of knowledge (Wagenschein, 2000). Using examples from the world of the students, and even

better, if the students themselves produce them, creates possibilities for students to experience new knowledge as meaningful (Aasebø, Midtsundstad & Willbergh, 2015). From the mimetic didactic perspective examples can be interpreted both ‘as if’ they are real to the students (it concerns me!) and ‘as if’ they are subject matter. This interpretation is an imaginative act because it requires that connections are created between aspects in new ways (Kemp, 2006; Willbergh, 2008, 2011). Mimetic meaning construction is creative interpretation: The examples uttered in plenary talk are always *unique*; they represent *this class*’, or teacher’s or student’s interpretation of content (Willbergh, 2015a).

Hence, working with teaching content is a context-dependent task, from the mimetic didactic perspective. When something is exemplified, the aesthetic object (here: the spoken words) is linked with a general knowledge base. Linking students’ lives to subject matter hence demands that the ‘topics’ of their culture are activated, such as ethics and politics, common sense and the themes that they take for granted spontaneously without reflection (Verene, 1981; Vico, 1997; Willbergh, 2008). A similar idea is found in *Allgemeine Didaktik*, where Klafki suggests that teachers work on the development of the students’ autonomy by linking subject matter with contemporary key questions challenging humanity (Klafki, 2000b, 2001b).

Consequently, representing reality in teaching from a mimetic didactic perspective is not a rational act, but rather operates through imagining being human in a culture. This grounds the concept in a basic hermeneutic assumption on how to understand texts in relation to general human knowledge, culture and society (Aristotle, 1999; Gadamer, 2004; Gebauer & Wulf, 1995; Grondin, 1994; Ricoeur, 1984). The mimetic-didactic view of knowledge as interpretable is connected to seeing the task of education as fostering autonomous students through classroom practice relying on professional teacher judgement (Hopmann, 2007). Contrary to this, is the view of knowledge inherent in evidence-based education, where the

desire to ‘see’ learning laid open to view, to disclose hidden brain processes, results in classroom practices relying more on instruments and tests than on the human discourse of classroom practice (Standish, 2012). In this context mimetic didactics represents a critical alternative to evidence-based education (Willbergh, 2015a).

2.3 Mimetic didactics in practice: Creating possibilities for students to have ‘as-if’ experiences from interpreting examples

In practice, this creative interpretation of spoken examples is a process explainable as follows (Willbergh, 2008, 2010b, 2011b, in press): instruction is cumulative, and students are expected to build their new knowledge on the memory and experience of what they have previously learned in school (Willbergh, 2011b). The teacher’s efforts are thus to be directed at trying to make the students *recall* their prior memories of subject matter (Willbergh, 2011b).

The second aspect of the process is the uttering of examples, establishing the notion that here and now it is ‘as if’ *this/these* spoken example(s) means/mean ‘subject matter’. In the theory of imagination, this designation of the object of imagining, in this case the spoken example, is essentially self-referential (Walton, 1990), making it possible to cater to the subjective aspect of educational content. Imagining something is to experience it ‘as if’ it is happening to me (Aristotle, et al., 1995). It is, however, not sufficient to make students imagine the example as a representation of subject matter. In order to contribute to students’ *Bildung*, the object must at the same time be perceived as relevant to their prior experiences (Herbart & Stern, 2002; Klafki, 2000a). If the students themselves are contributing examples from their own experience, the chances are greater that the object can be perceived as recognisable (Midtsundstad, 2011; Aasebø, Midtsundstad, & Willbergh, 2015). The students can identify with their peers in class, and examples given by people they know, including the

teacher, can be drawn from the shared knowledge base and culture of the class, school, local community or larger societal contexts (Verene, 1981; Vico, 1997).

Ultimately, if the subject matter is experienced as meaningful to the students, they will have gained a new perspective on the world: Next time they encounter a similar case (example) in their world, they will have the possibility of understanding it or acting on it in new ways (Klafki, 2001a; Willbergh, 2008). From a mimetic perspective, spoken examples represent possibilities for teachers so the examples can therefore be deliberated on by drawing consequences for real and future lives.

3. Methodology

The study involves qualitative analysis of data from non-participatory observation of classroom talk in plenary teaching sessions at four Norwegian lower secondary schools, collected from 2012 to 2013. The data collection was part of a larger research project entitled Learning Regions (Aasebø, Midtsundstad, & Willbergh, 2015; Langfeldt, 2015). Two of the schools were located in a county with high scores on national tests and the other two were located in a county with low scores on the same tests. After controlling statistically for municipal scores on variables usually decisive for schools' test results (Hassan, 2009), one school from each county that performed worse than expected and one school that performed better than expected were studied.

The teaching of two teachers over a week in each school was subject to non-participant observation, all in all eight teachers. Non-participation observation is impossible from an epistemological point of view (Hammersley & Atkinson, 1987), although the formalised character of classroom interaction may reduce the observer effect in this context (Fangen, 2010). All talk in plenary class teaching in theoretical subjects (mathematics, Norwegian, English, German, Religion and Ethics, Social Studies and Science) was written down in field notes. Two researchers observed each teacher. In this study, only subject-matter

talk was studied, not social talk, negotiations and so on. The observation data material analysed in this paper comprises all the lessons, 84 in all (24, 19, 19 and 22 from each school). Each lesson lasted 45 minutes.

The study is a cross-case study and the method of analysis is inductive as it aims to describe what is typical of the use of examples in the data (Guba, 1981). From the 84 lessons, eleven excerpts of talk with a multitude of words referring to subject matter were chosen for more detailed analysis. The eleven excerpts were taken from different lessons across the four cases. From the eleven excerpts, 10 examples were chosen: To qualify as an example, the sequence had to have wording referring to vocabulary of the discipline, as well as wording referring to the real world (Willbergh, 2008). In the ten examples, all class levels and all the above-mentioned subjects, with the exception of mathematics and English, were represented. The ten examples were from three of the four schools because these types of sequence were not found in one of the schools.

The content emerging from the wording of the real world in the ten examples was categorised as follows: Students' real-world experiences, teachers' real-world experiences, and social and cultural issues in the local environment and in the national and international arenas. The three categories were developed abductively from the empirical data (Guba & Lincoln, 1994). These categories represent references to the world outside school, and represent non-subject matter, non-textbook and non-discipline vocabulary. In the analysis process, vocabulary typical to the discipline on subject matter was also highlighted. For the sake of clarity, vocabulary of the discipline is called textbook vocabulary in this paper. After categorisation, three typical traits or groups of examples emerged. During the analysis process it became clear that the three groups of example usage are distinguished from each other by their point of departure, i.e. what wording is used for content to start the example? An

example here is a semantic entity, a passage of talk exploring a topic (Levinson, 1983). Hence, the point of departure is how the sequence starts and how the topic is introduced.

The three categories of example usage are first described according to their sequence and exemplified in Section 4. Thereafter, each group is interpreted from a mimetic didactic perspective using concepts from the theory presented in Section 2. The mimetic aspects analysed are: 1) the sequencing of subject matter and real-world vocabulary, as this affects the mimetic interpretation ; 2) how the ‘as-if’ experiences are created; 3) the common knowledge bases that are used; 4) the aspects of being human actualised by the examples and 5) whether the potential real-life consequences of the knowledge are developed in the conversation.

4. Findings: Examples in the data

4.1 Group A: From recall of textbook vocabulary to students’ real-world experiences

The sequencing of the first group of examples in the data is characterised by the teacher-initiated recall of textbook vocabulary as the point of departure, followed by students’ real-world experiences. In a year 10 sciences lesson the teacher’s textbook questions on ‘epidemics’ turn into questioning the students about their experiences of the swine flu vaccine:

Teacher: Which epidemics have we had?

Student: The Black Death

Teacher: The Spanish flu pandemic, anyone heard of that?

Student: Yes

Teacher: Was it bacterial or viral?

Student: Viral

Teacher: How many have been vaccinated against swine flu? (hands up). Over half of you. Were there any side effects?

Student: I felt weak

Student: I felt stiff in my arm

Teacher: Who recommended you to be vaccinated?

Student: Doctors

Teacher: Yes, the people responsible for public health. If I'm not wrong. The Norwegian Institute of Public Health. Are there any people suffering from leprosy today?

A characteristic of the student experience-related examples in the data is, as shown in the 'epidemics' example, that when the students have expressed their experiences related to the subject matter (and in this case, the teacher has put the example in the social context of national health policies), the teacher moves on to another topic. However, in the example below, the example of 'the court' is elaborated on a bit further by the teacher in a year 9 social-studies lesson:

Teacher: Yes, power is shared between three institutions: the government, the parliament and the courts. That's called the principle of the division of power. What did you experience when you got back from the school trip yesterday, Bob?

Student: My bike

Teacher: Yes, your bike was stolen. Do you think you'll get it back?

Student: No

Teacher: No, that's rare. What can you do?

Student: Report it to the police

Teacher: If you go to the police and report it, what are they obliged to do?

Student: They have to research it

Teacher: They must research or investigate it, yes. If they don't solve the case, what happens to these cases?

Student: They dismiss the case

Teacher: Yes, it ends with dismissal due to lack of evidence, they usually say. Or they can have a trial, in bigger cases. Or if someone robbed you, and you report it, and you say that you think that this particular person did it. Can they just put him in prison?

Student: He has to go to court

Teacher: They have to pro...

Student: Prosecute

Teacher: They have to prosecute

The example of 'the court' is developed by the teacher by her asking for the students' thoughts on what would have happened if the boy who had his bike stolen had reported it, or what would have happened if he had been robbed and accused a particular person of the robbery. The sequence ends with the use and recall of textbook vocabulary ('prosecute') rather than moving on to another topic, as in the 'epidemics' example ('leprosy').

4.2 Group A: Mimetic didactic aspects

The interpretative act linking subject matter and real-world experiences in group A consists of imagining ‘epidemics’ as if they mean ‘feeling bad due to the swine-flu vaccine’, and ‘the court’ as if it is ‘my bike could be stolen’.

The ‘as-if’ imaginative experience in this group of examples is created by the students identifying with the experiences of their peers: They have the possibility to experience viral epidemics ‘as if’ it feels like feeling weak and stiff in the arm, or to experience the court ‘as if’ their bike was stolen.

The common sense knowledge base that they make use of is different in the two examples. In ‘epidemics’, the context is a national or global health policy issue, whereas in ‘the court’, the local community is the reference, as evidently someone among them is stealing things. However, in both cases the examples are rooted in individuals who are present in the classroom and the experiences are their own, they are unique. In this way the wider social and cultural context is made relevant in their lives. The examples also actualise being human: In ‘epidemics’, the fragile, susceptible human body becomes a topic of existential potential. In ‘the court’, ethics and justice among the people are made relevant.

The two examples develop in different ways, however. The ‘epidemics’ example ends abruptly, whereas ‘the court’ is developed by the teacher inviting the students to imagine further by asking what would have happened if the boy had reported the bike stolen and if one of them had been robbed and accused a particular person of the crime. From the mimetic didactic perspective, these are valuable questions to ask because it can make the students aware of the relevance of school knowledge, in this case ‘the court’, for their future lives. Hence, in the example of ‘the court’, the potential consequences of school knowledge for the students’ future lives are explored.

4.3 Group B: From recall of textbook vocabulary to teacher's real-world experiences

The second group of examples in the data is characterised by the teacher-initiated recall of textbook vocabulary as the point of departure, followed by the teacher's real-world experiences. Teachers use stories about themselves, and what they have experienced, to illustrate textbook vocabulary. In this year 10 science class, the teacher displays the relevance of the textbook vocabulary 'susceptible to an illness' in the following manner:

Teacher: What does it mean to be susceptible to an illness?

Student: That it lies in the genes, it's hereditary

Teacher: So then there is benefit in knowing what your forefathers have died of. The men on my side of the family, for example, die young. So my odds are not good.

Student: What have they died from?

Teacher: Cancer

Student: Have you been tested?

Student: You can eat healthily

Teacher: You can be susceptible to cancer. But I'm okay. That's right, I can live in a healthy way. What lifestyle related illnesses are there?

The example 'susceptible to an illness' is developed by the immediate health advice given by the students which results in the teacher calming them by saying that he is "okay". The teacher then turns to another topic ('lifestyle related illnesses'), which also is relevant for the topic in the previous dialogue.

When teachers use their own experiences, they are acting as storytellers, as with the teacher below, who exemplifies the textbook vocabulary ‘a total eclipse of the sun’ by telling a story about his father:

Teacher: You’ll never experience a total eclipse of the sun. It’s very rare. My father was in the woods during the eclipse in 1954. The flowers closed. The birds stopped singing. My father went home because a colleague said he was going blind. Do you want me to tell you more about this or do you want to work?

Student: Tell us some more

The example ‘a total eclipse of the sun’ is not a first-hand experience for the teacher, but a story he has heard in a private context. The example ends with the students wanting to hear more.

4.4 Group B: Mimetic didactic aspects

The interpretative act linking subject matter and real-world experiences in group B consists of imagining being ‘susceptible to an illness’ as ‘my teacher may have cancer and die young’, and ‘a total eclipse of the sun’ as ‘experiencing extraordinary things in the ‘woods’.

The ‘as-if’ imaginative experience in this group of examples is created in two ways: In ‘susceptible to an illness’, the ‘as-if’ experience comes from the students identifying or feeling empathetic with their teacher. This is shown by their immediately uttered health advice. In ‘a total eclipse of the sun’ the ‘as-if’ experience is created by the students listening to a story. The story has a classical narrative structure and appeals to the imagination in a way that is similar to fiction: it invites the students to imagine being in the woods having an extraordinary experience and identifying with the teacher’s father, the story’s protagonist, and not their teacher, who is outside the fiction as a storyteller.

As for the knowledge bases used in the examples, ‘susceptible to an illness’ provokes knowledge about health policies and the fragility of the human body, similar to ‘epidemics’ in group A, whereas ‘a total eclipse of the sun’ calls upon knowledge of nature and being a human witness subjected to the forces of nature. ‘A total eclipse of the sun’ also activates knowledge about the local forest, or the Norwegian forest, due to the fact that this is a story about a Norwegian man.

The two examples end in different ways. In ‘susceptible to an illness’ the teacher draws the sequence to an end by calming the students when he says that he is okay, and in ‘a total eclipse of the sun’, the students want to hear more, but the story is finished and the teacher moves on to talk about something else. The fact that the students want to hear more is, however, interesting from a mimetic didactic perspective because it may be understood as signifying the joy of imagining.

4.5 Group C: From explicit societal context to students’ real-world experiences

The last group of examples is characterised by an explicit societal or geographical context serving as the point of departure followed by the students’ experiences or opinions and textbook vocabulary. This example from a year 9 religion and ethics lesson on the topic of ‘gender equality’ illustrates references to students’ opinions on societal issues in a national context:

Teacher: Are there equal rights in Norway?

Students: Yes

Students: No

Student: Women and men can work wherever they want

Student: Everybody has the right to vote

Student: Men earn more, for example football players

The example 'gender equality' starts off with equal rights in a national context and is followed by the students' opinions ('yes', 'no', 'work wherever they want'), textbook vocabulary ('right to vote' represented an important subject matter topic as women's right to vote in Norway had its centenary anniversary in 2013, the year the data material was collected) and ends with the students' experience of male football players earning more than female ones.

The following example illustrates a case where the social studies topic 'private business' is elaborated on in a year 9 class by the teacher, and the point of departure is the local environment:

Teacher: In 'the name of the village the school is located in' we don't have too many shops or hairdressers and not that many buses

Student: It's a small village

Student: We have three shops

Student: Yes in 'name of nearby village' but not here

Teacher: Can we buy clothes here? If you young girls want to shop for clothes for young girls

Student: Then it would perhaps have gone bankrupt

Teacher: Why? If all of you wanted it?

Student: The prices would have been high due to transport

Teacher: Ok, yes

Student: We can't buy things all the time

Teacher: Yes, that's why we find more shops where there are many people.

You have to have a lot of people who can buy and pay. Private business is located in areas with a high population.

The example 'private business' develops from the naming of the local village to students' experiences (the number of shops in their village and the nearby village), to the teacher asking for the students' thoughts on the possibility of having a clothing shop for young girls, and ends with the explanation of the textbook vocabulary 'private business', related to the local context.

4.6 Group C: Mimetic didactic aspects

The interpretative act linking subject matter and real-world experiences in group C consists of imagining 'gender equality' as 'being able to work wherever you want' and 'the earnings of football players' and imaging 'private business' as the 'number of shops in the village' and 'potential clothing shop for girls'.

The 'as-if' imaginative experiences in this group of examples are created by calling immediately on the students' common knowledge base (their knowledge of 'Norway' and 'their local community'). Hence, the opinions and experiences are framed into specific contexts from the beginning, which is not the case in the examples in groups A and B. However, this does not mean that the examples are not unique, in 'gender equality' the topic is seen from these unique students' points of view: exemplifying by referring to the salaries of football players is this unique student's interpretation, demanding an 'as-if' imaginative act. In 'private business', the students' unique knowledge of their very small community (even in a Norwegian context this municipality is a small one) is exploited. This group of examples is

set within the political and economic spheres of the human condition and through this lens they highlight being human.

As in the case of group A, in group C one example is stopped abruptly; ‘gender equality’, and the other is explored imaginatively; ‘private business’, where the teacher asks the students about the potential clothing shop for young girls and the students start to imagine what could have happened to it. ‘We can’t buy things all the time’, says one of the students, illustrating how the topic concerns these unique girls in this specific community. Finally, the teacher links subject matter vocabulary to the students’ imaginings by stating that ‘private business’ is located in places with a higher population.

4.7 Summary of findings

The link between subject matter and matters of the real world in the examples in the data consists of sequencing from textbook vocabulary to students’ or teachers’ real-world experiences and from explicit social contexts to students’ real-world experiences. The link is established by inviting the students to have different ‘as-if’ experiences that bring together textbook vocabulary and unique real-world experiences: ‘As-if’ experiences in the data are created from identification with others (with peers in group A and with a story’s protagonist in ‘a total eclipse of the sun’ in group B), from feeling empathy with others (‘susceptible to an illness’ in group B) and from a context-dependent knowledge base (group C). The topics of the examples activate common knowledge bases, from the local to the global and actualise being human within the political, economic and existential realm. Furthermore, the study has found that the examples can be developed in the conversation: Some of the examples are developed by the teacher inviting the students to explore them and imagine what they could mean for them in their future lives. From the perspective of *Bildung*, the purpose of teaching is to learn for life, to understand self, world and society for the sake of democracy and so teachers should link subject matter to key questions challenging humanity (Klafki, 200b).

This empirical study from the mimetic didactic perspective illustrates how teaching can represent reality through the use of examples.

5. Discussion: Contributions from the mimetic perspective to the field of classroom research

The mimetic didactic perspective can contribute to classroom research by offering new concepts addressing teaching content in classroom talk. To find the ‘perfect marriage of pedagogical form and content’ (Alexander, 2001), the content aspect of teaching talk can be developed further by conceptualising the immediate interpretations of content happening in classrooms here and now. The mimetic didactic perspective of this study can contribute with such concepts on the use of spoken examples, keeping what is uttered and imagined in the centre rather than the planning perspective of teachers (Klafki, 2000a; van Dyk, 2006; Wagenschein, 2000).

With respect to the question of knowledge accumulation, the mimetic perspective can contribute to ‘dialogic teaching’ (Alexander, 2001) by pointing out that interpretations of knowledge are unique interpretations (Willbergh, 2008, 2011, 2015a). The examples uttered in class that link the subject matter to matters of the real world are created through an imaginative act that is subjective and rooted in the real lives of individuals who are present in the situation (Walton, 1990). By imagining the examples both ‘as if’ they are subject matter and real-world experiences, knowledge accumulation is enabled by activating the students’ preconceptions (Aristotle et al., 1995; Ricoeur, 1984) through recall of subject-matter vocabulary, through real-life experiences and by drawing on a knowledge base they have in common, ‘common sense’ (Verene, 1981; Vico, 1997).

From the mimetic perspective, the question of knowledge accumulation (Alexander, 2001) is further connected to the question of purpose, as without anchoring new knowledge

within what is already known (Comenius & Keatinge, 2005; Dewey, 2008; Herbart & Stern, 2002; Klafki, 2001a; Pestalozzi, 1977) learning becomes superficial and cannot be learning for life. The purpose of teaching is to create possibilities for students to interpret subject matter in a meaningful way as knowledge that concerns them and that can make a difference in how they understand their world and how they can prepare for the future (Hopmann, 2007; Klafki, 2000b). This paper has made a contribution on how this can be done in practice by underlining the importance of welcoming the examples uttered by the students and developing them in the conversation by inviting the students to imagine what consequences this knowledge can have for them in the future, as shown in the two examples above: ‘the court’ (group A) and ‘private business’ (group C).

Bearing the research of Martin et al. in mind (Martin, 2012; McNaught et al., 2013), this study supports their findings that subject-matter terms are rephrased in common-sense terms to explain them to students, but rarely explained in relation to wider perspectives on knowledge in the discipline. The exception is perhaps the example of ‘the court’, where the local bike theft is developed into ‘dismiss the case’ and ‘prosecute’. Where this study can contribute, however, is in the area of highlighting the value of common-sense wording when learning for life. Hence, mimetic didactics can contribute to classroom research by clarifying the double purpose of schooling as being both learning the disciplines and understanding the world.

6. Concluding remarks

This paper has argued that the mimetic aspects of example usage can be studied in practice. The study of the data from the four Norwegian lower secondary schools found that the ‘as-if’ experiences that bring together subject matter and real-world experiences were created from identifying with others, feeling empathy and drawing on context-dependent knowledge bases. Whether there are other types of ‘as-if’ experiences in practice could be the subject of further

study as well as the need to develop the examples in relation to wider contexts of the disciplines. The study found that the mimetic aspects of example use can contribute to classroom research by theorising the knowledge-accumulation and purpose-aspects of teaching content. From the mimetic perspective, teaching can represent reality to accomplish these goals.

7. References

- Aasebø, Turid Skarre, Midtsundstad, Jorunn H., & Willbergh, Ilmi. (2015). Teaching in the age of accountability: Restrained by school culture? *Journal of Curriculum Studies*. doi: <http://dx.doi.org/10.1080/00220272.2015.1072249>
- Alexander, R. J. (2000). *Culture and pedagogy. International comparisons in primary education*. Oxford: Blackwell Publishers.
- Alexander, R. J. (2001). *Towards dialogic teaching* (3rd ed.). New York: Dialogos.
- Aristoteles. (1999). *Etikk. Et hovedverk i Aristoteles' filosofi, også kalt "den nikomakiske etikk"* (A. Stigen, Trans. 3rd ed.) (Nicomachean ethics). Oslo: Gyldendal Norsk Forlag.
- Aristotle, & Halliwell, S. (1995). *Poetics* (S. Halliwell, D. A. Russell & D. Innes, Trans.). Cambridge, Massachusetts/London, England: Harvard University Press.
- Auerbach, Erich, & Said, Edward W. (2003). *Mimesis : The representation of reality in Western literature / by Erich Auerbach ; translated from the German by Willard R. Trask ; with a new introduction by Edward W. Said*. Princeton, N. J.: Princeton University Press.
- Bollnow, Otto Friedrich. (1992). Tilbake til anskuelsen (Back to Anschauung). *Ergo*, 23, 140-148.
- Bruner, Jerome. (1996). *The culture of education*. Cambridge, Massachusetts/London, England: Harvard University Press.
- Cazden, C. B. (1988). *Classroom discourse: The language of teaching and learning*. Portsmouth, NH: Heinemann.

- Chin, Christine, & Osborne, Jonathan. (2010). Supporting argumentation through students' questions: Case studies in science classrooms. *Journal of the Learning Sciences*, 19, 230-284.
- Comenius, Jan Amos, & Keatinge, Maurice Walter. (2005). *Didactica magna* (Great didactic, first published in 1657): Kessinger Publishing.
- Deng, Z. (2015). Content, Joseph Schwab and German Didaktik. *Journal of Curriculum Studies*, 47(6), 773-786.
- Dewey, John. (2008). *Democracy and education: An introduction to the philosophy of education* (first published in 1916). [Champaign, Ill.]: [Book Jungle].
- Fangen, Katrine. (2010). *Deltagende observasjon* (Participant observation) (2nd ed.). Bergen: Fagbokforlaget.
- Gadamer, Hans-Georg. (2004). *Sandhed og metode. Grundtræk af en filosofisk hermeneutik* (Truth and method. Outlines of an hermenetic philosophy, first published in 1960) (A. Jørgensen, Trans.). Århus: Systime Academic.
- Gebauer, Gunter, & Wulf, Christoph. (1995). *Mimesis : Culture, art, society* (D. Reneau, Trans.). Berkeley: University of California Press.
- Green, Judith L., & Smith, Deborah. (1983). Teaching and learning: A linguistic perspective. *The Elementary School Journal*, 83, 352-391.
- Grondin, Jean. (1994). *Introduction to philosophical hermeneutics; foreword by Hans-Georg Gadamer ; translated by Joel Weinsheimer*. New Haven, Conn.: Yale University Press.
- Guba, E. G. (1981). Criteria for assessing trustworthiness of naturalistic inquiries. *Educational communication and technology: A journal of theory, research and development*, 29, 75-91.
- Guba, Egon G., & Lincoln, Yvonna S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research*. London: Sage.
- Hammersley, Martyn, & Atkinson, Paul. (1987). *Feltmetodikk: Grunnlaget for feltarbeid og feltforskning* (Field methodology: The basis of fieldwork and field research). Oslo: Gyldendal.

- Harris, Christopher, Philips, Rachel S., & Penuel, William R. (2012). Examining teachers' instructional moves aimed at developing students' ideas and questions in learner-centered science classrooms. *Journal of Science Teacher Education, 23*, 769-788.
- Hassan, Jamila Elhag. (2009). Parents' socioeconomic status and children's academic performance. Oslo: NOVA - Norwegian Social Research.
- Heffernan, Peter. (1986). Questioning communicatively in the second language classroom. *Canadian Modern Language Review, 43*, 108-116
- Herbart, Johann Friedrich, & Stern, Jeffrey. (2002). *Allgemeine pädagogik. With an introduction by Jeffrey Stern* (General pedagogy first published in 1806). Bristol: Thoemmes.
- Hoffman, Lore, Krapp, Andreas, Renninger, K. Ann, & Baumert, Jürgen. (1998). *Interest and learning. Proceedings of the seeon conference on interest and gender*. Kiel: Institut für die Pädagogik der Naturwissenschaften an der Universität Kiel.
- Hopmann, Stefan Thomas. (2007). Restrained teaching: The common core of Didaktik. *European Educational Research Journal, 6*, 109-124.
- Humboldt, Wilhelm von. (2000). Theory of Bildung (probably written in 1793 or 1794, translated from a publication from 1969). In I. Westbury, K. Riquarts & S. T. Hopmann (Eds.), *Teaching as a reflective practice: The German Didaktik tradition* (pp. 57-61). Mahwah, N.J: L. Erlbaum Associates.
- Kemp, Peter. (2006). Mimesis in educational hermeneutics. *Educational Philosophy and Theory, 38*, 171-184.
- Klafki, Wolfgang. (2000a). Didaktik analysis as the core of preparation of instruction (first published in 1958). In I. Westbury, S. T. Hopmann & K. Riquarts (Eds.), *Teaching as a reflective practice. The German Didaktik tradition* (pp. 139-159). Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Klafki, Wolfgang. (2000b). The significance of classical theories of Bildung for a contemporary concept of allgemeinbildung. In I. Westbury, K. Riquarts & S. T. Hopmann (Eds.), *Teaching as*

- a reflective practice : The German Didaktik tradition* (pp. 85 - 107). Mahwah, N.J.: L. Erlbaum Associates.
- Klafki, Wolfgang. (2001a). *Dannelsesteori og didaktik - nye studier* (Bildung-theory and didactics – new studies, first published in 1985) (B. Christensen, Trans. 2nd ed.). Århus: Forlaget Klim.
- Klafki, Wolfgang. (2001b). Kategorial dannelse. Bidrag til en dannelsesteoretisk fortolkning av moderne didaktikk (Categorical Bildung. Contributions to a Bildung-theoretical interpretation of modern didactics, first published in 1958). In E. L. Dale (Ed.), *Om utdanning – klassiske tekster* (pp. 167 – 204). Oslo.
- Krapp, Andreas. (2002). Structural and dynamic aspects of interest development: Theoretical considerations from an ontogenetic perspective. *Learning and instruction*, 12, 383–409.
- Langfeldt, G. r. (2015). *Skolens kvalitet skapes lokalt. Presentasjon av funn fra forskningsprosjektet "Lærende regioner"* (The quality of schooling is created locally. Presentation of finding from the research project "Learning Regions"). Bergen: Fagbokforlaget.
- Lardner, Ted. (1989). Rethinking classrooms: Perspectives on teaching and learning styles. *English Journal*, 78, 88-89.
- Lefstein, Adam, & Snell, Julia. (2014). *Better than best practice. Developing teaching and learning through dialogue*. London and New York: Routledge.
- Levinson, S. C. (1983). *Pragmatics*. Cambridge: Cambridge University Press.
- Linden, Jos van der, & Renshaw, Peter. (2004). *Dialogic learning. Shifting perspectives to learning, instruction and teaching*. Dordrecht/Boston/London: Kluwer Academic Publishers.
- Littleton, Karen, & Howe, Christine. (2010). *Educational dialogues. Understanding and promoting productive interaction*. London and New York: Routledge.
- Loflin, Marvin D., Guyette, Thomas W., Barron, Nancy, & Marlin, Marjorie. (1972). Reconstruction in the analysis of verbal interaction. *American Educational Research Journal*, 9, 101-112.

- Lundgren, U. P. (2015). What's in a name? That which we call a crisis? A commentary on Michael Young's article 'Overcoming the crisis in curriculum theory'. *Journal of Curriculum Studies*, 47(6), 787-801.
- Martin, J. R. (2012). Embedded literacy: Knowledge as meaning. *Linguistics and Education*, 24, 23–37.
- McNaught, Lucy, Maton, Karl, Martin, J. R., & Matruglio, Erika. (2013). Jointly constructing semantic waves: Implications for teacher training. *Linguistics and Education*, 24, 50–63.
- Menck, Peter. (2000). Content: Still in question. In I. Westbury, S. T. Hopmann & K. Riquarts (Eds.), *Teaching as a reflective practice. The German Didaktik tradition* (pp. 177-193). Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Menck, Peter. (2010). The formation of conscience : A lost topic of Didaktik. *Journal of Curriculum Studies*, 33, 261.
- Mercer, Neil, & Littleton, Karen. (2007). *Dialogue and the development of children's thinking. A sociocultural approach*. London and New York: Routledge.
- Midtsundstad, Jorunn H., & Willbergh, Ilmi. (2010). *Didaktikk – nye teoretiske perspektiver på undervisning* (Didactics – new theoretical perspectives on teaching). Oslo: Cappelen Damm.
- Midtsundstad, Jorunn H. (2011). School performance and diversity. In T. Werler (Ed.), *Heterogeneity. General didactics meets the stranger*, (pp. 137-158). Münster: Waxmann.
- Mills, Kathy A. (2009). Floating on a sea of talk: Reading comprehension through speaking and listening. *The Reading Teacher*, 63, 325–329.
- Noor, Noorizah Mohd, Aman, Idris, Mustaffa, Rosinah, & Seong, Teo Kok. (2010). Teacher's verbal feedback on students' response: A Malaysian esl classroom discourse analysis. *Procedia - Social and Behavioral Sciences*, 7, 398–405.
- Pestalozzi, Johann Heinrich. (1977). *How Gertrude teaches her children: An attempt to help mothers to teach their own children and an account of the method* (first published in 1801) (L. E. Holland & F. C. Turner, Trans.). New York: Gordon Press.

- Reindal, Solveig M. (2013). Bildung, the Bologna process and Kierkegaard's concept of subjective thinking. *Studies in Philosophy and Education*, 32, 533-549.
- Ricoeur, Paul. (1984). *Time and narrative* (K. Blamey & D. Pellauer, Trans. Vol. I). Chicago: University of Chicago Press.
- Staab, Claire F. (1991). Teachers' practices with regard to oral language. *Alberta journal of educational research*, 37, 31-48.
- Standish, Paul. (2012). 'This' is produced by a brain-process! Wittgenstein, transparency and psychology today. *Journal of Philosophy of Education*, 46, 61-72.
- Todd, Richard Watson. (1998). Topic-based analysis of classroom discourse. *System*, 26, 303–318.
- Uljens, M. (2002). The Idea of a Universal Theory of Education-an Impossible but Necessary Project? *Journal of philosophy of education*, 36(3), 353-375.
- van Dyk, C. J. (2006). Exemplary teaching: Some possibilities for renovating and stimulating didactic practice. *Journal of Curriculum Studies*, 38, 127-134.
- Verene, Donald Philip. (1981). *Vico's science of imagination*. Ithaca and London: Cornell University Press.
- Vico, Giambattista. (1997). *Vor tids studiemetode* (On the study methods of our time, first published in 1708) (C.-K. Jørgensen, Trans. Vol. 4). København: Museum Tusulanums Forlag.
- Wagenschein, Martin. (2000). Teaching to understand: On the concept of the exemplary in teaching. In I. Westbury, S. T. Hopmann & K. Riquarts (Eds.), *Teaching as a reflective practice. The German Didaktik tradition*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Walton, Kendall L. (1990). *Mimesis as make-believe. On the foundations of the representational arts*. Cambridge, Mass.: Harvard University Press.
- Willbergh, Ilmi. (2008). *Mimesis, didaktikk og digitale læremidler* (*Mimesis, Didaktik and digital media*). Trondheim: Phd-thesis, The Norwegian University of Science and Technology.

- Willbergh, Ilmi. (2010). *Mimetisk didaktikk: Om undervisning som kunst (Mimetic didactics: On teaching as an art-form)*. In J. H. Midtsundstad & I. Willbergh (Eds.), *Didaktikk – nye teoretiske perspektiver på undervisning*. Oslo: Cappelen Damm.
- Willbergh, Ilmi. (2011). The role of imagination when teaching the diverse group. In S. Hillen, Tanja Sturm & Ilmi Willbergh (Ed.), *Challenges facing contemporary didactics: Diversity of students and the role of new media in teaching and learning* (pp. 61-73). Münster: Waxmann.
- Willbergh, Ilmi. (2015a). The problems of 'competence' and alternatives from the Scandinavian perspective of Bildung. *Journal of Curriculum Studies*, 47, 334-354. doi: 10.1080/00220272.2014.1002112
- Willbergh, Ilmi. (2015b). Freedom of speech in the classroom. In S. A. Hillen & C. Aprea (Eds.), *Instrumentalism in education - where is 'bildung' left?* (pp. 43-58). Münster: Waxmann.